# Final Revised
# Environmental Impact Report
# for
# Magee Preserve

State Clearinghouse File: 2010112042
Town Files: LEG10-0004, SD9291, DEV10-0072, & TR10-28

## May 2019

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B. Transportation Impact Analysis Update
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D. Ramboll Memo

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# 1.0 INTRODUCTION

## 1.1 BACKGROUND

This Final Revised Environmental Impact Report (FREIR), together with the Revised Draft EIR (RDEIR), constitutes the Revised Environmental Impact Report (REIR) for the Magee Preserve project. This FREIR consists of an introduction, written and oral comments received during the 45-day public review period, responses to comments, and revisions to the RDEIR. Revisions to the RDEIR include:

- BLOS tables revised to correct a technical error in the original calculations.
- BLOS assumed bicycle speeds revised.
- Relocation of a storm drain outfall following consultation with the resource agencies and immediate project neighbors.

No significance conclusions in the RDEIR are changed as a result of these revisions and none of the revisions to the RDEIR constitutes significant new information so as to require recirculation of the RDEIR.

The project evaluated in the RDEIR consists of development of a 410-acre property referred to as Magee Preserve. The applicant, Davidon Homes, proposes 69 single family lots, road rights-of-way and open space on 29 acres of the 410-acre site, preserving the remaining 381 acres in permanent open space. A minimum of 10% of the homes would include second dwelling units in accordance with the Town's Inclusionary Housing Ordinance.

The project proposes to rezone the property from A-4 (Agricultural Preserve District), A-2 (General Agricultural District), and P-1 (Planned Unit Development District) to a new P-1 (Planned Unit Development District). In addition, a Vesting Tentative Map is proposed to create the 69 single family lots on the site. The lots would be clustered and located primarily on the flatter portions of the property.

The RDEIR was prepared to inform the public of the significant environmental effects of the project, identify possible ways to minimize the significant effects, and describe reasonable alternatives that support the objectives of the project.

## 1.2 PUBLIC PARTICIPATION

In accordance with CEQA, this document is included in the official public record for the REIR. Based on the information contained in the public record, decision makers will be provided with the documentation on the projected environmental consequences of the Magee Preserve development proposal.

The Town notified all responsible and trustee agencies, interested groups, and individuals that a RDEIR had been completed for the proposed project. The Town used the following methods to solicit input during the preparation of the RDEIR. The following is a list of the actions taken during the preparation, distribution, and review of the RDEIR.

- The Notice of Preparation (NOP) was filed with the California State Clearinghouse for a 30-day review period from August 31, 2017 to October 2, 2017 under Clearinghouse Number 2010112042.

- The NOP was distributed by the Town to responsible and trustee agencies, interested groups, and individuals.

- On August 31, 2018, the RDEIR was distributed for a 45-day public review period to responsible and trustee agencies, interested groups, and individuals. The public review period for the RDEIR ended on October 15, 2018.

- On September 25, 2018, the Planning Commission held a public hearing to solicit comments on the adequacy of the RDEIR.

# 2.0 RESPONSES TO COMMENTS

## 2.1 INTRODUCTION

This section provides responses to written and oral comments on the RDEIR.

## 2.2 LIST OF COMMENTERS

A. Written Comments

Following is a list of written comments received on the RDEIR.

| List of Comments Received on RDEIR | | |
|---|---|---|
| **Letter No.** | **Name** | **Date Received** |
| **Public Agencies** | | |
| 1. | Contra Costa County Public Works Department | 10/15/2018 |
| 2. | Contra Costa Local Agency Formation Commission | 10/12/2018 |
| 3. | East Bay Municipal Utility District | 9/28/2018 |
| 4. | East Bay Regional Park District | 10/11/2018 |
| 5. | San Ramon Valley Unified School District | 9/7/2018 |
| **Public Comments** | | |
| 6. | Deanne Andres | 10/15/2018 |
| 7. | Jackie Baldi | 10/14/2018 |
| 8. | Ted Barstad | 10/14/2018 |
| 9. | Leonard S. Becker | 10/15/2018 |
| 10. | James Brady | 10/8/2018 |
| 11. | Ray & Ann Brant | 10/13/2018 |
| 12. | Robert Braunscheidel | 9/16/2018 |
| 13. | Sally Bryden | 9/16/2018 |
| 14. | Emily Busquets | 9/16/2018 |
| 15. | Catherine Cale | 10/14/2018 |
| 16. | Sam Campbell | 9/16/2018 |
| 17. | Maryann Cella – SOS-Danville Group (1) | 9/24/2018 |
| 17A | Attachment - Cella 7/1/18 letter | -- |
| 17B | Attachment - Flashman 10/2/17 letter | -- |
| 17C | Attachment - Cella undated memo | -- |
| 18. | Maryann Cella – SOS-Danville Group (2) | 9/26/2018 |
| 19. | Maryann Cella – SOS-Danville Group (3) | 10/4/2018 |
| 20. | Maryann Cella – SOS-Danville Group (4) | 10/15/2018 |
| 21. | Maryann Cella – SOS-Danville Group (5) | 10/15/2018 |
| 22. | Maryann Cella – SOS-Danville Group (6) | 11/17/2018 |
| 23. | Chris Cesio | 10/15/2018 |
| 24. | Bjoern Christensen | 10/13/2018 |
| 25. | John Ciccarelli (1) | 9/25/2018 |
| 26. | John Ciccarelli (2) | 10/15/2018 |
| 27. | Bogdan Cojocaru | 9/17/2018 |

| List of Comments Received on RDEIR | | |
|---|---|---|
| **Letter No.** | **Name** | **Date Received** |
| 28. | Ruth Collins | 9/18/2018 |
| 29. | Alyce Cozine | 9/16/2018 |
| 30. | Susan & David Cross | 10/15/2018 |
| 31. | Diane and Christopher Cross | 10/15/2018 |
| 32. | Nancy Daetz | 9/16/2018 |
| 33. | Jerome Davis, MD | 10/14/2018 |
| 34. | Angela Dew | 10/7/2018 |
| 35. | Susan Douglass-Jones | 9/16/2018 |
| 36. | Stefanie Dowdy | 9/24/2018 |
| 37. | Kathleen Dunphy | 10/15/2018 |
| 38. | Dr. Nadine Durant | 9/16/2018 |
| 39. | Eric Edmondson | 10/14/2018 |
| 40. | Elena Fischer | 10/14/2018 |
| 41. | Stuart Flashman | 10/14/2018 |
| 42. | Allen & Kate Flickinger | 10/15/2018 |
| 43. | Margaret Freeman | 10/15/2018 |
| 44. | Todd Gary (1) | 9/26/2018 |
| 45. | Todd Gary (2) | 10/15/2018 |
| 46. | David & Linda Gates | 10/1/2018 |
| 47. | Donya George | 10/15/2018 |
| 48. | Eleanor Gould | 10/15/2018 |
| 49. | Heather Hackman | 10/15/2018 |
| 50. | Dan Harrelson | 10/14/2018 |
| 51. | Elizabeth Harvey | 10/15/2018 |
| 52. | Dave Havlik | 10/15/2018 |
| 53. | Jutta Herrick | 10/15/2018 |
| 54. | Melessa Hirschhorn | 9/16/2018 |
| 55. | Angie Ho | 9/27/2018 |
| 56. | Jackie Howe | 10/16/19 |
| 57. | Juley Hull | 10/15/2018 |
| 58. | Don Hunter | 9/7/2018 |
| 59. | Greg Isom | 10/15/2018 |
| 60. | Pat Isom (1) | 10/4/2018 |
| 61. | Pat Isom (2) | 10/5/2018 |
| 62. | Pat Isom (3) | 10/10/2018 |
| 63. | Pat Isom (4) | 10/15/2018 |
| 64. | Pat Isom (5) | 10/15/2018 |
| 65. | Pat Isom (6) | 10/15/2018 |
| 66. | Kristin Johnson (1) | 9/16/2018 |
| 67. | Kristin Johnson (2) | 10/15/2018 |
| 68. | Yasmin Kotval | 9/17/2018 |
| 69. | Barbara Kurtenbach | 10/14/2018 |
| 70. | Shahin Lavasani | 10/15/2018 |
| 71. | Adam Leftik | 10/15/2018 |
| 72. | Elizabeth Leftik | 10/13/2018 |
| 73. | Michael Levine | 9/10/2018 |

| List of Comments Received on RDEIR | | |
|---|---|---|
| **Letter No.** | **Name** | **Date Received** |
| 74. | Steven McCann | 9/16/2018 |
| 75. | Eileen McCauley | 9/17/2018 |
| 76. | Greg McPherson | 10/15/2018 |
| 77. | Maria Medina-Kirby | 10/13/2018 |
| 78. | Michelle Merkel | 10/15/2018 |
| 79. | Rama Murty | 10/14/2018 |
| 80. | Valeria Nealis | 10/15/2018 |
| 81. | Crystal Nelson | 10/15/2018 |
| 82. | Mark & Gail Oney | 9/24/2018 |
| 83. | Louis Palandrani | 10/10/2018 |
| 84. | Tom Parker | 10/15/2018 |
| 85. | Mary Peart | 9/26/2018 |
| 86. | Kasia Proctor | 9/17/2018 |
| 87. | Katie Robinson | 9/15/2018 |
| 88. | Rachel Rogers | 10/15/2018 |
| 89. | Renee Rogers | 10/15/2018 |
| 90. | Nancy & Hank Salvo | 10/14/2018 |
| 91. | Carrie Sawyer | 9/16/2018 |
| 92. | Patricia Sherve | 9/22/2018 |
| 93. | Denis Squeri & Ronni Carlier | 10/8/2018 |
| 94. | Michael Steinbrecher (1) | 9/27/2018 |
| 95. | Michael Steinbrecher (2) | 10/3/2018 |
| 96. | Ryan & Kimberlie Stow | 10/15/2018 |
| 97. | Clelen Tanner (1) | 8/25/2018 |
| 98. | Clelen Tanner (2) | 9/11/2019 |
| 99. | Clelen Tanner (3) | 10/6/2018 |
| 100. | Clelen Tanner (4) | 10/11/2018 |
| 101. | Antoinette & Jay Thomas | 9/21/2018 |
| 102. | Robert Tiernan, Jr. | 10/13/2018 |
| 103. | Kelly Trevethan | 10/14/2018 |
| 104. | Jami Tucker | 10/15/2018 |
| 105. | Mark & Ellen Whitfield | 10/13/2018 |
| 106. | Vicky Wong | 10/15/2018 |
| 107. | Erika Woolley | 9/26/2018 |
| 108. | Gloria Wright | 10/15/2018 |

B. Oral Comments:

Oral comments were made during the Planning Commission public hearing for the RDEIR on September 25, 2018. A list of the individuals who made oral comments on the RDEIR during the public hearing is provided below, in alphabetical order.

1. Abbs, Steve - Applicant (Speaker 16)
2. Belotz, Mark (Speaker 4)
3. Bowles, Archie - Commissioner (Speaker 22)

4. Brant, Ray (Speaker 1)
5. Cella, Maryann (Speaker 10)
6. Ciccarelli, John (Speaker 8)
7. Combs, Robert - Commissioner (Speaker 21)
8. Gary, Todd (Speaker 9)
9. Gates, Linda (Speaker 2)
10. Haberl, Randy - Chairman (Speaker 19)
11. Havlik, David - Commissioner (Speaker 20)
12. Heusler, Kerri - Commissioner (Speaker 23)
13. Isom, Pat (Speaker 11)
14. Johnson, Ken (Speaker 6)
15. Mini, Jeff (Speaker 12)
16. Namburi, Ram (Speaker 14)
17. Radich, Paul - Commissioner (Speaker 18)
18. Rich, Gary (Speaker 15)
19. Sutak, Tom (Speaker 5)
20. Tanner, Clelen (Speaker 7)
21. Tuma, Roger (Speaker 3)
22. Verriere, Andrew - Commissioner (Speaker 17)
23. Viani, Christian (Speaker 13)

## 2.3 RESPONSES TO COMMENTS

Each written and oral comment received on the RDEIR is presented in this chapter, as identified in Section 2.2 above. Individual comments are numbered. Correspondingly numbered responses to each comment are provided in the discussion following the comment. The written comments are addressed followed by oral comments.

Where comments raise environmental issues that result in additions or deletions to the text, tables, or figures in the RDEIR, a brief description of the change is given and the reader is directed to Section 3.0, Revisions to the RDEIR.

Where the same or similar related comments have been made more than once, a response may direct the reader to another numbered comment and response or to a master response.

Some comments received do not raise environmental issues or do not comment on the analysis in the RDEIR and, thus, do not require a response in this FREIR. These comments generally express an opinion on whether or not the project should be approved. CEQA does not require a substantive response to comments on an EIR that do not specifically relate to environmental issues. Response to these comments is generally, "The comment does not raise a significant environmental issue and, therefore, does not require response in this Final REIR. The comment is part of the project record and will be available to decisionmakers."

## 2.4 MASTER RESPONSES TO COMMENTS

Several recurring comments were raised during the public review process for the RDEIR. Master responses for each of these comments are provided in the following section. The master responses address comments raised by multiple commenters at one location. This ensures that each comment is thoroughly addressed and minimizes repetition.

### 2.4.1 Master Responses to Traffic Comments

#### *I. Operations at Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard Without and With Signal*

**Comment:** A number of comments identified concerns with traffic operations at the intersection of Diablo Road-Blackhawk Road & Mt. Diablo Scenic Boulevard, and/or with signalization of that intersection, which is identified as mitigation in the RDEIR.

**Response**: The RDEIR identifies a significant impact at the Mt. Diablo Scenic Boulevard intersection on Diablo Road/Blackhawk Road due to added project traffic. The intersection currently operates at a level of service (LOS) E in the AM peak hour and LOS F in the School PM peak hour. Mitigation Measure 4.3-1 would require the project applicant to install a traffic signal that would improve traffic flow and reduce delay without acquiring right-of-way from adjacent properties. The RDEIR identified the project's impact as significant and potentially unavoidable because Contra Costa County has jurisdiction over this intersection and it was unknown whether the County would approve the improvements described in the mitigation. Historically, Contra Costa County had not expressed interest in signalizing the Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard intersection, as Town staff indicated at the September 25, 2018 Planning Commission meeting to solicit comments on the RDEIR.

On October 15, 2018, however, the Contra Costa County Public Works Department submitted a letter (Comment Letter 1) that states that the County agrees that the Mitigation Measure 4.3-1 should be implemented, that the applicant should install the traffic signal at the intersection, and that "as a precursor to signalization of the intersection, the developer should conduct a study to determine if a roundabout would be effective at this location." As summarized below, this study has been conducted and confirms that signalization would be highly effective, and a roundabout would be both less effective and infeasible at this location.

An Intersection Control Evaluation (ICE) was performed for the intersection of Diablo Road-Blackhawk Road & Mt. Diablo Scenic Boulevard. ICE is recommended to determine the optimal geometric and traffic control solutions for an intersection through a data-driven, decision-making process and framework that provides a balanced and holistic approach to screening alternatives. A copy of the ICE is provided in Attachment A of this FREIR.

This ICE evaluated the following traffic control options:

1. All-Way Stop Control (AWSC) (Existing Control)
2. Single-Lane Roundabout (as requested by Contra Costa County)
3. Traffic Signal

The above control types were analyzed using Synchro (for AWSC and signalization) and SIDRA INTERSECTION 8 model software (for roundabout analysis). Analysis results showed that the traffic signal would provide the most optimal level of service and delay during all peak periods under all study scenarios with minimal or no impact to right-of-way. The roundabout alternative was found to operate unacceptably during the AM peak periods under Cumulative and Cumulative Plus Project Conditions, while the traffic signal would operate acceptably under all scenarios.

With signalization, the LOS during the AM peak hour would improve to LOS A under Existing Plus Project conditions and LOS B under Cumulative plus Project conditions. The LOS during the School PM peak would improve to LOS A under both Existing Plus Project and Cumulative Plus Project conditions. Queue length analysis results show that the traffic signalization would significantly reduce westbound queue lengths without increasing queues in other directions to an extent that would result in significant delays.

A traffic signal would improve operating conditions from the current all-way stop control. Traffic signal control provides the benefit of a protected left-turn phase from Diablo Road onto Mt. Diablo Scenic Boulevard, allowing traffic travelling in the eastbound direction to clear the intersection effectively. Additionally, a signal phase for the southbound left-turns would allow any vehicle traffic to clear the intersection consistently, reducing backups for southbound Mt. Diablo Scenic Boulevard.

Right-turning vehicles from Mt. Diablo Scenic Boulevard onto Diablo Road would benefit from the eastbound and southbound left-turn signal phases as they create gaps within the westbound traffic stream. When the westbound flow is stopped, drivers west of the intersection would be provided space to enter the Diablo Road corridor with fewer conflicts.

Overall, the new traffic signal would improve operating conditions by significantly reducing existing delay along the Diablo Road corridor.

In addition to the ICE analysis, a Cumulative Plus Project arterial LOS and queueing analysis was performed along the Diablo Road/Blackhawk Road corridor. This analysis assumed signalization of both the Diablo Road-Blackhawk Road & Mt. Diablo Scenic Boulevard intersection (Mitigation Measure 4.3-1) and the Blackhawk Road/Magee Ranch Road-Hidden Oak Drive intersection (where signal warrants will be met under Cumulative conditions). Comparing the Cumulative no-build scenario to the Cumulative Plus Project scenario shows minor changes in average travel time and speed, except in the westbound direction at the AM peak hour, where average travel time would be reduced by 39% and average speed would improve from 18-29 mph. The LOS at both intersections would improve to A and B. These signalizations would not affect operations at the intersection of Diablo Road/McCauley Road-Green Valley Road.

## *II. Proposed Crosswalk at Blackhawk Road*

**Comment:** Several commenters identified concerns with the proposed crossing of Blackhawk Road at the main project entrance. The Contra Costa County Public Works Department recommended use of a system such as a HAWK crossing mechanism, per its comment letter dated October 18, 2018.

**Response**: The Town recommends the use of a Rectangular Rapid Flashing Beacon (RRFB) for the new crosswalk at the intersection of the main project entrance and Blackhawk Road. RRFBs are used in combination with pedestrian warning signs to provide high-visibility strobe-like warnings to drivers when pedestrians use a crosswalk. At this location, Blackhawk Road is two lanes wide, has a speed limit of 35 mph, provides ample sight distance, and is expected to experience low pedestrian volume from the project. An RRFB is intended for, and would provide sufficient crossing enhancement for, a crosswalk located at an uncontrolled intersection such as the Blackhawk Road and project entrance intersection.

A High-Intensity Activated Crosswalk beacon (HAWK) is a traffic control device used to stop road traffic as needed and allow pedestrians to cross safely. HAWK beacons are more typically used at midblock crossing locations with more than two travel lanes. A HAWK at the main project driveway accessing Blackhawk Road could create confusion for drivers exiting the project site since they may not be able to adequately assess whether they can maneuver onto Blackhawk Road.

RRFB installation is recommended at this location due to its effectiveness and applicability for the expected conditions. If the proposed project is approved, the project applicant will be required to coordinate with Contra Costa County to ensure that the design of the pedestrian crossing improvements is appropriate for the location as the County would ultimately control and maintain the traffic control device.

## *III. Traffic Safety*

**Comment:** Several commenters expressed concerns that traffic from the project would impact traffic safety along the Diablo Road-Blackhawk Road corridor.

**Response**: As explained in the RDEIR, the Town reviewed collision history for the Diablo Road-Blackhawk Road corridor from California Highway Patrol's (CHP's) Statewide Integrated Traffic Record System (SWITRS) and Danville Police Department records between January 2005 and December 2017. This data only accounts for collisions reported and recorded by a police officer, which does not include near-misses or minor collisions where a police officer is not called.

Over the nearly 13-year study period, a total of 79 collisions were reported. For the study segment length and volume of vehicles it carries, Diablo Road shows an accident rate of 0.55 accidents per million vehicle miles, which is well below the Statewide Average Accident Rate of 1.14 per 2015 Caltrans data. In consideration of the corridor's existing accident rate and additional traffic volumes that would be generated by the project, the project would not have a significant impact on traffic accident rates throughout the corridor.

In addition, as noted in Section I above, traffic signal control at the Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard would generate gaps in the traffic stream along Diablo Road/Blackhawk Road, benefitting vehicles entering or exiting the numerous uncontrolled driveways and side streets along the corridor.

### *IV. TRAFFIX*

**Comment**: Some comments expressed concerns that continuation of the TRAFFIX Program buses to local schools should not be assumed for the future.

**Response**: The TRAFFIX Board has approved a new five-year agreement for service with the option for extensions of up to three additional years. In addition, Measure J, which funds the TRAFFIX program, is funded through 2034. It is anticipated by TRAFFIX that ridership will continue to increase, particularly on routes that travel on the Diablo Road corridor, with the potential addition of a seventh bus that would serve Monte Vista High School based on future demand. In 2013, the project applicant agreed to provide a $30,000 fund for new project homeowners to purchase TRAFFIX bus passes. The current applicant has agreed to provide $30,000 in funding that could be used to subsidize TRAFFIX use or other school transportation programs.

### *V. Traffic Impacts during Construction*

**Comment**: Several comments requested analysis of traffic impacts during construction and provision of mitigation for such impacts.

**Response**: Project approval would be subject to the following condition, which was included in the 2013 approval: "Limit the allowable hours for the delivery of materials or equipment to the site and truck traffic coming to and from the site for any purpose to Monday through Friday between 7:00 a.m. and 6:00 p.m. The allowable hours for delivery of materials and equipment to the site shall be further limited to avoid the area's peak morning and afternoon weekday school commute hours of between 7:30 a.m. and 9:00 a.m. and between 2:30 p.m. and 4:00 p.m. Truck traffic related to the delivery of materials and equipment may exit the site to the east, but not the west, prior to 9:00 a.m. In addition, all cement trucks shall be limited to accessing the site from the easterly direction. Appropriate signage shall be posted on site to specific these restrictions, subject to review and approval by the Planning Commission."

## 2.4.2 Master Responses to Bicycle Safety Comments

### *I. Use of BLOS to Analyze Project Impacts to Bicycle Safety*

**Comment**: Several comment letters and oral comments state that the RDEIR should not have used Bicycle Level of Service (BLOS) methodology to analyze, and identify a significance threshold for, project traffic impacts to bicycle safety on Diablo Road and Blackhawk Road.

**Response**: The Highway Capacity Manual 2010 (HCM 2010) Bicycle Level of Service (BLOS) was selected to analyze the quality of service provided to bicyclists because it is standardized and nationally recognized to quantitively assess the state of bicycle infrastructure.

In response to the Court of Appeal's ruling that the 2013 project's EIR needed to separately analyze the effects of project-induced vehicle traffic on bicycle safety, the Town sought a methodology for analyzing the impact and identifying a threshold of significance. The Town's Transportation Division, along with Advanced Mobility Group experts (formerly with Stantec), searched for a technically supported method of analyzing the potential impacts of vehicle trips associated with a development project on bicycle safety.

The Town and the consultants found no widely accepted methodology that focused only on bicycle safety impacts from new vehicle trips or that correlated bicycle accidents to vehicle traffic volume. Nor have commenters suggested such a methodology. The Town did, however, identify two different traveler perception models that measure bicyclist comfort on roadways: 1) the Bicycle Compatibility Index (BCI) developed by the Federal Highway Administration (FHWA) in 1998 and 2) the Bicycle Level of Service (BLOS) methodology described in the 2010 Highway Capacity Manual (HCM 2010). The two methodologies were developed the same way, using bicyclist-rated conditions on various street segments throughout the United States.

In both models, factors affecting bicycle safety are the key determinant of bicyclist comfort, because bicyclists generally are not comfortable on roadways that they perceive to be unsafe.

Although both models would produce similar results, the Town selected the BLOS methodology given that it is cited in the Contra Costa Transportation Authority's Technical Procedures (2013) as a standardized methodology that has been developed by a national committee and provides a "rigorous quantitative methodology for defining LOS by roadway segment separately for pedestrians, bicyclists, and transit." Further, it is a newer model, based on data collected in the 2000s rather than the 1990s, and incorporates refinements to the BCI. In addition, another regional congestion management agency, the Santa Clara Valley Transportation Authority, specifically encourages the use of BLOS methodologies (including HCM 2010) because they measure features "that affect the comfort and safety of bicyclists from the user's perspective" (SCVTA Transportation Impact Analysis Guidelines, Sections 5.2.5 and 9.3, October 2014).

BLOS scores are most heavily determined by the following safety-related parameters:

- Roadway cross section (lane and shoulder widths)
- Motorized vehicle volumes
- Motorized vehicle speeds
- Heavy vehicle percentage
- Pavement condition
- Number of through lanes
- Number of access points on the right side in the subject direction of travel

The proposed project would negatively affect one of these parameters - motorized vehicle volumes. The proposed project's addition of 841 daily trips to Diablo Road/Blackhawk Road does not significantly affect the BLOS score, even though BLOS scores of D and E are, appropriately, more sensitive to increases in vehicular traffic volumes than are roadways with better starting BLOS scores.

The HCM 2010 does not recommend a level of change in BLOS scores that an agency might consider significant. The Town selected a five percent change as significant because that number is consistent with its threshold for vehicle traffic impacts, is within the limits of perceptibility of traffic changes, represents one half of the 10% daily variation in vehicle traffic experienced on this roadway, and is within the vehicle traffic study's margin for error. The BLOS analysis showed that none of the five roadway segments studied would experience even a one percent change in BLOS as a result of the proposed project for any segment at any peak hour (weekday AM Peak, PM School Peak, PM Peak or Weekend Bicycle Peak). In no scenario [Existing Plus Project or Cumulative Plus Project] would the proposed project cause existing BLOS to deteriorate from D to E or E to F.

Only one different significance threshold has been suggested in comments on the RDEIR. That suggestion is that *any* increase in vehicle traffic on Diablo Road/Blackhawk Road should be considered significant. Substantial evidence does not support this single-vehicle significance threshold, which would require full EIRs for otherwise exempt projects such as the construction of one single-family home.

One set of comments attempts to describe general conditions under which one additional vehicle trip should be considered to cause a significant impact to bicycle safety. The comments suggest the following triggers for the one-additional-vehicle significance threshold for a two-lane roadway with:

1. a volume-capacity (V/C) ratio of at least 0.3 on both sides of the road the V/C ratio would be measured; (The comment does not state over what roadway distance or time, e.g., daily, vehicle peak hours, bicycle peak hours.)

2. a 0.3 V/C ratio plus more than 20 bicyclists per hour plus no demarcated bicycle lanes; (The comment does not state whether the bicyclist usage would be measured on a daily or peak hour basis.)

3. a 0.3 V/C ratio and segments longer than ½ mile where passing is prohibited but shoulders and lanes are too narrow to allow 3-foot clearance between bicyclists and vehicle travel lanes; or

4. project-caused trips by large, slow-moving construction vehicles where there are no marked bicycle lanes but a significant volume of bicycle traffic.

Several of these suggested conditions are unclear, but many are so common that the one-vehicle test would necessitate EIRs for small, otherwise exempt projects. Roadways with V/C ratios of 0.3 are very common, particularly if a peak hour rather than daily measurement is applied. In addition, many roadways, particularly older roadways, are narrow and a construction project of any size, even for one single-family home, requires at least one large slow-moving construction vehicle. Finally, the suggested conditions that would lead to a one-vehicle significance threshold exclude most of the safety conditions that BLOS, using nationwide bicyclist surveys, does include.

## *II. Specific Critiques of BLOS*

**Comment**: Several comments state that BLOS only measures subjective bicyclist comfort and not safety. Comments also state that BLOS is intended only for urban streets and does not apply to Diablo Road because this facility is rural.

**Response**: The roadway to which the BLOS analysis was applied, starting in the west at the intersection of Diablo Road/Green Valley Road/McCauley Road and ending in the east at the intersection of Blackhawk Road/Magee Ranch Road/Hidden Oak Drive, meets the HCM 2010 definition of an urban roadway, primarily due to the many righthand-turn intersections and driveways along the roadway.

As described in Section I above, seven objective safety factors are the primary determinants of BLOS Several comments argue that BLOS does not take into account other factors that could affect bicycle safety such as sight distances, slopes, narrowest lane widths at any point on the roadway (as opposed to averages based on roadway measurements taken at every 100$^{th}$ linear foot), curves, number of bicyclists using the facility, sideways slopes of shoulders, pavement stability and hazards adjacent to the roadway such as trees and telephone poles. Pavement condition is, in fact, one of the BLOS factors but there is not a validated nationally accepted model or methodology that takes all of these factors into account and such an analysis would be infeasible. The BLOS model used for the project accounts for the most important and measurable determinants of bicycle safety, based on nationwide bicyclist surveys.

Through the Town's Pavement Management Program, pavement condition evaluations are documented for all Town-maintained streets, including Diablo Road, and are used as a tool for prioritizing pavement rehabilitation and preventative maintenance projects. Although the most recent pavement condition index (PCI) evaluation along Diablo Road from Green Valley Road to Avenida Nueva has an average PCI rating of 82, classified as "very good-excellent" condition, based on a 0-100 scale, a small number of isolated locations along the Diablo Road corridor have been identified for minor asphalt repairs and will be included in the Town's pavement rehabilitation project scheduled for spring 2019.

Through the BLOS analysis, existing conditions are measured to provide a baseline for comparison with alternate scenarios, such as with the addition of a project. This comparison provides a measurable change from the baseline condition, which defines whether a project significantly impacts bicycle transportation operations, primarily based on bicycle safety, and thus whether the project would be responsible for mitigating a significant impact.

Finally, the RDEIR's BLOS analysis reports an assumed bicycle running speed of 15 miles per hour. However, speeds on uphill eastbound sections are observed to be generally lower. While an assumed bicycle running speed of 15 mph is prescribed in the HCM procedures, assumed bicycle running speeds are simply reported in a BLOS analysis and do not factor into the calculation of the BLOS score. Nevertheless, this FREIR reports a more conservative assumed running speed for the eastbound direction of travel along the Diablo Road/Blackhawk Road corridor to account for the increase in road grade.

## *III. Bicycle Accident History*

**Comment**: Several comments on the RDEIR call into question the accuracy and implications of the bicycle accident history along Diablo Road-Blackhawk Road corridor.

**Response**: In addition to the BLOS analysis, the Town reviewed the collision history for the Diablo Road/Blackhawk Road corridor from the California Highway Patrol's (CHP's) Statewide Integrated Traffic Record System (SWITRS) and Danville Police Department records between January 2005 and December 2017. This data only accounts for collisions reported and recorded by a police officer, which does not include near-misses or minor collisions where a police officer is not called. One commenter suggests that necessary facts include a description not only of bicycle accidents reported to police but also "near accidents" and their causes. It is not feasible for the Town to attempt to obtain reliable evidence on the numbers of near accidents, and their potential causes, that were not reported to police.

Over the nearly 13-year study period, a total of 79 vehicle collisions were reported. For the study segment length and volume of vehicles it carries, Diablo Road showed an accident rate of 0.55 accidents per million vehicle miles, which is well below the Statewide Average Accident Rate of 1.14 per 2015 Caltrans data.

During this same study period, there were ten 10 reported collisions involving bicycles along the corridor, one of which was actually west of Green Valley Road and two of which did not involve vehicles. As expected, and as reflected in the BLOS analysis, most of these accidents occurred at or near intersections, not on stretches of roadway with few intersections. This result translates to an average bicycle accident rate of 0.8 per year, which is not considered a substantial number of bicycle accidents for the corridor, as described in Section 4.3 of the RDEIR. Several comments assert that had the Town taken bicycle/vehicle accidents along the eastern Diablo Road/Blackhawk Road corridor more seriously, the RDEIR would have focused on that stretch of roadway. The RDEIR's bicycle safety analysis, including its BLOS analysis, is in fact closely focused on conditions along this corridor. Improvements that have been completed by the Town and County to enhance bicycle safety and wayfinding through the Diablo Road/Blackhawk Road include:

- Installation of Class II bike lanes and shared lane pavement markings and signage on Blackhawk Road from Camino Tassajara to Mt. Diablo Scenic, completed by Contra Costa County in May 2018.

- Installation of bicycle directional signage at Diablo Road/Green Valley intersection and along Diablo Road Trail from Diablo Road/Green Valley intersection to Calle Arroyo intersection, completed by the Town in 2015.

- Installation of bicycle shared lane pavement markings on Diablo Road from Calle Arroyo to Avenida Nueva intersections, completed by the Town in 2015.

- Installation of additional bicycle directional signage at Diablo Road/Green Valley Road intersection and additional bicycle shared lane pavement markings and signage on Diablo Road from Diablo Road/Green Valley Road to Calle Arroyo intersections, completed by the Town in January 2019.

- Installation of vehicle/bicycle detection hardware for signalized intersections at 12 locations including Green Valley Road/Diablo Road, Diablo Road/El Cerro Boulevard, and Diablo Road/Camino Tassajara. Completed by the Town in 2019 as part of CIP C-621.

- Spot pavement repair improvements on Diablo Road from Green Valley Road to Avenida Nueva intersections scheduled and to be completed by the Town in spring 2019.

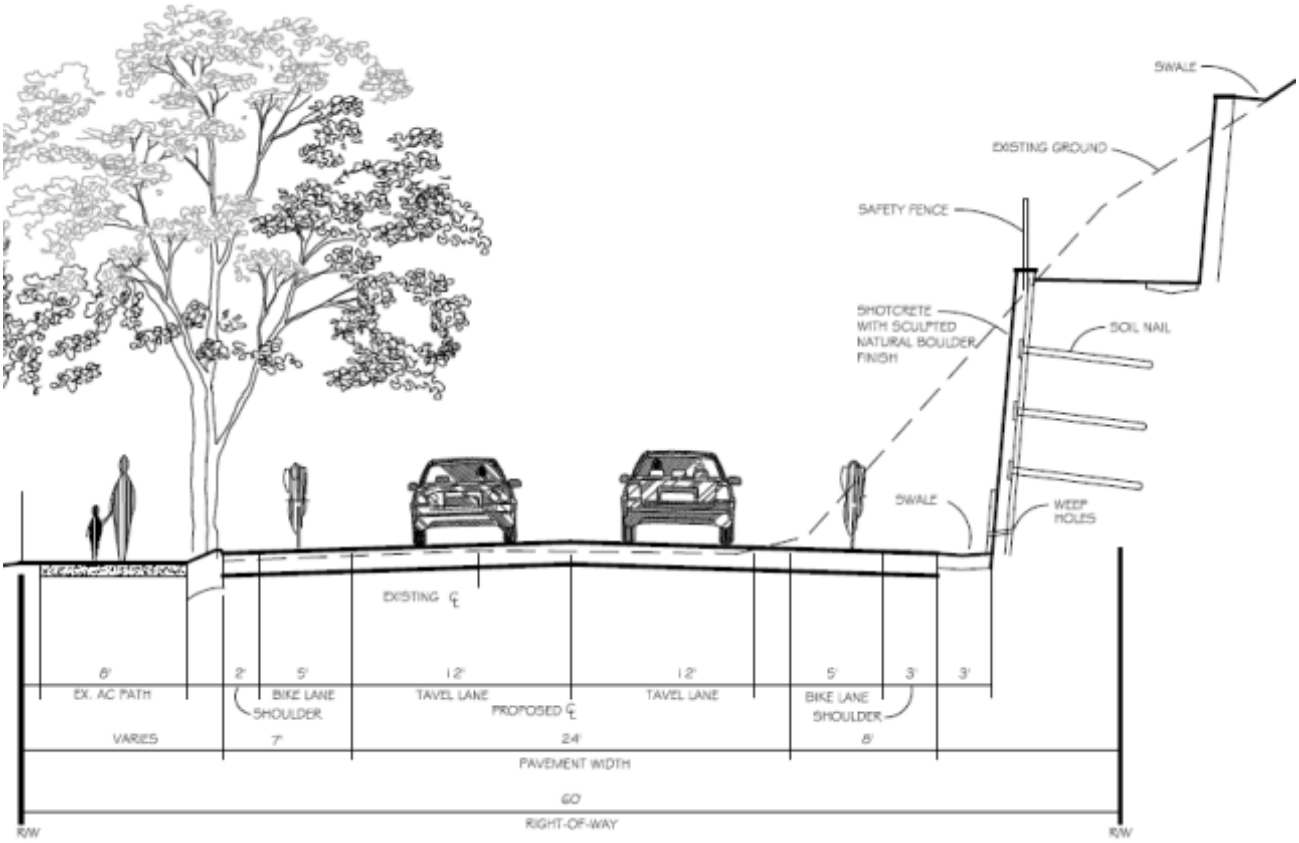
### *IV. Addition of Bike Lanes or Shoulders*

**Comment:** A number of commenters raised questions about whether it is feasible to add physical infrastructure to address bike safety issues on Diablo Road.

**Response**: As a preliminary matter it should be noted that pursuant to CEQA and U.S. Supreme Court takings jurisprudence, a project is responsible only for impacts caused by the project itself; a project is not responsible for mitigating existing conditions.

The Town has intentionally not designated Diablo Road as a Class III bike route because there is an existing alternative route (Camino Tassajara to Blackhawk Road) that has designated Class II bike lanes or Class III bike routes for the entire distance and allows cyclists to reach Mt. Diablo Scenic Boulevard.

In response to public inquiries, the Town's Engineering Division prepared a feasibility analysis of the cost and environmental impacts of constructing Class II bike lanes on Diablo Road between Green Valley Road and Avenida Nueva, a distance of approximately 1.35 miles. This feasibility analysis is based on widening Diablo Road to current geometric design standards published by the American Association of State Highway and Transportation Officials (AASHTO), which would consist of a 42-foot wide roadway cross-section illustrated below.




Due to the topography and natural setting of the corridor, constructing these bike lanes would necessitate the following actions:

- Removing approximately 341 oak trees,
- Grading 61,000+ cubic yards of soil,
- Constructing ~5,450 linear feet of retaining walls, ranging from 3-17 feet in height,
- Realigning Green Valley Creek, near the entrance to the Diablo Country Club,
- Relocating 47 utility poles as well as all EBMUD fire hydrants, and
- Temporary one-lane travel on Diablo Road during an approximate 18-24 month construction period

Using Caltrans' actual cost data, the estimated costs of such a project for design and construction would total approximately $54.8 million, as shown below. These cost estimates do not include the necessity to acquire additional right-of-way to construct the improvements. The precise amount of right-of-way required along the 1.35- mile stretch has not been determined, but would need to be acquired through dedication or acquisition.

| Class II Bike Lanes Cost Breakdown<br>Project Component | Estimated Subtotals | Estimated Total Cost |
|---|---|---|
| 1. Project Design | | $8,100,000 |
| Engineering, surveys, geotechnical services, environmental permits | | |
| 2. Site Preparation | | $23,758,000 |
| • Site mobilization and traffic control | $7,000,000 | |
| • Tree removal | $1,705,000 | |
| • Removal of fences, road rail, retaining walls, drainage systems, etc. | $1,863,000 | |
| • Clearing and grubbing | $3,500,000 | |
| • Utility relocation (47 power poles, EBMUD fire hydrants) | $6,500,000 | |
| • Culvert crossing and creek realignment | $2,950,000 | |
| • Miscellaneous administrative | $240,000 | |
| 3. Construction | | $15,751,074 |
| 4. Contingency (15%) | | $7,141,361 |
| **Project Total (Design & Construction):** | | **$54,750,435** |

Other commenters asked about the feasibility of installing four-foot wide shoulders in both directions, rather than actual Class II bike lanes. While this would reduce some environmental impacts and costs, it is still estimated that this would cost approximately $49.7 million, as broken down below.

| Install Four-Foot Shoulders Cost Breakdown<br>Project Component | Estimated Subtotals | Estimated Total Cost |
|---|---|---|
| 5. Project Design | | |
| Engineering, surveys, geotechnical services, environmental permits, etc. | | $8,100,000 |
| 6. Site Preparation | | $23,258,000 |
| Utility relocations, tree removal, culvert crossing, creek realignment, etc. | | |
| 7. Construction | | $11,865,630 |
| 8. Contingency (15%) | | $6,483,544 |
| **Project Total (Design & Construction):** | | **$49,707,174** |

While not required as an environmental mitigation under CEQA, the project proposes an amenity that would provide an alternative to Diablo Road for cyclists and pedestrians. The project proposes to construct an eight-foot wide pedestrian/bicycle ("multi-use") trail to provide access from Blackhawk Road through the project panhandle and to the proposed residential portion of Magee East along Green Valley Creek. The trail would connect to the project's new emergency vehicle access road. The trail, including the emergency vehicle access, would be approximately 3,085 feet in length, as shown in the attached trail exhibit (in green).

In addition to the multi-use trail to be constructed as part of the project, the project applicant would also be required to dedicate a public easement to the Town to construct an estimated 3,600 linear foot paved multi-use trail (shown in light blue in the trail exhibit) that would connect the existing Class I trail on the north side of Diablo Road (shown in dark blue in the trail exhibit).


GREEN VALLEY ROAD
DIABLO ROAD
MCCAULEY ROAD
DIABLO ROAD
MT. DIABLO SCENIC BLVD
DIABLO ROAD
EBRPD Potential Regional Route to Mt. Diablo State Park
NORTH
BLACKHAWK ROAD
TRAIL EXHIBIT
Existing Pedestrian and Bicycle Path
Proposed Public East Bay Regional Park District Regional Trail
Proposed Land Provided to the Town for Future Expansion of the Paved Bike and Pedestrian Trail Along Diablo Road
Proposed Public Bicycle & Pedestrian Path
Proposed Staging Area & Public Parking Lot
Existing & Potential East Bay Regional Park District Trails
Magee Preserve Property Boundary
EBRPD Existing Route to Sycamore Valley/ Iron Horse Trail
NOT TO SCALE

In 2018, the Town retained a consultant to determine the feasibility of constructing the approximately 3,600 linear foot multi-use trail within that easement. The study determined that it is feasible for the trail to be constructed and that the estimated cost of construction would be, at a minimum, in the range of $1.5-$2.6 million. Design and environmental review of that trail would be prepared by the Town separately if the Magee Preserve project moves forward.

**Comment**: Several comments were made regarding the 1994 Capital Improvement Project (CIP Project C-55B) and pavement conditions on Diablo Road.

**Response**: CIP Project C-55B, constructed in 1994, was primarily an asphalt overlay of Diablo Road. The project also included the addition of 2-foot wide aggregate (unpaved) shoulders where feasible. Almost 25 years later, it is not possible to determine where aggregate shoulders were added and to what extent they have eroded. In any event, that project never contemplated adding paved shoulders. C-55B also contained language that indicated a typical lane width of 12 feet. That plan did not guarantee a uniform lane width. Appendix K to Appendix E of the RDEIR does contain average lane and shoulder widths for the entire length of Diablo Road based on actual measurements in the field taken at 100-foot intervals (RDEIR, p. 4.3-9).

### *V. Other Suggested Changes to the Diablo Road/Blackhawk Road Corridor*

Other bicycle-oriented changes to the Diablo Road/Blackhawk Road corridor suggested by commenters are summarized and addressed below.

**Comment**: The lane widths on Diablo Road are substandard.

**Response:** For the purposes of CEQA, the RDEIR identifies the existing road widths in Appendix K to Appendix E of the RDEIR. Those actual lane widths are a factor used in the BLOS methodology, meaning that the results of the BLOS account for road width. In the broader perspective, the fact that lane widths in some locations are less than 12 feet does not make them substandard. The Caltrans Highway Design Manual (Section 301.1) provides for a minimum lane width of 11 feet, while the American Association of State Highway and Transportation Officials (ASSHTO) Geometric Design Manual finds that lane widths of 10-12 feet are acceptable for arterials.

**Comment**: The Town should replace "Share the Road" signs with "Bicycles May Use Full Lane" signs and Shared Lane Markings ("sharrows").

**Response**: Comments were made that the existing bicycle symbol/Share the Road warning sign assemblies (CA MUTCD[1] Sign Nos. W11-1/W16-1P) are inadequate and should be replaced with Bicycles May Use Full Lane signs (2014 CA MUTCD sign No. R4-11). Comments reference other locations in Danville where the R4-11 sign has been utilized. The CA MUTCD allows for the use of either of the referenced signs to convey the message to road users of the potential presence of bicyclists within the travel way. Further, the CA MUTCD defines the practice and application of the referenced signs as "guidance" or "option" and allows for engineering judgement to serve the roadway conditions.

[1] 2014 California Manual on Uniform Traffic Control Devices.

The Town of Danville utilized the R4-11 sign in conjunction with Shared Lane Markings along a short roadway segment within its downtown; however, the prevailing conditions (on-street parking, frequent driveways, 25 mph speed limit, connection of a short gap in the Class II bike lane network) along that segment vary significantly from the prevailing conditions on Diablo Road.

Further, the comments state that the frequency of existing Shared Lane Marking or sharrow (2014 CA MUTCD Section 9C.07) pavement legends along Diablo Road are inadequate and should be increased in frequency. In 2019, the Town installed additional Shared Lane Markings on Diablo Road east of the Green Valley Road intersection to Calle Arroyo, adding to the existing network of shared lane pavement markings. The CA MUTCD prescribes "guidance" on the spacing of the Shared Lane Markings that allows for the latitude to apply engineering judgment appropriate to the roadway conditions. Currently, there are a total of 12 Bicycle Warning/Share the Road sign assemblies and 36 shared lane pavement markings on Diablo Road between Green Valley Road and Avenida Nueva.

**Comment**: The Town should improve the safety of the existing trail north of Diablo Road.

**Response**: Some comments raised concerns with the utility and safety of the existing path on the north side of Diablo Road between Green Valley Road and Calle Arroyo. The Diablo Road Trail is defined as a multi-use path in multiple Town governing documents including the 2030 General Plan, the Parks, Recreation and Arts Strategic Plan (2006), the Townwide Trails Master Plan (1989), and Danville Parks, Recreation and Strategic Plan Update (2017). All non-motorized modes of travel are permitted to use the facility, and further, provides an option for bicyclists to travel along a separated facility parallel to this portion of Diablo Road.

The Caltrans "Guide to Bikeway Classification" (2017) defines a Class I bikeway as follows: "Class I bikeways, also known as bike paths or shared-use paths, are facilities with exclusive right-of-way for bicyclists and pedestrians, away from the roadway and with cross flows by motor traffic minimized. Some systems provide separate pedestrian facilities. Class I facilities support both recreational and commuting opportunities. Common applications include along rivers, shorelines, canals, utility rights-of-way, railroad rights-of-way, within school campuses, or within and between parks." While the existing trail does not meet all physical standards for a newly designed and constructed path under the current edition of the Highway Design Manual, that does not change the fact that the existing trail does meet the Caltrans standard to be classified as a Class I path. With respect to maintenance, the Town does maintain the path and vegetation along the path.

**Comment**: The Town should enforce prohibited passing and speed limits and install a large sign similar to that on El Cerro.

**Response**: Regarding police enforcement, some comments suggest both that the Town's Police Department does not enforce the prohibition against crossing the double yellow line and that they only enforce the posted speed limit after accidents. The response of the Town's Police Department is that the issuance of citations is only a component, and not always an accurate measurement of, the level of enforcement occurring in a specific area at a specific time. The Police Department

carries out regular traffic enforcement on Diablo Road as well as throughout the entire Town. In addition, the officer who provided the attached citation information to the commenter did not at any time say that "low enforcement" is due to the lack of safe places to pull over drivers.

A suggestion was made that the radar speed display signs with changeable messages indicating "No Passing Bicyclists" should be installed. California Vehicle Code Section 21760 dictates the manner in which motor vehicles may pass bicycles on highways. Further, the California Manual on Uniform Traffic Control Devices (CA MUTCD) establishes standards for the use of changeable message signs and specifically, vehicle speed feedback signs (CA MUTCD Section 2B.13). Vehicle speed feedback signs shall convey a singular message and be for the sole purpose of alerting drivers to their vehicle's speed relative to the posted speed limit. Additional messaging in conjunction with radar speed display/speed control would not be an appropriate use of the traffic control device. A new radar speed display sign location on Diablo Road has been identified and will be included as a Condition of Approval of the project, as it was for the 2013 project approval. Future locations of vehicle speed feedback signs will be determined through the Town's Capital Improvement Program.

**Comment**: Lowering the speed limit to 25 mph on Diablo Road would improve bicycle safety.

**Response**: Regulatory speed limits and speed zones are established according to California Vehicle Code (CVC) Sections 627, 22350, 22352 and 22358 (for local roadways). Speed limits are determined through engineering and traffic surveys and are conducted per requirements mandated in CVC Section 627 and CA MUTCD Section 2B.13. Arbitrary lowering of posted speed limits is not allowed; lowering of posted speed limits must be justified and in compliance with CVC Sections 627 and 22358 and CA MUTCD Section 2B.13. There is no survey or engineering data that would support lowering the speed limit on Diablo Road consistent with the Vehicle Code.

**Comment**: The Town should remove roadside hazards.

**Response**: Regarding utility poles, the Town has no authority to direct PG&E to relocate existing poles. In many instances, the existing poles are located at the outer edge of the existing public right-of-way, consistent with design standards. With respect to road and vegetation maintenance, the Town regularly trims vegetation encroaching on the right-of-way, repairs potholes and paints as needed. Diablo Road is also on the Town's regular schedule for street sweeping. With respect to fences/walls, those referenced in comments are located outside the public right-of-way and outside of the Town's boundaries. Finally, with regard to wildlife warning signs, Section 2C.50 of the MUTCD directs that the Deer Crossing (W11-3) sign should be used "only after confirmation from a Department of Fish and Wildlife warden having jurisdiction in the area that a substantial problem exists." The Town has no such confirmation.

### 2.4.3 Master Responses to Measure S and Open Space Comments

**Comment:** Multiple comments were received that question the adequacy of the RDEIR regarding the potential application of Measure S to any project approval; the ability to develop homes on the

portions of the project site that are designated "Agricultural" in the Town's General Plan; and the preservation of permanent open space through the use of P-1 zoning.

**Response to Measure S Comments**: Many of the comments call for the application of Danville's Measure S to the proposed project. A brief explanation of Measure S is as follows.

Passed by Danville voters in 2000, Measure S amended the Town's General Plan by adding a new policy regarding the process for changing three of the land use designations in the General Plan. Measure S provides that properties with the General Plan land use designations of "General Open Space," "Parks and Recreation," and "Agricultural" may only have those land use designations changed by either a vote of the people or by a 4/5's vote of the Town Council based on specific findings. However, neither the public or Town Council approval requirements of Measure S apply to rezonings or other land use decisions that are allowed by a property's existing "General Open Space," "Parks and Recreation," or "Agricultural" designations. As an example, properties with the General Plan designation of "Agricultural" have some limited residential development potential, while those designated as "General Open Space" and "Parks and Recreation" do not.

In addition, Measure S does not alter any other existing General Plan policies that may be applicable to the properties with one of the three specified land use designations, nor does it eliminate or reduce any development potential that existed under the designated land uses for those properties.

*Prior Litigation and Measure S*

After the Town's previous approval of development on the Magee property (the 2013 Summerhill project), the organization SOS-Danville sued the Town on a number of grounds. One of the allegations in the suit was that the Town's approval of the project constituted a general plan amendment, thus triggering the provisions of Measure S. The California Court of Appeal, First District, rejected this argument in 2015, concluding: "In sum, the General Plan's discussion of the Magee Ranch special concern area suggests defendants [Town] are correct and the entire Project site, including the areas designated as agricultural open space, may be cluster developed and zoned P–1." This judicial interpretation is binding.

*Application of the 2030 General Plan*

At least one commenter attempts to avoid the appellate court's ruling regarding Measure S by arguing that the current project proposed by Davidon is being reviewed under a different General Plan than the 2013 proposal. This argument is without merit, as it disregards both the substance of the 2030 General Plan and the points previously argued by SOS-Danville in their 2013 litigation.

As background, when the prior application was filed with the Town, the applicable General Plan was the 2010 General Plan. While the previous Summerhill application was being processed, the Town adopted its current General Plan, the 2030 General Plan.

Early drafts of the 2030 General Plan proposed adding P-1 (Planned Unit Development) as a zoning designation consistent with the General Plan land use designation of Agricultural. As

explained in numerous public documents (such as staff reports and the Final EIR for the General Plan), deletion of this proposal would not change the application or effect of Measure S as applied to the Magee or any other properties with the Agricultural designation.

As the previous application continued to be processed, representatives of SOS-Danville asked which General Plan (2010 or 2030) was being applied to the project. The Town made clear, both in direct email correspondence, verbally in public hearings, and in findings of approval, that while the 2010 General Plan was being used, the 2030 General Plan contained identical language both with regard to Agricultural properties and the Special Concern Area text for the Magee property.

As mentioned above, the SOS-Danville suit over the 2013 approval alleged that the approval required a General Plan amendment and Measure S vote. The Petition and Complaint filed by SOS-Danville specifically recounted the history of the 2030 General Plan as described above (Petition, paragraphs 28-33) and incorporated those facts into their argument. Thus, the SOS litigation included these same allegations, allegations which the Court of Appeal found to be without merit.

**Response to Preservation of Open Space Comments:** Commenters on the RDIER raised two questions regarding open space: 1) the belief that the project approval is allowing residential development of existing open space, and 2) questions about how the project would ensure that open space to be created will be protected in the future.

*Current Status of Open Space on the Magee Property*

As illustrated in Table 3-2 of the RDEIR, the existing General Plan designations for the 410.3-acre Magee property are as follows:

- 205.7 acres with an existing General Plan Designation of Residential
- 198.7 acres with an existing General Plan Designation of Agricultural (which allows residential use)
- 5.9 acres with an existing General Plan Designation of General Open Space (this area is not proposed for development)

If approved, the property would be developed as follows:

- 23 acres would be developed with 69 single family homes
- 5.7 acres would be developed with street rights-of-way
- 381.6 acres would be preserved as permanent open space (using methods described below)

*Methods to Preserve Open Space*

As described above, with one small exception of 5.9 acres, the remaining 404.4 acres of the Magee property all have some level of development potential. However, should the project be approved, a total of 381.6 acres would be preserved as permanent open space with no potential for further development. This would be accomplished through the following methods to be incorporated as

conditions of approval for the project (similar conditions were imposed on the previous 2013 project approvals):

- The 381.6 acres outside of the areas to be developed will be designated as permanent open space on the final subdivision map.
- The developer will be required to dedicate a Scenic Easement for those same 381.6 acres to the Town, precluding any future development other than the trail system.
- The developer will be required to dedicate a conservation easement and/or deed restriction to be recorded on some or all of the 381.6 acres to preserve conservation value.
- The open space lands will be owned by either a Geologic Hazard Assessment District (GHAD) or the Homeowner's Association (HOA), but in either instance the GHAD will be required to prepare an open space management plan.

These mechanisms would ensure that the remaining 381.6 acres will be preserved as open space, with public access rights to the trail system. The Town has effectively used this mechanism for decades, including development of the Sycamore Valley, the Elworthy property and other large tracts of land.

### 2.4.4 Master Response to School Capacity Comments

**Comment**: Several comments identified concerns that the project would exacerbate the overcrowding of local schools.

**Response**: This issue is addressed in Appendix A of the RDEIR. The 2013 EIR found that the project would generate 62 school-aged children from development of 70 lots. (2013 DEIR, p. 4.11-6.) The 2013 DEIR found that this enrollment increase could result in a potentially significant impact. Mitigation Measure 4.11-1, which required compliance with the school impact fees imposed by Government Code Section 65995, was determined to mitigate the impact to less than significant. The fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects [Government Code Section 65996(a)]. They are "deemed to provide full and complete school facilities mitigation" [Government Code Section 65996(b)].

### 2.4.5 Master Response to Hydrology and Erosion Comments

Comment letters and oral comments made at the Planning Commission raise questions regarding existing and future flooding, culvert inadequacy and erosion in and along Green Valley Creek. Most of these comments repeat comments from the 2017 scoping process and the 2013 EIR, and are fully addressed in the RDEIR under Hydrology, pages 1-8 to 1-9. SOS-Danville raised flooding, erosion, and siltation claims in its litigation challenging the 2013 EIR, but did not prevail on those claims. Additional responses are provided below.

**Comment**: Green Valley Creek has inadequate capacity downstream to convey post development flows if the project is implemented.

**Response**: See RDEIR pages 1-8 to 1-9. Based on ENGEO's hydrologic modeling and addenda prepared in 2013 and 2018, the project would not increase peak flows in the East Branch of the Green Valley Creek watershed downstream of the project (based on most recent project plans prepared by RJA). The project proposes to install a storm drain system that would collect stormwater runoff on the site and direct it to a detention basin. The detention basin would meter peak project rainfall runoff flows to pre-project levels, before discharging them into Green Valley Creek. In addition, the hydrologic modeling confirmed that the release of peak flows from the project into the Green Valley Creek would not occur at the same time that the regional watershed hydrograph peaks at the same location. Therefore, hydrologic impacts related to increase of downstream flooding issues are considered less-than-significant. The Contra Costa County Flood Control & Water Conservation District and the Town of Danville will review the project's final Hydrologic Analysis prior to issuance of any grading permits.

**Comment**: The Alameda Diablo culvert has insufficient capacity to carry 100-year flows and implementation of the project will exacerbate flooding in this area of Green Valley Creek.

**Response**: Analysis from ENGEO confirms that the existing capacity of the Alameda Diablo culvert is approximately 1,700 cubic feet per second (cfs) assuming approximately 7 feet of vertical difference between the top of pipe and the top of Diablo Road. Contra Costa County has reported a 100-year recurrence interval peak flow rate of approximately 1,850 cubic feet per second in the creek in this area. Thus, the existing culvert has capacity to transmit approximately 90% of the 100-year peak flow before overtopping Diablo Road.

As required by law and as demonstrated in the hydrologic modeling performed by ENGEO, the project would not increase peak flow rates downstream of the development area and in the area of the Alameda Diablo culvert along Green Valley Creek. Thus, while extreme events may currently cause overtopping of Diablo Road at the Alameda Diablo Road culvert, implementation of the project would have no impact on flooding in this area. Therefore, the project is not required to mitigate for impacts that it does not create. While it is not a required mitigation, the applicant has agreed to contribute toward the repair of the existing culvert as a condition of approval for the proposed project.

The project is proposing to relocate a storm drain outfall following consultation with resource agencies and immediate project neighbors. The storm drain outfall was originally located near the intersection of the proposed Charolais Court and emergency vehicle access (EVA) road. The outfall is proposed to be relocated approximately 1,000 feet downstream, closer to the intersection of Diablo Road and the proposed EVA Road. The relocated outfall would discharge in the same general location as the proposed project detention basin. ENGEO performed a hydrologic analysis for the relocated outfall, which is contained in Attachment C.

The results of the analysis provided in Attachment C indicate that the timing of project stormwater discharges into the creek would not coincide with the timing of peak discharges from the Green Valley Creek watershed and, therefore, would not increase peak flow discharges downstream of the proposed project.

Please refer to Section 3.0 for revisions related to the project's storm drainage plan. These revisions do not alter the responses or the impact conclusions of the RDEIR.

**Comment**: The project would exacerbate downstream erosion.

**Response**: The project would be subject to current Contra Costa County Clean Water Program standards, which include conformance to watershed hydromodification requirements. These standards require new development projects to slowly meter smaller flows (i.e., stormwater flows caused by rainfall events between 10% of the 2-year recurrence interval storm up to the 10-year recurrence interval storm) specifically to mitigate erosion potential downstream of the project in the project watershed. This requirement has been in effect in Contra Costa County since 2006 and is a far more rigorous hydrologic mandate than that previously imposed on similar past developments in the Green Valley Creek watershed. Given that peak flows would not increase with implementation of the detention basin and that smaller erosive flows would be addressed through hydromodification controls, potential impacts to downstream receiving waters would be less than significant.

### 2.4.6 Master Response to Alternatives Comments

**Comment**: Two commenters question the selection of project alternatives addressed in the RDEIR.

**Response**: The alternatives evaluated in the RDEIR are modeled on those evaluated in the 2013 EIR. The 2013 EIR analyzed the following alternatives:

1. No Project/No Build
2. No Project/Build without Subdivision (7 residential lots)
3. More Clustered Alternative/Minimum 5,000 SF Lots (78 residential lots)
4. Non-Clustered Alternative (78 residential lots)
5. Modified Design Alternative/20,000 SF Lots (66 residential lots)

The 2013 EIR also addressed two zoning alternatives suggested by commenters that would reduce units by allowing nine homes on 20-acre lots in the area currently zoned Agricultural, along with a reduced number of clustered residences elsewhere on the property. These commenters challenged the 2013 EIR's range of alternatives and the Town's responses to their proposed alternatives. The courts rejected that challenge.

The RDEIR includes the same alternatives previously studied, with two alterations to reflect changes in the proposed project. The RDEIR alternatives are as follows:

1. No Project/No Build
2. No Project/Build without Subdivision (7 residential lots)
3. More Clustered Alternative/Minimum 5,000 SF lots (69 residential lots)
4. Non-Clustered Alternative (78 residential lots, no zoning change)

For the RDEIR, the Town revised Alternative 3 from the 2013 EIR to include 69 rather than 78 lots in order to isolate the effects of reduced lot sizes compared to the currently proposed 69-unit project. The Town did not consider Alternative 5 from the 2013 EIR because 1) the proposed

project no longer includes custom lots, 2) 20,000-square-foot lots would increase the proposed project footprint impacts, and 3) the number of single-family units in this Alternative is virtually identical to the proposed project's 69 units.

As in 2013, the commenter suggests mechanisms for reducing the proposed project's unit count, either directly or by manipulating zoning in an explicit effort to reduce the number of residences that could feasibly be constructed. As in 2013, such alternatives are not necessary to provide a reasonable range of alternatives to the proposed project.

One of these comments suggests an alternative directly calculated to eliminate the proposed project's significant congestion impact at the Diablo Road/Mt. Diablo Scenic Boulevard intersection and asks how many of the proposed project units would need to be eliminated in order to avoid that significant impact. Congestion at this intersection is already at an unacceptable LOS E in the AM peak hour and LOS F at the school peak hour, fulfilling the prediction of the 2013 EIR that traffic congestion would deteriorate over time with or without the project. Because of that background deterioration, the addition of project traffic now results in a project-level impact rather than only a cumulative impact. Thus, the project will be required to fully fund and construct signalization of the intersection if Contra Costa County approves the proposed signal, as it is currently considering. If there were a project alternative that would not trigger a significant impact at the intersection, the alternative would not be required to fully fund signalization but rather would be required to make a smaller "fair share" payment toward potential future signalization if additional funds could be obtained. Signalization would improve operations at this intersection to LOS C or better at all peak hours, without causing significant congestion impacts elsewhere. See also the Master Response in Section 2.4.1 regarding traffic.

The commenter's second suggested alternative is essentially the same as the alternative proposed in 2013 (nine 20-acre parcels on land currently zoned Agricultural, with small clusters elsewhere on the site). The comment adds details to the previously suggested alternative in addition to an explicit goal of rendering most of the purportedly permitted development under the alternative infeasible, due to cost and topography.

Maintaining the existing A-2; General Agricultural District (five acre lot minimum) and A-4; Agricultural Preserve District (twenty acre lot minimum) would not provide for the clustering of potential development to a limited number of areas or result in the bulk of the site being set aside as permanent open space. This approach would also lead to more visible hillside development, impacting the views and vistas from Diablo Road.

Comments also stated that some of the residences build on the property could be accessed from Camino Tassajara to the south. This is not the case, as the Magee property has no legal access right to Camino Tassajara. Also, additional new driveway connections onto Diablo Road would add vehicular conflicts and reduce bicycle safety. Finally, through previous study, the Town found that it is infeasible to construct a signalized intersection at Clydesdale, including the addition of turn lanes, due to constraints posed by the adjacent creek and numerous mature oak trees.

Comments also suggested that spreading the proposed lots out would reduce bike safety issues. Leaving aside the other potential environmental impacts of such a plan (see above), this suggestion would actually have the potential for making both vehicular and bicycle travel more difficult. The BLOS methodology looks at the number of driveways and intersections as a factor in evaluating bike safety. The greater the number of such conflict points, the less safe the main route potentially is. This was a factor in the Town's initial review of the 2013 proposal because this earlier proposal included multiple driveways along Diablo Road, adding to the potential for vehicular conflicts associated with turning movements into and out of the project site.

The commenter suggests that the three "Magee West" residential lots be eliminated to avoid localized traffic impacts from these three lots. As stated in the RDEIR, however, no significant traffic impacts would result from these three residences (RDEIR pp. 4.3-42 to 4.3-44), and the proposed project includes implementation of the required striping plan on McCauley Road and the required improvements to the Diablo Road/McCauley Road/Green Valley Road intersection (RDEIR p. 4.3-32).

In addition to suggesting new alternatives, two commenters suggest that Alternative 4, the Non-Clustered Alternative, should not be included in the RDEIR. As noted above, this Alternative was included in the 2013 EIR, whose range of alternatives was approved by the courts. As stated in the RDEIR, this Alternative was included in response to public comments asserting that an alternative that did not require any zoning change on the property should be considered. As noted above, the non-clustered alternative would not fulfill the project objectives of clustering development and creating a large open space preserve on the project site.

### 2.4.7 Master Response to Wildfire and Emergency Access/Evacuation Comments

**Comment:** A number of comments were received raising concerns related to emergency access and evacuation along the Diablo/Blackhawk Road corridor from existing traffic combined with incremental increases in traffic from the project. Some comments also raised concerns regarding potential wildland fire hazards.

**Response**: Appendix A of the RDEIR addresses wildfire (see Section VII.g). This discussion notes that the San Ramon Valley Fire Protection District was contacted and confirmed its ability to respond to fires at and near the project site. In addition, the project would add a street south of Blackhawk Road neighborhoods and an emergency-vehicle-accessible one-half mile trail south of Diablo Road, connecting to an existing emergency vehicle access, thus adding a parallel emergency route through the project site. The Fire District has indicated that the existing roadway network is sufficient to accommodate emergency vehicles and meets minimum roadway standards. If vehicle access were impaired during an emergency or evacuation, the Fire District would be able to respond to the emergency from a number of different stations and could utilize a network of fire access trails in adjacent open space areas for emergency response purposes.

Appendix A also refers to the 2013 Magee Ranch Final EIR, which explains that the risk of spread of a wildland fire would be reduced through new emergency access as well as requirements for Class-A rated fire-resistant roofs, defensible space, vegetation management, roadway widths, turning radii, fire flow requirements, fire hydrant locations, and other requirements.

### 2.4.8 Master Responses to Biological Comments

**Comment**: Several commenters identified concerns regarding the presence and protection of biological resources on the project site. Comments specifically questioned impacts to special status species and habitat, including the riparian habitat, oak trees, and the wildlife corridor.

**Response**: As described in Appendix A of the RDEIR, the 2013 EIR found that impacts to biological resources (including special-status wildlife species) could be affected by the project and identified mitigation measures to reduce the potential impacts to less-than-significant. This analysis was based on a comprehensive biological evaluation prepared by Live Oak Associates. The analysis, particularly with respect to the California red-legged frog, was challenged in litigation, but the court upheld the EIR's analysis.

In May and June of 2017, field surveys by Live Oak Associates verified that the habitats on the project site are unchanged.

The biological assessment prepared by Live Oaks Associates includes a detailed description of the East Branch of Green Valley Creek riparian corridor, and the formal tree survey completed by HortScience (2017) shows the location of all trees occurring along the creek corridor. Mitigation Measures 4.4-12 and 4.4-13 include removal and replacement of an existing bridge, creek restoration, restoration of riparian woodland, replacement of wetland and riparian habitat at a 1:1 replacement-to-loss ratio, preparation of an on-site habitat mitigation and monitoring plan, and acquisition and compliance with all applicable permits to minimize impacts to riparian habitat. In addition, Mitigation Measures 4.4-14 through 4.4-17would require the applicant to protect trees to be retained from construction damage, to replace all trees removed (at specified ratios) and implement a monitoring plan for the replacement trees. With these mitigation measures, the project's impacts from tree removals were found to be less-than-significant.

## 2.5 INDIVIDUAL COMMENT RESPONSES

Following are the responses to individual comments received on the RDEIR.

Contra Costa County
Public Works
Department

Brian M. Balbas, Director
Deputy Directors
Stephen Kowalewski, Chief
Mike Carlson
Warren Lai
Carrie Ricci
Joe Yee

October 15, 2018

Town of Danville
Attention: David T. Crompton, Principal Planner
Development Services Department – Planning Division
510 La Gonda Way
Danville, CA 94526

RE: Magee Preserve Revised DEIR

Dear Mr. Crompton:

We have reviewed the Revised Draft Environmental Impact Report (DEIR) for the Magee Preserve Project and provide the following comments:

1. The main subdivision entrance is located on Blackhawk Road at proposed future intersection with Appaloosa Street. The County is interested in safety measures to assure pedestrians and bicyclists can cross to the existing path or bike lanes on the north side of Blackhawk Road. Please describe more particularly what type of "Supplemental flashing beacon treatment" that is proposed at the intersection. We recommend that the Town require installation of a system such as the High-Intensity Activated crosswalk beacon (HAWK) on such a high-volume high-speed arterial. The applicant should be required to submit plans for the proposed intersection to the County for review and approval by the County through our Road Encroachment Permit or Road Acceptance process. A

2. The County agrees that mitigation measure 4.3-1, improvements to intersection operations at Blackhawk Road/Diablo Road/Mount Diablo Scenic, should be implemented with the project. The Town should require the applicant to work with the Contra Costa County Public Works Department and submit intersection improvement plans to the County for review and approval and obtain the necessary encroachment permits. The DEIR indicates that the applicant should pay for the installation of a traffic signal; however, the County prefers that the applicant install the signal so that mitigations can be implemented at the time of the project. The County requests that as a precursor to signalization of intersection, the developer conduct a study to determine if a roundabout would be effective at this intersection. B

3. The traffic impact analysis identifies that the Stone Valley/Green Valley Road intersection currently operates at LOS F. The project will increase delay at the intersection of Stone Valley and Green Valley Roads by 12 seconds during the AM peak and 10 seconds in the school PM peak for the existing plus project condition and delay will increase by approximately 13 seconds in the cumulative plus project condition. This delay represents an increase in delay over 5% at a high volume intersection adjacent to Monte Vista High School. We recognize that the increase in delay does not meet the Town's threshold of significant impact, but we encourage the developer to explore non-infrastructure measures to increase the efficiency of movements through this highly congested intersection. C

Should you have any questions, please contact me at (925) 313-2327.

Sincerely,

Mary Halle

Mary Halle
Senior Civil Engineer
Transportation Engineering

MH:ET:sr
G:\transeng\EIR\Danville\Magee Preserve DEIR comments.docx
c: M. Carlson, Deputy Public Works Director
J. Fahy, Division Manager, Transportation Engineering

## 1: RESPONSE TO CONTRA COSTA COUNTY PUBLIC WORKS DEPARTMENT

**1A:** Please refer to the Master Responses in Section 2.4.1 regarding the type of supplemental flashing beacon that the Town recommends. The design and construction of pedestrian crossing improvements on Blackhawk Road at the project entrance shall meet the requirements and approvals of Contra Costa County and the Town of Danville. The project applicant will be required to consult with Contra Costa County and Town of Danville staff as appropriate during preliminary design phases of the proposed improvements and shall comply with the Contra Costa County Public Works Department's plan review and encroachment permit processes.

**1B:** Please refer to the Master Responses in Section 2.4.1 regarding analysis of traffic signalization or a roundabout at the intersection of Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard.

**1C:** The RDEIR identifies that the intersection of Green Valley Road/Stone Valley Road operates unacceptably under existing conditions during AM, School PM, and PM peak hour periods. However, the project's contribution to increases in vehicle delay at this intersection does not exceed the Town's threshold of significance. In consideration of the close proximity of Monte Vista High School to the intersection, opportunities for non-infrastructure implementation measures that would contribute to mitigating vehicle delay could include reducing vehicular trips to Monte Vista High School through carpool, rideshare and transit opportunities. These measures could be leveraged through subsidies for utilization of the 511 Contra Costa Transportation Demand Management Program's High School Carpool to School Incentive and Student Transit Ticket programs and the San Ramon Valley's TRAFFIX Program - a student transportation/congestion relief program that serves schools along the Diablo Road/Green Valley Road corridor including Monte Vista High School. The project applicant has agreed to provide $30,000 in funding that could be used to subsidize any or all of the programs described above.

CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION
651 Pine Street, Sixth Floor • Martinez, CA 94553-1229
e-mail: LTexe@lafco.cccounty.us
(925) 335-1094 • (925) 646-1228 FAX

October 12, 2018

David Crompton, Principal Planner
Town of Danville
510 La Gonda Way
Danville, CA 94526

**SUBJECT: Notice of Availability for the Revised Draft Environmental Impact Report (RDEIR) for the Magee Preserve Residential Development Project**

Dear David:

Thank you for including the Contra Costa Local Agency Formation Commission (LAFCO) in the environmental review process for the proposed Magee Preserve Residential Development project.

We understand that the project includes development of 29± acres of the 410-acre project site with 69 single family homes and seven attached secondary dwelling units; and that approximately 381± acres of the project site would be retained as permanent open space. Further, that the project would rezone the 410-acre property from A-4 (Agricultural Preserve District), A-2 (General Agricultural District), and P-1 (Planned Unit Development District) to a new P-1 (Planned Unit Development District) and would subdivide the property to create 69 single family parcels.

As noted in the Town's Notice of Availability, the RDEIR identifies significant environmental impacts with respect to light and glare; biological resources; unknown cultural resources; geology and soils; hazards and hazardous materials; surface water quality; schools; traffic congestion; and utilities. The RDEIR identifies mitigation measures to address the significant impacts.

As noted in the 2017 LAFCO comment letter that we submitted in response to the Town's Notice of Preparation (attached), LAFCO expressed concern regarding the absence of reference in the Town's CEQA document to the LAFCO definitions of agricultural lands (Gov. Code §56016), prime agricultural land (Gov. Code §56064), and/or open space (Gov. Code §56059), or to LAFCO's recently adopted Agricultural and Open Space Preservation Policy (AOSPP). Our prior comment letter noted that the EIR should expand on its discussion of potential effects on agricultural resources by providing an assessment based on the definition of "prime agricultural lands" as provided in §56064 of Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH"); and that failure to address impacts to agricultural resources under CKH definitions could render the Town's EIR deficient for LAFCO purposes. A

We continue to urge the Town to include an analysis of agricultural resources consistent with the definitions provided in CKH and include an assessment of the project in relation to LAFCO's AOSPP. Our concern regarding this issue was addressed, at least in part, in the Town's Final EIR for the prior project. The response to our comment at that time was that the project site does not qualify as prime land for livestock production per the USDA Handbook criteria (one animal unit per acre), since, as stated in the Responses to Comments, the average stocking rate for grazing operations on the project site is one cow per 10 acres. If this fact remains true, it should be included in the RDEIR.

A - Cont'd

LAFCO applications that involve impacts to agricultural and/or open space lands must provide a detailed assessment and measures to mitigate impacts as required by LAFCO's policies. It is desirable for LAFCO, as a Responsible Agency, to also have analysis in the CEQA document to support this required assessment.

As a Responsible Agency pursuant to the California Environmental Quality Act (CEQA), LAFCO will need to rely on the Town's environmental document for this project in consideration of the needed boundary changes which include annexation to the East Bay Municipal Utility District (EBMUD) for water service and to the Central Contra Costa Sanitary District (CCCSD) for wastewater services.

B

Thank you for your consideration of our comments and questions. Please contact the LAFCO office if you have any questions.

Sincerely,

Lou Ann Texeira
Executive Officer

c: LAFCO Planner

Attachment – LAFCO's 2017 Comment Letter – Magee Ranches Project

## 2: RESPONSE TO CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION

**2A:** Appendix A of the RDEIR, analyzes potential impacts to agricultural resources using the Town's significance thresholds, which are the same as those identified in the CEQA Guidelines. The analysis shows that the proposed project would not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use and would not conflict with existing zoning for agricultural use or any Williamson Act contract.

Contra Costa County LAFCO requests that the EIR refer to Government Code definitions or agricultural lands, prime agricultural land, open space, and LAFCO's Agricultural and Open Space Preservation Policy (AOSPP). The Town has reviewed the AOSPP, which includes the Government Code provisions cited in LAFCO's comment letter. If the Town approves the proposed Magee Preserve project, it is acknowledged that the application to LAFCO for annexation to EBMUD and CCCSD of the 29-acre development portion of the project site would require that the applicable items listed in the AOSPP be addressed. The AOSPP does not state or imply that its provisions should be addressed in CEQA documents as well as in applications for annexation.

LAFCO also comments that its concern would partially be addressed if the Town confirmed that the project site continues not to constitute prime land for livestock production per the USDA Handbook criteria (one animal unit per acre). The Town has confirmed with the current property owner and grazing operator that the average stocking rate for grazing operations on the project site is one cow per 10 acres (personal communication, J. Magee to D. Crompton, March 2019). Therefore, the project site continues not to constitute prime grazing land or any other category of prime agricultural land.

In addition, grazing operations would continue indefinitely on much of the site within the 381-acre open space area under the proposed project. To support continued grazing operations, the project applicant would replace the property owner's existing corral with a new corral.

EAST BAY
MUNICIPAL UTILITY DISTRICT

September 28, 2018

David Crompton, Principal Planner
Town of Danville, Planning Division
510 La Gonda Way
Danville, CA 94526

Re: Notice of Availability of a Revised Draft Environmental Impact Report
Magee Preserve Project, Danville

Dear Mr. Crompton:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Availability of a Revised Draft Environmental Impact Report (EIR) for Magee Preserve Project located in the Town of Danville. EBMUD commented on the Notice of Preparation of the Revised EIR for the project on September 11, 2017. EBMUD's original comments (see enclosure) still apply.

If you have any questions concerning this response, please contact Timothy R. McGowan, Senior Civil Engineer, Major Facilities Planning Section at (510) 287-1981.

Sincerely,

David J. Rehnstrom
Manager of Water Distribution Planning

DJR:KKN:dks
sb18_164.doc

Enclosure: Letter to Town of Danville from EBMUD dated September 11, 2017

cc: Davidon Homes
Attention: Steve Abbs
1600 South Main Street, Suite 150
Walnut Creek, CA 94596

Ruggeri-Jensen-Azar
Attention: Kirk Myers
4690 Chabot Drive, Suite 200
Pleasanton, CA 94588



Recycled Paper

EAST BAY
MUNICIPAL UTILITY DISTRICT

September 11, 2017

David Crompton, Principal Planner
Town of Danville, Planning Division
510 La Gonda Way
Danville, CA 94526

Re: Notice of Preparation of the Revised Environmental Impact Report for the Magee Ranches Project, Danville

Dear Mr. Crompton:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Preparation of the Revised Environmental Impact Report for the Magee Ranches Project located in the Town of Danville (Town). EBMUD has the following comments.

**GENERAL**

EBMUD owns and maintains four EBMUD rights-of-way (R/W) located within the boundary of this project including R/W 1581 that is an access road to EBMUD's Green Valley Reservoir, R/W 1580-A that is an access road to EBMUD's Diablo Reservoir, which is scheduled to be rebuilt between 2021 and 2023, R/W 1580-B that has a 20-inch water distribution pipeline, and R/W 3998 that has a 12-inch water distribution pipeline. The integrity of these rights-of-way needs to be maintained at all times. Any proposed construction activity, including proposed grading, within the rights-of-way will need to be coordinated with EBMUD and may require relocation of the rights-of-way, at the project sponsor's expense. No buildings, trees, or structures, including decorative pavements, shall be constructed in EBMUD's rights-of-way unless specific approval is given by EBMUD. A

Although the entire development is located within EBMUD's Ultimate Service Boundary, only part of the development (Parcels 48 – 58 and Parcel 60) is located within EBMUD's current service area. The remaining portion of the development (Parcels 1 – 47, Parcel 59, and Parcels 61 – 69) is located outside EBMUD's current service area and would need to be annexed into EBMUD's current service area before receiving water service from EBMUD. Please note that EBMUD will not deliver water to any annexed property until a formal approval is issued by the U.S. Bureau of Reclamation. A description of the requirements pertaining to annexation is enclosed. The project sponsor should contact the Contra Costa County Local Agency Formation Commission (LAFCO) to apply for annexation. B

## WATER SERVICE

EBMUD's Diablo Pressure Zone, with a service elevation between 450 and 650 feet, will serve Magee West, and EBMUD's Scenic Pressure Zone, with a service elevation between 650 and 850 feet, will serve Magee East. Main extensions, at the project sponsor's expense, will be required to serve the proposed development. Off-site pipeline improvements, also at the project sponsor's expense, may be required to serve the proposed development. Off-site pipeline improvements include, but are not limited to, replacement of existing pipelines to the project site. When the development plans are finalized, the project sponsor should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions for providing water service to the proposed development. Engineering and installation of water mains, off-site pipeline improvements, and services require substantial lead time, which should be provided for in the project sponsor's development schedule.

The project sponsor should be aware that EBMUD will not inspect, install or maintain pipeline in contaminated soil or groundwater (if groundwater is present at any time during the year at the depth piping is to be installed) that must be handled as a hazardous waste or that may pose a health and safety risk to construction or maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping in areas where groundwater contaminant concentrations exceed specified limits for discharge to sanitary sewer systems or sewage treatment plants. Applicants for EBMUD services requiring excavation in contaminated areas must submit copies of existing information regarding soil and groundwater quality within or adjacent to the project boundary. In addition, the applicant must provide a legally sufficient, complete and specific written remedial plan establishing the methodology, planning and design of all necessary systems for the removal, treatment, and disposal of all identified contaminated soil and/or groundwater. C

EBMUD will not design the installation of pipelines until such time as soil and groundwater quality data and remediation plans are received and reviewed and will not install pipelines until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exists or the information supplied by the applicant is insufficient, EBMUD may require the applicant to perform sampling and analysis to characterize the soil being excavated and groundwater that may be encountered during excavation or perform such sampling and analysis itself at the applicant's expense.

## WATER CONSERVATION

The proposed project presents an opportunity to incorporate water conservation measures. EBMUD would request that the Town include in its conditions of approval a requirement that the project complies with California Model Water Efficient Landscape Ordinance (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). The project sponsor should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense. D

If you have any questions concerning this response, please contact Timothy R. McGowan, Senior Civil Engineer, Water Service Planning at (510) 287-1981.

Sincerely,

David J. Rehnstrom
Manager of Water Distribution Planning

DJR:TRM:dks
sb17_153

Enclosure: Annexation to EBMUD Current Service Area Requirements

cc: Davidon Homes
Attention: Steve Abbs
1600 South Main Street, Suite 150
Walnut Creek, CA 94596

Ruggeri-Jensen-Azar
Attention: Kirk Myers
4690 Chabot Drive, Suite 200
Pleasanton, CA 94588

## ANNEXATION TO EBMUD CURRENT SERVICE AREA REQUIREMENTS

Changes to EBMUD's water supply commitments, such as supplying water to lands outside EBMUD's existing customer service area, require EBMUD to seek and obtain approval from the U.S. Bureau of Reclamation (USBR), with whom EBMUD has a contract for supplemental water supply in dry years. To support its approval of any expansion of EBMUD's customer service area, USBR requires environmental documentation that extends beyond what is typically needed to meet the CEQA requirements. This documentation is required to satisfy federal environmental laws including the National Environmental Protection Act (NEPA), the Endangered Species Act (ESA), and Section 106 of the National Historic Preservation Act (NHPA). EBMUD will require any developer requesting annexation to provide such documentation, which EBMUD will use to support its request for USBR's consent to the provision of water service to the annexed area. In evaluating the adequacy of this environmental documentation, USBR typically consults with other federal agencies, including the U.S. Fish and Wildlife Service. In situations where the U.S. Army Corps of Engineers (Corps), in fulfilling its obligations for issuing permits and documenting environmental impacts under the Clean Water Act, ESA, NEPA and other federal environmental laws, USBR has indicated to EBMUD that it would prefer that the Corps complete all of its requirements under these laws, after which USBR would augment the documentation only as necessary to fulfill its own requirements to support the expansion of EBMUD's customer service area.

Since documentation that fulfills CEQA requirements is generally also sufficient to meet the majority of NEPA requirements, it is advisable when undertaking work to satisfy CEQA to also be cognizant of the parallel NEPA requirements as well as those NEPA requirements that go beyond CEQA requirements. Early discussions with EBMUD in this regard are highly recommended.

Because the NHPA Section 106 requirements are generally less well understood than other environmental requirements under USBR's purview, guidelines have been issued for conducting studies and preparing documentation to address these requirements. In particular, USBR requires a stand-alone report addressing Section 106 requirements. EBMUD will review the developers' Section 106 report and submit it for USBR's approval. Once satisfied with the Section 106 report, USBR may forward it to the State Historic Preservation Officer for approval.

It is important to note that EBMUD's Central Valley Project water supply contract requires payment of USBR's costs incurred to review the relevant documentation supporting any annexation request and to fulfill its own documentation responsibilities under the applicable federal laws. EBMUD requires the developer of any proposed annexation to reimburse EBMUD for these costs. Once a developer approaches EBMUD for annexation approval, EBMUD will require the developer to enter into an agreement (or separate agreements, if necessary) to advance sufficient funds for any related studies or work, including CEQA documentation if necessary, as well as the USBR costs that will be charged to EBMUD.

Charges and agreements related to the installation of water delivery facilities and connections are subject to EBMUD's Regulations Governing Water Service to Customers of EBMUD.

## 3: RESPONSE TO EAST BAY MUNICIPAL UTILITY DISTRICT

This comment letter, dated 11/11/17 and resubmitted as an RDEIR comment, consists of EBMUD's response the RDEIR NOP for the project.

**3A:** Water services are addressed in Appendix A of the RDEIR, pages 63-66. As requested, if the project is approved the applicant will be required to coordinate with EBMUD on all proposed construction activity within the EBMUD facility rights-of-way.

**3B:** If the Town approves the proposed project, it is acknowledged that an application to LAFCO for annexation to EBMUD and CCCSD of the 29-acre development portion of the project site would be required. See also Response 2A and 3C.

**3C:** The RDEIR description of water service (Appendix A, p. 64) is consistent with EBMUD's description in this comment. The Town acknowledges the standard EBMUD requirements described in this comment.

**3D:** If the project is approved, the Town will include in its conditions of approval the existing legal requirement that the project comply with the California Model Water Efficient Landscape Ordinance (Title 23 CCR).



East Bay Regional Park District

2950 PERALTA OAKS COURT P.O. BOX 5381 OAKLAND CALIFORNIA 94605-0381 T: 1-888-EBPARKS F: 510-569-4319 TRS RELAY: 711 WWW.EBPARKS.ORG

October 11, 2018

David Crompton
Principal Planner
Town of Danville
510 La Gonda Way
Danville, CA 94526

Sent via regular mail and e-mail to dcrompton@danville.ca.gov on October 11, 2018

**RE: Comments on the Revised Draft Environmental Impact Report for the Magee Preserve Project**

Dear Mr. Crompton,

The East Bay Regional Park District (Park District) appreciates the opportunity to provide comments on the 2018 Revised Draft Environmental Impact Report (DEIR) for the Magee Preserve Project (project), located in the Town of Danville off Diablo Road. The project proposes to develop approximately 29 acres of the 410-acre project site property with 69 single family homes. The remaining approximately 381 acres would be preserved as open space used for cattle grazing, habitat preservation and enhancement, and public trails.

The Park District previously provided comments regarding this project on October 2, 2017, in which we suggested addressing pedestrian and bicycle safety, which has now been incorporated into this DEIR, and important trail connections.

The project is located to the north of the Sycamore Valley Open Space Regional Preserve owned and managed by the Park District and is adjacent to protected open space areas managed by local homeowners associations or geological hazard abatement districts. The South Gate entrance to Mount Diablo State Park is located to the north of the property, accessed via Mount Diablo Scenic Boulevard.

In general, the Park District supports the "clustered" development of the proposed project. Clustering the home sites within a smaller footprint on the lower elevations of the property allows for the retention of significant open space that provides greater biodiversity benefits and avoids the need to fragment open space with larger lots or more roads. A

The Park District supports the project's inclusion of trails that will connect Sycamore Valley Open Space Regional Preserve to the protected open space of the project. This will benefit residents throughout the Town of Danville by providing a connection to the Sycamore Valley Preserve to local trails managed by the Town of Danville. The DEIR does address public trails: B

> ***Pedestrian/Bicycle Trail***
> *The project proposes an eight-foot wide pedestrian/bicycle trail in the Magee East portion of the project site. This trail provides access from Blackhawk Road through the panhandle and to the proposed residential portion of Magee East along Green Valley Creek. The trail would connect to the emergency vehicle access road (EVA). The trail, including EVA portion, would be approximately 3,085 feet in length.*

Board of Directors

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> ***Open Space/Hiking Trails***
> *The project proposes to preserve approximately 381 acres of the 410-acre site as permanent open space. As shown in Figures 3.4a and b, portions of existing fire trails are proposed to be granted to the East Bay Regional Park District for use as public trails. In addition, the project would grant an easement to the Town of Danville for construction of a multi-use public trail for pedestrian and cyclists. (2018 DEIR, pg. 3-11)*

B Cont'd

In addition to this language in the DEIR, the Final EIR should note that the existing "Short Ridge Trail" at the western-most border of Sycamore Valley Preserve is considered as a connection to the nearest available project fire road, which creates a continuous trail option for the public between the Preserve and the project.

The Park District agrees with how the DEIR addresses pedestrian and bicycle access and safety at the project's main entrance on Blackhawk Road:

> *A crosswalk is also proposed on the west leg of the intersection of Blackhawk Road & Appaloosa to facilitate north-south pedestrian crossing. Supplemental flashing beacon treatment may also be included to enhance the crossing (2018 DEIR, pg. 3-12, and Figure 3-4a, Detail A).*

C

However, the Park District suggests the Town require as a condition of approval the installation of in-pavement lighting to enable a crossing that will allow connection to the paved pathway located along the north side of Blackhawk Road. This will allow for pedestrian safety and also facilitate non-motorized connections between the Magee Preserve open space/trails and Sycamore Valley Open Space Regional Preserve to Mount Diablo Scenic Boulevard providing access to Mount Diablo State Park. As written now in the DEIR, the crosswalk is "proposed" and the in-pavement lighting is merely suggested.

The project proponent proposes to establish a Geological Hazard Abatement District (GHAD) to own and manage the project "permanent" open space area of approximately 381 acres. The project proponent also proposes that the public trails will be managed by the GHAD or another public or private entity. While the 2013 DEIR included mitigation measure #4.4-4f, which would "Define and identify the GHAD maintenance and management activities to manage the open space habitats…," (2018 DEIR, pg. 2-7), also included mitigation measure #4.4-4g, which would "Define the financial mechanism for the GHAD to manage the open space into perpetuity" (2018 DEIR, pg. 2-8), the 2018 DEIR does not include either this analysis or this definition. The Park District requests that the Final EIR analyze a future GHAD's ability to provide sufficient funding to ensure that the area can be appropriately managed and maintained. Mitigation measures and/or project conditions of approval will need to ensure that an appropriate and sufficient funding mechanism is established to provide for the long-term management and maintenance of the protected open space area and the public trails.

D

Thank you for your review and consideration of our comments. The Park District looks forward to working with the Town of Danville and project applicant on this project. Please send the Park District notices on any future actions regarding this project. If you have any questions or concerns, please contact me at (510) 544-2623, or by e-mail at bholt@ebparks.org.

Respectfully,

Brian W. Holt,
Chief of Planning/GIS

## 4: RESPONSE TO EAST BAY REGIONAL PARK DISTRICT

**4A:** Comments regarding the District's support for the proposed inclusion of trails connecting to the Sycamore Valley Preserve are acknowledged.

**4B:** Revisions have been incorporated into the RDEIR to indicate that the existing Short Ridge Trail at the westernmost border of Sycamore Valley Preserve provides a connection to the nearest available project fire road, as presented in Section 3.0.

**4C:** Please refer to the Master Responses in Section 2.4.1 regarding the proposed crosswalk at Blackhawk Road.

**4D:** As required by law, the GHAD's responsibilities for Magee Preserve would be articulated in a plan of control, prepared by a certified engineering geologist. The plan of control would describe in detail the geologic hazards and locations and include provisions for the prevention, mitigation, abatement, and control of those hazards. The proposed responsibilities for the GHAD with respect to the project would include: 1) maintenance and operation of subdrains and outlets, 2) sediment removal in drainage ditches, 3) maintenance of bioretention areas, 4) sediment removal of storm drain inlets, outlets, and pipelines, 5) slope stabilization, 6) creek bank maintenance and erosion protection, 7) emergency vehicle access road maintenance and resurfacing, 8) mitigation and monitoring responsibilities within the open space/conservation areas, and 9) other activities needed to mitigate potential geologic hazards.

The GHAD would be financed through real property assessments levied on each parcel within the Magee Preserve project (only). An engineer's report would be prepared that explains the cost and expenses of the GHAD. This report would include an annual budget, the proposed estimated assessment to be levied, and a description of the method used in formulating the estimated assessments. The Magee Preserve project would remain in the GHAD in perpetuity.

The GHAD annexation documents (including the plan of control and engineer's report) would be brought before the public through the GHAD annexation process. The GHAD governing board would review and consider the request. The process of annexing into a GHAD will not occur unless the Magee Preserve project is approved by the Town.

**FACILITIES DEVELOPMENT**
3280 Crow Canyon Road, San Ramon, CA 94583
(925) 552-5986 • FAX (925) 328-0560

SAN RAMON VALLEY UNIFIED SCHOOL DISTRICT
Rick Schmitt, Superintendent
699 Old Orchard Drive, Danville, California 94526 · 925.552.5500 · FAX 925.838.3147

September 7, 2018

via email: dcrompton@danville.ca.gov

Town of Danville
Planning Division
Attn: David Crompton, Principal Planner
510 La Gonda Way
Danville, CA 94526

RE: **Magee Preserve (formerly known as Magee Ranches)**
**APNs 202-050-071, 202-050-073,0202-050-078, 202-050-079, 202-050.080, 202-100-017, 202-100-019, 202-100-038, 202-100-040, 215-040-002**

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Listed below are the schools that may serve the subdivision referenced above:

| | |
|---|---|
| Green Valley Elementary School (K-5)<br>1001 Diablo Road, Danville CA 94526 | 925.855.5400 |
| Los Cerros Middle School (6-8)<br>968 Blemer Road, Danville, CA 94526 | 925.855.6800 |
| Monte Vista High School (9-12)<br>3131 Stone Valley Road, Danville CA 94526 | 925.552.2800 |

A

These school assignments may only be in effect for the current school year. Generally, the District's schools are significantly overcrowded. A school may be at capacity at various grade levels, making the possibility of diversions likely at those grade levels.

Consistent with Board Policy 5116, Assignment of Students to Schools, students may be diverted to another school because classes at their grade level have reached maximum size.

Developers need to contact the District at the beginning of each school year for possible amended school assignments.

Sincerely,

Gigi Gines
Facilities Planning Analyst
ggines@srvusd.net
(925) 552-2962

## 5: RESPONSE TO SAN RAMON VALLEY UNIFIED SCHOOL DISTRICT

**5A:** Please refer to the Master Responses in Section 2.4.4 regarding school capacity.

## David Crompton

**From:** Deanne Benjamin <deannebenjamin@yahoo.com>
**Sent:** Monday, October 15, 2018 12:09 PM
**To:** David Crompton; Archie Bowles; Robert Combs; Mark Graham; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; Rob Ewing; Newell Arnerich; Robert Storer; Karen Stepper; Lisa Blackwell; Renee Morgan
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project. ***I am firmly opposed to the Magee Ranches project*** and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more car trips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. A

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. B

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead is designed to benefit only special interests---the developers and landowners. The project will be a very negative change to our community. C

Deanne Andres

Resident of Cameo Acres

## 6: RESPONSE TO DEANNE ANDRES

**6A:** The commenter's opposition to the project is acknowledged. Please refer to the Master Responses in Section 2.4.1 regarding traffic.

**6B:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**6C:** Please refer to the Master Responses in Section 2.4.3 regarding Measure S.

## David Crompton

**From:** jcbaldi@aol.com
**Sent:** Sunday, October 14, 2018 6:08 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project.
I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The project will be a very negative change to our community. A
Respectfully,

Jackie Baldi
55 Headland Court
Danville, CA 94506

## 7: RESPONSE TO JACKIE BALDI

**7A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Bert Barstad <btbarstad@me.com>
**Sent:** Sunday, October 14, 2018 9:34 AM
**To:** David Crompton
**Subject:** Extra Water Runoff from development

When Magee Ranch was first developed there was suppose to be flood control holding ponds built...did not happen and now creek over flows into Diablo backyards. More runoff from development will mean more flooding.....What do you plan to do to control the additional runoff?????
Respectfully, Ted Barstad, 1850 Alameda Diablo, PO Box 834. A

## 8: RESPONSE TO TED BARSTAD

**8A:** The required detention basin for the Magee Ranch Subdivision was in fact constructed, is operational, and is maintained by the Geologic Hazard Abatement District for that subdivision. Please refer to the Master Responses in Section 2.4.5 regarding hydrology.

**David Crompton**

**From:** Leonard S. Becker <lbecker@lsbeckerlaw.com>
**Sent:** Monday, October 15, 2018 4:35 PM
**To:** David Crompton
**Subject:** Comments On The Draft Revised Environmental Impact Report for the Magee Preserve Project

Dear Town of Danville City Council and Planning Commission, and Senior Planner David Crompton:

My name is Leonard S. Becker, I am a practicing attorney with 30 plus years of experience. I live in Diablo, California and as a neighbor I am concerned with the Draft Revised Environmental Impact Report for the Magee Preserve Project.

Please accept this letter as comments on the Draft Revised Environmental Impact Report for the Magee Preserve Project.

Diablo residents are your neighbors. I am a candidate for one of the three open seats on the Diablo Community Services District Board ("DCSD") of Directors. As the attached letter sent to you by the DCSD Board in 2015 attests, pedestrian, bicyclist and motorist safety both on Diablo Road and in our community is of grave concern to the Board and to Diablo residents.

In that three of the four candidates running for election to the Board will be taking seats as of December 7th (when we may be sworn in), I thought it especially important that I share my comments on the Town's draft revised Environmental Impact Report ("DREIR") for the Magee Preserve Project (formerly known as the Magee Ranches Project) with you.

Diablo Road is unsafe for motorists, bicyclists and pedestrians. The Magee Ranches project will add significantly more cartrips to the already congested road, and therefore worsen safety significantly. Before the project is approved, or as a condition for its approval, major bicycle safety improvements must be undertaken on the road. In my view, it is a matter of common sense and public safety. A

Thank you for your consideration.

Sincerely,

Leonard S. Becker, Esq.
LAW OFFICES OF LEONARD S. BECKER
A PROFESSIONAL CORPORATION
1728 B Street
Hayward, CA 94541
P (510) 886-1996
F (510) 538-8089
lbecker@lsbeckerlaw.com
www.lsbeckerlaw.com

This email message and any attachments are confidential. If you are not the intended recipient, please immediately reply to the sender and delete the message from your email system. Thank you.

## 9: RESPONSE TO LEONARD S. BECKER, ESQ. – LAW OFFICES OF LEONARD S. BECKER

**9A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic and Section 2.4.2 regarding bicycle safety.

**David Crompton**

**From:** Jim Brady <jamesstreetbrady@gmail.com>
**Sent:** Monday, October 8, 2018 11:17 AM
**To:** David Crompton; maryann.cella@gmail.com; Newell Arnerich
**Cc:** Debbie410@yahoo.com
**Subject:** Don't Let Danville Become the EBay's Palo Alto -- Do Not rezone Magee Ranch Please

David, Maryann and Newell,

I rarely get involved in community debates but thought I'd offer a perspective...for what it's worth. If you like the quaintness of Danville, you might want to get involved, as well.

I moved to Palo Alto, CA from the east coast in early 2000. It was my first time visiting Northern California, and marveled at the quaintness, charm, and sense of community that permeated everyday life there.

Over time, through ongoing development and population increases under the guise of progress, Palo Alto lost a great deal of its charm. The Palo Alto population between 2000 and 2015 increased 10,000 (to roughly 67k). And additional development took place, as well. Now its streets are crowded, parking is impossible to find at times, and it often takes 40+ minutes to get from the University Ave. 101 exit to Stanford (compared with 15 minutes before…).

It's unrecognizable to the neighborhood I once called home. Yes, the home values have increased — due to a variety of reasons — but at what cost? Three years ago, my wife and I, after living 10 years in San Francisco, decided to raise a family in Danville in Hidden Valley right near Magee ranch. Despite the heavy traffic during rush hour and school open/close, we love it here…the contrast to San Francisco is a welcome change. We have a two-year old now, and while we embrace progress, we're deeply concerned that development around Magee Ranch will open the door to further residential and commercial development, and that Danville will undergo the same erosion that took place in Palo Alto. The traffic at Diablo and McCauley is brutal during rush hours, and this will exacerbate the problem. Many of us commute to SF and Silicon Valley where more jobs are, and the already horrendous commute will worsen the situation. A

Danville is special for its quaintness, natural splendor, open spaces, schools, "downtown," and tremendous sense of community. Why would we risk losing all of this?

Make no mistake Palo Alto transformed from a town into a bustling small city in 15 years. Take a drive through Palo Alto sometime and see for yourself — but be sure to carve out at least a couple of hours. Developing Magee Ranch will open the door to the same thing potentially happening in Danville over time. Danville politicians will be tempted to seize added tax revenue. We need to keep them in check.

Once the door is open to initial development around Magee Ranch, there are no guarantees this will not continue. Once the door opens it will stay that way. Let's prevent Danville from becoming the Palo Alto of the Easy Bay. Let's keep Danville…Danville. The risk-reward does not warrant the development.

James Brady
161 Merano Street (in Hidden Valley, adjacent to Magee Ranch)
Danville, CA 94526

## 10: RESPONSE TO JAMES BRADY

**10A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic. With respect to induced growth, Section 5.1 of the RDEIR explains why the proposed project would not cause significant growth inducement.

## David Crompton

**From:** Ray Brant <r_abrant@sbcglobal.net>
**Sent:** Saturday, October 13, 2018 3:48 PM
**To:** David Crompton
**Subject:** Magee Ranches Project

Mr. Crompton,

I am writing to be sure that the 2 following issues are properly addressed before approving the Magee Ranches Project.

1. That there be bicycle lanes added to diablo Rd. between Green valley Road and Mt. diablo Scenic Blvd. At present the 100,000. bicycles are traversing the very narrow streets of Diablo. A
2. The failing and under sized culvert at Diablo Rd. and Alameda Diablo be replaced. B

Thank you,

Ray & Ann Brant
41 Palma Vista
PO Box 728
Diablo, CA

## 11: RESPONSE TO RAY & ANN BRANT

**11A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety, which include a discussion of the infeasibility of constructing bike lanes along Diablo Road.

**11B:** Please refer to the Master Responses in Section 2.4.5 regarding hydrology.

## David Crompton

**From:** Robert Braunscheidel <rjbraun57@gmail.com>
**Sent:** Sunday, September 16, 2018 6:57 PM
**To:** David Crompton
**Subject:** McGee Ranch Development

Hello David,

My name is Robert Braunscheidel and I live @ 1025 McCauley Road.

I wanted to document that my wife and I are completely opposed to any development of McGee Ranch Open Space and We are disappointed that efforts continue to be made to do so against measure "S" and the public's original wishes. A

We will be voting against any efforts to do so and will be attending the meeting on the 25th.

Rob

Sent from my iPhone

## 12: RESPONSE TO ROBERT BRAUNSCHEIDEL

**12A:** The commenter's opposition to the project is acknowledged. Please refer to the Master Responses in Section 2.4.3 regarding Measure S.

**David Crompton**

**From:** Sally Bryden <sallybok@hotmail.com>
**Sent:** Sunday, September 16, 2018 10:13 AM
**To:** Newell Arnerich
**Subject:** Magee Ranch

I absolutely do not support rezoning of Magee Ranch. It is a lovely quiet place to walk and enjoy. Development is not good for anyone but a person with deep pockets. Please leave this lovely area for all the residents of Danville. A

Sally Bryden
1903 Rancho Verde Cr W. Danville 94526

Sent from Outlook

## 13: RESPONSE TO SALLY BRYDEN

**13A:** The commenter's opposition to the project is acknowledged. The project site is not currently open for public use. If the project is approved, publicly accessed trails both along Green Valley Creek and through the hills (the latter operated by the East Bay Regional Park District) would be provided.

## David Crompton

**From:** Emily <epbusquets@aol.com>
**Sent:** Sunday, September 16, 2018 6:55 PM
**To:** David Crompton
**Subject:** Opposition to development

Hello,

I'm writing to state my opposition to the development of the McGee ranch area. We need to preserve as much open space as we can. And of course the obvious issue would be the horrendous traffic and the impact on safety for bicyclists, pedestrians (including the schools children at Green Valley Elementary) and drivers. There's a lack of infrastructure to support this area as it is, further development would compound this problem. A

Regards,

Emily

Sent from my iPhone

## 14: RESPONSE TO EMILY BUSQUETS

**14A:** Please refer to the Master Responses to Comments in Sections 2.4.1 and 2.4.2 regarding traffic and bicycle safety. The proposed project would permanently preserve 381 acres of the site as open space.

**David Crompton**

**From:** Cat Cale <catcale44@gmail.com>
**Sent:** Sunday, October 14, 2018 9:28 PM
**To:** David Crompton
**Subject:** Wildfire evacuation plans

Mr. Compton,

As we along the Diablo/Blackhawk corridor are in an extreme high fire zone area, what are the safety impacts by adding 69 homes in this area? It will already be a nightmare to evacuate the area with the 2 lane roads.

Has the San Ramon Valley Fire District and the Contra Costa Fire District reviewed the new Magee Preserve development? If yes, what were their comments? A

With the current traffic conditions and the high Fire danger, please consider the emergency evacuation plans for us in the area.

Catherine Cale
213 Still Creek Rd
Danville

Sent from my iPad

## 15: RESPONSE TO CATHERINE CALE

**15A:** Please refer to the Master Response in Section 2.4.7 regarding wildfire and emergency access.

## David Crompton

**From:** Sam Campbell <samcam09@gmail.com>
**Sent:** Sunday, September 16, 2018 8:27 PM
**To:** David Crompton
**Subject:** Magee Preserve

Hi David,

I hope you are well. My wife and I recently moved to Danville and bought our first home in the Diablo Hacienda neighborhood (located off Diablo Rd., just passed Green Valley elementary). Our property line has an easement for a creek, running adjacent to Diablo. We love being able to see the Magee Preserve from our backyard. We've only lived here for two months, but absolutely love the small town feel and beautiful scenery.

One of the main draws to Danville for us was the open space. I am troubled to hear that Magee Preserve is being considered for development. I have reviewed the plans on the City's website and believe the reduction of open space and traffic will outweigh any benefit to the residents of Danville. When we first drove up to our house, we saw cows in the in the open space, and knew that we could have country living in the San Francisco Bay Area. A

I would like to strongly petition your reconsideration of the beautiful space in our backyard. Danville has a certain charm that should not be taken away for more houses. Please

I would be more than happy to share my opinions on the project as a resident who's property back directly up to the beautiful Magee Preserve.

Thank you,
Sam Campbell
(971) 533-1962

## 16: RESPONSE TO SAM CAMPBELL

**16A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic. Regarding views from individual homes, these are not an issue evaluated in the RDEIR because CEQA is concerned with views from public rather than private viewpoints. However, the comment is part of the project record and will be available to decisionmakers. Please also note that under the proposed project, 381 of the project site's 410 acres would be protected as permanent open space, and that cattle would continue to graze in the open space.

## David Crompton

**From:** Maryann Cella <maryann.cella@gmail.com>
**Sent:** Monday, September 24, 2018 9:37 PM
**To:** Randy Haberl; Robert Combs; Mark Graham; Archie Bowles; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik
**Cc:** David Crompton
**Subject:** SOS-Danville Group's comments on the Bicyclist Safety Analysis in the Magee Ranches draft revised EIR
**Attachments:** Diablo Road white line.JPG; Diablo Rd. White line 2.JPG; Midori Tabata Bicyclist Safety comments in the Magee Ranchese 2013 EIR.jpg; email 1.docx; Bicycles May Use Full Lane.docx; Contract C-55b.pdf; Danville Police Speeding and Double Yellow line enforcement Green Valley To Mt. Diablo Scenic.xlsx; DIABLO RD - GREEN VALLEY RD PAVEMENT PROJECT C-511 .pdf; Diablo Rd Bike Collision History (updated 051518).pdf; Proposed Thresholds of Significance for evaluating Bicyclist Safety Impacts from Magee Ranches project.pdf; SWITRS_Townwide Combined Bike Collisions (Updated 0518).pdf; Townwide Bike Collision Summary (051518).pdf

Dear Danville Planning Commission Chairperson Haberl and Commissioners, and Mr. Crompton:

The comments below (in email1.docx) and supporting facts contained in the attachments below and additional emails containing additional supporting documentation (all of which were sent to you on July 2, 2018 by Clelen Tanner) have not been sufficiently considered, or in most instances even considered at all, in the so-called bicyclist safety analysis in the draft revised EIR for the Magee Ranches project. Please let me know if you wish to receive all the additional emails with attached supporting documentation again. David, please enter all those comments and supporting emails previously sent on July 2 into the record as comments on the draft revised EIR for the project.

The draft EIR employs a measurement tool called the Bicycle Level of Service (BLOS), not a bicyclist -safety- impacts-specific analytical tool to assess the negative safety impact from the project's nearly 1000 additional cartrips per day on the bicyclists making more than 100,000 trips per year on the dangerous segment of Diablo Road between Green Valley Road and the project entrance next to Jillian Court. BLOS is simply not appropriate for use in the EIR to assess bicyclist safety impacts. A

Instead of evaluating bicyclist safety, as the Town was ordered to by the California Court of Appeal in SOS-Danville Group v. Danville Town Council, the Town has instead added a new EIR section that evaluates bicycle level of service (BLOS) on several sections of Diablo Road between Green Valley Road and Jillian Court. The EIR concludes that each section is currently rated as BLOS D, which the Town considers acceptable, except for the section between Avenida Nueva and Jillian Court, which the Town rated as BLOS E and thus currently unacceptable to the Town. With the additional project traffic, the EIR states that existing BLOS of D and E will not worsen significantly, and thus it concludes that no bicyclist safety improvements are needed for the Town to approve the Magee Ranches project. That analysis and its conclusions are just plain wrong and do not comply with the Court's order. B

BLOS is not an appropriate tool to measure bicycle safety impacts from the project. BLOS analysis is designed to evaluate subjective bicyclist comfort on urban streets, not bicyclist safety on a rural road like Diablo Road. BLOS considers multiple aspects of a roadway, but only some of them like lane width and auto speed are factors that can affect bicyclist safety. Dangerously low bicyclist C

safety is thus counterbalanced by other factors that positively affect bicyclist comfort to achieve a better BLOS measurement. Moreover, the BLOS fails to consider crucial aspects of bicyclist safety: C Cont'd

1. The BLOS analysis does not address the disproportionate frequency of bicycle accidents on the curvy one-half mile crucial segment of Diablo Road between Green Valley Road and Alameda Diablo. Because the vast majority of bicyclists now divert off of Diablo Road into the Community of Diablo to avoid the most dangerous one mile of Diablo Road between Alameda Diablo and Mt. Diablo Scenic Blvd., almost all of the bicyclist accidents in this area occur on that one-half mile. Between late January 2005 and December 2017, nine reported accidents have occurred (see collision report below; one accident involved 2 bicyclists being hit) on that 1/2 mile (one lane mile). An additional accident occurred in August 2018 at the Diablo Road/Alameda Diablo intersection, subsequent to the Diablo Road Bike collision History prepared by the Town included in the attachments. Those nine accidents represent about 6% of all bicycle accidents in Danville during that time period (143 according to the SWITRS collision report below), a frequency 20 times higher than expected because that one lane mile represents only .3% of the total length of Danville's road system (323.38 lane miles according to Danville's Pavement Management Report, Final Report, dated Feb. 2018). The discrepancy needs discussion. D

2. The BLOS excludes key determinants of bicyclist safety: sight distances (very short on Diablo Road between Green Valley and Jillian Court), slopes (which are sometimes steep on that segment), shoulder width (very narrow or nonexistent on that segment) and the lane widths on the narrowest parts of the segment, which after all resembles a rural two-lane highway and not an urban street like most Danville streets. E

3. The BLOS analysis uses average lane widths and average speeds. Bicyclists and cars do not drive on averages. The specific lane widths, shoulder widths, speeds, slopes, curves, and sight distances, and their interactions, are all important and should have been considered. F

4. BLOS analysis focuses on a bicyclist's subjective "comfort," not his or her perceived or objective safety. It factors in bicyclist delay at intersections, bicyclist running speed and overall travel speed (faster is better). These factors only dilute the bicyclist safety factors. Further, it emphasizes factors that are unimportant on a rural roadway like this, while ignoring factors such as sight distance, shoulder width, curves, and slopes that are much more important on a rural road like Diablo Road. G

In short, the court asked for an analysis of bicycle safety, not BLOS. As an analogy, consider that if a specific bar in Danville had had five murders in a year, the Town would not analyze the overall crime rate in entire Town of Danville to decide if there was a problem. It would look at murders at that bar. The same applies here. BLOS might be an appropriate metric for bicyclist comfort in the Town of Danville as a whole. It is inadequate to assess bicyclist safety on Diablo Road, or the effect this project's additional traffic will have on bicyclist safety there. The draft revised EIR does not satisfy the Court's order that bicyclist safety----not bicyclist level of service----be fairly addressed prior to any approval of the Magee Ranches project. H

Thank you for your consideration.

Sincerely,
Maryann Cella
SOS-Danville Group

---------- Forwarded message ---------
From: **Clelen Tanner** <foothilldental@sbcglobal.net>
Date: Mon, Jul 2, 2018 at 4:05 PM
Subject: #1: Upcoming Magee Ranches Project EIR and Essential Diablo Road Facts for Assessment of Project Impacts.
To: Renee Morgan <rmorgan@danville.ca.gov>, Karen Stepper <kstepper@danville.ca.gov>, Robert Storer <rstorer@danville.ca.gov>, Lisa Blackwell <lblackwell@danville.ca.gov>, Rob Ewing <rewing@danville.ca.gov>, abowles@danville.ca.gov <abowles@danville.ca.gov>, Robert Combs <robert@combsteam.com>, Kerri Heusler <kerribw@gmail.com>, Paul Radich <pradich@danville.ca.gov>, mgraham@danville.ca.gov <mgraham@danville.ca.gov>, David Crompton <dcrompton@danville.ca.gov>, averriere@danville.ca.gov <averriere@danville.ca.gov>, rhaberl@danville.ca.gov <rhaberl@danville.ca.gov>, dhavlik@danville.ca.gov <dhavlik@danville.ca.gov>, Newell Arnerich <arnerich@danville.ca.gov>, Kevin Gailey <kgailey@danville.ca.gov>, Tai Williams <twilliams@danville.ca.gov>, Andrew Dillard <adillard@danville.ca.gov>
Cc: sabbs@davidonnewhomes.com <sabbs@davidonnewhomes.com>, lhumble@ddaplanning.com <lhumble@ddaplanning.com>, trevor.macenski@stantec.com <trevor.macenski@stantec.com>, Al Kalin <alankalin@yahoo.com>, diablojeff@sbcglobal.net <diablojeff@sbcglobal.net>, markm@diablodocs.com <markm@diablodocs.com>, Daniel Borenstein <dborenstein@bayareanewsgroup.com>, Jeremy Walsh <jwalsh@embarcaderopublishing.com>, dcuff@bayareanewsgroup.com <dcuff@bayareanewsgroup.com>, Dave Campbell <dave@bikeeastbay.org>, Dave Snyder <dave@calbike.org>, Steve Whelan <s.whelan@icloud.com>, b-bpowers@valleyspokesmen.org <b-bpowers@valleyspokesmen.org>, jtgallag@gmail.com <jtgallag@gmail.com>, r_abrant@sbcglobal.net <r_abrant@sbcglobal.net>

Please see the attachment document and supporting materials for the main details of this message related to Magee Ranches Project EIR and essential Diablo Rd. facts for assessment of project impacts. This is the first of multiple emails and photo support being sent of all of you.

1 document
11 supporting material



**David Crompton**

**From:** Midori Tabata <midori.tabata@gmail.com>
**Sent:** Tuesday, June 11, 2013 5:19 PM
**To:** David Crompton
**Subject:** Safe biking through Diablo

David,
I am a recreational as well as utilitarian rider. I have ridden up Mt. Diablo numerous times. My bicycle club, the Oakland Yellowjackets official route is Diablo Rd to Diablo Scenic Rd. We try to maintain order by asking everyone to be careful and to ride single file. It is a route that is used by many, including many bicyclists. I understand the concern that the citizens of Diablo have about bicycle riders through their neighborhoods. Please facilitate improvements on Diablo Rd so that cyclists and drivers can share the road safely. At minimum, setting the speed limit to 25 and enforcing it would help. If the road can be widened to allow for wider shoulders, all the better. Any more improvements would be wonderful. As Robert Raburn, the former director of the East Bay Bicycle Coalition and now Bart board member says, you are much more likely to survive a crash with a vehicle at 25 miles per hour than at 35 miles per hour. Thank you.

Midori Tabata
Also member of the Alameda County Transportation Commission Bicycle Pedestrian Advisory Committee (BPAC), the Oakland BPAC, EBBC, Walk Oakland Bike Oakland

July 1, 2018

To:

Fr:

RE: **FIRST OF MULTIPLE EMAILS (#1, #2, #3A, #3B, #4A, #4B, #5A, #5B, #5C, #6, #7A, #7B, #8, #9)**

Dear Town of Danville Council members, Planning Commissioners, and staff; Magee Ranches project EIR consultant Leann Humble; and Steve Abbs, Davidon Homes Magee Ranches project manager:

As you know, pursuant to court order in SOS-Danville Group v. Danville Town Council, the Town is revising the EIR for the Magee Ranches project. This email addresses concerns of SOS-Danville Group that (1) the Town will again fail to perform a proper CEQA review because the Town misunderstands the CEQA process, and is mischaracterizing the purposes of the lawsuit; and that (2) the Town is ignoring essential, accurate facts involving bicyclist safety that must be addressed in performing the court-ordered CEQA review, and in providing appropriate mitigation as part of any re-approval of the Magee Ranches project.

We also note that due to the imminent dangers posed by hazardous conditions on Diablo Road, there ***needs to be immediate action to improve bicyclist safety through easily-accomplished means***.

Portions of this letter are based on input from traffic safety consultant and bicycling educator John Ciccarelli, principal of Bicycle Solutions (San Francisco). The input includes descriptions of signs and markings contained in the Manual on Uniform Traffic Control Devices (MUTCD), an engineering FAQ item posted by the U.S. Federal Highway Administration (FHWA), and certain options for improvements to Diablo Road.

**1. STAFF MUST DO A PROPER CEQA REVIEW, which requires that staff UNDERSTAND THE CEQA PROCESS and RECOGNIZE the fact that THE LACK OF MITIGATION FOR IMPACTS WAS THE REASON AND THE BASIS FOR THE CEQA LAWSUIT.**

1-A

We are very concerned that the **Town staff misunderstands the process** it needs to go through to comply with the Court's order, which was enforcing the California Environmental Quality Act ("CEQA"), and that staff has **mischaracterized the purposes** of the SOS-Danville v. Danville Town Council lawsuit.

**A**. **THE CEQA-MANDATED PROCESS**. In an October 2017 email to a local bicyclist , (please click on the link below)

**Tai Williams email to Alan Kalin regarding cour...**

a Town official described the Town's current EIR revision process as merely backfilling: providing the court with "additional documentation to support our conclusion that the project would not have a significant impact on bicycle safety."

The official appears to be saying that "no significant impact" is a foregone conclusion in the revised EIR. That makes a mockery of the entire California Environmental Quality Act ("CEQA") process and the court's order. In its previous EIR, the Town had *zero facts* supporting its conclusion that an additional nearly 1000 more car trips per day in the dangerous Diablo/Blackhawk Road corridor would have no significant impact on bicycle safety. Because there were *zero facts*, the conclusion was meaningless. The court required the Town to rescind its approval of the project and the EIR so it could correctly go through the CEQA process **to fairly assess and if necessary provide improvements to mitigate the negative bicyclist safety impacts** from the additional nearly 1000 more car trips per day the Magee Ranches project would generate in the Diablo/Blackhawk Road corridor.

1-A Cont'd

**Here is the process that CEQA requires**:

1). Choose an objective "threshold of significance" to measure whether the additional traffic from the Magee Ranches project will cause a significant negative
impact on bicyclist safety. SOS-Danville Group has suggested a fair threshold of significance in an October 2, 2017 communication from SOS' attorney, Stuart Flashman, to the Town (see "Proposed Thresholds of Significance" attachment below).

2). Gather important facts necessary to make a conclusion about significance. Such facts will include the following: for example, *actual* specifications for Diablo and Blackhawk Roads; analysis of sightlines and roadside hazards; numbers of bicyclists and cars traveling those roads and when; numbers of bicycle accidents and near-accidents; causes of those accidents and near-accidents; speed limits, no-passing conditions, and other important traffic safety laws on the roads; enforcement and adherence to such safety laws.

3). Using the threshold of significance, come to a fair conclusion. ----not a reverse-engineered one as the Town official suggests.

4). FINALLY, in light of the conclusion about significance decide what mitigation will be required as a condition of approval for the project.

1-A Cont'd

**The public expects and deserves no less than full and fair compliance with CEQA as part of the review of the Magee Ranches project application.**

**B**. **<u>HOW STAFF IS MISCHARACTERIZING</u> <u>THE PURPOSES OF THE LAWSUIT</u>**. Contrary to the Town official's assertions in the attached October 2017 email, the lawsuit *was* "about bike lanes" and **in general the lack of mitigation for bike safety impacts and other negative, unmitigated impacts of the Magee Ranches project**.

Based on actual facts and analysis of road conditions, and motorist and bicyclist traffic and the other above-listed factors in A.2), ----as opposed to the Town's lack of facts and analysis----SOS and its bicyclist partners concluded that the project would have a significant negative impact on bicycle safety, and SOS and its bicyclist partners requested that as mitigation for that impact, improved bicycle safety signage, reduced speeds and better enforcement, and bicycle lanes be conditions of approval of the project. All that was part of the record reviewed by the court in <u>SOS-Danville Group v. Danville Town Council.</u>

1-B

**Mischaracterizing the purposes of the lawsuit in a communication to a bicyclist safety activist appears to be for the purpose of discouraging his participation in the Magee Ranches project review process with demands for bicyclist safety improvements as conditions of approval for the project.**

It is also important to note that the **Town official's assertion that SOS' lawsuit "has kept the Town from moving forward with the plans to construct a grade separated, paved pathway" south of Diablo Road between Alameda Diablo and Avenida Nueva is just plain wrong**. Again, the official appears to be intent on dissuading bicyclists from concerning themselves with the negative bicyclist safety impacts of the Magee Ranches project and its review.

In fact, SOS continued to press during the pendency of the lawsuit for progress on the potential trail **to determine its feasibility *before* any more bicyclist-endangering traffic is added to the Diablo Road corridor**. As we have reminded the Town multiple times, SummerHill Homes' geotechnical advisors determined that a paved, road-bike- usable off-road trail (the "trail") *was not feasible* south of Diablo Road between Alameda Diablo and Avenida Nueva (see attached to Email #2, a May 9,

2011 SummerHill Homes email to David Crompton, and 2 photos of mudslides on the hillside where the trail would be located), and the Town rescinded its request for any work by the applicant concerning the trail. Since the Town's 2013 approval of the project, SOS representatives have requested at several Capital Improvement Program ("CIP") hearings that **feasibility and environmental studies and plans for a potential trail** (in 2013, the trail CIP project was given #5 *lowest priority* and had negligible funding) **be performed (as the Town had requested of SummerHill Homes in 2011) by the Magee Ranches project applicant,** now Davidon Homes.

In apparent response to SOS' requests, the Town hired Alta Planning on **June 30, 2017** to do a trail feasibility study, which is not yet completed (see reprinted at the bottom of this email, an email dated April 16th, 2018, from Robert Ewing to Clelen Tanner, and an email dated June 27th, 2018, from Robert Ewing to Maryann Cella). Rather than using the Magee Ranches applicant's money (which would be appropriate), however, the Town is using County taxpayer Measure J funds. At present, the Town attorney states that there are *no technical specifications and not even a location for such a trail* (see reprinted below an April 17th, 2018 Robert Ewing email to Clelen C. Tanner ). **Why is the trail feasibility study "not yet completed" a full year after its signing despite the imminent release of the draft revised Magee Ranches EIR?** The contract stated that only about 335 hours of work were required thereunder, and that "time was of the essence" in the performance of the contract. We are concerned that the study concluded that a road-bike usable and consistently maintainable hillside trail is INFEASIBLE and that the Town does not want that to be known during the upcoming Magee Ranches project review.

1-B Cont'd

In any case, an unplanned, unfunded likely infeasible off-road trail on a slide-ridden hillside is not mitigation for increased bicycle safety impacts. **Most importantly, road bicyclists will likely disregard any trail in favor of travelling on Diablo Road, which they have every legal right to use, and despite all the current dangers, do use. *Improving Diablo Road for bicyclists should be the Town's focus.***

**We also note that the TOWN *CURRENTLY HAS* A PUBLIC RIGHT-OF-WAY SUFFICIENT TO ADD BICYCLE LANES TO DIABLO ROAD. Please see Contract C-55b attached below.**

**2. THE EIR NEEDS TO FAIRLY EVALUATE BICYCLIST SAFETY USING ALL THE AVAILABLE FACTS, AND PROVIDE APPROPRIATE SAFETY IMPROVEMENTS AS MITIGATION FOR IMPACTS. MOREOVER, THERE ARE IMMINENT SAFETY HAZARDS THAT CAN AND MUST BE ALLEVIATED IMMEDIATELY.**

2-A

Town staff need to use all relevant, accurate facts to analyze bicycle safety as part of fairly preparing the revised draft EIR for the Magee Ranches project. We offer some such facts below that certainly need to be considered. We have found the following additional and/or updated facts since the Town's 2013 project approval, now rescinded.

IN GENERAL:
50,000 bicyclists per year (source: 5/21/2015 email to Geoff Gillette of the Town of Danville staff, from Alan Kalin, President of the Mt. Diablo Cyclists organization) and over 13,000 motorists per day (per 2030 Danville General Plan) travel along the 1 1/2-mile two-lane Diablo Road segment between Green Valley Road/McCauley Road and Mt. Diablo Scenic Blvd., hereinafter referred to as "the Stretch". The dangerous conditions include an extremely narrow, shoulder-less, sloping roadway that varies significantly in width from one point to another; hazardous roadside conditions; non-existent enforcement of traffic safety laws; and inadequate road and roadside maintenance by the Town.

Although the Stretch is designated as a "Minor Arterial" in the 2030 Danville General Plan because it is considered to have a capacity of between 10,000 -15,000 car trips per day, that capacity seems an overestimate when one compares the actual road and roadside conditions on the Stretch to any other Danville minor arterial, and even to the less-traveled Danville roads designated as Major and Minor Collector streets in the General Plan. Many if not most of the other Town minor arterials have dedicated bicycle lanes.

2-A Cont'd

BICYCLIST ACCIDENT HISTORY

Since and including 2005, there have been **9 separate reported bicyclist accidents along** the 1/2 mile of Diablo Road between Alameda Diablo and the Green Valley/McCauley Road intersection (see attached "Diablo Rd Bike Collision History" report). In one of the 9 accidents, 2 bicyclists traveling one behind the other were severely injured.

Even though the 1 mile between Alameda Diablo and Mt. Diablo Scenic, hereafter referred to as "the Khyber Pass", is by far the most dangerous portion of Diablo Road, there has been only 1 reported accident there since 2005, and that was close to Avenida Nueva where the road is not as dangerous. The obvious explanation for the lack of bicyclist accidents on the Khyber Pass is that the vast majority of bicyclists try to avoid it by diverting onto the narrow, winding, no-shoulder, no-sidewalk, no-center line roads in the residential community of

Diablo, to reach a short private- property cut-through gravel path connecting Alameda Diablo to Mt. Diablo Scenic Blvd. In the summer of 2017, a bicyclist diverting from Danville's dangerous Diablo Road through Diablo was seriously injured when she was involved in an accident with a car on Calle Arroyo, a narrow, winding residential lane with no center line that can barely accommodate two cars side-by-side.

**Danville has the responsibility to maintain ALL of its arterial roads to a standard that is safe for use by bicyclists, and not to rely on residential neighborhoods to handle through traffic.**

The 1/2 mile of Diablo Road between Alameda Diablo and Green Valley/McCauley Roads bears a vastly disproportionate amount of bicyclist accidents compared to Danville's vast number of miles of roadways. The 9 accidents that occurred on that **1/2 mile** represent about 5 % (1/20) of the entire Town's 173 bicyclist accidents during the same time period. The disproportion is due to the large volumes of both vehicles and bicycles, lack of bicycle lanes, the generally too-narrow and deplorable state of the road, and the incompatibility of the nearby "Diablo Road Trail" for use by fast-moving road bicyclists and pedestrians.

2-A
Cont'd

IMPLICATIONS

The conditions of the entire Stretch are so imminently hazardous, in fact, that we believe the Town needs to make **immediate easily-accomplished improvements, as described below**. Moreover, unless and until sufficient major improvements described below are completed on the Stretch, **under no circumstances should the Stretch be made significantly worse by approving the ill-conceived Magee Ranches project *as is*. The location chosen for that project maximizes the traffic impact (nearly 1000 more car trips per day in the Diablo/Blackhawk Road corridor) on the Stretch, and as originally approved, provided for *zero safety improvements* for the dangerous Stretch.**

In order to appreciate the dangers of the Stretch, you must first realize that **the plans** that we have been told that the Town relies upon as being the specifications for Diablo Road **bear little relationship to the actual road**. Those plans (the "Plans"), attached hereto, are for Contract C-55b (1994 Town Capital Improvement Project, accepted as complete by the Danville Town Council in 1994). The funds to pay for C-55b contract were collected from the homeowners of the existing Magee Ranch development as mitigation for the traffic impacts of that development, approved by the Town Council in 1987.

It is troubling, to say the least, that despite the disparity between the actual road and the Plans, the Town Council accepted the C-55b contract per the Plans as complete, with no mention of change orders to the Plans' specifications, or any reference to "as-built" drawings showing the divergence between the Plans and the actual road. **It is unacceptable that the Diablo/Blackhawk corridor has not yet been improved pursuant to mitigations promised from the1987 250-home Magee Ranch development, yet the Town is poised to again try to approve another Magee Ranch large-scale development that will further congest and endanger travelers on the very same roads.**

2-A Cont'd

**FOLLOWING ARE SOME SPECIFICS OF THE ACTUAL DANGEROUS CONDITIONS of the STRETCH AND WHAT IS NEEDED TO ALLEVIATE THEM:**

**1. <u>SUBSTANDARD LANE WIDTHS. INADEQUATE and MISLEADING SIGNAGE AND MARKINGS.</u>** The Plans show uniform12-foot lane widths along the Stretch and Khyber Pass. However, in most locations the lanes are **less than 12 feet wide**, and in **some locations less than 11 feet wide, with one section less than 10 feet wide,** Sub-12-foot widths are most common in the exceptionally dangerous 1-mile segment between Alameda Diablo and Mt. Diablo Scenic Blvd. (see reprinted below some Diablo Road measurements taken between Alameda Diablo and Avenida Nueva) The widths at adjacent sections of the eastbound and westbound lanes all along the Stretch and Khyber Pass vary significantly, independently of each other. So not only is the road dangerously narrow given the mostly 35- mph speed limit, but the variation in just how narrow it is causes confusion for both motorists and bicyclists and results in motorists and bicyclists traveling in the Stretch making dangerous assumptions.

2-B

In numerous areas the white edge line is missing or broken because the pavement edge has been damaged or thoroughly crushed by vehicle traffic (see photos attached to Email #3A).

On some segments, the usable lane width has been further narrowed because the most recent pavement overlay is narrower than the older road surface (see attached photos called "Diablo Road White Line 2 and "Diablo Road White Line").

**Lanes like those in the Stretch with a width <u>less than 14 feet</u> are considered <u>too narrow for vehicles to safely pass bicyclists</u> without encroaching into an adjacent lane**. (Please see photos attached to Email #3B) California Vehicle Code section 21202 calls those "<u>substandard width lanes</u>". Where passing is legal, regardless of

lane width, a broken white center line would be present, and a motorist would typically cross the broken white center line to pass a bicyclist traveling in a substandard width lane. But because of the lack of adequate sightlines for passing, the entire length of the Stretch and Khyber Pass has double yellow lines---no passing is allowed. Thus, **THERE IS NO WHERE THAT MOTORISTS LEGALLY MAY PASS BICYCLISTS ON THE STRETCH OR KHYBER PASS.** Legally, motorists are required to stay behind every bicyclist they encounter on the Stretch or Khyber Pass, until they reach either Mt. Diablo Scenic Blvd. or Green Valley Road.

Note that bicyclists, when traveling slower than prevailing traffic and being followed by five or more vehicles, are required by CVC to pull over when it is safe to do so, in order to allow the following vehicles to overtake. *However, on the Stretch there are few if any locations where it is safe for a bicyclist to pull over in this manner and there is no place in the Khyber Pass section. This is due to a total lack of on-grade shoulder in either of these sections of Diablo Rd.*

When a bicyclist travels close to the pavement edge on the Stretch or Khyber Pass, motorists may mistakenly assume that there is adequate width to pass within the lane, i.e. without crossing the center line. That false assumption may have contributed to October 2017 accidents in which 3 bicyclists were hit in two separate incidents by the same SUV traveling the Stretch.

2-B Cont'd

**In recognition of that potential false assumption, CVC 21202 (a)(3) allows bicyclists to leave the right edge of the roadway when traveling in a substandard lane like those on the Stretch. They may legally occupy as much of the lane as needed to deter unsafe passing. (CVC 21202 (a)(3) & CVC 21656).**

Several traffic control devices can be used to improve safety by encouraging bicyclists to ride close to the center of substandard width lanes, and by informing motorists of bicyclists' legal right to do so. **The MUTCD R4-11 "Bicycles May Use Full Lane" sign serves this purpose on narrow lanes in other areas of Danville (see attached "Bicycles May Use Full Lane" article with included photo). The Shared Lane Marking ("Sharrow") can also provide such guidance when installed in the center of a narrow lane.**

In contrast, MUTCD W16-1p "Share The Road" plaques installed on W11-1 bicycle warning sign assemblies are frequently misinterpreted by motorists as stating that there is sufficient width for a bicyclist and a car to coexist in the same lane. Such plaques are currently installed in the eastbound lane just west of the Diablo Road/Alameda Diablo intersection and the westbound lane just west of the Diablo Road/Avenida Nueva intersection, yet **nowhere between Green Valley Road and**

**Avenida Nueva does sufficient width exist for cars and bicyclists to actually "share" a lane side-by-side.** As mentioned above, a false sense of sufficient width for passing may have contributed to a terrible car-bike collision in October 2017 just west of the Diablo Road/Clydesdale Drive intersection, in which two bicyclists were struck and severely injured by a passing motorist driving an SUV, and another bicyclist suffered minor injuries in a separate collision just west of Avenida Nueva involving the same motorist (see accident scene photos attached to Email #4A). **There are no signs warning motorists of bicycles on the Green Valley to Alameda Diablo stretch of Diablo Road, despite a long-standing request for them.**

**ACTION REQUIRED**: The "Share the Road" signs should be taken down immediately and replaced with "Bicycles May Use Full Lane" signs and Shared Lane Pavement Markings ("sharrows"). The signs and sharrows should **begin at either end of the Stretch and Khyber Pass and be repeated at appropriate intervals (every 250 feet with sharrows in between.**

The replacement of "Share The Road" (W16-1P) plaques with "Bicycles May Use Full Lane" (R4-11) signs is supported by the US Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) team, in its Frequently Asked Questions webpage regarding MUTCD Part 9 (Bicycle Facilities),

https://mutcd.fhwa.dot.gov/kno wledge/faqs/faq_part9.htm#sign sq5

In the Signs topic, FAQ item #5 states:

> **Q: Should "share the road" signing be used to inform drivers of the likely presence of bicyclists and to inform them to pass bicyclists safely?**
>
> **A:** The SHARE THE ROAD (W16-1P) plaque was introduced into the MUTCD in the context of slow-moving farm equipment with no associated mention of bicyclists. Since that time, it has become prevalent in conjunction with the Bicycle (W11-1) warning sign with the intent of warning drivers of the presence of bicyclists and warning drivers to pass safely. **Research has shown that the "share the road" message when applied to bicyclists does not adequately communicate the responsibilities of either user group on the roadway. [bold added]**

2-B Cont'd

Road users are unclear whether "share the road" means that drivers should give space when passing or that bicyclists should pull to the side to allow drivers to pass. Where bicyclists are expected or preferred to use the full lane, that message is more clearly communicated with the Bicycles May Use Full Lane (R4-11) sign, supplemented by shared-lane markings as appropriate. When using the Bicycle (W11-1) warning sign, many jurisdictions have phased out the use of "share the road" in favor of an IN LANE or ON ROADWAY word message plaque, more clearly indicating the condition ahead instead of giving an unclear instruction. It is still compliant with the MUTCD if a jurisdiction chooses to post a SHARE THE ROAD (W16-1P) plaque under a Bicycle (W11-1) warning sign, but it would not be the best practice.

**2**. **NO SHOULDERS, AND HAZARDOUS PAVEMENT EDGE CONDITION.** A two- foot paved shoulder as specified in Contract C-55B, if installed as a horizontally level widening of the pavement, would arguably improve conditions for bicyclists by increasing the total usable width of each direction of the roadway from 10'-12' to 13'-14'. However, this additional bicycle-usable shoulder width was never added.

2-B Cont'd

Further, most of the very limited shoulders or adjacent dirt level created by the most recent overlay is unusable for bicyclists because the old roadway surface or adjacent dirt level is 3 inches or more lower than the recent overlay surface (see "Diablo Road White Line 2" and "Diablo Road White Line" attached photos below). A bicyclist who mistakenly thinks that the paved shoulder is level with the travel lane and doesn't realize how abruptly its level drops may lose control if his or her wheel(s) drift outside the edge line and down this pavement step. This condition is hazardous in daylight and becomes more so in low-light and nighttime conditions when the cues of shadowing may not be present.

**3. LIMITED OR NO SIGHTLINES.** Severe sight distance limitations in one or both directions in several locations along the Stretch compound the narrow lane condition. In recognition of that, the entire section is marked with double yellow lines, prohibiting passing of vehicles and bicycles. On the most dangerous section of the Stretch between Alameda Diablo and Avenida Nueva, not only are sight distances on the road itself severely constrained, but there are seven hidden driveways where

cross vehicles could be entering the roadway. There should be signs warning of those driveways, yet there are none on that segment of the Khyber Pass, although there are two 'Hidden Intersection' signs (see photo attached to Email #4B) warning westbound and eastbound vehicles and bicyclists of the hidden intersections of Clydesdale Drive intersection and two others east of the Diablo Road/Green Valley Road intersection.

**4**. **NO BICYCLE LANES.** There are no bicycle lanes (Caltrans Class II Bikeway) on any portion of the Stretch. Between Green Valley/McCauley Roads and Calle Arroyo (about 1/2 mile), there is a multi-use " **trail**" (the Town's term on signage for it) which although useful for pedestrians and slower bicyclists, especially school-age children, does not in general meet the requirements of a Caltrans Class I Bikeway ("Bike Path"), despite the Town's claim in the 2013 Magee Ranches EIR and in the Town of Danville 2030 General Plan (page 4.13, Figure 14) that the trail is actually a "Class I" Bikeway. The shortcomings include lack of sight distance, insufficient lateral separation or barriers from vehicle traffic and lack of graded shoulders. The "trail" is unsuitable for bicycling at touring speeds.

**ACTION REQUIRED FOR 2, 3, AND 4:** The improvements that were specified in C-55B should be completed as soon as possible. Before or as a condition of approval of any new developments within the Diablo/Blackhawk Road corridor, safe Class II Bikeways or 4-foot shoulders should be added to the Stretch and Khyber Pass. We believe in the Khyber Pass section this can be implemented by replacing the existing swale drainage with a subsurface drainage structure.

2-B Cont'd

**5**. **HAZARDOUS MULTI-USE TRAIL between GREEN VALLEY ROAD and CALLE ARROYO THAT BICYCLISTS LEGALLY MAY DISREGARD AND DO.**

Why do most road bicyclists disregard the multi-use trail that they are directed to by a small sign at the Diablo Road/Green Valley Road/McCauley Road intersection? There are the many reasons why the trail is ignored: The trail is at most a mere 8 feet wide and has no shoulders---**far from the requirements of a Caltrans Class I Bikeway ("Bike Path"**). It is separated from busy Diablo Road by haphazard small stretches of non-road-bicycle-friendly uneven dirt or gravel surfaces; a small curb; and/or too-close and therefore hazardous trees. Sometimes it is practically adjacent to Diablo Road. The trail is not swept frequently enough to address the accumulation of gravel traveling from adjacent areas, and leaves and other debris from adjacent foliage; such debris is dangerous for road bike tires with 110 lbs. of air pressure (standard manufacturer pressure recommendations). There is at least one recent documented case in which a road bicyclist was felled by slippery leaf litter on this facility and suffered a fracture. The trail has blind curves (see

photo attached to Email #5A) and numerous trees adjacent to its south side or within 2 feet. The trail is adjacent to a rigid metal fence or high bushes on much of its north side. Those conditions could create a legal liability for the Town for injuries sustained by or because of road bicyclists traveling the trail.

Put simply, **the multi-use trail was never intended for use by fast-moving road bicyclists.** The trail was built about 50 years ago as a path for children to get to Green Valley Elementary School and Los Cerros Middle School from the Clydesdale Drive/Fairway Drive neighborhoods, and from the Diablo community, which are within walking distance of those schools. The trail's primary users are still school children; parents with baby strollers and small children; youngsters on bicycles and scooters; adults and teens casually cruising on bicycles, walking, or running with and without dogs; local high school running teams and mountain biking teams; and sometimes elderly wheelchair-using residents of the Brookdale Assisted Living Facility or the Sunrise Nursing Home and their attendants. Golf carts are even occasionally on the trail. (see photos attached to Emails #5B)

***Because of all those factors, the multi-use trail is unsuitable for fast riding by bicyclists as an alternative to traveling on the roadway***. That trail is not at all comparable to the much wider, flat, straight, non-hazardous Iron Horse Trail, which is an example of a multi-use trail that is suitable for fast-moving cyclists. In any case, the California Vehicle Code does not require that bicyclists use a trail parallel to a roadway. **Bicyclists may legally use adjacent Diablo Road and most often choose to do so.** *Indeed, if all road bicyclists traveling the Stretch used the trail, it would be too dangerous for most pedestrians, especially the school children it was built to accommodate, to use.*

2-B Cont'd

**<u>ACTION REQUIRED</u>**: Immediately: Maintain the trail to a higher standard. Perhaps bicyclists groups such as Valley Spokesmen and Mt. Diablo Cyclists can be enlisted to assist in regular maintenance. Eliminate blind curves on the trail. Those places are where bicycle/pedestrian crashes are most likely to occur. **In addition, if the Town seeks to have road bicyclists use this trail, it must be improved so that it is safe for *<u>all</u>* users**.

Before any new developments are approved for the Diablo/Blackhawk Road corridor: Design and construct a trail safer for multi-use in conjunction with, not as a replacement for, an engineered plan for bicycle lanes or 4-foot paved shoulders on the Stretch and Khyber Pass.

**6**. **<u>NO ENFORCEMENT OF PROHIBITED PASSING.</u>** Please refer to the attached documents ("Danville Police Speeding and Double Yellow Line") regarding Danville Police enforcement of laws prohibiting speeding and crossing of the double yellow line.

Motorists ***routinely*** cross the double yellow line ***illegally*** to pass bicyclists (see photo attached to Email #5C), and often to ***also pass motorists*** that are refusing to illegally pass bicyclists. **Yet the attached documents show that there have been ZERO tickets issued in the last five years for illegal passing.**

**<u>7. ENFORCEMENT OF SPEED LIMITS ONLY *AFTER* A COLLISION</u>**

Similarly, a comparison of the attachment ("Danville Police Speeding and Double Yellow Line") describing the 13 speeding tickets issued during the last five years to the attached collision report ("Diablo corridor collision history") shows that speeding tickets are issued only AFTER there has been an accident. The Police state that the low enforcement is due to the lack of safe locations to pull over the offending drivers (see "Diablo corridor collision history" attachment).

**<u>ACTION REQUIRED for 6 and 7</u>:** Immediately enforce the no- passing law and the speed limits on the Stretch. There are many side-roads that may be used to pull violators over----Fairway Drive and Clydesdale Drive (where numerous accidents have occurred) at the western side of the Stretch, Alameda Diablo in the middle, and Creekledge Court at the eastern side. Install large radar speed displays or Changeable Message Displays (like the one on El Cerro Blvd.) that say “No Passing Bicyclists” and flash the speeds of vehicles. One could be installed west of Clydesdale, one east of Fairway, and others somewhere between Avenida Nueva and Alameda Diablo.

2-B Cont'd

**8. <u>ROADSIDE HAZARDS.</u>** Per Contract No. C-55B, power/telephone poles hazardously close to the edge of pavement (frequently where the white edge line is located) were specified to be relocated, and certain large trees were to be removed. It appears that none of those actions were performed. On May 22, yet another driver ran into a tree (that may be one that was supposed to have been removed ) on the Stretch (see photo attached to Email #6). Luckily, the driver was not seriously injured. Another recent accident involved a crash into a power pole (see photo attached to Email #6).

**In addition to power/telephone poles and trees, other types of vegetation** typically grow adjacent to or encroach onto the roadway, and there is often **debris** on the road pavement, particularly in the most dangerous one-mile segment between Alameda

Diablo and Mt. Diablo Scenic Blvd. The encroaching vegetation is literally trimmed by the large school buses and large trucks.

On certain parts of this segment, the white edge line has been worn away and the pavement edge deteriorated by vehicle traffic, reducing the guidance available to motorists and bicyclists. In the winter, the road is muddy, and sandbags take up even more of the road, which is substandard in the best weather (see "Diablo Road white line" photos below, and those attached to Email #7A).

On some of the north side of the Stretch between Alameda Diablo and Avenida Nueva, there are stucco walls and fences very close to the edge of pavement. There have been many crashes into those walls and fences by cars (see, for example, the photo attached to Email #7B). But for those walls, vehicles leaving the road would crash down the steep hillsides on the other side of the walls and into buildings, trees, front and back yards, and local residents.

Another hazard is the wildlife that frequently enter the roadway. Deer, turkeys, and squirrels are commonly encountered. In recognition of the deer hazards, warning signs are posted (see photo of Deer warning sign attached to Email #8). Nonetheless, carcasses of turkeys, skunks, raccoons, and squirrels that have been killed by motorists are frequently seen along Diablo Road, and occasionally a dead deer is seen.

2-B Cont'd

**ACTION REQUIRED**: Work with PG&E to relocate hazardous utility poles. Remove hazardous trees. Replant trees in non-hazardous locations. Keep in mind, for the Magee Ranches project, 57 Town-protected trees were to be removed for homesites, and 12 more trees for the 200-feet lengthening on Diablo Road of the westbound turn lane onto Green Valley Road.

Reduce and actually enforce speed limits because of the many above-described hazards along the road. Improve the road to standard 12' widths with at least a 2' paved usable shoulder on both sides and appropriate grading beyond the shoulders.

**9. IN-VEHICLE COLLISION ALERT SYSTEMS ACTIVATED.** The above existing conditions 1-8 contribute to in-vehicle collision alert systems, installed according to manufacturer specifications, randomly activating along the Alameda Diablo to Avenida Nueva segment of Diablo Road. That is further confirmation of the hazards present, the narrowness of the road, and the dangerous curves.

10. **MANY TYPES OF HUMAN POWERED VEHICLES USE DIABLO ROAD**:

Road bikes constitute the vast majority of human-powered vehicles that use Diablo Road. But recumbent bicycles also use Diablo Road.
The 2 photos attached to Email #9 entitled "Recumbent bicyclist on substandard Diablo Road" show a recumbent cyclist being passed by an SUV as the cyclist heads into the most narrow, dangerous section of the Stretch. Luckily for all vehicles concerned, the cyclist was passed on one of the few areas where a usable shoulder exists, and he moved into it. As the photos show, he had just been forced to ride nearly on top of the white line at the edge of pavement, where no shoulder existed as the SUV barrelled up the narrow road to overtake him.

2-B Cont'd

Battery-assisted recumbent tricycles also use Diablo Road. Another photo attached to Email #9 shows such a cyclist walking his dog on the sidewalk near Green Valley School. Battery-assisted recumbent tricyclists could legally be riding the middle of Diablo Road in the Stretch and Khyber Pass sections.

**CALL TO ACTION:**

Given the actual road conditions of the Stretch, the Town has a duty to **do the following:**

1. **Install the following bicyclist-related signs/road markings** that properly address lane widths inadequate for safe passing of bicyclists within the lane (i.e. without crossing the centerline):

A. Put **SHARROWS** on the Stretch **every 250 feet in both directions;**

B. Post "**Bicyclists May Use FULL LANE**" signs at either end of the Stretch and intermittently throughout.

2. **Enforce existing speed limits and the no-passing (double-yellow) centerline**. **Better yet, lower the speed limit to 25 mph and ENFORCE IT and the NO-PASSING CENTERLINE**. During the course of the Magee Ranch project 2013 review, Midori Tabata, a member of the Alameda County Bicycle Transportation Commission Bicycle Pedestrian Advisory Committee (BPAC) and an Oakland Yellowjackets experienced rider of the group's "official route" to Mt. Diablo---- Diablo Road to Mt. Diablo Scenic Blvd., recommended lowering the Stretch's speed limit to 25 mph and ENFORCING IT (see attached email from Midori Tabata).

2-C

3. **DISAPPROVE THE MAGEE RANCHES PROJECT**. **Unless and until** the Town improves the ENTIRE Stretch and Khyber Pass sections to safely accommodate usage by road bicyclists and motorists, the Town must not make the road even more hazardous for such lawful roadway users and therefore **must not approve the Magee Ranches project as is**. According to the 2013 Final EIR for the Magee Ranches

project (approval since rescinded), it would have generated nearly 1000 more daily car trips in the Diablo/Blackhawk Road corridor, each one creating additional dangers for the bicyclists and motorists that must use the Stretch and Khyber Pass now.

**Moreover, the current plans for the project should in any case be revised to minimize the traffic from the project on dangerous Diablo Road**. It is important to recognize that the P-1 rezoning for the Magee Ranches project to enable "clustering" of nearly all of the potential home sites from the entire 410 acre ranch onto 35+ acres of the Agricultural-designated land closest to Blackhawk Road, coupled with the upzoning of the Agricultural land to A-2 from A-4, is ***ensuring* that the *maximum possible number of homes* will be built** under the existing land use designations for hilly, slide-ridden, spring -and -stream-crossed, inaccessible Magee Ranch. Ensuring that the maximum number of homes will be built also ensures that there will be **the maximum number of car trips per day**. Even worse, **the Blackhawk Road location of that 35+ acres chosen for the clustering ensures that vehicle trips generated by those homes will have the maximum possible impact on the most dangerous segments of Diablo Road**!

2-C Cont'd

Contrary to the project, the 2030 General Plan calls for any homes to be built on the ranch to be clustered in "a limited number of areas", not necessarily in one single area. If, for example, potential homes on the Rural Residential parcels and the Single-Family low-density parcels were required to be transferred to locations **within contiguous same-designation parcels**---rather than having nearly all of them transferred to the Agricultural parcels accessed from Blackhawk Road---- far fewer homes would likely be built because the other parcels are far more constrained by their steep topography and geotechnical features such as slides and streams. Even more importantly, one of the entrances (for the Rural Residential parcels south of the Agricultural parcels) could be accessed from Camino Tassajara rather than Blackhawk Road, taking the cartrips for any homes built there (maximum of about 25 per the current zoning) off of the Stretch, and another entrance (for the single-family low-density parcels) could be Diablo Road across from St. Timothy's Church. Residents of that area could walk or bicycle to four public schools, and cars would not have to travel the entire Stretch to get to downtown Danville and the 680 Freeway.

**MOVING FORWARD:**

We continue to hope that the Town will support a cooperative effort among the many competing interests to plot a path forward addressing the existing dangerous, and over-capacity conditions in the Diablo Road corridor regarding roads and creeks. If Town officials wish to discuss any of the above-provided information in the spirit of such a cooperative effort we will be most appreciative.

Thank you for your consideration of our community and those that travel through it.

Sincerely,
Dr . Clelen Tanner
Maryann Cella, Esq.
Patricia Isom

SOS-Danville Group

As stated above, portions of this letter are based on input from traffic safety consultant and bicycling educator **John Ciccarelli**, principal of Bicycle Solutions (San Francisco). The input includes descriptions of signs and markings contained in the Manual on Uniform Traffic Control Devices (MUTCD), an engineering FAQ item posted by the U.S. Federal Highway Administration (FHWA), and certain options for improvements to Diablo Road.

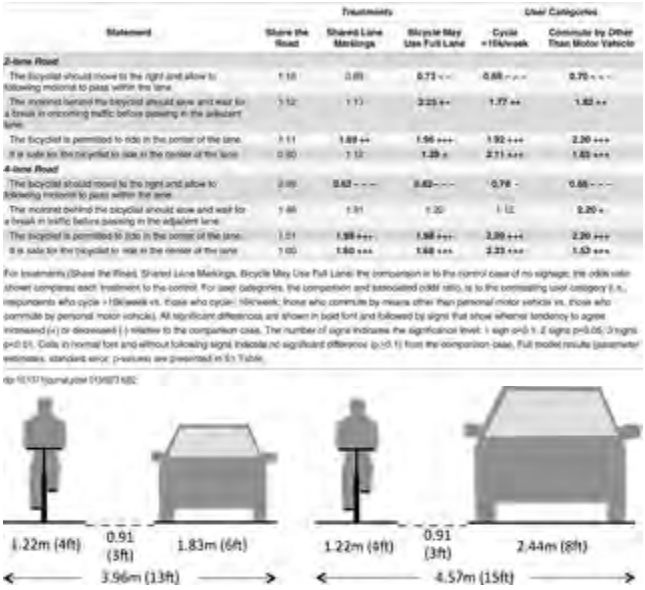
Note: 11 Photo Supports attached to email

Contract C-55

# Abstract

Many global challenges, including obesity, health care costs, and climate change, could be addressed in part by increasing the use of bicycles for transportation. Concern about the safety of bicycling on roadways is frequently cited as a deterrent to increasing bicycle use in the USA. The use of effective signage along roadways might help alleviate these concerns by increasing knowledge about the rights and duties of bicyclists and motorists, ideally reducing crashes. **We administered a web-based survey, using Twitter for recruitment, to examine how well three US traffic control devices communicated the message that bicyclists are permitted in the center of the travel lane and do not have to "get out of the way" to allow motorists to pass without changing lanes: "Bicycles May Use Full Lane" and "Share the Road" signage, and Shared Lane Markings on the pavement.** Each was compared to an unsigned roadway. We also asked respondents whether it was safe for a bicyclist to occupy the center of the travel lane. "Bicycles May Use Full Lane" signage was the most consistently comprehended device for communicating the message that bicyclists may occupy the travel lane and also increased perceptions of safety. "Share the Road" signage did not increase comprehension or perceptions of safety. Shared Lane Markings fell somewhere between. "Bicycles May Use Full Lane" signage showed notable increases in comprehension among novice bicyclists and private motor vehicle commuters, critical target audiences for efforts to promote bicycling in the USA. Although limited in scope, our survey results are indicative and suggest that Departments of Transportation consider replacing "Share the Road" with "Bicycles May Use Full Lane" signage, possibly combined with Shared Lane Markings, if the intent is to increase awareness of roadway rights and responsibilities. Further evaluation through virtual reality simulations and on-road experiments is merited.


# Figures













**George Hess** @george_hess · 6 Aug 2014
**#WhatShouldTheyDo? | go.ncsu.edu/BikeCar | please ReTweet**
**@Road_Worrier** @RaleighGov @EasternWakeNews



2:12 PM - 6 Aug 2014 · Details

# Motorist - Bicyclist Interactions

* Required




**Please examine the situation above and respond to each of the four statements. ***

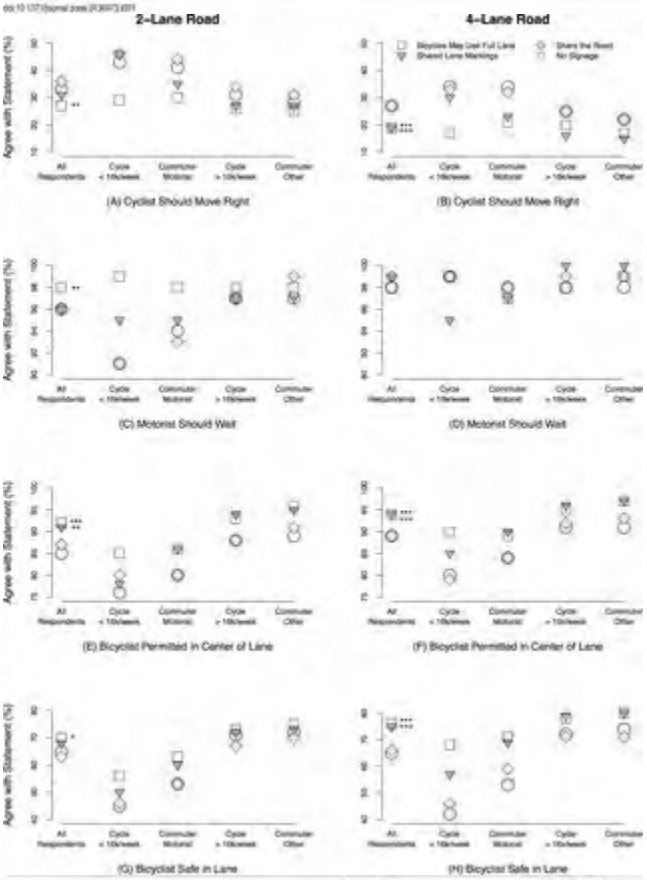
| | Agree | Disagree |
|---|---|---|
| The bicyclist should move to the right and allow the following motorist to pass within the lane. | | |
| The motorist behind the bicyclist should slow and wait for a break in oncoming traffic before passing in the adjacent lane. | | |
| The bicyclist is permitted to ride in the center of the lane. | | |
| It is safe for the bicyclist to ride in the center of the lane. | | |

Continue »

25% completed

| Geographic Distribution | | Traffic Control Device | |
|---|---|---|---|
| United States | 1,824 (92%) | Bicycle May Use Full Lane | 448 (27%) |
| Non-US (excluded from analysis) | 154 (8%) | Shared Lane Marking | 454 (25%) |
| Total | 1,978 (100%) | Share the Road | 422 (23%) |
| | | None | 459 (25%) |
| | | Total | 1,824 (100%) |
| **Weekly Cycling Distance** | | **Commute Mode** | |
| ≤ 10km (10mi) | 369 (20%) | Private Motor Vehicle | 776 (43%) |
| >10km | 1,455 (80%) | Other means | 1,048 (57%) |
| Total | 1,824 (100%) | Total | 1,824 (100%) |
| **Education** | | **Gender** | |
| Less than High School | 3 (<1%) | Female | 411 (23%) |
| High School | 133 (7%) | Male | 1,387 (76%) |
| Community College | 171 (9%) | No response | 26 (1%) |
| 4-Year College | 843 (46%) | Total | 1,824 (100%) |
| Graduate Degree | 667 (37%) | | |
| No response | 7 (<1%) | | |
| Total | 1,824 (100%) | | |

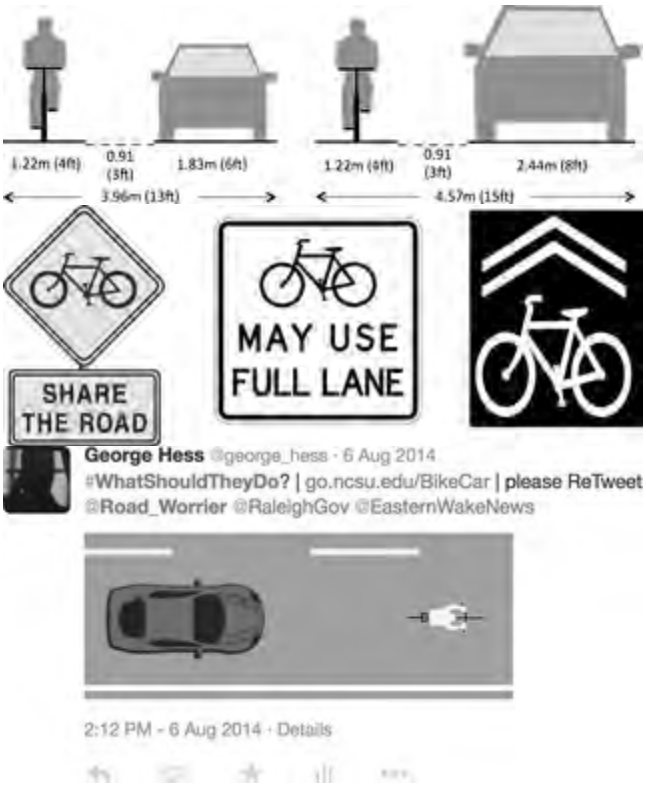
doi:10.1371/journal.pone.0136873.t001




| | | Treatments | | User Categories | |
|---|---|---|---|---|---|
| **Statement** | **Share the Road** | **Shared Lane Markings** | **Bicycle May Use Full Lane** | **Cycle <10k/week** | **Commute by Other Than Motor Vehicle** |
| ***2-lane Road*** | | | | | |
| The bicyclist should move to the right and allow to following motorist to pass within the lane | 1.18 | 0.69 | **0.73 - - -** | **0.68 - - -** | **0.70 - - -** |
| The motorist behind the bicyclist should slow and wait for a break in oncoming traffic before passing in the adjacent lane | 1.12 | 1.11 | **2.25 +++** | **1.77 ++** | **1.82 ++** |
| The bicyclist is permitted to ride in the center of the lane | 1.11 | **1.69 ++** | **1.96 +++** | **1.92 +++** | **2.20 +++** |
| It is safe for the bicyclist to ride in the center of the lane | 0.80 | 1.12 | **1.29 +** | **2.11 +++** | **1.63 +++** |
| ***4-lane Road*** | | | | | |
| The bicyclist should move to the right and allow to following motorist to pass within the lane | 2.09 | **0.62 - - -** | **0.62 - - -** | **0.78 -** | **0.66 - - -** |
| The motorist behind the bicyclist should slow and wait for a break in traffic before passing in the adjacent lane | 1.46 | 1.31 | 1.20 | 1.12 | **0.20 +** |
| The bicyclist is permitted to ride in the center of the lane | 1.51 | **1.98 +++** | **1.98 +++** | **2.20 +++** | **2.20 +++** |
| It is safe for the bicyclist to ride in the center of the lane | 1.00 | **1.60 +++** | **1.68 +++** | **2.33 +++** | **1.53 +++** |

For treatments (Share the Road, Shared Lane Markings, Bicycle May Use Full Lane) the comparison is to the control case of no signage; the odds ratio shown compares each treatment to the control. For user categories, the comparison and associated odds ratio, is to the contrasting user category (i.e., respondents who cycle >10k/week vs. those who cycle< 10k/week; those who commute by means other than personal motor vehicle vs. those who commute by personal motor vehicle). All significant differences are shown in bold font and followed by signs that show whether tendency to agree increased (+) or decreased (-) relative to the comparison case. The number of signs indicates the significance level: 1 sign $p<0.1$, 2 signs $p<0.05$, 3 signs $p<0.01$. Odds in normal font and without following signs indicate no significant difference ($p \geq 0.1$) from the comparison case. Full model results (parameter estimates, standard error, p-values) are presented in S1 Table.

doi:10.1371/journal.pone.0136873.t002

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**Funding:** No external funding supported this work.

**Competing interests:** The authors have declared that no competing interests exist.

# Introduction

Many of the greatest challenges facing humanity globally can be addressed, in part, by bicycling.

This statement may seem like exaggeration, but under scrutiny may be an understatement [1]. For instance, obesity is tied to car dependency in the United States and linked to the first lifespan decline in 200 years for people living there [2–3]. Cyclists are healthier and spend less time and money on medical care than other commuters [4]. Bicycling can promote mobility, particularly for the poor and elderly who often live in landscapes with amenities too dispersed for pedestrian access and cannot afford personal motor vehicle travel [5]. Replacing a car with a bicycle is, by a large margin, the single most important change a person can make to reduce their contributions to climate change [5–6]. Finally, because average Americans spend 15.6% of their income on motor vehicle driving, riding bicycles could have a large, positive effect on economic welfare and overall quality of life [5,7].

Why hasn't this incredibly simple solution to so many problems been more broadly adopted, particularly in the United States? The reasons are complex and intertwined, including lack of access or desire to bicycle, roadways designed primarily for motor vehicle traffic, unpleasant weather, route, and light conditions, the need to carry bulky or heavy loads, and safety concerns [1,8–9]. In this article, we focus on safety concerns.

Most US cities have horrible bicycle safety records, with mortality rates about double those in other developed nations and injury rates between eight and 30 times higher [10]. Perceptions of unsafe conditions for bicycling are cited as an important deterrent to initiating or increasing bicycle use in many studies [8–9,11–12]. In a survey of Texas bicyclists, for example, Sener and others found that 69% felt bicycling was somewhat or very dangerous from the perspective of potential traffic crashes [13]. In particular, motorists driving too close (40%) or too fast (32%) were the most frequently reported dangers among the 11% of bicyclists who felt threatened by motorists [8,12].

Research consistently demonstrates that some infrastructure promotes safety, including traffic calming features, using separate bicycle paths, or placing barriers between motor vehicle and bicycle traffic [14]. Bicyclists in the US will invariably have to share roadway travel lanes with motor vehicles, however, because most roadways do not have bicycle-specific infrastructure. In fact, Royal and Muller-Steiger reported that 61% of US bicycle trips were made on paved roads (including their shoulders) without such infrastructure [8]. The lanes on most US roadways are too narrow for motorists to pass bicyclists within the same lane.

A 4.27m (14ft) travel lane is generally recognized as the narrowest in which motorists can pass bicyclists within the same lane, with 4.57–4.88m (15–16ft) needed where speeds, overall traffic volume, or large truck traffic volume are higher (Fig 1) [15–17]. US roadways typically have narrower travel lanes, stripped between 3.05–3.66m (10–12ft) in width, requiring motorists to move fully or partially into the adjacent lane to lawfully pass a bicyclist. Numerous bicycle safety education programs teach bicyclists that riding near the edge of typical roadways encourages unlawful, too-close passing and that they should ride near the center of the travel lane to encourage motorists to change lanes before passing [18–19]. This engenders resentment among motorists who must wait behind slow-moving bicycle traffic, and close passes, harassment, and fear of overtaking collisions among bicyclists, particularly those with inadequate skills and knowledge of bicycling in traffic; bicyclists have also reported a pattern of harassment by motorists and some police when practicing this technique [20].

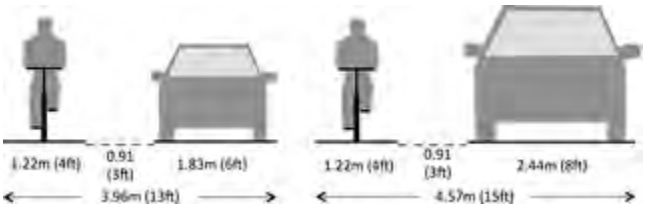

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Fig 1. Geometry of lawfully passing a bicyclist.

Depiction of two common US motor vehicles (typical sedan on the left, pickup truck/sport utility vehicle on the right), 0.91m (3ft) minimum lateral passing distance required in most states (red dashed line), and typical 1.22m (4ft) operating space for bicyclists. The resultant total width does not include any "shy distance," typically 0.46m (1.5ft) that motorists and bicyclists keep away from hazardous objects, between the motor vehicle and the lane marking to its left, or between the bicyclist and the edge of the road.

https://doi.org/10.1371/journal.pone.0136973.g001

Traffic control devices might improve interactions among bicyclists and motorists on US roadways, improve the perception and reality of bicyclist safety, and ultimately lead to increased bicycling. Ideally, such traffic control devices would increase roadway users' knowledge of the rights of bicyclists on roadways, help motorists recognize the need to change lanes when passing bicyclists, support the practice of bicyclists using the full travel lane under conditions where motorists cannot pass bicyclists within the lane, and reduce the number of crashes. Put plainly, they would communicate the message that bicyclists are permitted in the travel lane and do not have to "get out of the way" to allow motorists to pass without changing lanes. We examined the potential of three traffic control devices to attain these goals on US roadways: "Share the Road," "Bicycles May Use Full Lane," and Shared Lane Markings [21].

## Traffic Control Devices for Bicycles as Vehicles

Bicycles are classified or treated as vehicles in all 50 US states, which means that bicyclists have most of the same legal operating rights and responsibilities as motorists, including the right to occupy a full travel lane [22]. North Carolina's Driver Manual states this unambiguously:

“Bicyclists usually ride on the right side of the lane, but are entitled to use of a full lane” [23]. In many states, so-called “far-to-right” laws specifically require bicyclists to drive as far to the right as practicable. Yet, even in those states bicyclists ultimately have the right to use the full lane when, at their discretion, driving far-to-right is not practicable. Florida’s Driver Manual, for example, notes that “A bicyclist may use the full lane even while traveling substantially below the speed of traffic if the lane is too narrow for a car to safely pass a bicycle within the lane” [24].

The right of bicyclists to use a full travel lane is not well-recognized by motorists or bicyclists, which contributes to safety concerns and creates social friction among them [25]. State Departments of Transportation have used three traffic control devices in attempts to communicate the right of bicyclists to use roadways, most commonly “Share the Road” signage and, more recently, “Bicycles May Use Full Lane” signage and Shared Lane Markings, also called “sharrows,” on the roadway pavement (Fig 2) [21]. The two-plaque “Share the Road” signage was designed to warn motorists that slow-moving vehicles–in this case bicycles–may be on the roadway [21]. Many State Departments of Transportation also declare that it is intended to remind motorists that bicyclists have a legal right to use roadways, though it was not designed for that purpose [26]. “Bicycles May Use Full Lane” signage is intended to remind roadway users that bicyclists might be in the travel lane and have a legal right to occupy the full lane. Shared Lane Markings on roadway pavement are intended to suggest appropriate lane positioning for bicyclists, alert other roadway users that bicyclists may be present within the travel lane, and encourage safe passing of bicyclists by motorists.




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Fig 2. Bicycle-related traffic control devices.

From left to right, “Share the Road” (Manual on Uniform Traffic Control Devices W11-1 upper plaque plus W16-1 lower) and “Bicycles May Use Full Lane” (R4-11) signage; Shared Lane Markings (sharrows) are painted on the roadway pavement [21].

https://doi.org/10.1371/journal.pone.0136973.g002

Basic design principles provide guidance for hypotheses regarding traffic control devices, which must be clearly legible and quickly comprehended [21,27]. Our focus is on comprehension, which for signage in general emerges from “guessability,” learnability, and experienced user performance [28]. Comprehensible traffic signs are concrete (visually obvious, not abstract) and simple (few elements and little detail), which make them meaningful; they also have low semantic distance (closeness between what is depicted and what it is intended to represent; for example, a picture of a bicycle to suggest bicycles ahead has a lower semantic distance than the use of a triangle to suggest a hazard) and are familiar (frequently encountered) [29]. Effective signs should be comprehensible, unambiguous, precise [30], and “convey a clear, simple meaning” [21].

Comprehension of the familiar “Share the Road” signage as a statement of bicyclists’ roadway rights has been challenged, based on arguments that it is ambiguous, imprecise, frequently misinterpreted, and not designed for that purpose [31–32]. Although often described as a reminder to motorists that bicyclists may use the travel lane [26], bicyclists frequently complain that motorists interpret the sign to mean that they should get out of the way. In fact, the US state of Delaware discontinued use of the “Share the Road” plaque in November, 2013, because “Some believe the plaque puts more onus on the bicyclist to share the road than the motorist” [33]. Those challenging “Share the Road” signage often call for the use of “Bicycles May Use Full Lane” instead, because it is an unambiguous, precise statement of law [32]. Shared Lane Markings are intended to show bicyclists the best place to ride and remind motorists that bicyclists are permitted in the travel lane [21], but may be somewhat ambiguous and imprecise in communicating that message.

Evaluations of the comprehensibility of “Share the Road” and “Bicycles May Use Full Lane” signage in the USA are few and have produced conflicting results, in part because roadway conditions introduce confounding factors (**S1 Text**). Studies of Shared Lane Markings are more common, also have conflicting results, and have been subject to criticism for drawing positive conclusions from the evaluation of improperly placed markings or using inappropriate metrics of success.

## Objective

Our contribution to the literature is a straightforward evaluation of the comprehensibility of three traffic control devices: “Share the Road” and “Bicycles May Use Full Lane” signage and Shared Lane Markings. We evaluated whether any of these devices increased awareness among roadway users, relative to a control situation with no traffic control devices, that bicyclists are permitted to occupy the full travel lane and that motorists should wait to pass only after moving into the adjacent lane. Secondarily, we evaluated perceptions of safety in response to each traffic control device and with no device.

We chose to evaluate these traffic control devices based on design principles and pragmatic grounds. Pragmatically, these are the four most common situations faced by US cyclists. From the perspective of design principles, although “Share the Road” signage is the most familiar, we hypothesized it would not increase comprehension, relative to an unsigned roadway, of bicyclists’ right to use the travel lane because of its high semantic distance and ambiguous, imprecise message. We hypothesized that “Bicycles May Use Full Lane” signage would increase comprehension because it is meaningful, unambiguous, precise, and has low semantic distance; and that Shared Lane Markings would somewhat increase comprehension because the markings are concrete, but ambiguous and imprecise with medium semantic distance. Our hypotheses and expectations were rooted in previous research suggesting semantic distance was more important than familiarity in terms of eliciting correct interpretation of signs and symbols [34–35].

# Methods

We used a web-based survey to examine the comprehensibility of three traffic control devices on roadways relative to unsigned roadways using unambiguous scenarios and simple questions. Comprehensibility was measured by the degree to which the device increased, when compared to no device, respondent recognition of the right of bicyclists to occupy the full travel lane and the duty of motorists to move into the adjacent lane to pass.

## Survey Recruitment

We conducted a web-based survey using a convenience sample of respondents recruited through a series of tweets–short messages sent through Twitter (twitter.com), a social media tool (Fig 3). Tweets were originated in waves by Twitter user @george_hess and directed to (“mentioned,” in the language of Twitter) other Twitter users with an interest in automobiles, bicycles, highway safety, and mass transportation, and using several different hashtags (keywords preceded by #) representing the same interests. Recipients were asked to retweet widely, to further spread our request for survey respondents. In a few cases, Hess contacted Twitter users by electronic mail to explain the survey and ask them to retweet. Our questionnaire was designed to be completed on computers, tablets, and mobile phones in well under 5 minutes.




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Fig 3. Example tweet.

Each tweet included a request that the viewer complete our survey and retweet it and was directed at other Twitter users (the @handles) and Twitter users interested in specific issues (keywords preceded by #).

https://doi.org/10.1371/journal.pone.0136973.g003

Before administering the survey, we conducted two pilot tests. The first involved cognitive interviews [36] with four people knowledgeable about driving bicycles on roadways and aware of the full study design. During the second, we engaged a group of six naïve respondents who pre-tested the survey in the manner it would be seen during the study. We modified the survey after each pilot test to increase clarity, streamline flow, and ensure statistical rigor. The survey was opened on 14 July 2014 and closed on 19 September 2014.

## Ethics Statement

Our survey protocol was reviewed and approved by the NC State University Institutional Review Board for the Protection of Human Subject in Research (Study #4070) during June, 2014.

## Questionnaire Design

In our questionnaire, respondents were asked to evaluate two traffic situations involving motor vehicles and a bicycle: a two-lane and a four-lane roadway. The situations each depicted a motorist behind a bicyclist riding in the center of the travel lane (Fig 4). The roadway was depicted intentionally with lanes too narrow for lawful in-lane passing of bicyclists by motor vehicles (approximately 3.35m (11ft) travel lane, 1.83m (6ft) wide motor vehicle), no shoulder, no adjacent bicycle or mutli-use path, passing permitted (dashed lane lines), and traffic in the adjacent lane precluding immediate, lawful passing of the bicyclist by the motorist. This depiction was intended to focus attention on essential questions of respondents' beliefs about the rights and duties of the bicyclist and following motorist, without confounding factors such as the possibility of the bicyclist using a shoulder, the presence of a no-passing zone, and the absence of traffic in the adjacent travel lane.

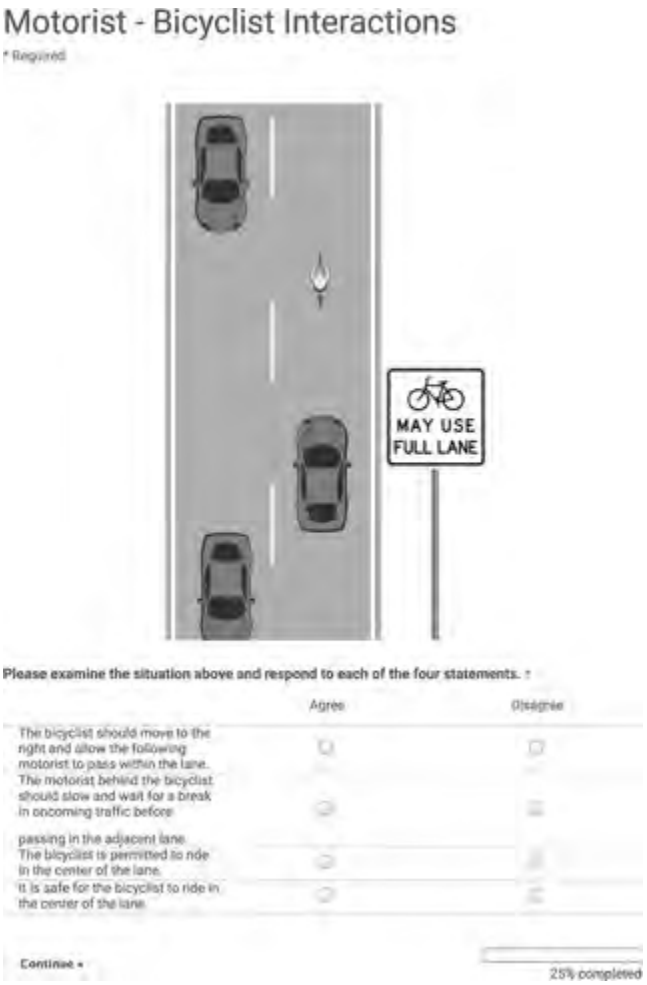


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Fig 4. Example traffic situation.

This shows the image and statements we used for the two-lane roadway with the *Bicycles May Use Full Lane* signage treatment. Images for the other three treatments were identical except for signage, which was appropriate for the treatment. The full survey is shown in **S1 Methods**; images for all four treatments are reproduced in **S2 Methods**.

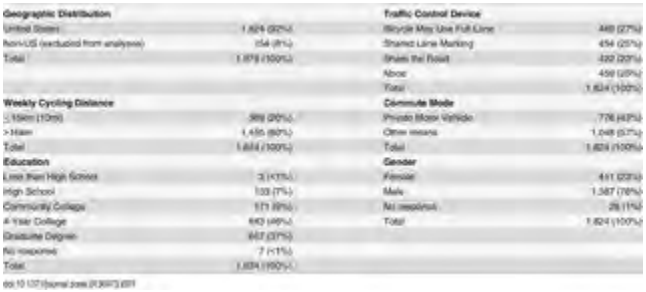
https://doi.org/10.1371/journal.pone.0136973.g004

For each of the two traffic situations, respondents were asked to agree or disagree with four statements regarding action the motorist or bicyclist should take, and the permissibility and safety of the bicyclist's road position. We created four versions of the questionnaire, one for each of our three signage scenarios and a control with no signage. All versions of the questionnaire were identical with the exception of the images for the two traffic situations; the images for each treatment contained the appropriate signage or travel lane markings (Fig 4, **S1 and S2 Methods**). The first panel of the questionnaire was an informed consent and an invitation for eligible respondents to proceed to the survey. To avoid drawing attention to the signage, the informed consent indicated that respondents were being asked to evaluate motorist–bicyclist interactions. Once a potential respondent proceeded, s/he was served, at random, one of the four versions of the questionnaire (**S2 Methods**).

We also asked respondents to provide information about the distance they drove motor vehicles and bicycles weekly, primary mode of transportation to school or work, level of education, gender, and state of residence. Responses to all demographic questions except education and gender were required for questionnaire submission.

## Data Analysis

We obtained 1,978 responses to our questionnaire (Table 1) and excluded 154 from our analysis, because the respondents identified themselves as living outside the United States. We analyzed the remaining 1,824 responses (**S1 and S2 Data**) using a logistic regression model that predicted agreement versus disagreement with each statement as a function of the signage scenario (each of the three traffic control devices compared to no signage), the respondent's primary commute mode (private motor vehicle vs. other), and the distance the respondent bicycled during a typical week (≤16km(10mi) vs. >16km). Our analyses were conducted using the statistical package, R (www.r-project.org).



| Geographic Distribution | | Traffic Control Device | |
|---|---|---|---|
| United States | 1,824 (92%) | Bicycle May Use Full Lane | 449 (27%) |
| Non-US (excluded from analysis) | 154 (8%) | Shared Lane Marking | 454 (25%) |
| Total | 1,978 (100%) | Share the Road | 420 (23%) |
| | | None | 459 (25%) |
| | | Total | 1,824 (100%) |
| **Weekly Cycling Distance** | | **Commute Mode** | |
| ≤16km (10mi) | 369 (20%) | Private Motor Vehicle | 776 (43%) |
| >16km | 1,455 (80%) | Other means | 1,048 (57%) |
| Total | 1,824 (100%) | Total | 1,824 (100%) |
| **Education** | | **Gender** | |
| Less than High School | 3 (<1%) | Female | 411 (23%) |
| High School | 133 (7%) | Male | 1,387 (76%) |
| Community College | 171 (9%) | No response | 26 (1%) |
| 4 Year College | 643 (49%) | Total | 1,824 (100%) |
| Graduate Degree | 867 (37%) | | |
| No response | 7 (<1%) | | |
| Total | 1,824 (100%) | | |

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Table 1. Characteristics of our survey respondents.

https://doi.org/10.1371/journal.pone.0136973.t001

# Results

In almost every case, on 2- and 4-lane roadways, respondents who saw “Bicycle May Use Full Lane” signage were significantly more likely ($p<0.1$) than those who saw no signage to agree that bicyclists are permitted in the center of the lane, do not have to move right to allow motorists to pass within the same lane, that motorists should wait for a break in traffic before passing in the adjacent lane, and that bicyclists are safe in the travel lane (Fig 5, Table 2, **S1 Table**). The only exception was on 4-lane roadways in response to the statement that motorists should wait to pass, for which behavior was unaffected by the signage. Agreement with this statement, however, was uniformly high (≥95%), regardless of traffic control devices, suggesting the vast majority of roadway users recognize the duty of motorists to wait for an opportunity to pass even without signage.

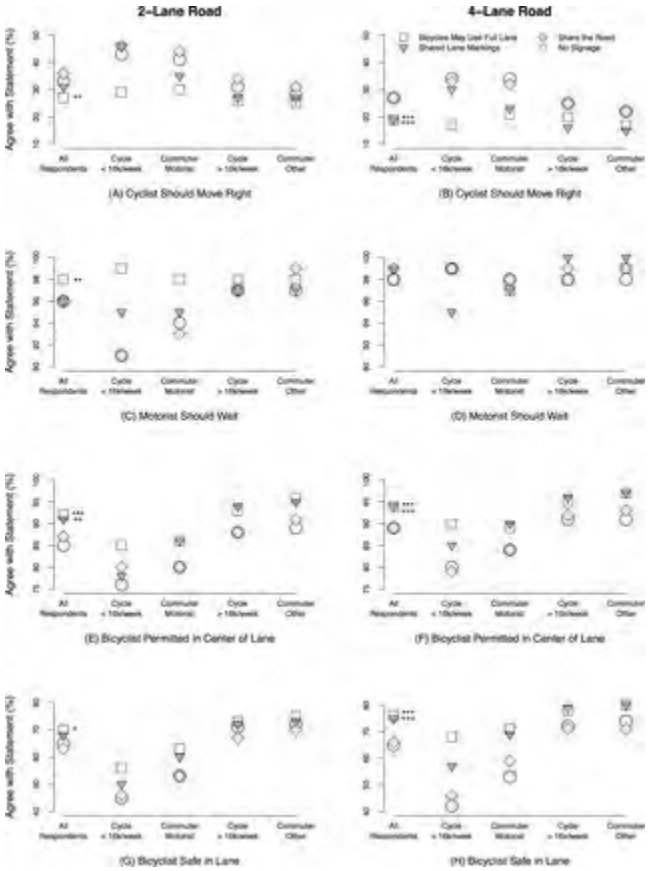


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Fig 5. Comparison of agreement with four road use statements under three treatments.

Bicycle May Use Full Lane–square; Shared Lane Markings–inverted triangle; Share the Road–yellow diamond; and control (No Sign)–red circle on 2-lane (left column) and 4-lane (right column) roads. In each plot results for the overall sample (n = 1,824) are compared to respondents who bicycle ≤ 16km/week (n = 369), who commute by personal motor vehicle (n = 776), who bicycle > 16km/week (n = 1,455), and who commute by other means (n = 1,048). The y-axis scales vary among statements (rows). For all respondents, significant differences between the Bicycles May Use Full Lane treatment and the control (No sign) are marked using * for

p<0.1, ** p<0.05, *** p<0.01; similarly, for the Shared Lane Marking treatment they are marked using +; Share the Road never differed significantly from no signage.

https://doi.org/10.1371/journal.pone.0136973.g005

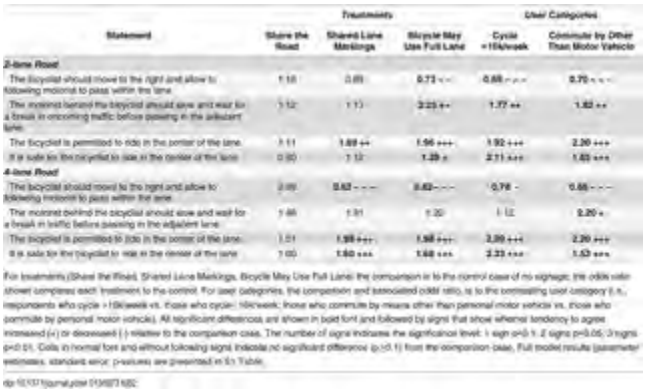

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Table 2. Comparison of agreement with four road use statements by treatment and by two user categories on 2- and 4-lane roads.

https://doi.org/10.1371/journal.pone.0136973.t002

There was no statistically significant difference in responses between those who saw “Share the Road” signage and those who saw no signage in any scenario we tested (Fig 5, Table 2).

Respondents who experienced Shared Lane Markings were significantly more likely than respondents who saw no signage to agree that bicyclists are permitted in the center of the travel lane, on both 2- and 4-lane roads (Table 2). They were also more likely, on 4-lane roads, to disagree that the bicyclist had to move out of the way and to agree that the bicyclist was safe in the center of the lane.

Regardless of signage, respondents who commuted to work by means other than personal motor vehicle were significantly more likely than those who commuted by personal motor vehicle to agree that bicyclists are permitted in the center of the lane, do *not* have to move right to allow

motorists to pass within the same lane, that motorists should wait for a break in traffic before passing in the adjacent lane, and that bicyclists are safe in the travel lane (Table 2). The same can be said of respondents who bicycled >16km/week in comparison to those who bicycled ≤16km/week, except on 4-lane roads for which there was no difference between the groups in response to the "motorist should wait to pass" statement.

We saw the largest shifts in response to the "Bicycles May Use Full Lane" signage when compared to no traffic control devices among respondents who bicycled ≤16km per week or commuted by private motor vehicle (Fig 5). Among those who bicycled ≤16km per week, for example, agreement with the statement that the bicyclist should move right to allow the motorist to pass within the same lane decreased 14 percentage points (to 29%) on the 2-lane roadway and 17 percentage points (to 17%) on the 4-lane roadway, compared to 5-point decreases (to 26% and 20%) for respondents who bicycled >16km per week. Among respondents who commuted by private motor vehicle we saw a 10-point increase (to 63%) in agreement with the statement that it was safe for the bicyclist to be in the center of the travel lane on 2-lane roadways, and an 18-point increase (to 71%) on the 4-lane roadway, compared to 3 points (to 75%) and 6 points (to 80%) for respondents who commuted by other means.

Although significantly more respondents agreed that bicyclists are permitted in the center of the travel lane when presented "Bicycles May Use Full Lane" signage, a large proportion still disagreed – 8% overall on 2-lane and 6% on 4-lane roadways. The tendency to disagree was particularly strong among those who cycled ≤16km per week (15% on 2-lane and 10% on 4-lane roadways) or commuted by private motor vehicle (14% on 2-lane and 11% on 4-lane roadways).

# Discussion

Taken as a whole, our results supported our hypotheses. "Bicycles May Use Full Lane" signage was the most comprehensible traffic control device of those we tested for delivering the message that bicyclists may use a full lane and do not have to "get out of the way" for motorists, and for increasing the perception that using the full lane is safe. "Share the Road" signage provided no additional comprehension compared to an unsigned roadway; this is unsurprising because, despite being used for that purpose [26], it was not designed to do so [21]. Shared Lane Markings on roadway pavement fell somewhere between, showing statistically significant effects in some cases but not others.

Our results are consistent with sign design principles and guidelines promulgated in the Manual on Uniform Traffic Control Devices that support concrete, simple, unambiguous, and precise signage with low semantic distance that "convey a clear, simple meaning" [21,29–30]. They support arguments that "Share the Road" signage should not be used as a substitute for "Bicycles May Use Full Lane" signage to deliver that message, because "Share the Road" is imprecise and ambiguous for that purpose. While the one available study we reviewed for "Bicycles May Use Full Lane" signage (**S1 Text**) showed mixed results, we believe they can be ascribed to the confounding factors described in that study rather than inherent problems with comprehensibility of the signage. Our middle-of-the-road results for Shared Lane Markings suggest comprehensibility issues that may be partly responsible for conflicting results in on-road observational studies, many of which also suffered from improper placement of the Shared Lane

Markings (**S1 Text**). The Manual on Uniform Traffic Control Devices suggests that "Bicycles May Use Full Lane" signage and Shared Lane Markings may be used together [21]. Although we did not test this combination, our results lead us to hypothesize that the combination would be more comprehensible than either device used in isolation.

The improved perceptions of safety elicited by "Bicycles May Use Full Lane" signage suggest that its expanded use could help increase cycling rates. Specifically, because concerns about safety are a deterrent to initiating or increasing bicycling [9,11–12], signage improving perceptions of safety may increase bicycling mode share. "Bicycles May Use Full Lane" signage significantly increased perceptions of safety when bicycling in the travel lane on 2- and 4-lane roadways, whereas Shared Lane Markings did so only on 4-lane roadways; "Share the Road" signage did not differ significantly in this regard from the roadways without traffic control devices.

The comparative advantages of "Bicycle May Use Full Lane" signage, and failure of "Share the Road" signage, may be much larger than our results suggest, because our sample included an unusually high number of bicycle commuters and bicycle riders relative to the US population (Table 1). Further, the positive effects, in terms of delivering the message and increasing perceptions of safety, of "Bicycle May Use Full Lane" signage were particularly strong for the two groups of respondents who most accurately reflect the US population: the 86% who commuted by private motor vehicle in 2013 [37] and those who do not bicycle >16km per week. These portions of the population are likely to be less familiar with the application of vehicle codes to bicyclists and represent critical target audiences for traffic control devices and efforts to promote bicycling in the US.

Our results show a clear, consistent pattern of greater importance of these bicycle-related traffic control devices among private motor vehicle commuters and respondents with less experience bicycling (Fig 5). We speculate that as people learn through real-life experience–by bicycling more or by commuting in ways other than private motor vehicle–they no longer need signs to remind them of appropriate behavior. One way of learning is through clear messages delivered by well-designed signage, which, in our study, appear to have influenced the views of novice bicyclists and private motor vehicle commuters. An effective bicycle-related traffic control device could initiate a virtuous cycle, because small increases in the number of bicycle commuters can create large declines in risk as bicyclists become part of motorists' search image. In California, for example, the risk of a bicyclist being hit by a motor vehicle is about ten times lower in communities where more than 2% of the residents commute on bicycles, relative to places where less than 1% do [38]. Decreasing risk could lead to even further increasing bicycle use.

The reasons for low bicycle use in the US are multiple and complex, including land use patterns that spread destinations too far apart for bicycle trips of reasonable length; roadways designed primarily for motor vehicle traffic; failure, or even refusal, of motorists to recognize the right of bicyclists to use a full travel lane; and failure of bicyclists to follow traffic regulations. These factors contribute to safety concerns among all roadway users and create social friction among motorists and bicyclists. While we do not expect signage alone to turn the US into a bicycling haven, well-designed signage that conveys the intended message in a clear and simple way could

be an important and highly visible part of a broader educational campaign on roadway users' rights and responsibilities, potentially improving conditions for bicyclists.

Our findings suggest that Departments of Transportation should evaluate replacing "Share the Road" signs–which are already located in areas of potential motorist-bicyclist conflict–with "Bicycles May Use Full Lane" signs to provide a less ambiguous, more educational statement, with no net increase in visual clutter. There is potential for backlash, however, from motorists frustrated by learning they are legally obligated to wait behind bicyclists; this could lead to increased harassment of bicyclists and banning bicycles and other slow-moving vehicles from roadways. For example, North Carolina's Commissioner of Motor Vehicles recently recommended banning mopeds from roadways with speed limits of 45 miles per hour or faster [39]; it is not hard to imagine a similar recommendation for bicycles.

## Study Limitations

We evaluated comprehensibility only, and in a limited and highly controlled situation. In real-world traffic situations, reaction time, visibility, and visual clutter may make sign interpretations more difficult for roadway users. This is especially true in urban areas, where such devices abound and may only be visible briefly [27]. While recognizing these limitations, we argue that a traffic control device with low comprehensibility in a highly controlled situation such as our survey is unlikely to be effective on real roadways where these additional factors must be considered.

Using Twitter to recruit survey respondents limits our scope of inference, because Twitter users are not representative of the US population. For example, Mislove and others reported that, in the US, Twitter users overrepresented densely populated areas and were not a representative sample of gender or ethnicity [40]. Our respondent population was skewed toward people who cycled >16km per week (80%) and commuted by other than private motor vehicle (57%) (Table 1). Only 165 (9%) respondents reported that they did not bicycle at all during a typical week (these are included with our ≤16km per week respondents). This happened for at least two reasons. First, bicyclists seemed to have more of a vested interest in the outcome and consequently spread the survey link widely to friends and to groups to which they belonged. Second, and related, a popular urban bicycling blog, UrbanVelo (urbanvelo.org), posted an entry about our survey which attracted bicyclists. Our findings, however, would likely be stronger with a less biased sample because the different impacts of signs found in this study were strongest among non-cyclists.

## Further Work

Our finding that signage had the greatest effect on understanding of traffic laws and perceptions of safety among respondents who cycled the least suggests that future research should target people who do not cycle at all, as these roadway users may benefit most from more comprehensible signage. Limiting the scope of future studies to assessing "Bicycles May Use Full Lane" signage and Shared Lane Markings would further decrease the sample size needed to evaluate differences related to key demographic attributes not considered in this study, such as child versus adult. Although "Share the Road" signage was no better than an unsigned roadway

at conveying the message that bicyclists are permitted to occupy a full lane, future studies may find it conveys other important messages.

The use of emerging virtual reality technologies that allow respondents to experience realistic traffic situations using immersive, head-mounted displays can further enhance our ability to evaluate traffic control devices [41]. Respondents would be put behind the wheel of a virtual motor vehicle or handlebars of a virtual bicycle and exposed to a variety of roadway conditions. This would add reaction time, visibility, and visual clutter in a controlled environment with replication–every respondent would experience the exact same situations, reducing the complexity and confounding factors of on-road observation. Eye tracking would allow researchers to better understand what respondents are observing, and it would also be possible to collect supplemental data about knowledge and experience from each respondent.

On-road experiments, while an important part of evaluating traffic control devices, are inherently difficult to conduct, replicate, and compare to a control treatment. Even comparing different signage on different roadways is perilous, because each roadway has its own peculiarities, uses, and users that may confound comparisons; and it is difficult to collect data from the bicyclists and motorists using the roads. As in previous evaluations, fixed cameras could be used to measure interactions between bicyclists and motorists. We can also envision equipping experienced bicyclists with cameras and electronic distance measuring devices, and instructing them to ride up and down test roadways in varied, measurable, and repeatable ways to measure motorist behavior.

# Conclusion

Of the three bicycle-related traffic control devices we tested, “Bicycles May Use Full Lane” signage delivered the message about the rights and responsibilities of bicyclists and motorists with respect to travel lane occupancy most consistently: bicyclists are permitted in the travel lane and need not move to allow motorists to pass them within the lane. Although Shared Lane Markings did increase comprehension in some cases, they did not deliver the message as consistently as “Bicycles May Use Full Lane” signage. We speculate that a combination of “Bicycles May Use Full Lane” signage and Shared Lane Markings might be particularly comprehensible. “Share the Road” signage failed to provide any additional comprehension in this regard when compared to the unsigned roadways in any of our tests. “Bicycles May Use Full Lane” showed particularly strong increases in comprehension for novice bicyclists and private motor vehicle commuters, critical target audiences for these traffic control devices and for efforts to promote bicycling in the US.

# Supporting Information

S1 Data.PDF

fig**share**

Data dictionary.

List and description of variables in dataset (see **S2 Data** for full dataset).

(PDF)

## S1 Data. Data dictionary.

List and description of variables in dataset (see **S2 Data** for full dataset).

https://doi.org/10.1371/journal.pone.0136973.s001

(PDF)

## S2 Data. Comma-separated variable (CSV) dataset used in our analyses.

https://doi.org/10.1371/journal.pone.0136973.s002

(DAT)

## S1 Methods. Complete survey, shown here for the Bicycles May Use Full Lane treatment.

Each screen from the survey is shown separately as the respondent would experience them.

https://doi.org/10.1371/journal.pone.0136973.s003

(PDF)

## S2 Methods. Images for all four treatments, shown here for the two-lane roadway.

https://doi.org/10.1371/journal.pone.0136973.s004

(PDF)

## S1 Table. Parameter estimates, standard errors, and p-values for our logistic model.

https://doi.org/10.1371/journal.pone.0136973.s005

(PDF)

## S1 Text. Review of studies of the three traffic control devices evaluated in this article.

https://doi.org/10.1371/journal.pone.0136973.s006

(PDF)


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# Author Contributions

Conceived and designed the experiments: GH MNP. Performed the experiments: GH MNP. Analyzed the data: GH MNP. Contributed reagents/materials/analysis tools: GH MNP. Wrote the paper: GH MNP.

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- Questionnaires
- Transportation
- United States
- Traffic safety

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31 Aug 2015

**Brendan Kevenides** @bkevenides

"Bicycles May Use Full Lane" signage is better than "Share the Road." http://t.co/ySt6lld2b2 #bikeCHI #bikelawe



31 Aug 2015

**Matt Alexander** @WestEndMatt

RT @TindallDave: @WestEndMatt check this out http://t.co/g0BOX8VgXM http://t.co/3YRJPK96yn

- 

  31 Aug 2015

  **Dave Tindall** @TindallDave

  @WestEndMatt check this out http://t.co/g0BOX8VgXM http://t.co/3YRJPK96yn

- 

  31 Aug 2015

  **'Keith© Pears®'™** @kapers68

  RT @RacersWhoRide: Share the Road is out. Bicycles May Use Full Lane is the new standard. http://t.co/nQQLz0t3iW

- 


  31 Aug 2015

  **Racers Who Ride** @RacersWhoRide

  Share the Road is out. Bicycles May Use Full Lane is the new standard.
  http://t.co/nQQLz0t3iW

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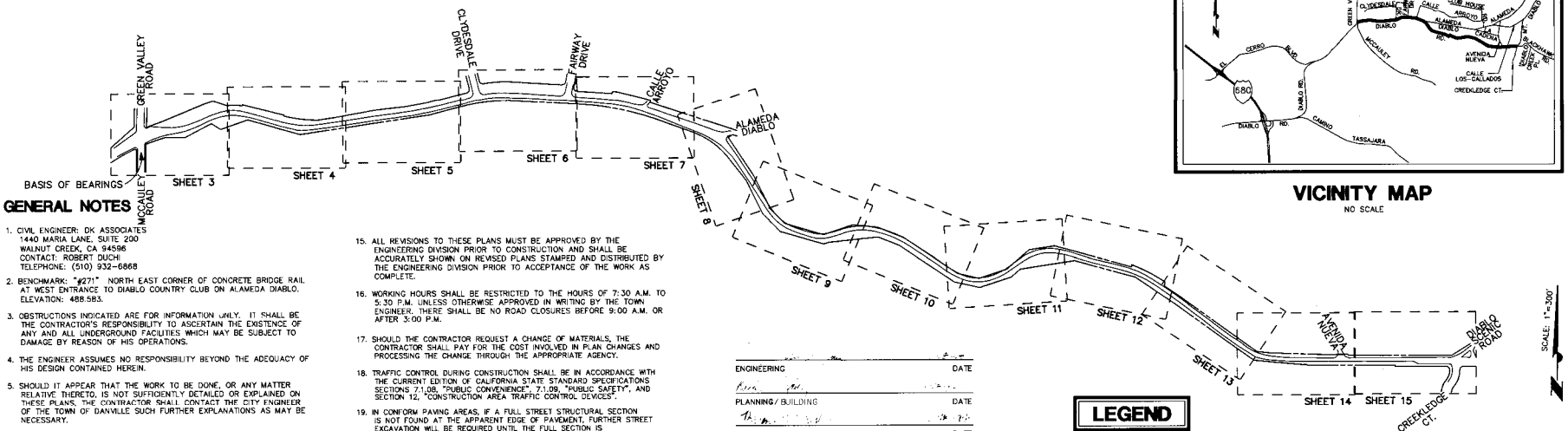
# DIABLO ROAD IMPROVEMENTS

## GREEN VALLEY ROAD TO DIABLO SCENIC ROAD

## TOWN OF DANVILLE, CALIFORNIA

## CONTRACT NO. C-55B







**VICINITY MAP**
NO SCALE

## GENERAL NOTES

1. CIVIL ENGINEER: DK ASSOCIATES
   1440 MARIA LANE, SUITE 200
   WALNUT CREEK, CA 94596
   CONTACT: ROBERT DUCHI
   TELEPHONE: (510) 932-6868
2. BENCHMARK: "#271" NORTH EAST CORNER OF CONCRETE BRIDGE RAIL AT WEST ENTRANCE TO DIABLO COUNTRY CLUB ON ALAMEDA DIABLO. ELEVATION: 488.583.
3. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE EXISTENCE OF ANY AND ALL UNDERGROUND FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
4. THE ENGINEER ASSUMES NO RESPONSIBILITY BEYOND THE ADEQUACY OF HIS DESIGN CONTAINED HEREIN.
5. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER OF THE TOWN OF DANVILLE SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
6. ALL STAKING REQUESTS SHALL BE DIRECTED TO THE ENGINEER A MINIMUM OF 48 HOURS PRIOR TO ACTUAL NEED. ANY ADDITIONAL STAKING OR RESTAKING WILL ONLY BE DONE AS DIRECTED AND AUTHORIZED BY THE OWNER OR HIS AUTHORIZED AGENT.
7. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
8. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THEIR COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTIONS WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER OR ENGINEER.
9. THE CONTRACTOR SHALL PROVIDE THE NECESSARY SAFETY TESTING OF EQUIPMENT AND PERSONNEL.
10. EXISTING UTILITIES MUST NOT BE INTERRUPTED UNTIL THE UTILITY COMPANY HAS PROVIDED ALTERNATIVE SERVICE FACILITIES. THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS WORK WITH P.G.&E. AND THE TOWN OF DANVILLE.
11. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST TOWN OF DANVILLE STANDARD PLANS AND SPECIFICATIONS, AND SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF DANVILLE ENGINEERING DIVISION.
12. ALL EXISTING ELEVATIONS SHOWN ARE AS MEASURED IN THE FIELD, UNLESS OTHERWISE NOTED.
13. THE CONTRACTOR SHALL NOT DESTROY ANY PERMANENT SURVEY POINTS WITHOUT THE CONSENT OF THE ENGINEER. ANY PERMANENT MONUMENTS OR POINTS DESTROYED SHALL BE REPLACED IN KIND BY A LICENSED ENGINEER OR SURVEYOR AT THE CONTRACTOR'S EXPENSE.
14. CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR ENGINEERING DIVISION, AMBULANCE, POLICE AND FIRE DEPARTMENTS. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, (800) 642-2444, 48 HOURS PRIOR TO ANY EXCAVATION. THE USA AUTHORIZATION NUMBER SHALL BE KEPT AT THE JOB SITE.
15. ALL REVISIONS TO THESE PLANS MUST BE APPROVED BY THE ENGINEERING DIVISION PRIOR TO CONSTRUCTION AND SHALL BE ACCURATELY SHOWN ON REVISED PLANS STAMPED AND DISTRIBUTED BY THE ENGINEERING DIVISION PRIOR TO ACCEPTANCE OF THE WORK AS COMPLETE.
16. WORKING HOURS SHALL BE RESTRICTED TO THE HOURS OF 7:30 A.M. TO 5:30 P.M. UNLESS OTHERWISE APPROVED IN WRITING BY THE TOWN ENGINEER. THERE SHALL BE NO ROAD CLOSURES BEFORE 9:00 A.M. OR AFTER 3:00 P.M.
17. SHOULD THE CONTRACTOR REQUEST A CHANGE OF MATERIALS, THE CONTRACTOR SHALL PAY FOR THE COST INVOLVED IN PLAN CHANGES AND PROCESSING THE CHANGE THROUGH THE APPROPRIATE AGENCY.
18. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF CALIFORNIA STATE STANDARD SPECIFICATIONS SECTIONS 7.1.08, "PUBLIC CONVENIENCE", 7.1.09, "PUBLIC SAFETY", AND SECTION 12, "CONSTRUCTION AREA TRAFFIC CONTROL DEVICES".
19. IN CONFORM PAVING AREAS, IF A FULL STREET STRUCTURAL SECTION IS NOT FOUND AT THE APPARENT EDGE OF PAVEMENT, FURTHER STREET EXCAVATION WILL BE REQUIRED UNTIL THE FULL SECTION IS ENCOUNTERED, OR STREET CENTERLINE IS REACHED. PAVING CONFORMS SHALL BE MADE AT A SMOOTHLY TRIMMED BUTT JOINT. DO NOT OVERLAP EXISTING PAVEMENT.
20. EXISTING CURB AND GUTTER THAT IS DAMAGED OR DISPLACED, EVEN THOUGH IT IS NOT SHOWN TO BE REMOVED ON THE PLANS, SHALL BE REPAIRED OR REPLACED EVEN IF THE DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO THE COMMENCEMENT OF ANY WORK BY THE CONTRACTOR.
21. ALL TRENCH BACKFILL, WHICH LIES WITHIN EITHER EXISTING OR NEW ROADWAYS, SHALL CONFORM TO THE ROADWAY PAVEMENT AREA BACKFILL SPECIFICATION OF TOWN STANDARD PLAN 114.
22. PAVEMENT DESIGN STRUCTURAL SECTION MAY BE REVISED PER CITY STANDARD DESIGN CHART IF R-VALUE IS FOUND TO BE DIFFERENT BEFORE OR AT THE TIME OF CONSTRUCTION.
23. ALL STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TOWN ORDINANCE CODE AND SPECIFICATIONS, TITLE 9, AND WILL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DIVISION. CONTACT ENGINEERING DIVISION AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK TO ARRANGE FOR INSPECTION.
24. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING STREETS, SURROUNDING LANDSCAPING AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURB AND GUTTER, GRADING, ETC. AND TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITION.
25. PRIOR TO THE PLACING OF ASPHALT CONCRETE OR SUB-BASE MATERIAL, THE ENGINEERING DIVISION OF THE TOWN OF DANVILLE SHALL BE NOTIFIED BY THE OWNER, OR ACCEPTING AGENCY, OF EACH UTILITY INSTALLATION BENEATH THE AREA TO BE PAVED THAT THE INSTALLATION HAS SATISFACTORILY PASSED FINAL ACCEPTANCE TESTING.

| | |
|---|---|
| ENGINEERING | DATE |
| PLANNING / BUILDING | DATE |
| TRANSPORTATION | DATE |
| MAINTENANCE / PARKS | DATE |

THE GEOTECHNICAL ASPECTS OF THESE PLANS HAVE BEEN REVIEWED. IT IS OUR OPINION THAT THE GEOTECHNICAL ASPECTS OF THESE PLANS ARE IN GENERAL CONFORMANCE WITH THE RECOMMENDATIONS PRESENTED IN THE PROJECT GEOTECHNICAL STUDY. WE ASSUME NO RESPONSIBILITY FOR THE NON-GEOTECHNICAL ASPECTS OF THESE PLANS.

BY: _____ DATE: _____

G.E. NO. 846

EXP. DATE: 6-30-97

**BASIS OF BEARINGS:**

TAKEN AS N 19°22'23" W BETWEEN TWO FOUND STANDARD STREET MONUMENTS IN MCCAULEY ROAD AS SHOWN ON THE MAP OF SUBDIVISION 6886, FILED OCTOBER 20, 1989, IN BOOK 338 OF MAPS AT PAGE 41.

## LEGEND

| | |
|---|---|
| | RIGHT OF WAY |
| | SURVEY CONTROL LINE/CENTERLINE |
| | NEW AC OVERLAY |
| | NEW PAVEMENT |
| | EXISTING GAS LINE |
| | EXISTING WATERLINE |
| | EXISTING STORM DRAIN |
| | EXISTING SANITARY SEWER |
| | 6" AC BERM(DETAIL ON SHEET 2) |
| | STORM DRAIN LINE WITH FLARED INLET & OUTLET, SIZE AS NOTED ON PLANS |
| | NEW EARTH SWALE(DETAIL ON SHEET 2) |
| | RETAINING WALL, HEIGHT AS NOTED ON PLANS |
| | NEW POWER POLE |
| | EXISTING POWER POLE |
| EC/BC | END OF CURVE/BEGINNING OF CURVE |
| PCC | POINT OF COMPOUND CURVATURE |
| INV/ FL | INVERT / FLOWLINE |
| (S) | SANITARY SEWER MANHOLE |
| DW | DRIVEWAY |
| WV | WATER VALVE |
| TW | TOP OF WALL |
| BW | BOTTOM OF WALL |
| AC | ASPHALT CONCRETE |
| EX | EXISTING |
| CMP | CORRUGATED METAL PIPE |
| CCCSD | CENTRAL CONTRA COSTA SANITARY DISTRICT |
| EBMUD | EAST BAY MUNICIPAL UTILITY DISTRICT |
| PG & E | PACIFIC GAS & ELECTRIC |
| CATV | CABLE TELEVISION |

## SHEET INDEX


| NO. | DESCRIPTION |
|---|---|
| 1 | KEY SHEET AND NOTES |
| 2 | DETAIL SHEET |
| 3 | DIABLO ROAD (0+00.00 TO 5+25.00) |
| 4 | DIABLO ROAD (5+25.00 TO 11+75.00) |
| 5 | DIABLO ROAD (11+75.00 TO 18+25.00) |
| 6 | DIABLO ROAD (18+25.00 TO 24+75.00) |
| 7 | DIABLO ROAD (24+75.00 TO 30+25.00) |
| 8 | DIABLO ROAD (30+25.00 TO 37+00.00) |
| 9 | DIABLO ROAD (37+00.00 TO 43+50.00) |
| 10 | DIABLO ROAD (43+50.00 TO 50+00.00) |
| 11 | DIABLO ROAD (50+00.00 TO 55+75.00) |
| 12 | DIABLO ROAD (55+75.00 TO 62+25.00) |
| 13 | DIABLO ROAD (62+25.00 TO 68+00.00) |
| 14 | DIABLO ROAD (68+00.00 TO 73+25.00) |
| 15 | DIABLO ROAD (73+25.00 TO 79+62.01) |


| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123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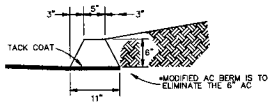
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires _____
Date

TOWN OF DANVILLE
DIABLO ROAD IMPROVEMENTS

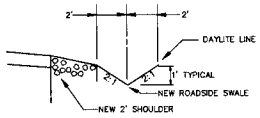
**COVER SHEET**

SHEET NO. 1 OF 15



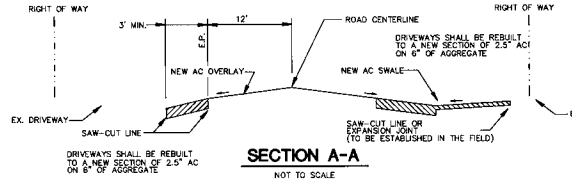

## AC BERM DETAIL*
**DANVILLE STD. 106**

NOT TO SCALE



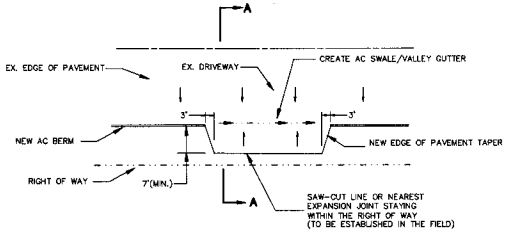

## ROADSIDE SWALE

NOT TO SCALE



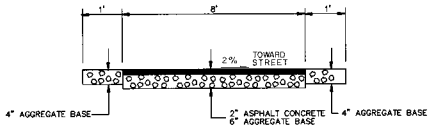

## SECTION A-A

NOT TO SCALE



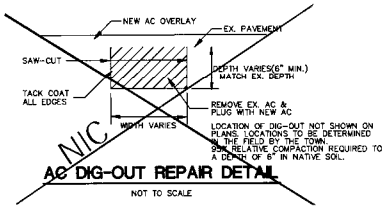

## DRIVEWAY CONFORM DETAIL

NOT TO SCALE




## AC PATH SECTION
**MEHRAN PROPERTY(28+75 TO 33+25)**

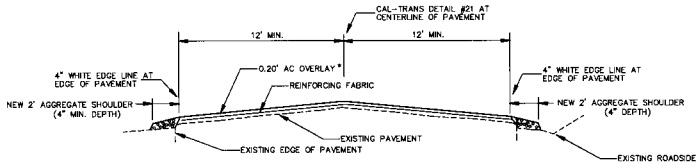
NOT TO SCALE




## AC DIG-OUT REPAIR DETAIL

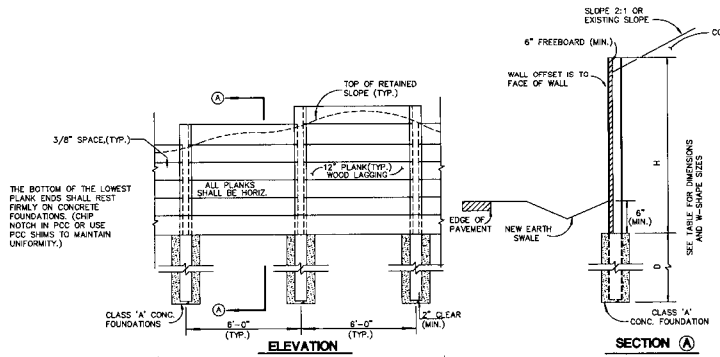
NOT TO SCALE

| PAVEMENT DESIGN CHART | | | | | | | |
|---|---|---|---|---|---|---|---|
| STREET NAME | FROM | TO | AC | AB | ASB | TI | R |
| DIABLO ROAD | 0+00.00 | 79+62.01 | 15" | 0" | 0" | 8.0 | 5 |
| ALTERNATIVE SECTION | | | 5" | 8" | 12" | | |



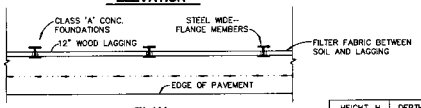

## STREET SECTION
01+00.00 TO 35+25.00 *
**(GREEN VALLEY ROAD TO ALAMEDA DIABLO)**

* EXCEPT FROM 20+31.47 TO 23+12.57 NORTH E.P. WIDENED 4'




## ELEVATION

## SECTION (A)




## PLAN

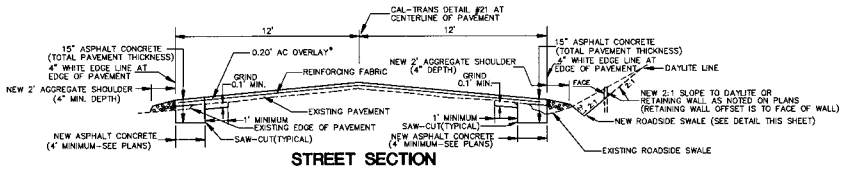
## RETAINING WALL

NOT TO SCALE

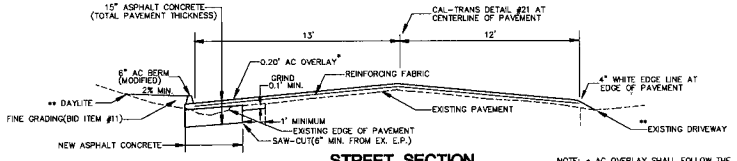
**RETAINING WALL NOTES:**

1. THE STEEL WIDE-FLANGE MEMBERS ARE AS GIVEN IN AISC "MANUAL OF STEEL CONSTRUCTION".
2. STEEL MEMBERS TO BE PAINTED AS SPECIFIED.
3. STEEL MEMBERS SHALL BE CENTERED IN THE CONCRETE FOUNDATIONS.

| HEIGHT, H (FEET) | DEPTH,D (FEET) | W SHAPE (AISC) | WOOD LAGGING (NOM.) | HOLE DIA. (INCHES) |
|---|---|---|---|---|
| 1. | N/A | N/A | N/A | N/A |
| 2. | 3.6' | W5X16 | 2"X12" | 18 |
| 3. | 5.3' | W5X16 | 3"X12" | 18 |
| 4. | 7.1' | W5X16 | 3"X12" | 18 |
| 5. | 8.85' | W6X25 | 4"X12" | 18 |
| 6. | 11.0 | W8X67 | 4"X12" | 18 |
| 7. | 13.0 | W8X67 | 4"X12" | 18 |




## STREET SECTION
35+25.00 TO 68+43.19
**(ALAMEDA DIABLO TO AVENIDA NUEVA)**




## STREET SECTION
69+12.68 TO 79+51.52
**(AVENIDA NUEVA TO DIABLO SCENIC ROAD)**

NOTE: * AC OVERLAY SHALL FOLLOW THE EXISTING STREET CROSS SLOPE.

NOTE: ** SEE DETAIL FOR EXISTING DRIVEWAY CONFORMS.

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


**CA ASSOCIATES inc.**
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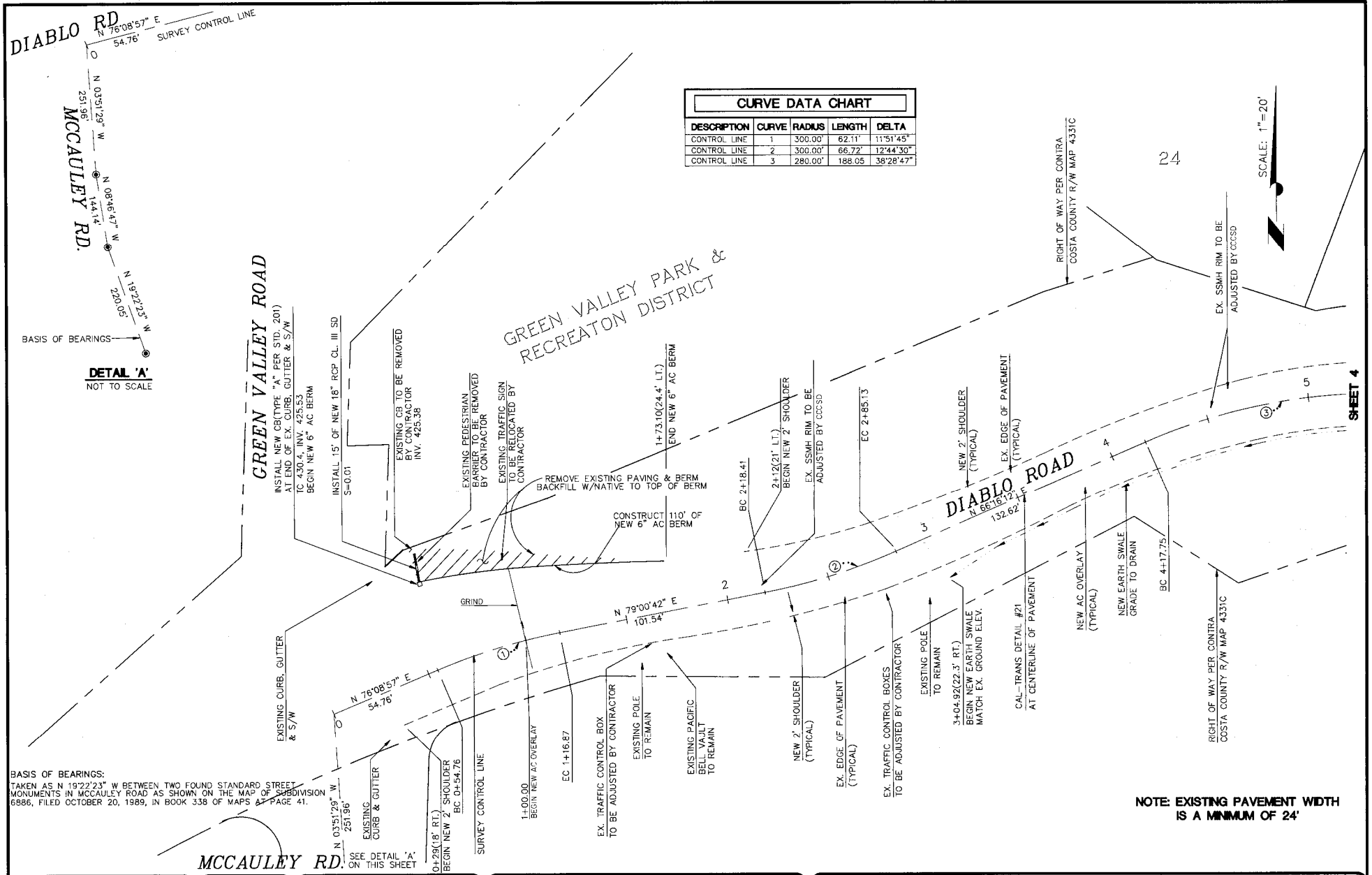
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires _____
Date _____

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

## DETAIL SHEET




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 300.00' | 62.11' | 11°51'45" |
| CONTROL LINE | 2 | 300.00' | 66.72' | 12°44'30" |
| CONTROL LINE | 3 | 280.00' | 188.05 | 38°28'47" |

BASIS OF BEARINGS:
TAKEN AS N 19°22'23" W BETWEEN TWO FOUND STANDARD STREET MONUMENTS IN MCCAULEY ROAD AS SHOWN ON THE MAP OF SUBDIVISION 6886, FILED OCTOBER 20, 1989, IN BOOK 338 OF MAPS AT PAGE 41.

**NOTE: EXISTING PAVEMENT WIDTH IS A MINIMUM OF 24'**

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
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Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


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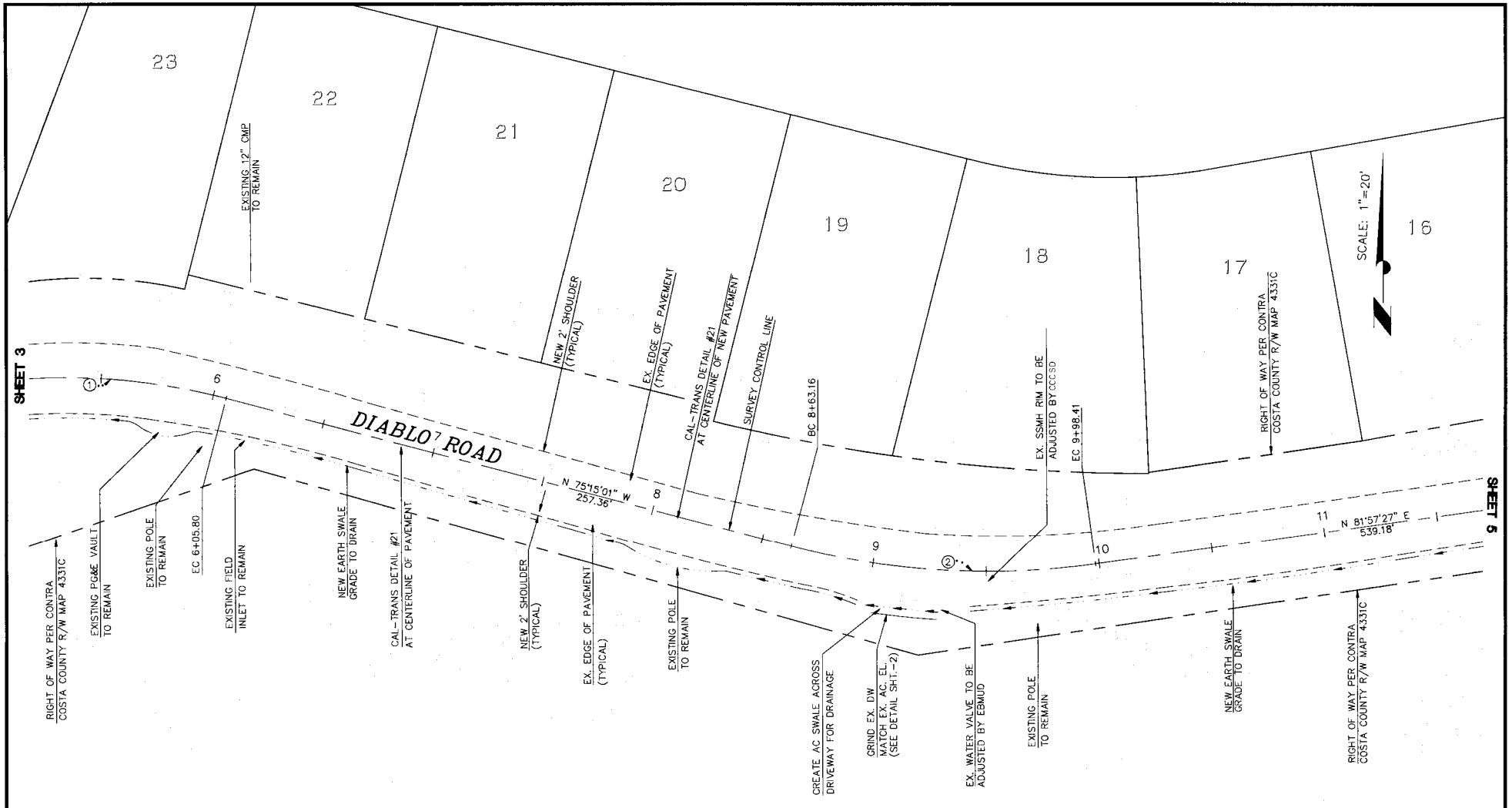
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

**0+00.00 TO 5+25.00**




## CURVE DATA CHART

| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
|---|---|---|---|---|
| CONTROL LINE | 1 | 280.00' | 188.05' | 38°28'47" |
| CONTROL LINE | 2 | 340.00' | 135.25' | 22°47'31" |

**NOTE: EXISTING PAVEMENT WIDTH IS A MINIMUM OF 24'**

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
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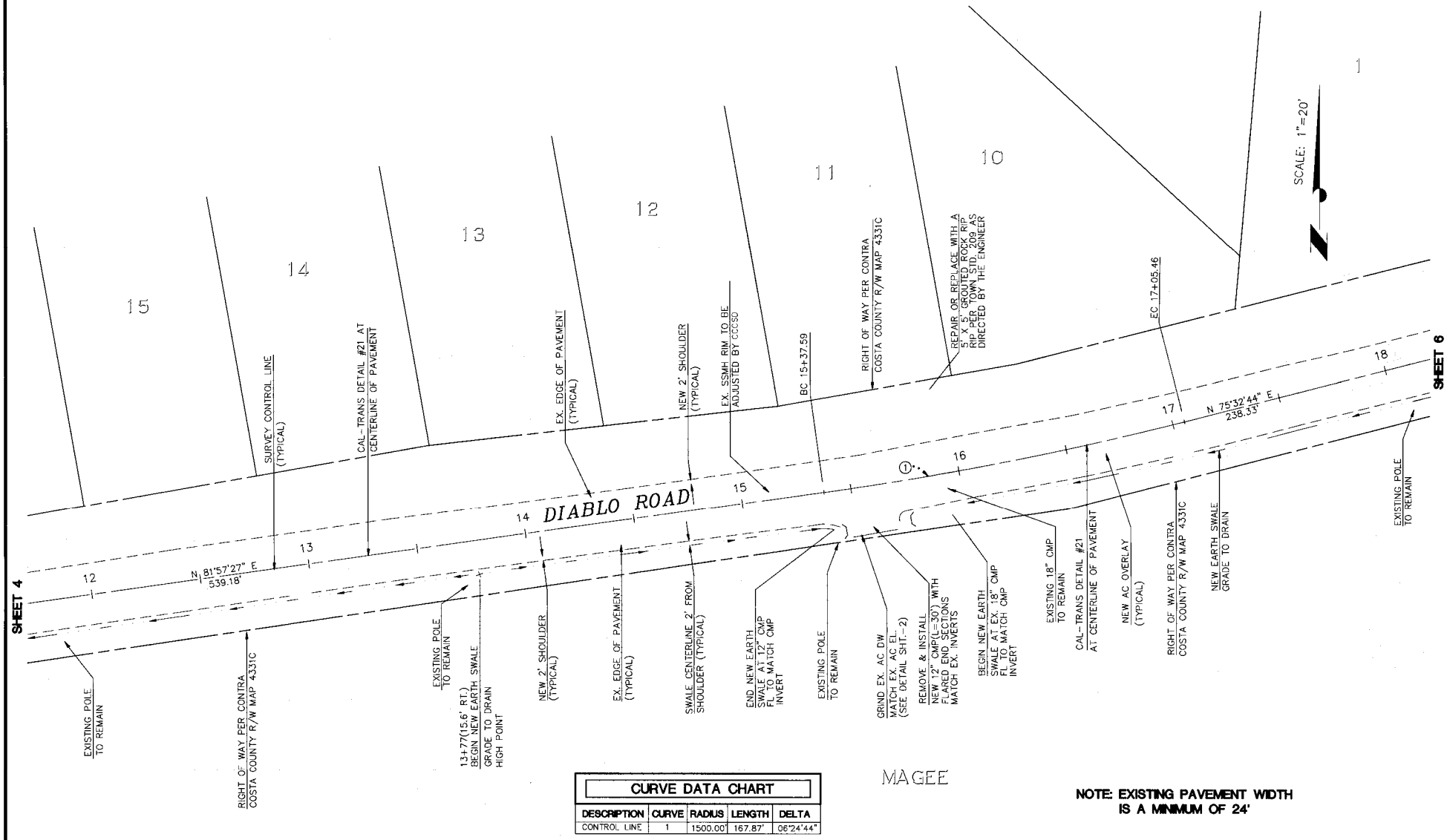
TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

5+25.00 TO 11+75.00

SHEET NO. 4 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 1500.00' | 167.87' | 06°24'44" |

**NOTE: EXISTING PAVEMENT WIDTH IS A MINIMUM OF 24'**

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


C|K ASSOCIATES Inc.
CIVIL ENGINEERING · PLANNING · SURVEYING
1440 Maria Lane, Suite 200, Walnut Creek, California 94596
Phone: (510) 932-6868 Fax: (510) 932-0910

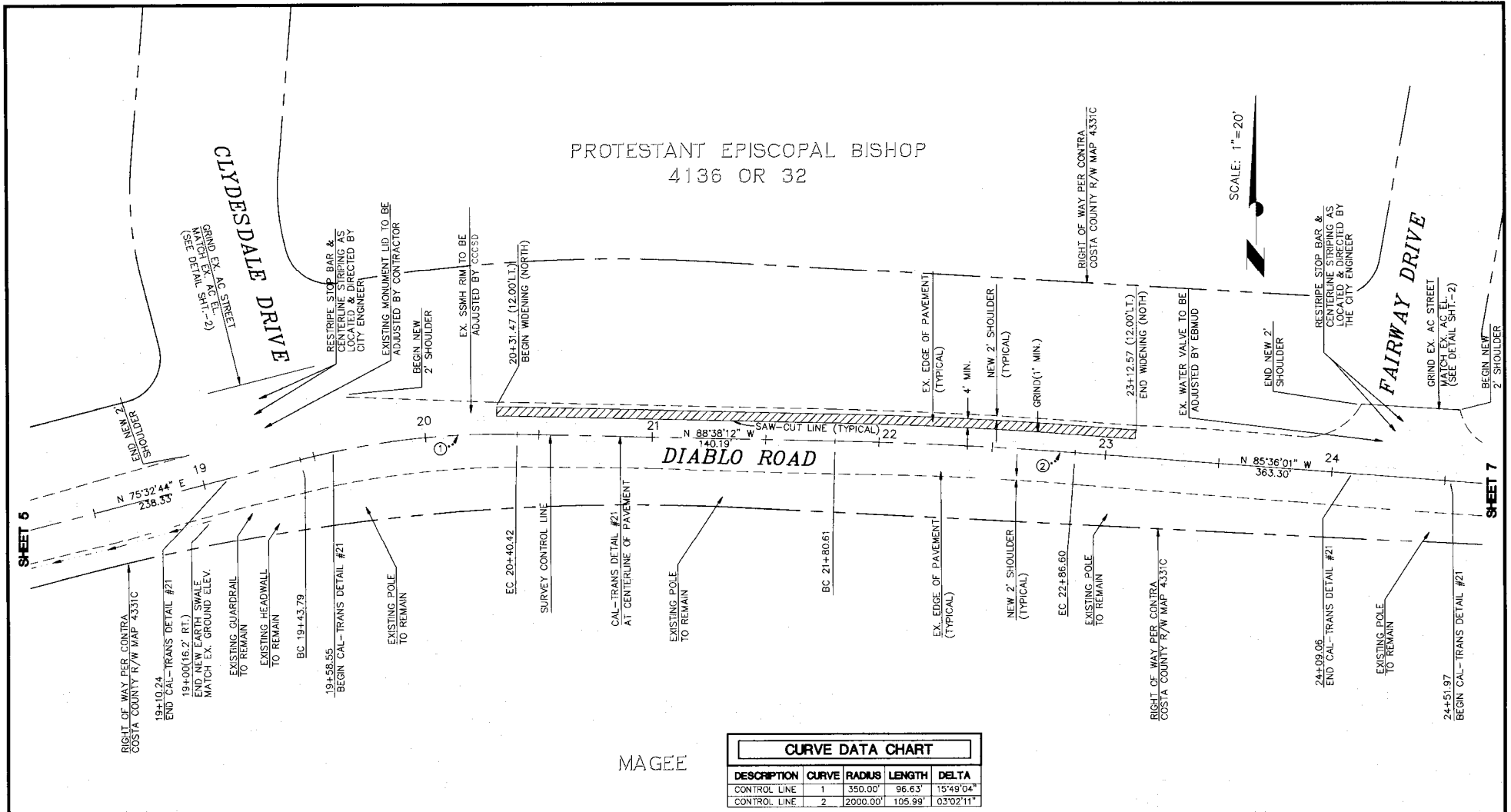

APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

DANVILLE

TOWN OF DANVILLE
# DIABLO ROAD IMPROVEMENTS

11+75.00 TO 18+25.00

SHEET NO. 5 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 350.00' | 96.63' | 15°49'04" |
| CONTROL LINE | 2 | 2000.00' | 105.99' | 03°02'11" |

**NOTE: EXISTING PAVEMENT WIDTH IS A MINIMUM OF 24'**

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


CHA ASSOCIATES Inc.
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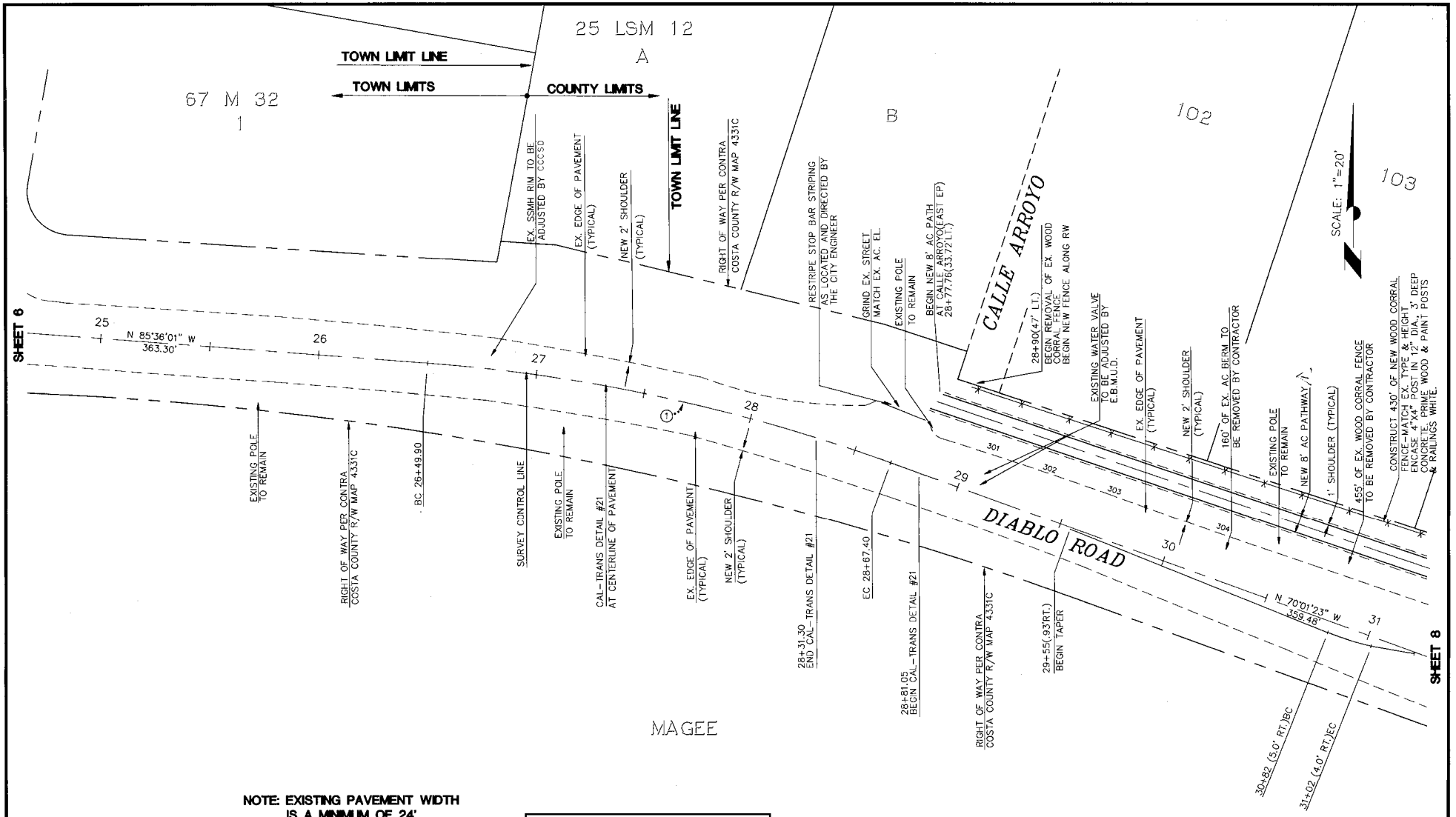
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires _____
Date

DANVILLE

TOWN OF DANVILLE
# DIABLO ROAD IMPROVEMENTS

18+25.00 TO 24+75.00

SHEET NO. 6 OF 15




**NOTE: EXISTING PAVEMENT WIDTH IS A MINIMUM OF 24'**

| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 800.00' | 217.50' | 15°34'38" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| 1 | 3/3/99 | | SHALL DELETED FROM CONTRACT |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123

**ASSOCIATES Inc.**
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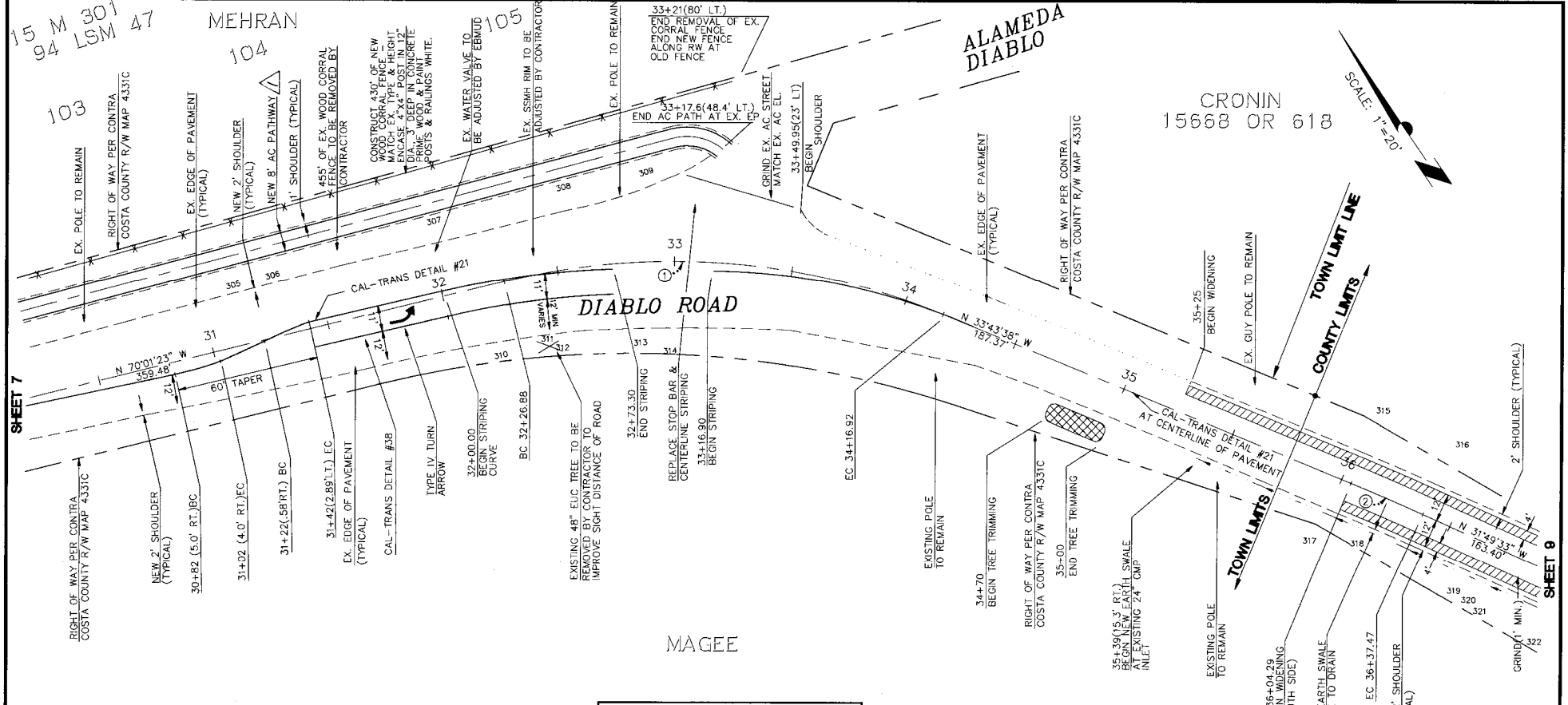
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

DANVILLE

TOWN OF DANVILLE
DIABLO ROAD IMPROVEMENTS

**24+75.00 TO 30+25.00**

SHEET NO. 7 OF 15




## CURVE DATA CHART

| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
|---|---|---|---|---|
| CONTROL LINE | 1 | 300.00' | 190.04' | 36°17'44" |
| CONTROL LINE | 2 | 1000.00' | 33.18' | 01°54'05" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| 1 | 3/3/98 | | RAIL DELETED FROM CONTRACT |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123

REGISTERED PROFESSIONAL ENGINEER ROBERT M. DUCHI 29123 STATE OF CALIFORNIA

**ASSOCIATES Inc.**
CIVIL ENGINEERING · PLANNING · SURVEYING
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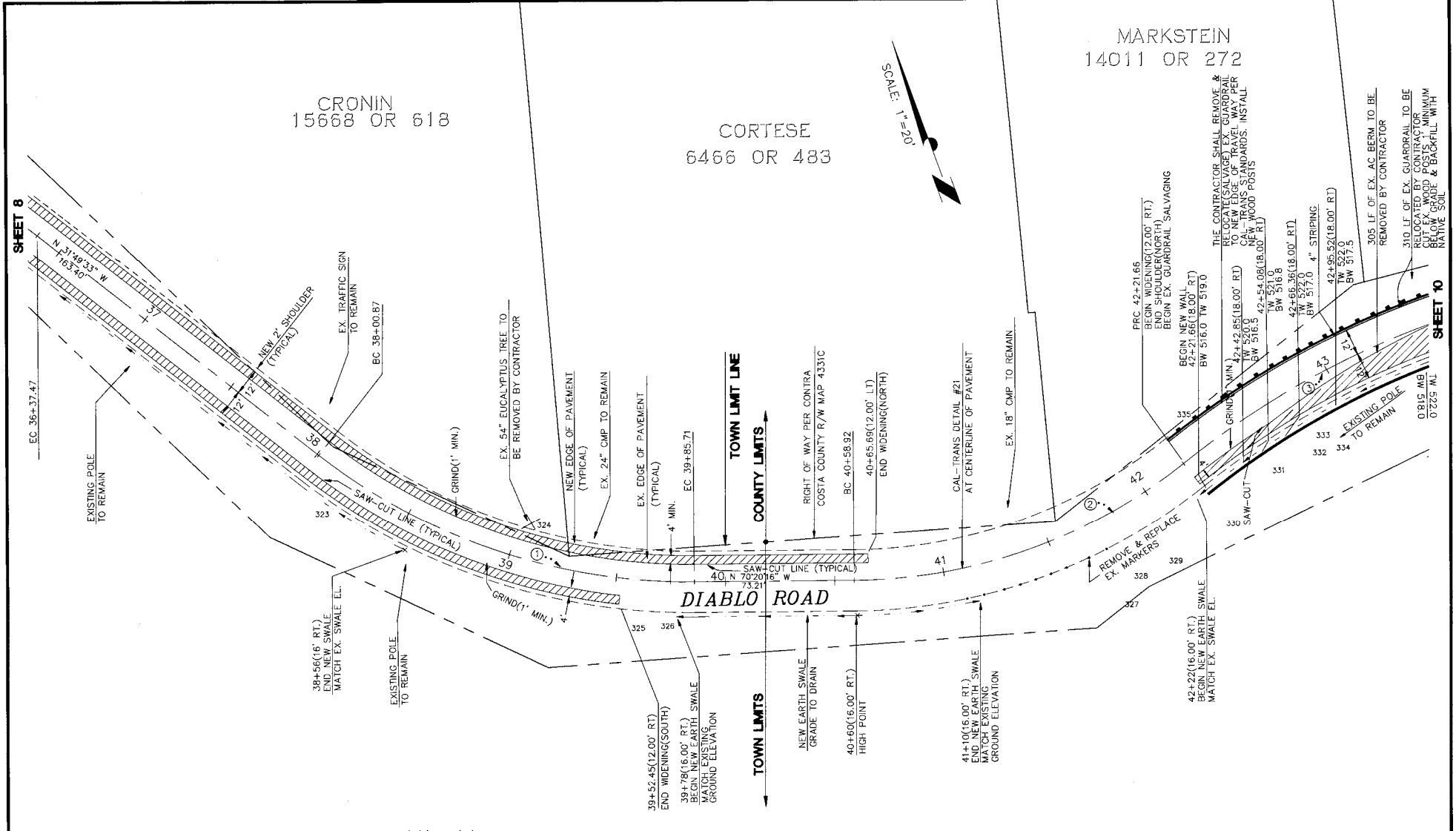
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

DANVILLE

TOWN OF DANVILLE
DIABLO ROAD IMPROVEMENTS

**30+25.00 TO 37+00.00**

SHEET NO. 8 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 275.00' | 184.84' | 38°30'43" |
| CONTROL LINE | 2 | 243.00' | 162.73' | 38°22'13" |
| CONTROL LINE | 3 | 400.00' | 144.04' | 20°37'57" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


CK ASSOCIATES Inc.
CIVIL ENGINEERING · PLANNING · SURVEYING
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Phone: (510) 932-6868 Fax: (510) 932-0910

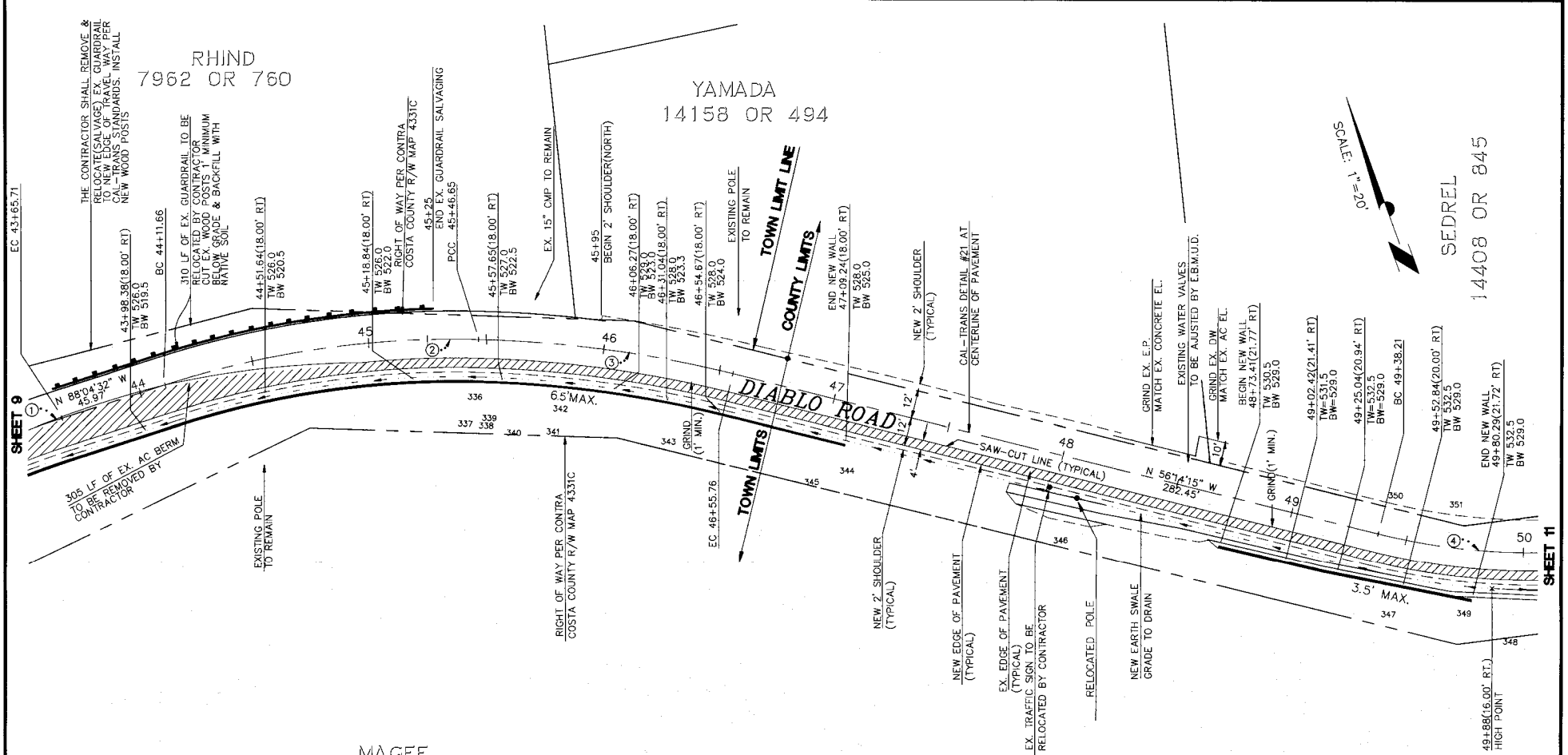

APPROVED
Steven C. Lake
City Engineer
R.C.E. 51870
Expires
Date

DANVILLE

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

## 37+00.00 TO 43+50.00




## CURVE DATA CHART

| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
|---|---|---|---|---|
| CONTROL LINE | 1 | 400.00' | 144.04' | 20°37'57" |
| CONTROL LINE | 2 | 400.00' | 134.99' | 19°20'06" |
| CONTROL LINE | 3 | 500.00' | 109.11' | 12°30'12" |
| CONTROL LINE | 4 | 265.00' | 255.97' | 55°20'39" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


CA ASSOCIATES Inc.
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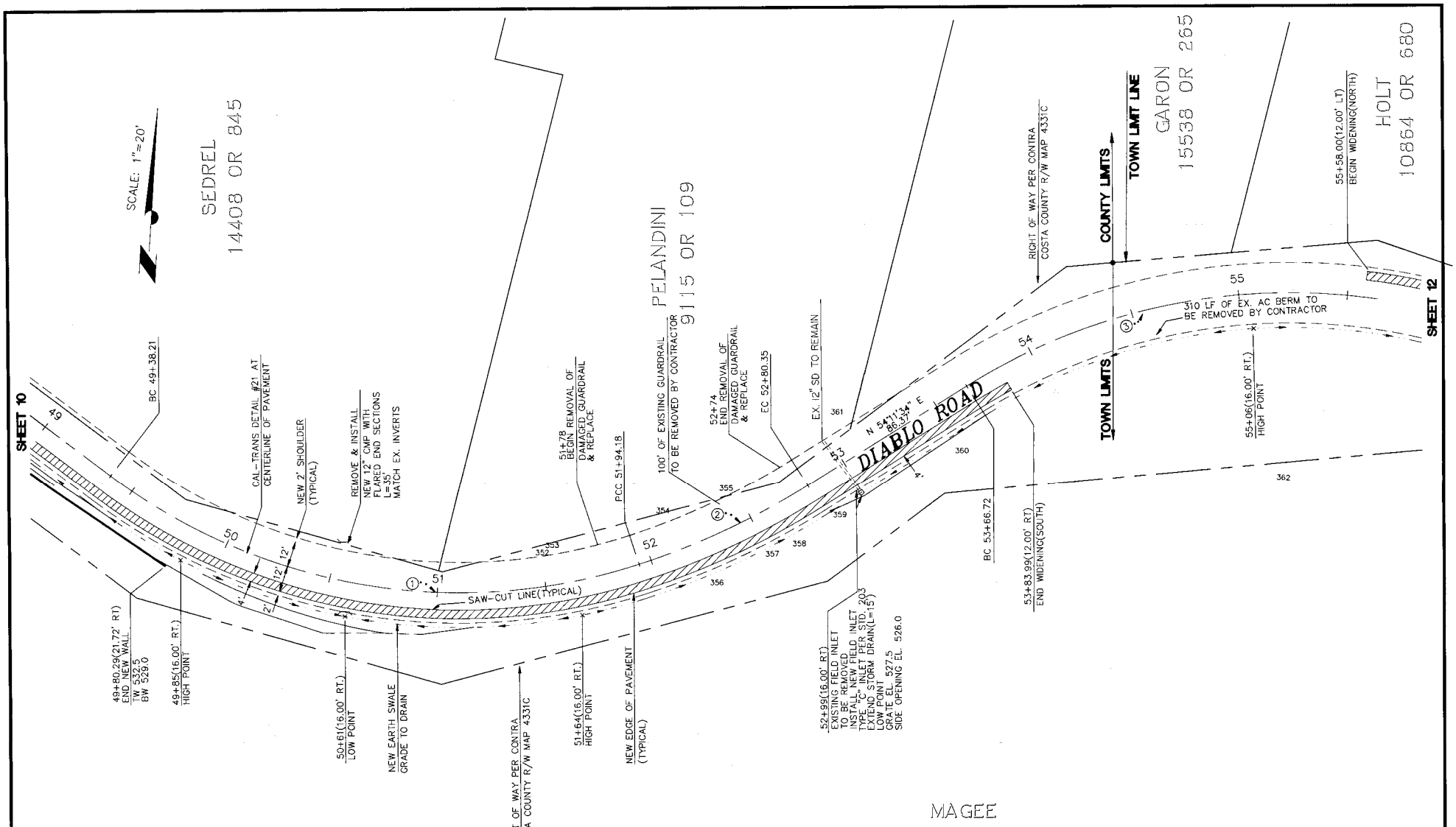
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires _____
Date

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

**43+50.00 TO 50+00.00**

SHEET NO. 10 OF 15




## CURVE DATA CHART

| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
|---|---|---|---|---|
| CONTROL LINE | 1 | 265.00' | 255.97' | 55°20'39" |
| CONTROL LINE | 2 | 347.00' | 86.17' | 14°13'39" |
| CONTROL LINE | 3 | 280.00' | 261.38' | 53°29'10" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


ASSOCIATES Inc.
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APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

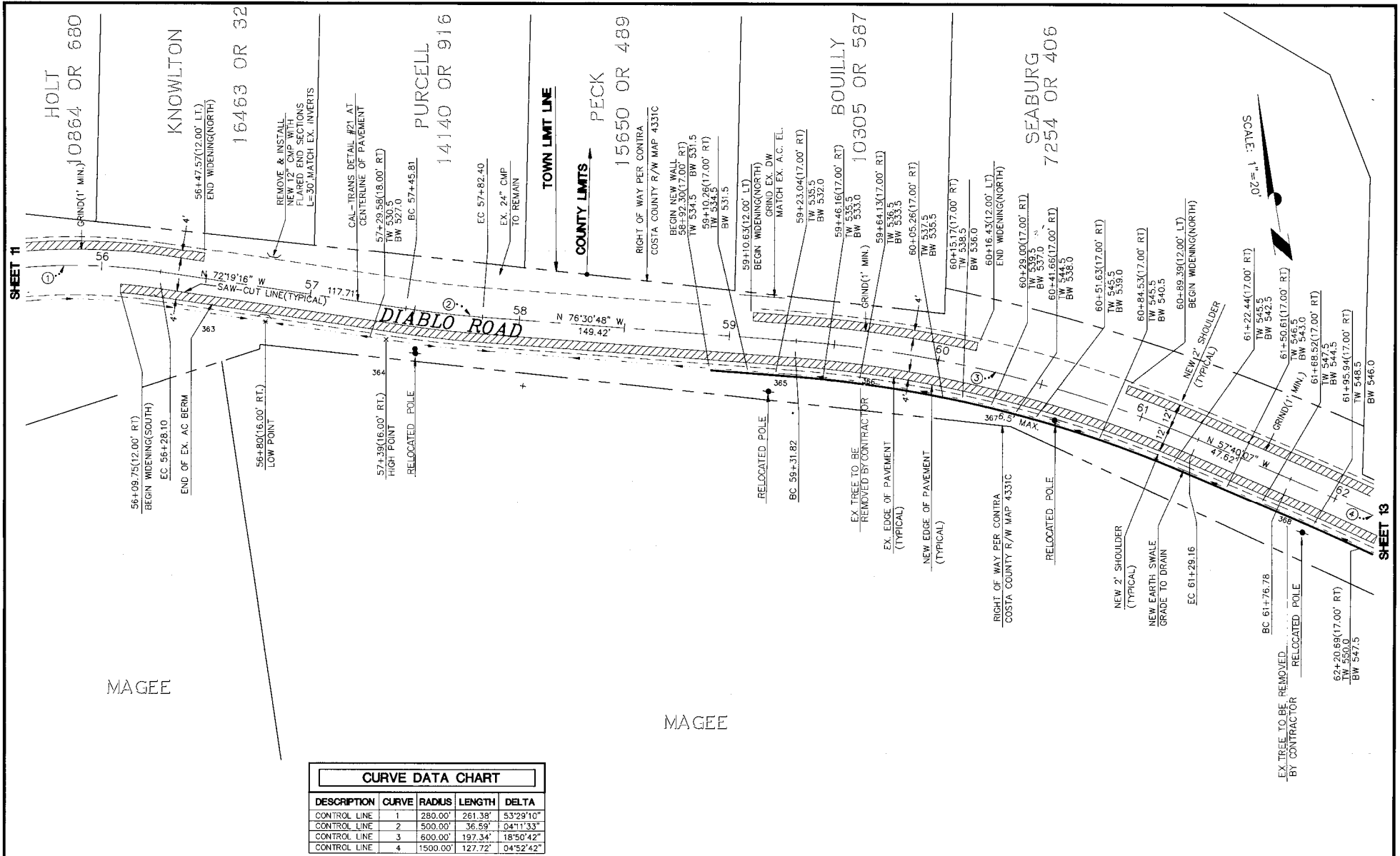
DANVILLE

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

**50+00.00 TO 55+75.00**

SHEET NO. 11 OF 15




## CURVE DATA CHART

| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
|---|---|---|---|---|
| CONTROL LINE | 1 | 280.00' | 261.38' | 53°29'10" |
| CONTROL LINE | 2 | 500.00' | 36.59' | 04°11'33" |
| CONTROL LINE | 3 | 600.00' | 197.34' | 18°50'42" |
| CONTROL LINE | 4 | 1500.00' | 127.72' | 04°52'42" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


C|K ASSOCIATES Inc.
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APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

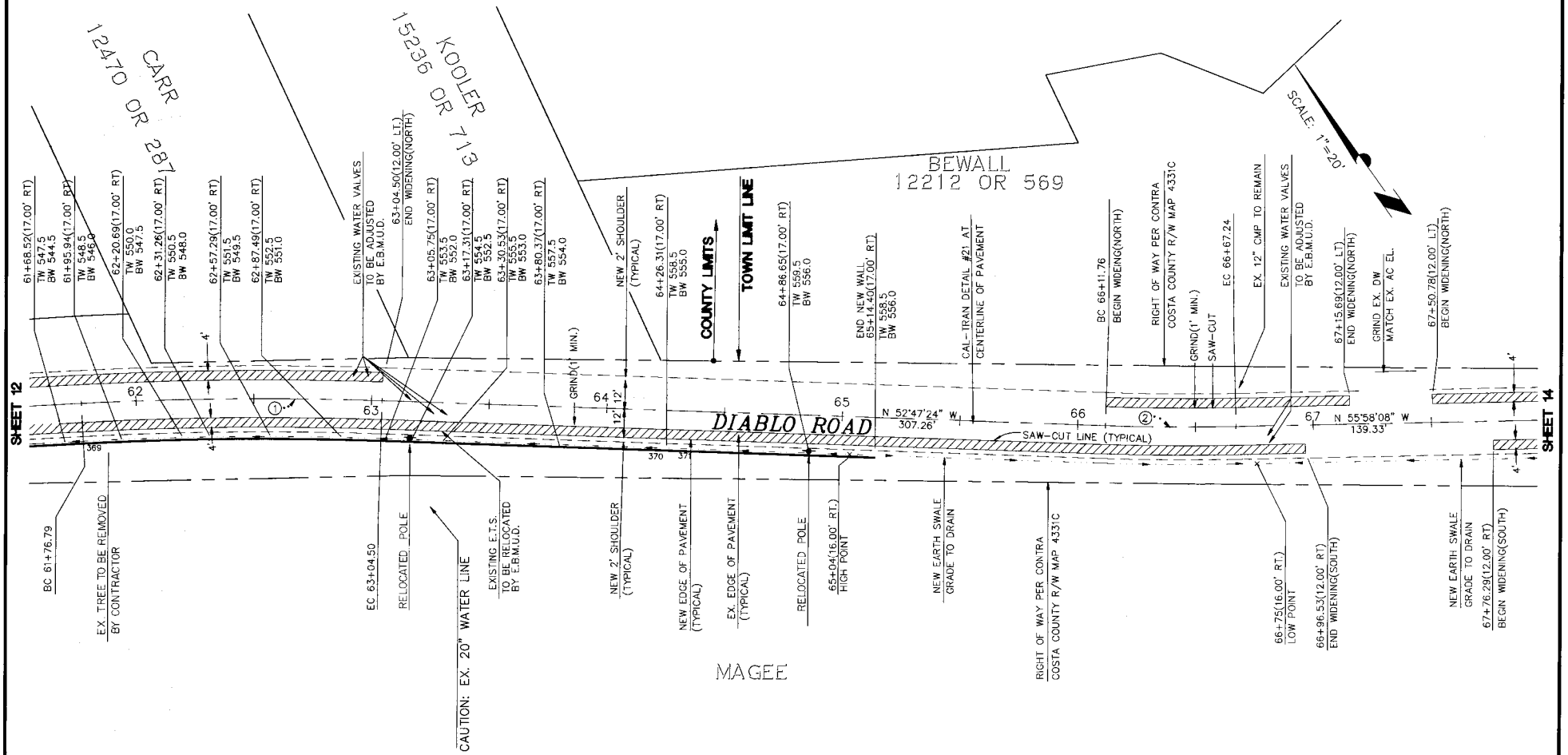
DANVILLE

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

**55+75.00 TO 62+25.00**

SHEET NO. 12 OF 15




## CURVE DATA CHART

| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
|---|---|---|---|---|
| CONTROL LINE | 1 | 1500.00' | 127.72' | 04°52'42" |
| CONTROL LINE | 2 | 1000.00' | 55.48' | 03°10'44" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123

REGISTERED PROFESSIONAL ENGINEER ROBERT M DUCHI No. 29123 STATE OF CALIFORNIA


ASSOCIATES Inc.
CIVIL ENGINEERING · PLANNING · SURVEYING
1440 Maria Lane, Suite 200, Walnut Creek, California 94596
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APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires _____
Date

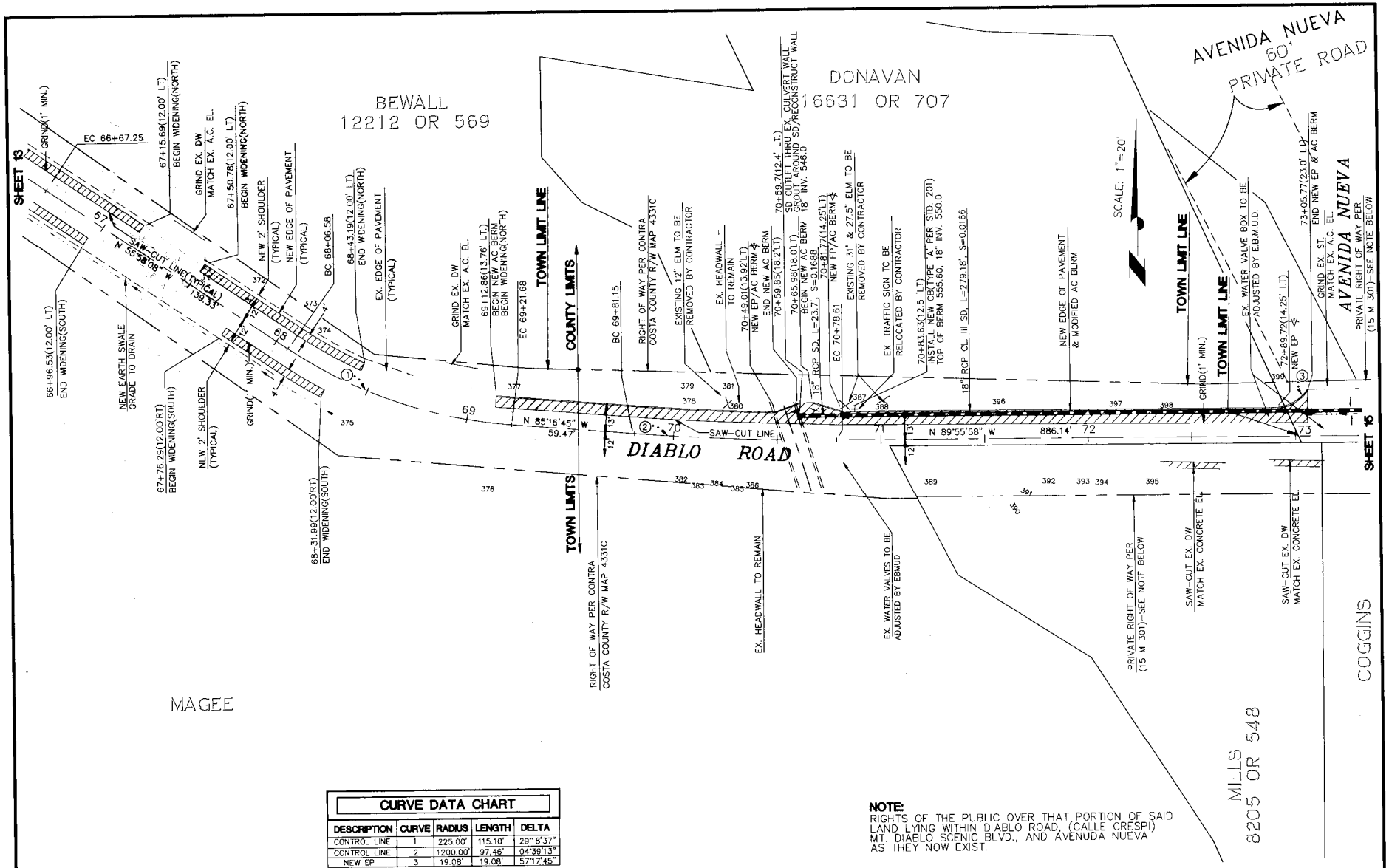
DANVILLE

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

**62+25.00 TO 68+00.00**

SHEET NO. 13 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 225.00' | 115.10' | 29°18'37" |
| CONTROL LINE | 2 | 1200.00' | 97.46' | 04°39'13" |
| NEW EP | 3 | 19.08' | 19.08' | 57°17'45" |

**NOTE:**
RIGHTS OF THE PUBLIC OVER THAT PORTION OF SAID LAND LYING WITHIN DIABLO ROAD, (CALLE CRESPI) MT. DIABLO SCENIC BLVD., AND AVENUDA NUEVA AS THEY NOW EXIST.

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


BKF ASSOCIATES Inc.
CIVIL ENGINEERING · PLANNING · SURVEYING
1440 Maria Lane, Suite 200, Walnut Creek, California 94596
Phone: (510) 932-6868 Fax: (510) 932-0910

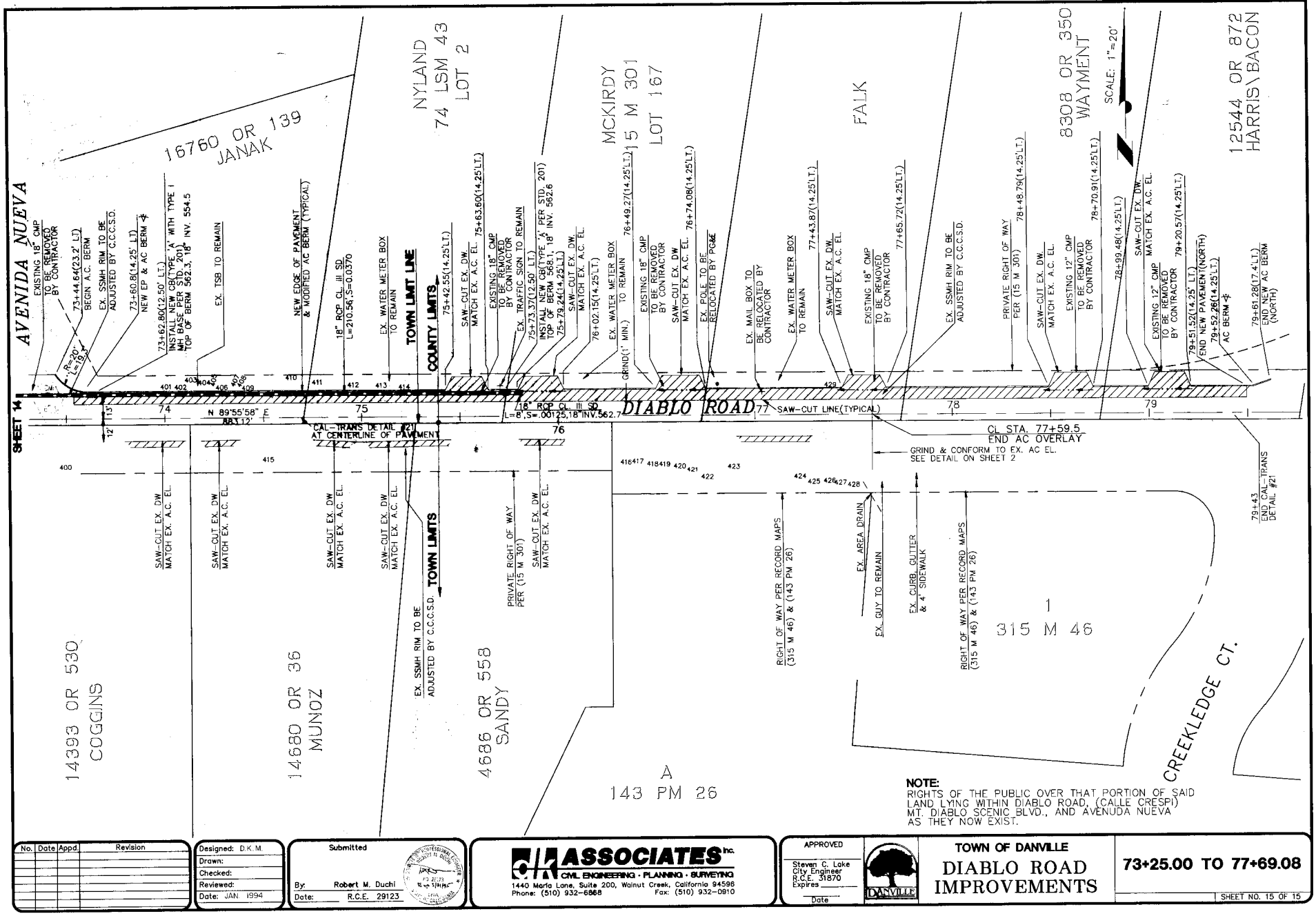

APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires _____
Date

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

**68+00.00 TO 73+25.00**

SHEET NO. 14 OF 15




**NOTE:**
RIGHTS OF THE PUBLIC OVER THAT PORTION OF SAID LAND LYING WITHIN DIABLO ROAD, (CALLE CRESPI) MT. DIABLO SCENIC BLVD., AND AVENUDA NUEVA AS THEY NOW EXIST.

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


CHS ASSOCIATES Inc.
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APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

**73+25.00 TO 77+69.08**

SHEET NO. 15 OF 15

## VEHICLE CITATIONS ISSUED

## 2013-2017

| LOCATION | # of Citations TOTAL = 1348 | VC # | | VC # | | VC # | |
|---|---|---|---|---|---|---|---|
| Clydesdale | 7 | 22350 | Speeding | 12500A | Driving w/o a license | 5200A | Driving without a license plate |
| Fariway Lane | 1 | 22350 | Speeding | | | | |
| Calle Arroyo | 1 | 22350 | Speeding | | | | |
| Alameda Diablo | 0 | | | | | | |
| Avenida Nueva | 2 | 22350 | Speeding | | | | |
| Creekledge Court | 0 | | | | | | |
| Mt Diablo Scenic @ Blackhawk | 2 | 22350 | Speeding | | | | |

| | | |
|---|---|---|
| TOTAL # of Citations Green Valley to Mt Diablo Scenic | 13 | 1% |

| | | |
|---|---|---|
| GreenValley Rd/McCauley to Alameda Diablo (Diablo Community entrance) | 9 | 0.7% |
| Alameda Diablo (Diablo Community entrance) to Mt Diablo Scenic Blvd | 4 | 0.3% |

**CITATION REPORT RECAPS**

| | | |
|---|---|---|
| 1710 Report by Officer | 1502 | Source: Crime Analysis includes County Sheriff officers |
| VC222350 Report | 1348 | Source: IT Department report, doesn't include County Sheriff |
| Difference ???? | 154 | |

**NOTE 1: No safe place to pull drivers over in the vicinity of Green Valley Rd to Mt Diablo Scenic. Source: Danville PD, their reason for low enforcement on Diablo Rd.**

**NOTE 2: Data shows NO citations recorded for CA VC 22107 & VC 21460a which would be related to drivers crossing a double yellow line.**

# TOWN OF DANVILLE

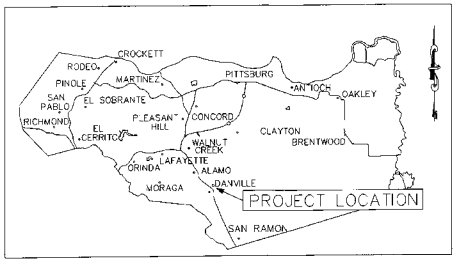
## CONTRA COSTA COUNTY, CALIFORNIA

**AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009**

# DIABLO ROAD/GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT

**DANVILLE CIP NOS. C-511 AND A-365**
**ESPL-5434(018)**

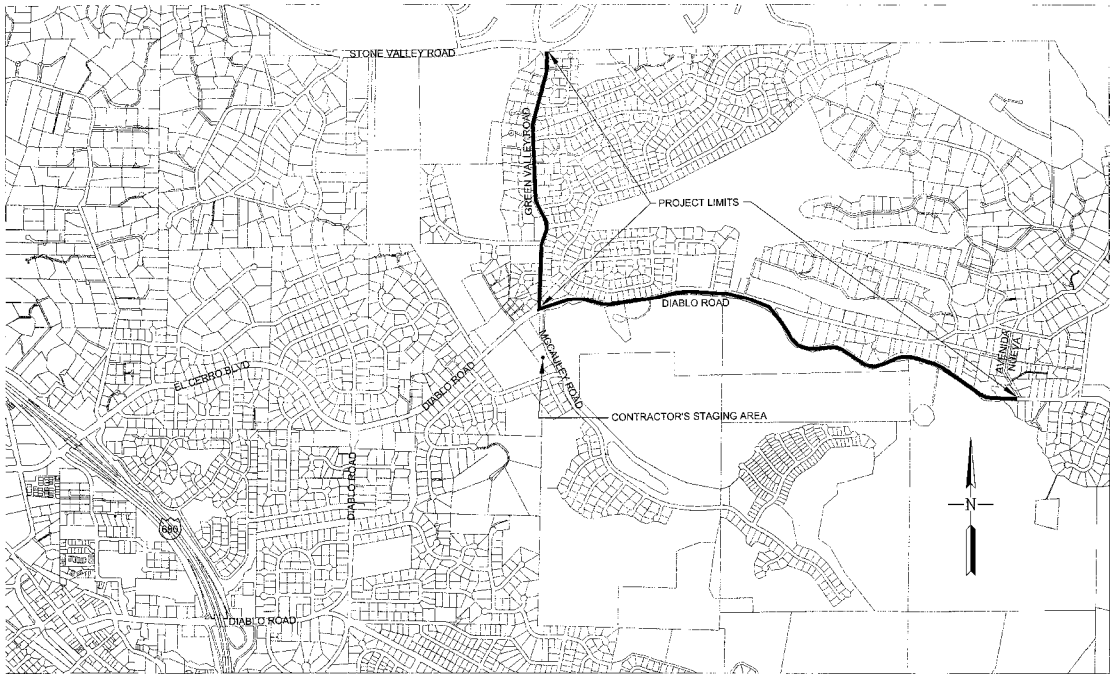
TO BE SUPPLEMENTED BY TOWN OF DANVILLE STANDARD PLANS DATED MARCH 1989, CONTRA COSTA COUNTY STANDARD PLANS DATED MARCH 2008, AND STATE OF CALIFORNIA STANDARD PLANS DATED MAY 2006.




**VICINITY MAP**
NO SCALE

**INDEX OF SHEETS**


| SHEET NO. | DESCRIPTION |
|---|---|
| 1 | TITLE SHEET (T-1) |
| 2 | KEY MAP (K-1) |
| 3 | NOTES, LEGEND AND ABBREVIATIONS (N-1) |
| 4 | TYPICAL SECTIONS (X-1) |
| 5-10 | LAYOUT PLANS (L-1 THROUGH L-6) |
| 11-14 | DETAILS (C-1 THROUGH C-4) |
| 15-20 | SIGNING AND STRIPING PLANS (S-1 THROUGH S-6) |
| 21-27 | TRAFFIC SIGNAL PLANS (E-1 THROUGH E-3, AND E-1A THROUGH E-4A) |


**LOCATION MAP**
NO SCALE

**APPROVED BY THE TOWN OF DANVILLE:**

APPROVED FOR CONSTRUCTION SUBJECT TO DATA SHOWN.

STEVEN C. LAKE, CITY ENGINEER — DATE 5-6-09
PLANNING — DATE 5-6-09
TRANSPORTATION — DATE 5.6.09
MAINTENANCE/PARKS — DATE 5-6-09

REGISTERED PROFESSIONAL ENGINEER — STEVEN C. LAKE — No. 38878 — Exp. 12-31-10 — CIVIL — STATE OF CALIFORNIA

overhead — BEFORE YOU EXCAVATE — underground

48 HOURS BEFORE ANY EXCAVATION WORK BEGINS OR ANY WORK BEGINS NEAR OVERHEAD POWER LINES, CALL 1-800-624-2444

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER — MICHAEL A. STELLA — No. 54642 — Exp. 12-31-09 — CIVIL — STATE OF CALIFORNIA


PLANS PREPARED BY: TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

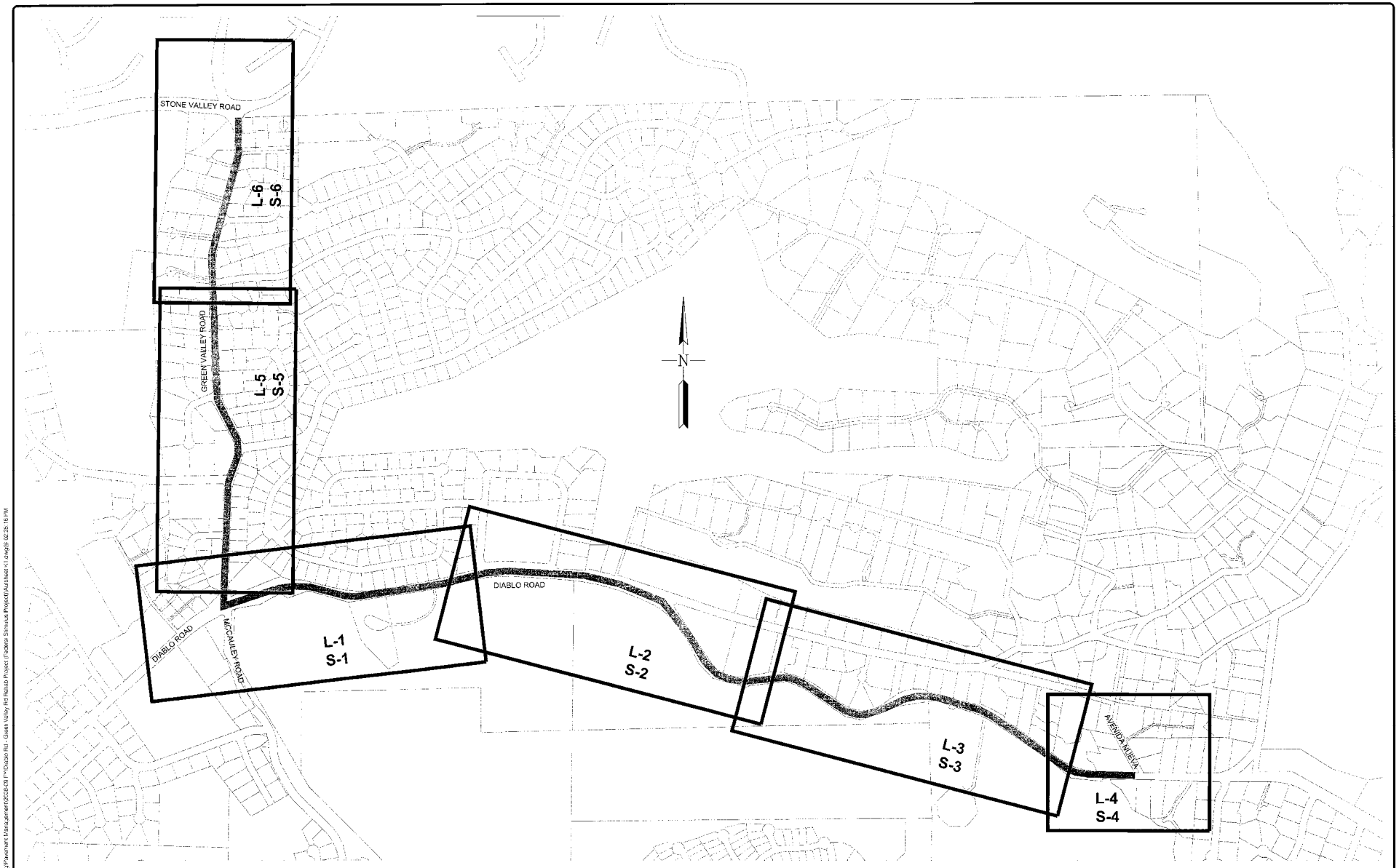

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES 12/31/09
5/06/09
DATE

**TOWN OF DANVILLE**
**AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009**
**DIABLO ROAD /GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT CIP NOS. C-511 AND A-365**

**TITLE SHEET**
**T-1**

SCALE: AS SHOWN | SHEET 1 OF 27


\\TLASW1\Dev\Srv\Engineering\Pavement Management\2008-09 F\Diablo Rd - Green Valley Rd Rehab Project\Federal Stimulus Project\Mxd\Sheet T1.mxd\ol 07:26:59 PM
Plotted on: 05/05/09 @ 08:20:58 PM




| NO | DATE | APPD | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. STELLA
No. 54642
Exp. 12-31-09
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES 12/31/09
5/06/09
DATE

DANVILLE

# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## KEY MAP

K-1

SCALE: AS SHOWN | SHEET 2 OF 27

\\PLAS-1\DevServ\Engineering\Pavement Management\2008-09 FY\Diablo Rd - Green Valley Rd Rehab Project (Federal Stimulus Project)\Autoheet K1.dwg@ 02:25:16 PM

Plotted on: 05/05/09 @ 02:25:16 PM

## NOTES

1. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FOR THE SAFETY OF ALL PERSONS AND PROPERTY DURING THE COURSE OF THE PROJECT AND COMPLY WITH CONSTRUCTION SAFETY ORDERS AND CAL/OSHA REQUIREMENTS.

2. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. ALL TRAFFIC CONTROL AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MAUNUAL OF UNIFORM TRAFFIC CONTROL DEVICES. LANE CLOSURES SHALL AT A MINIMUM CONFORM TO STATE OF CALIFORIA STANDARD PLAN T13.

3. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, (800) 227-2600 OR (800) 624-2444, 48 HOURS PRIOR TO ANY EXCAVATION. THE USA AUTHORIZATION NUMBER SHALL BE KEPT AT THE JOB SITE.

4. CONTRACTOR SHALL PROVIDE FOR CONTINUOUS INGRESS AND EGRESS TO ALL PRIVATE PROPERTY ADJACENT TO THE WORK THROUGHOUT THE DURATION OF CONSTRUCTION UNLESS APPROVED IN ADVANCE BY THE ENGINEER.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO THE SITE OR THE SURROUNDING AREA. EXISTING FACILITIES THAT ARE DAMAGED OR DISPLACED SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

6. ALL EXISTING FACILITIES, STRUCTURES, LANDSCAPING, ETC, SHALL REMAIN UNLESS SPECIFICALLY DESIGNATED FOR REMOVAL AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

7. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO THE PROPOSED AND EXISTING DRAINAGE FACILITIES FROM EXISTING AND NEW PAVEMENT. CONTRACTOR SHALL IDENTIFY ANY AREAS OF POTENTIAL WATER PONDING AND NOTIFY THE ENGINEER IMMEDIATELY.

8. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES WITHIN THE WORK AREA PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL PROCEED WITH CAUTION DURING EXCAVATION OPERATIONS AND SHALL BE RESPONSIBLE FOT REPAIR OR REPLACEMENT OF ALL UTILITIES DAMAGED DURING CONSTRUCTION AT THE CONTRACTOR'S EXPENSE.

9. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MAUNUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND STATE OF CALIFORIA STANDARD PLANS A20A THROUGH A20D, AND A24A THROUGH A24E. CAT TRACKING SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION OF FINAL STRIPING.

## TABLE 1 - AC DIG-OUTS (STREETS)

| NO. | SIZE (FT) | AREA (SF) |
|---|---|---|
| (1) | 4 X 60 | 240 |
| (2) | 16 X 30 | 480 |
| (3) | 4 X 100 | 400 |
| (4) | 12 X 44 | 528 |
| (5) | 8 X 24 | 192 |
| (6) | 4 X 30 | 120 |
| (7) | 4 X 15 | 60 |
| (8) | 8 X 30 | 240 |
| (9) | 4 X 15 | 60 |
| (10) | 12 X 140 | 1680 |
| (11) | 10 X 10 | 100 |
| (12) | 12 X 180 | 2160 |
| (13) | 12 X 60 | 720 |
| (14) | 10 X 40 | 400 |
| (15) | 12 X 170 | 2040 |
| (16) | 20 X 160 | 3200 |
| (17) | 12 X 390 | 4680 |
| (18) | 22 X 35 | 770 |
| (19) | 24 X 125 | 3000 |
| (20) | 20 X 45 | 900 |
| (21) | 16 X 121 | 1936 |
| (22) | 20 X 50 | 1000 |
| (23) | 12 X 58 | 696 |
| (24) | 10 X 80 | 800 |
| (25) | 16 X 57 | 912 |
| (26) | 18 X 33 | 594 |
| (27) | 14 X 160 | 2240 |
| (28) | 16 X 77 | 1232 |
| (29) | 11 X 197 | 2167 |
| (30) | 8 X 20 | 160 |
| (31) | 12 X 100 | 1200 |
| (32) | 16 X 115 | 1840 |
| (33) | 10 X 116 | 1160 |
| (34) | 12 X 246 | 2952 |
| (35) | 12 X 224 | 2688 |
| (36) | 4 X 12 | 48 |
| (37) | 6 X 113 | 678 |
| (38) | 12 X 107 | 1284 |
| (39) | 12 X 108 | 1296 |
| (40) | 12 X 330 | 3960 |
| (41) | 18 X 95 | 1710 |
| (42) | 24 X 45 | 1080 |
| (43) | 4 X 34 | 136 |
| (44) | 8 X 60 | 480 |
| (45) | 14 X 128 | 1792 |
| (*) | VARIES | 476 |
| TOTAL | | 56,487 |

* REPRESENTS 1'-WIDE STRIPS ADJACENT TO NEW CURB RAMPS

## TABLE 2 - AC DIG-OUTS (BIKEWAY)

| NO. | SIZE (FT) | AREA (SF) |
|---|---|---|
| (51) | 8 X 25 | 200 |
| (52) | 3 X 200 | 600 |
| (53) | 3 X 20 | 60 |
| (54) | 3 X 80 | 240 |
| (55) | 8 X 150 | 1200 |
| (56) | 8 X 220 | 1760 |
| (57) | 8 X 150 | 1200 |
| (58) | 3 X 127 | 381 |
| (59) | 3 X 50 | 150 |
| (60) | 6 X 65 | 390 |
| TOTAL | | 6181 |

## LEGEND AND ABBREVIATIONS

(FOR STANDARD LEGENDS AND ABBREVIATIONS, SEE STATE OF CALIFORNIA STANDARD PLAN SHEETS A10A THROUGH A10D.)

| | |
|---|---|
| AC | ASPHALT CONCRETE |
| ACD (A) | AC DIKE (TYPE A) |
| ACDS | AC DIKE STRIPING - PAINT TOP OF DIKE W WITH W TYPE G REFLECTIVE MARKERS @ 24' OC |
| ALT | ALTERNATIVE |
| BLL | BIKE LANE LEGEND - INSTALL BIKE LANE ARROW AND BIKE LANE SYMBOL |
| BSL | BIKEWAY STOP LEGEND - PER DETAIL ON SHEET S-6 |
| CW | CROSSWALK |
| CONC | CONCRETE |
| D39M | DET 39 W/ TYPE G ONE-WAY REFLECTIVE MARKERS @ 24' OC PLACE (MARKERS ON MOTOR VEHICLE SIDE OF DET 39 STRIPE) |
| DET | DETAIL |
| FH | FIRE HYDRANT |
| FHM | FIRE HYDRANT MARKER (REFLECTIVE BLUE) |
| FOC | FACE OF CURB |
| FT | FEET |
| G | GAS |
| HV | HIGH VOLTAGE VAULT |
| K-1 | TYPE K-1 (CA) OBJECT MARKER (OM2-2H) |
| LDHH | LOOP DETECTOR HAND HOLE (IRON LID) |
| LL | LIMIT LINE |
| MIN | MINIMUM |
| MON | MONUMENT |
| OC | ON CENTER |
| OL | OVERLAY |
| PCC | PORTLAND CEMENT CONCRETE |
| PB | PACIFIC BELL (AT&T) |
| PG&E | PACIFIC GAS AND ELECTRIC |
| PMW | PAVEMENT MARKING WORDS |
| R1-1(MOD) | MODIFIED R1-1 SIGN PER DETAIL ON SHEET S-6 |
| SDMH | STORM DRAIN MANHOLE |
| SF | SQUARE FEET |
| SHLD | SHOULDER |
| SSMH | SANITARY SEWER MANHOLE |
| STD | STANDARD |
| TPFS | TEMPORARY PROJECT FUNDING SOURCE SIGN |
| TS | TRAFFIC SIGNAL BOX |
| TYP | TYPICAL |
| VLT | VAULT |
| W | WHITE |
| W/ | WITH |
| WM | WATER METER |
| WV | WATER VALVE |
| Y | YELLOW |
| (X) | AC DIGOUT NO. X (SEE TABLES 1 AND 2 ON THIS SHEET) |

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. STELLA No. 54642 Exp. 12-31-09 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY: TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
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(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES 12/31/09
5/29/09
DATE

DANVILLE

# TOWN OF DANVILLE

**AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009**

**DIABLO ROAD /GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT**

**CIP NOS. C-511 AND A-365**

## NOTES, LEGEND AND ABBREVIATIONS

## N-1

SCALE: AS SHOWN | SHEET 3 OF 27

I:\FLASH\DanVille\Projects\Pavement Management\2008 09 PMP\Diablo Rd - Green Valley Rd Rehab Project\Federal Stimulus Project\Published N1.dwg 5/29/2009 02:25:58 PM
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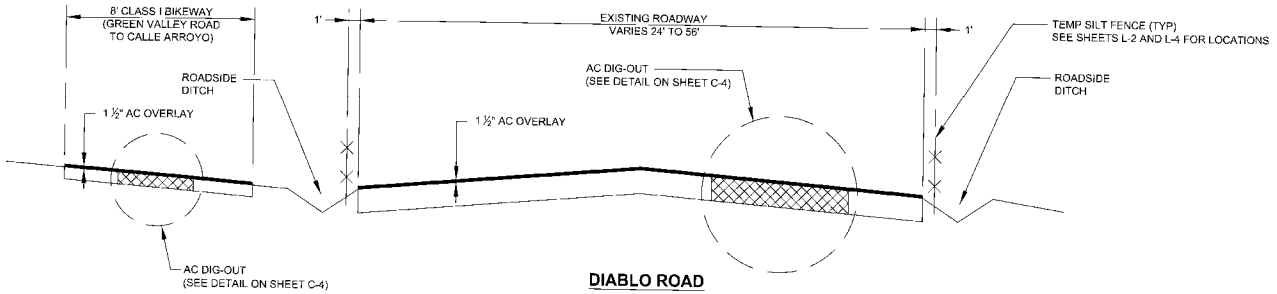
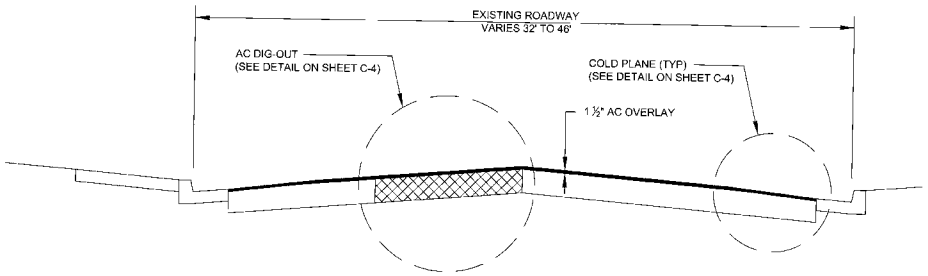



**DIABLO ROAD**
(FROM GREEN VALLEY ROAD
TO AVINEDA NUEVA)




**GREEN VALLEY ROAD**
(FROM DIABLO ROAD
TO STONE VALLEY ROAD)

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
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|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

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AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## TYPICAL SECTIONS

X-1

SCALE: AS SHOWN | SHEET 4 OF 27

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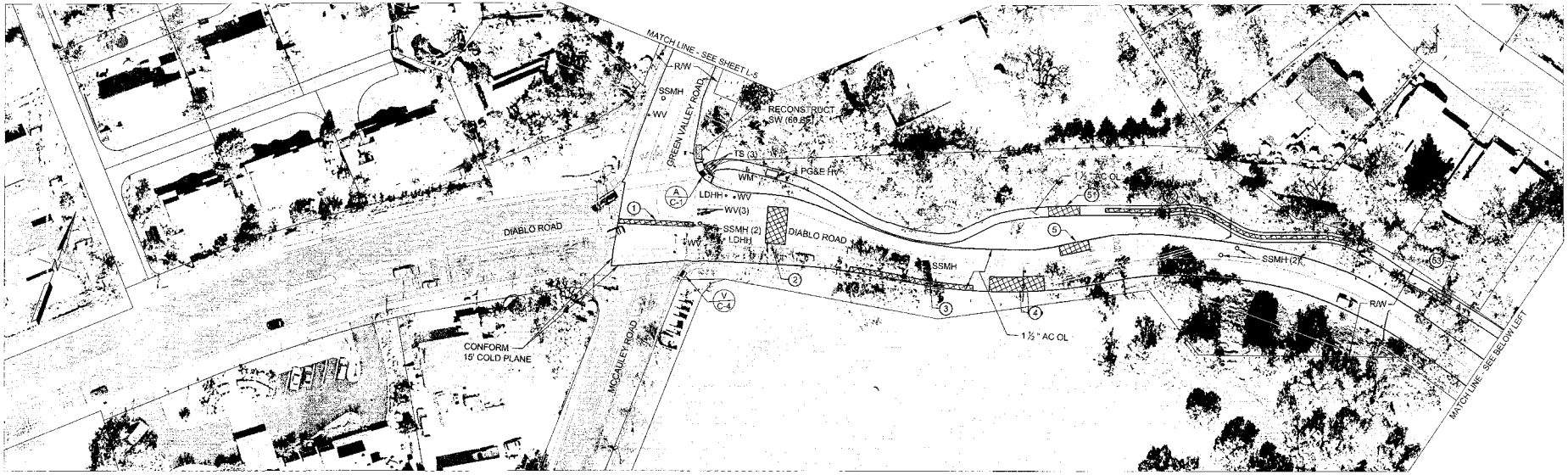





FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
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|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

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AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## LAYOUT PLAN
## DIABLO ROAD
## L-1

SCALE: 1" = 40' | SHEET 5 OF 27

\\PLASH\DevServ\Engineering\Pavement Management\2008-09 FY\Diablo Rd - Green Valley Rd Rehab Project (Federal Stimulus Project)\Autoproc L1.dwg\2-09 12:53 AM

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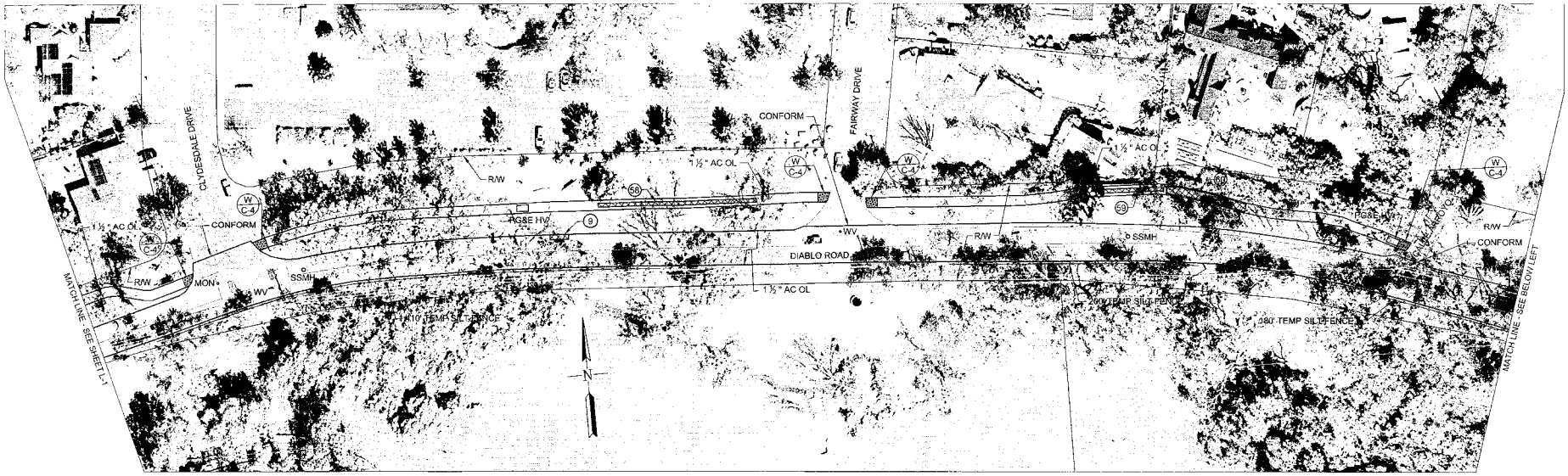


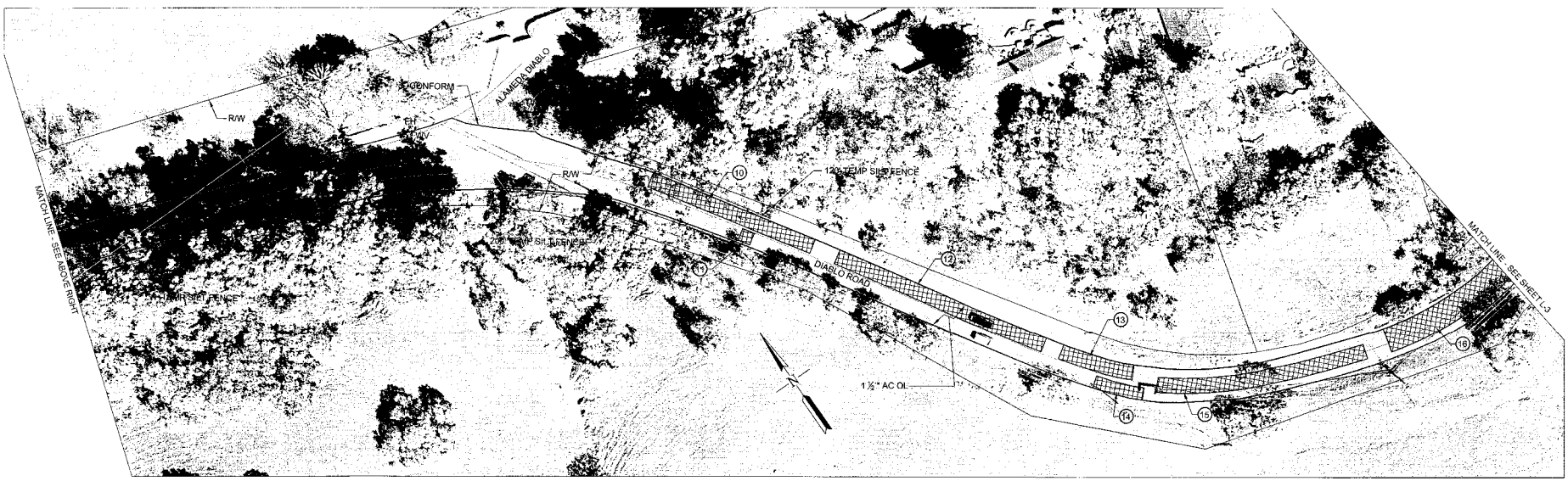


FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. STELLA No. 54642 Exp. 12-31-09 CIVIL STATE OF CALIFORNIA

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DANVILLE

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AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## LAYOUT PLAN
## DIABLO ROAD
## L-2

SCALE 1" = 40' SHEET 6 OF 27

\\FLASH\Docs\Sgn\Engineering\Pavement Management\2008-09 FY\Diablo Rd - Green Valley Rd Rehab Project (Federal Stimulus Project)\Autoshot L2.dwg@ 10:19:24 AM

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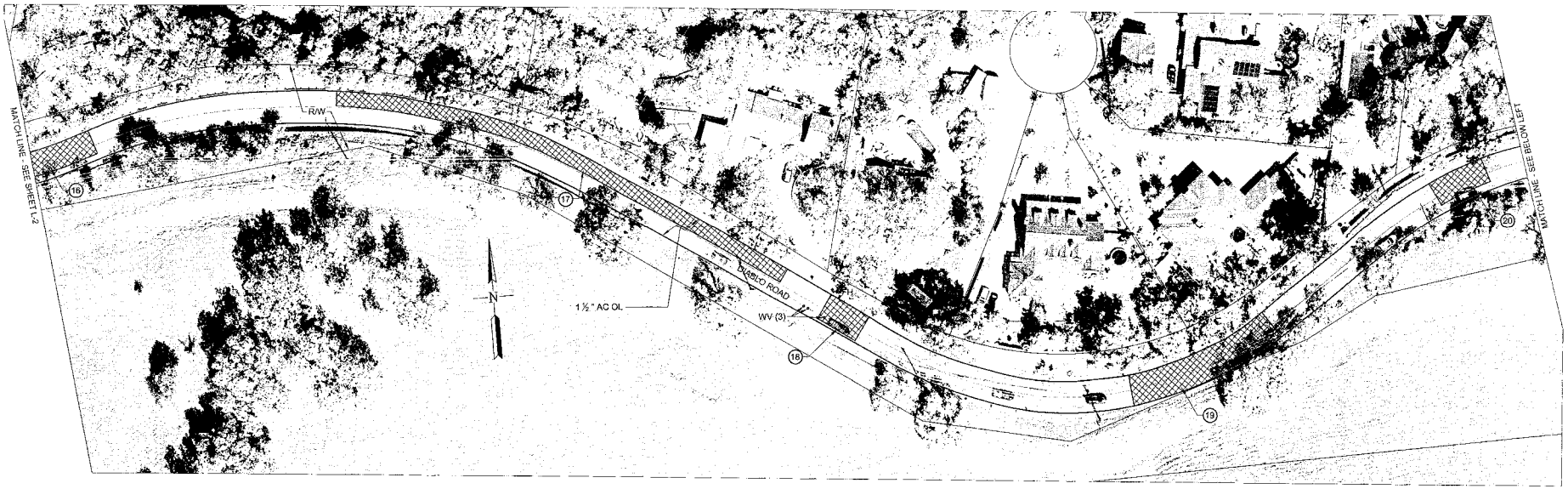


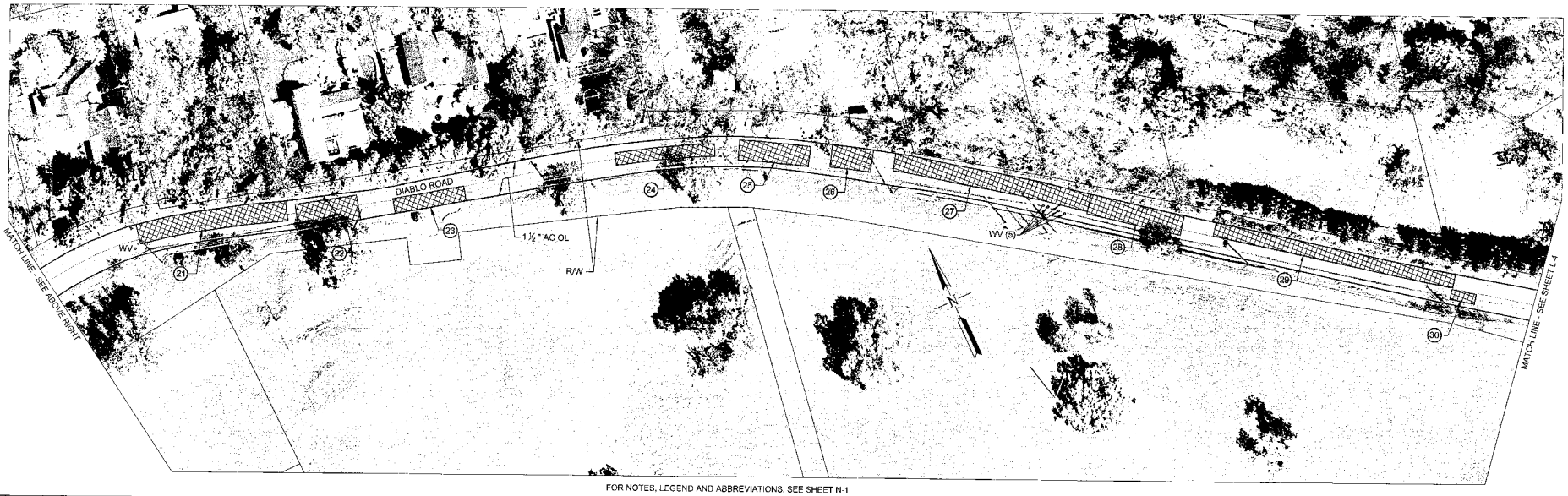


FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

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5/06/09
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# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## LAYOUT PLAN
## DIABLO ROAD
## L-3

SCALE: 1" = 40' | SHEET 7 OF 27

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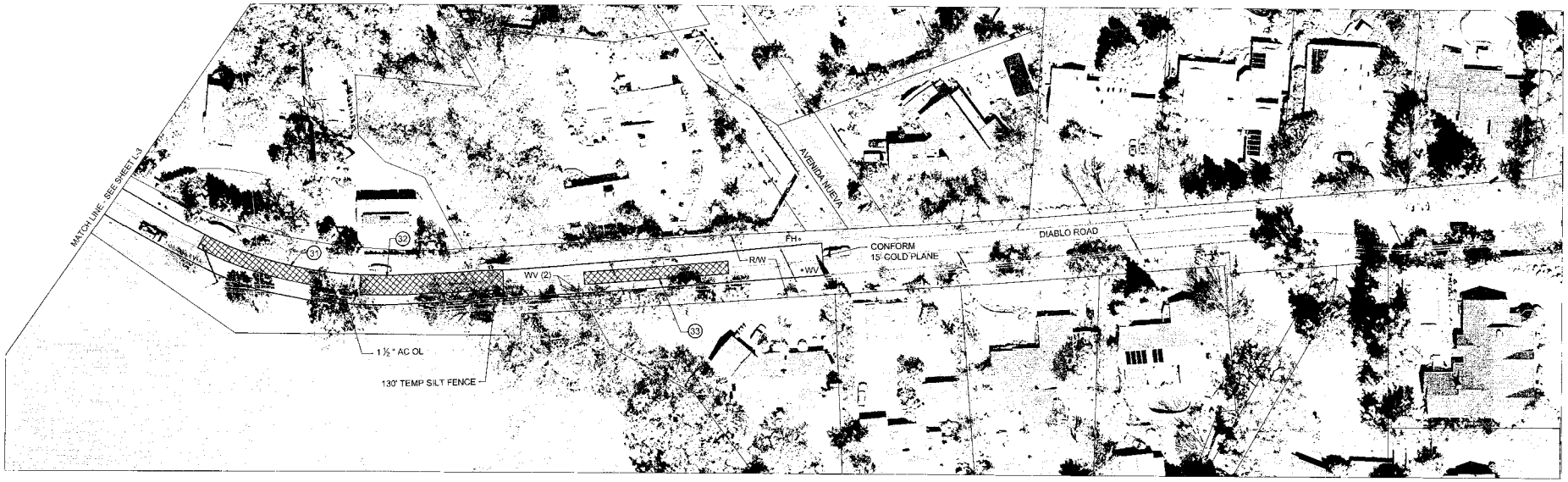


FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

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AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## LAYOUT PLAN
## DIABLO ROAD
## L-4

SCALE: 1" = 40' | SHEET 8 OF 27

\\PLAS1\DavServ\Engineering\Pavement Management\2008-09 Fy\Diablo Rd - Green Valley Rd Rehab Project (Federal Stimulus Project)\Aulsheet L4.dwg@ 11:13:45 AM

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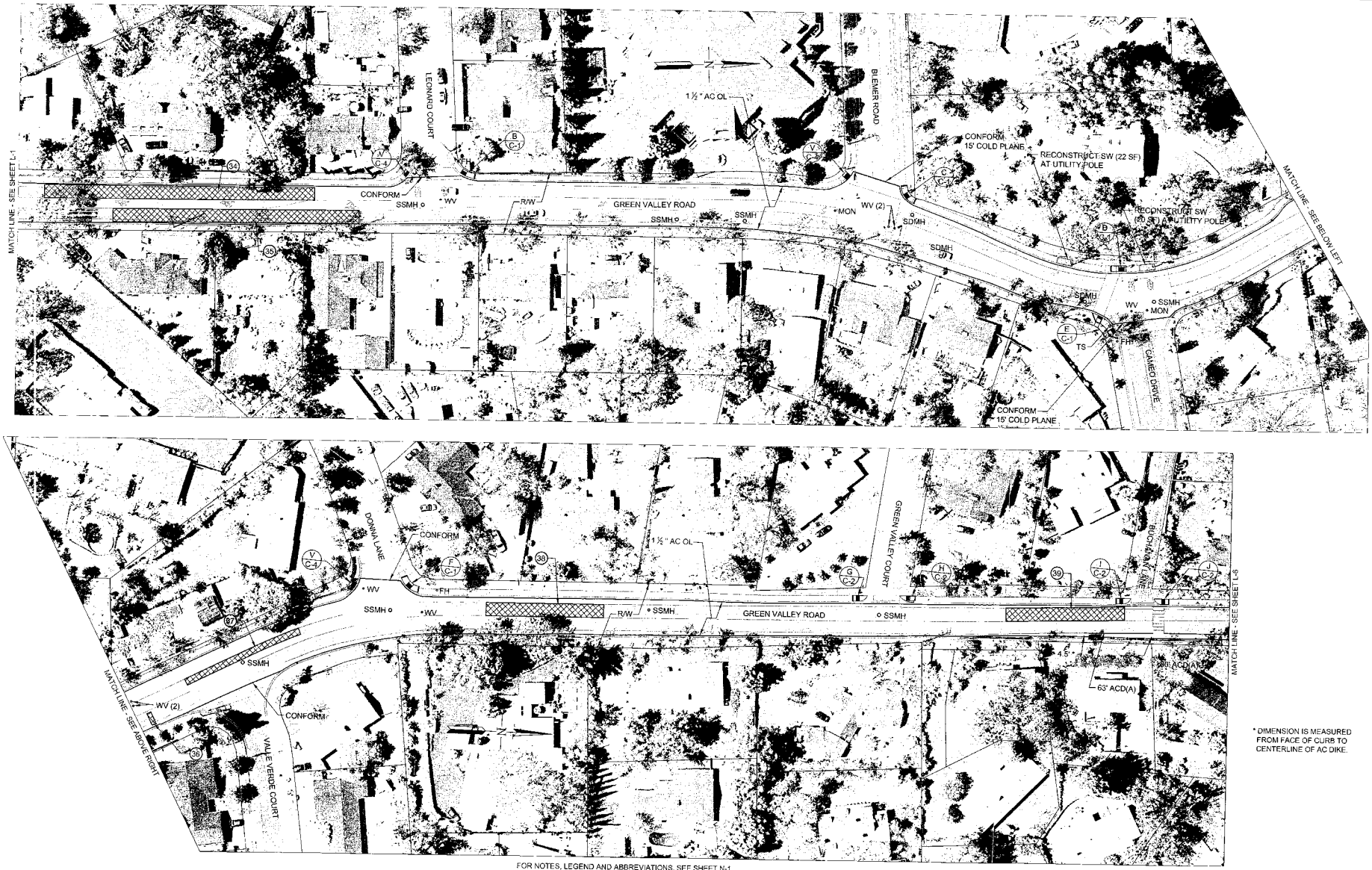


* DIMENSION IS MEASURED FROM FACE OF CURB TO CENTERLINE OF AC DIKE.

FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

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# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## LAYOUT PLAN
## GREEN VALLEY ROAD
## L-5

SCALE 1" = 40' | SHEET 9 OF 27

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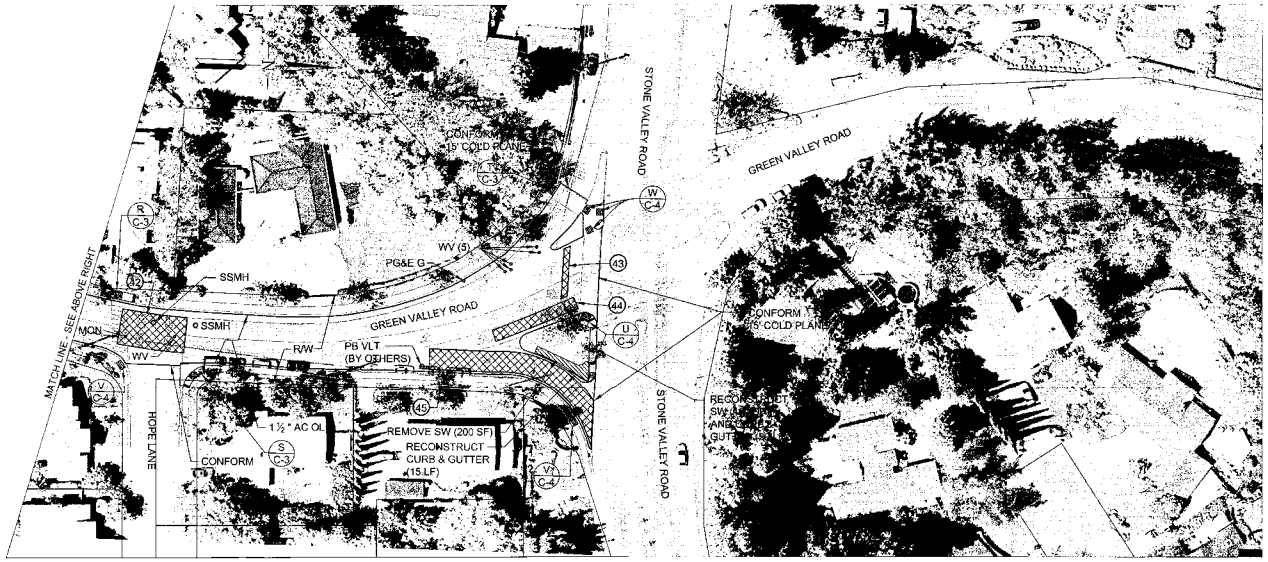


FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER
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# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

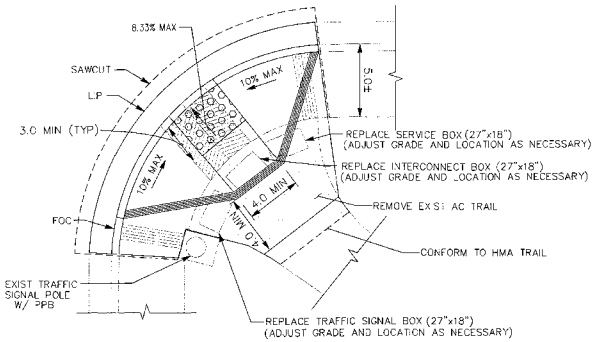
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## LAYOUT PLAN
## GREEN VALLEY ROAD
## L-6

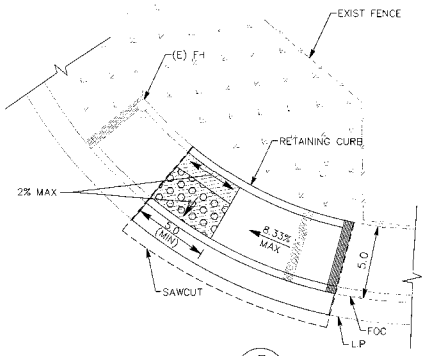
SCALE: 1" = 40' | SHEET 10 OF 27

Plotted on: 4/21/09 10:20:08 AM

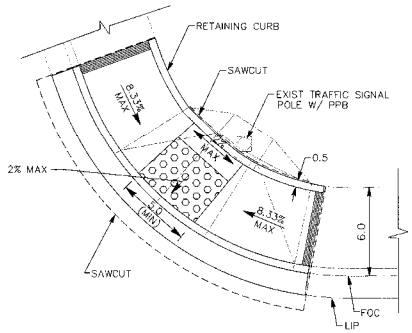
NOTE:
1. FOR DETAILS NOT SHOWN, SEE STATE STD DETAILS, A88A.



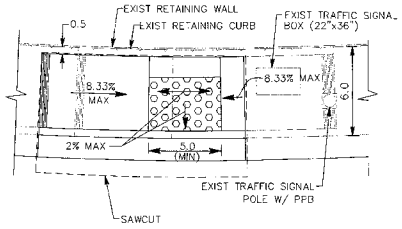

CURB RAMP DETAIL A
NORTH EAST CORNER OF DIABLO RD AND GREEN VALLEY RD
C-1



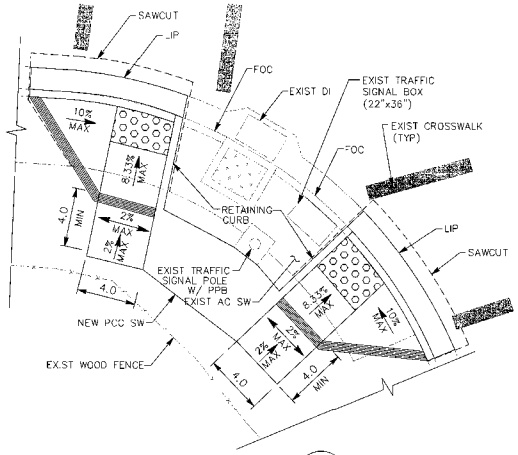

CURB RAMP DETAIL B
NORTH WEST CORNER OF LEONARD CT AND GREEN VALLEY RD
C-1



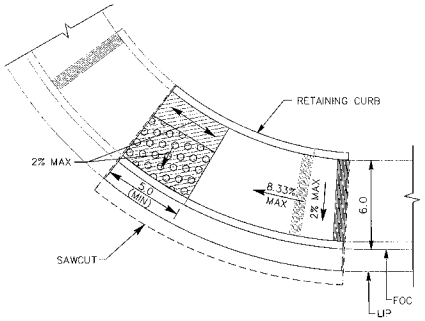

CURB RAMP DETAIL C
NORTH WEST CORNER OF BLEMER RD AND GREEN VALLEY RD
C-1




CURB RAMP DETAIL D
WEST CORNER OF CAMEO DR AND GREEN VALLEY RD
C-1




CURB RAMP DETAIL E
SOUTH EAST CORNER OF CAMEO DR AND GREEN VALLEY RD
C-1




CURB RAMP DETAIL F
NORTH WEST CORNER OF DONNA LANE AND GREEN VALLEY RD
C-1

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
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|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER MICHAELA. STELLA No. 54642 Exp. 12-31-09 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES 12/31/09
5/06/09
DATE

DANVILLE

# TOWN OF DANVILLE

**AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009**

**DIABLO ROAD /GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT**
**CIP NOS. C-511 AND A-365**

## CURB RAMP DETAILS

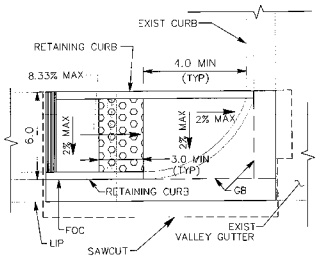
C-1

SCALE: NOT TO SCALE | SHEET 11 OF 27

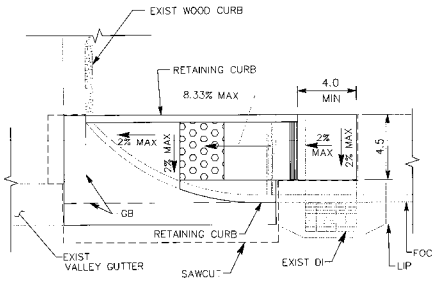
W:\PUBLIC\Docs\Engineering\Pavement Management\2008 09 PW\Diablo Rd Green Valley Rd Rehab Project Package\Submittals\Prelim Plans\C511\Prelim Plans C511 C-1.dwg 5/6/2009 10:28:34 PM

Plotted on: 05/06/09 10:28:34 PM

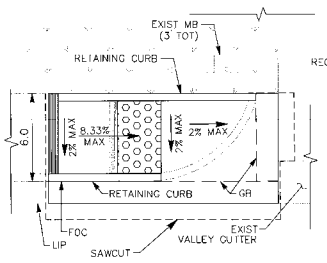
NOTE:
1. FOR DETAILS NOT SHOWN, SEE STATE STD DETAILS, A88A.



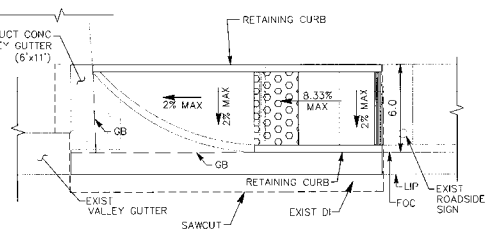

CURB RAMP DETAIL G C-2
SOUTH WEST CORNER OF GREEN VALLEY CT AND GREEN VALLEY RD



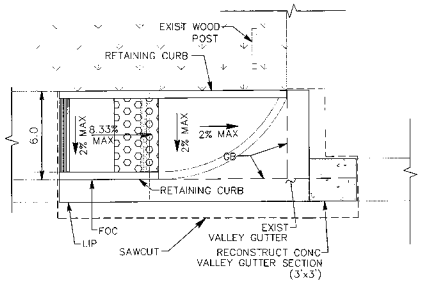

CURB RAMP DETAIL H C-2
NORTH WEST CORNER OF GREEN VALLEY CT AND GREEN VALLEY RD



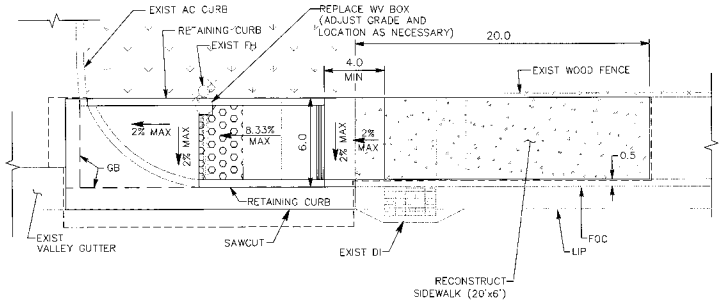

CURB RAMP DETAIL I C-2
SOUTH WEST CORNER OF BUCHANAN LN AND GREEN VALLEY RD



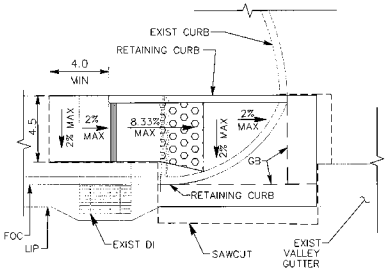

CURB RAMP DETAIL J C-2
NORTH WEST CORNER OF BUCHANAN LN AND GREEN VALLEY RD




CURB RAMP DETAIL K C-2
SOUTH WEST CORNER OF LIAHONA LN AND GREEN VALLEY RD




CURB RAMP DETAIL L C-2
NORTH WEST CORNER OF LIAHONA LN AND GREEN VALLEY RD




CURB RAMP DETAIL M C-2
SOUTH WEST CORNER OF COMPO VIA AND GREEN VALLEY RD

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
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|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. STELLA No. 54642 Exp. 12-31-10 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY: TOWN OF DANVILLE
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APPROVED
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EXPIRES 12/31/09
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DANVILLE

# TOWN OF DANVILLE

**AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009**

**DIABLO ROAD /GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT**
**CIP NOS. C-511 AND A-365**

## CURB RAMP DETAILS

**C-2**

SCALE: NOT TO SCALE | SHEET 12 OF 27

J:\ASM\DocSync\Engineering\Pavement Management\2009_R PX\Diablo Rd - Green Valley Rd Rehab Project\Plotting Stimulus Project\Archive\C01 C04.dwg 05.28.09 7 PM

Plotted on: 5/6/2009 @ 10:38:57 PM

NOTE:
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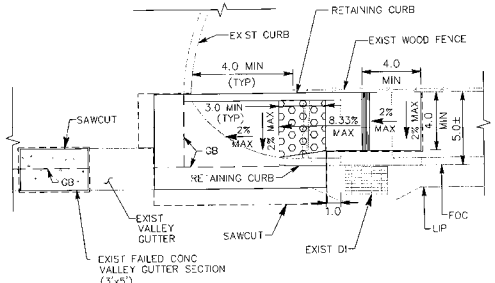
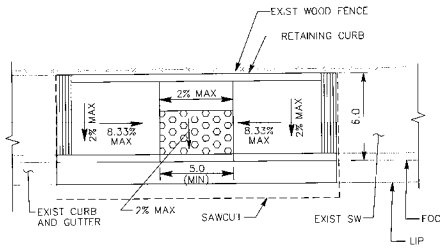
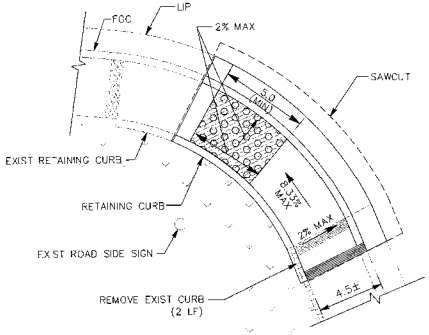


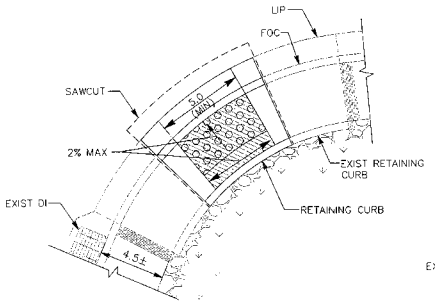

CURB RAMP DETAIL (MODIFIED CASE CM) NORTH WEST CORNER OF COMPO VIA AND GREEN VALLEY RD — N / C-3



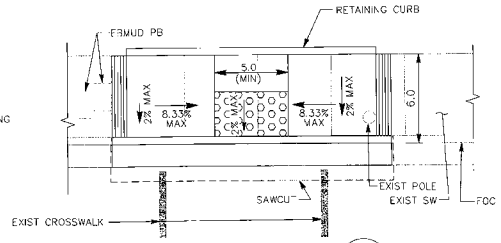

CURB RAMP DETAIL (CASE C) WEST SIDE OF WAINGARTH WAY AND GREEN VALLEY RD — O / C-3



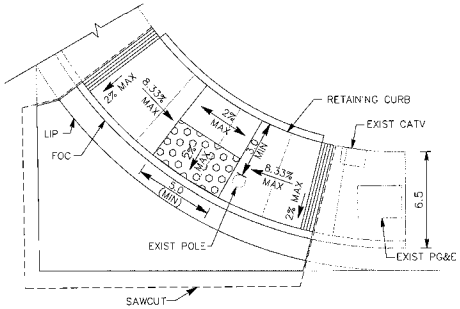

CURB RAMP DETAIL (CASE C) SOUTH EAST SIDE OF WAINGARTH WAY AND GREEN VALLEY RD — P / C-3



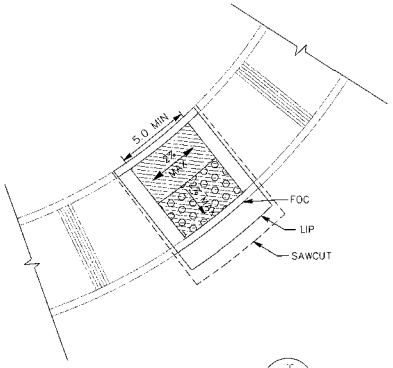

CURB RAMP DETAIL (CASE C) NORTH EAST SIDE OF WAINGARTH WAY AND GREEN VALLEY RD — Q / C-3




CURB RAMP DETAIL (CASE C) WEST OF HOPE LAND AND GREEN VALLEY RD — R / C-3




CURB RAMP DETAIL NORTH EAST CORNER OF HOPE LANE AND GREEN VALLEY RD — S / C-3




CURB RAMP DETAIL SOUTH WEST CORNER OF STONE VALLEY AND GREEN VALLEY RD — T / C-3

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
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| | |
|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. STELLA No. 54642 Exp. 12-31-09 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY: TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
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(925) 314-3310

APPROVED
MICHAEL A. STELLA
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EXPIRES 12/31/09
5/06/09
DATE

DANVILLE

# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

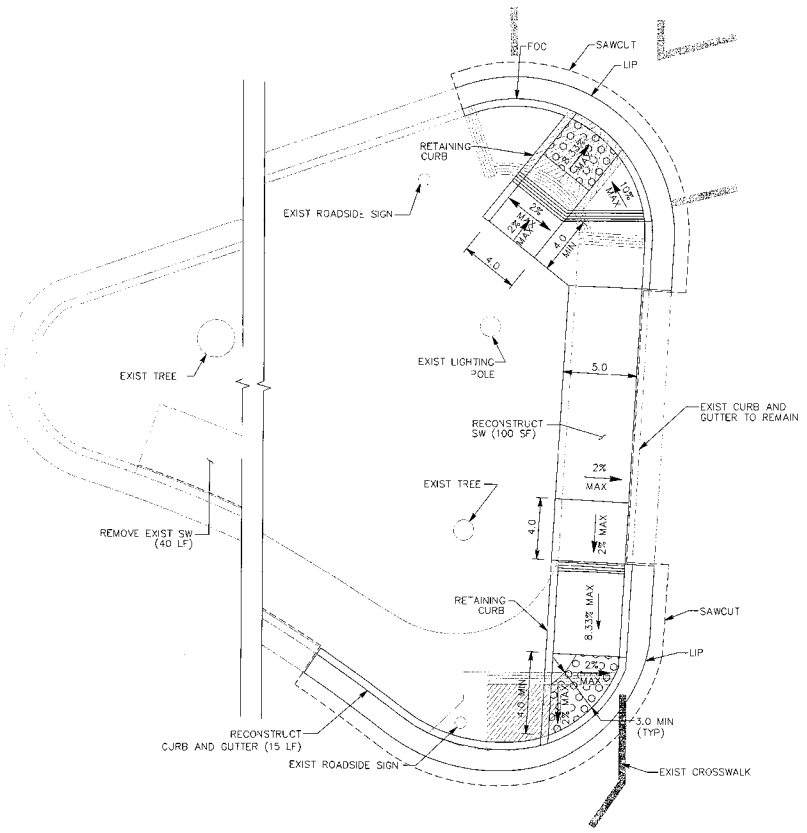
## CURB RAMP DETAILS

C-3

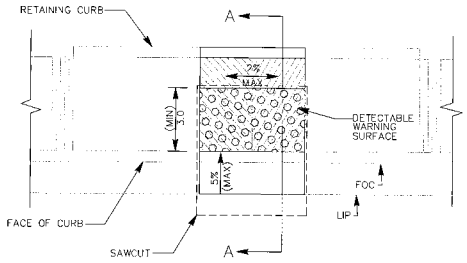
SCALE: NOT TO SCALE | SHEET 13 OF 27

Plotted on: 06/06/09 @ 02:29:12 PM

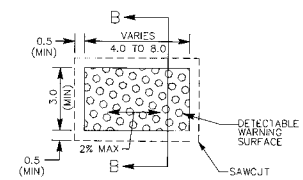
NOTE:
1. FOR DETAILS NOT SHOWN, SEE STATE STD DETAILS, A88A.



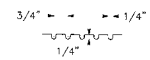

CURB RAMP DETAIL J / C 4
TRAFFIC ISLAND AT STONE VALLEY RD AND GREEN VALLEY RD




V / C-4 RETROFIT CURB RAMP DETAIL
NTS




W / C-4 CONSTRUCT DETECTABLE WARNING SURFACE DETAIL
NTS




GROOVING DETAIL
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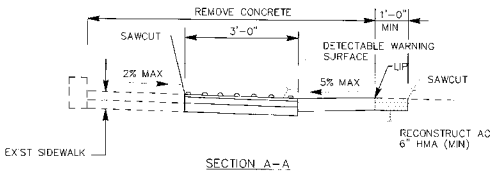
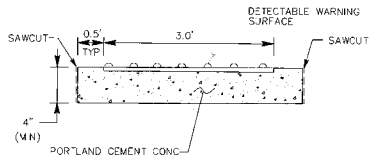



SECTION A-A
NTS




SECTION B-B
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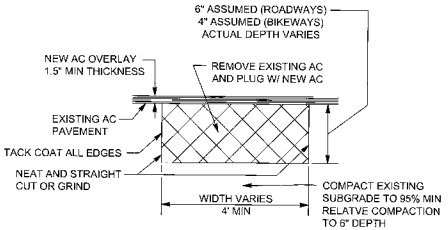
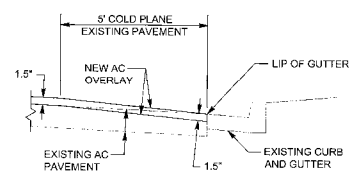
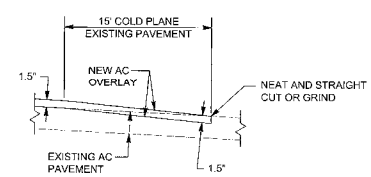



AC DIG-OUT REPAIR DETAIL
NTS




AT LIP OF GUTTER




AT PAVEMENT JOIN

COLD PLANE/CONFORM DETAILS
NTS

| NO | DATE | APPD | REVISION |
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|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. STELLA No. 54642 Exp. 12-31-09 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY: TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES 12/31/09
5/06/09
DATE

DANVILLE

# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

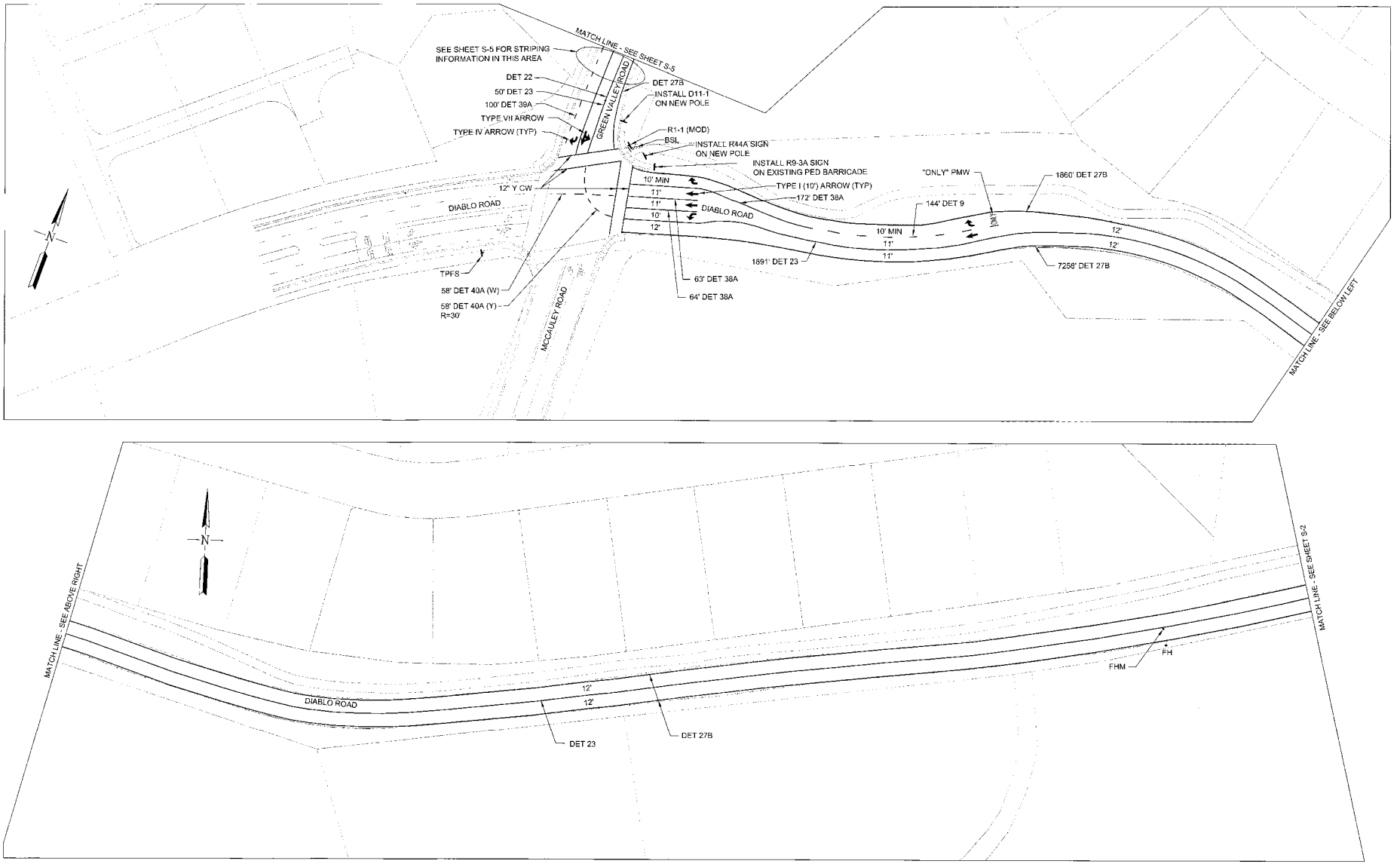
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## CURB RAMP DETAILS

C-4

SCALE: NOT TO SCALE | SHEET 14 OF 27

Plotted on: 05/05/09 02:29:39 PM




FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
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|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | S-1-2009 |

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. STELLA No. 54642 Exp. 12-31-09 CIVIL STATE OF CALIFORNIA

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DANVILLE, CA 94526
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APPROVED
MICHAEL A. STELLA
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5/06/09
DATE

DANVILLE

# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## DIABLO ROAD
## S-1

SCALE: 1 = 40 | SHEET 15 OF 27

W:\LAS ID\Civil\Engineering\Pavement Management\2008 CIP\Diablo Rd - Green Valley Rd Rehab Project (Federal Stimulus Project)\Auto'ized Sheets\S1.dwg, 12-31-02 PM

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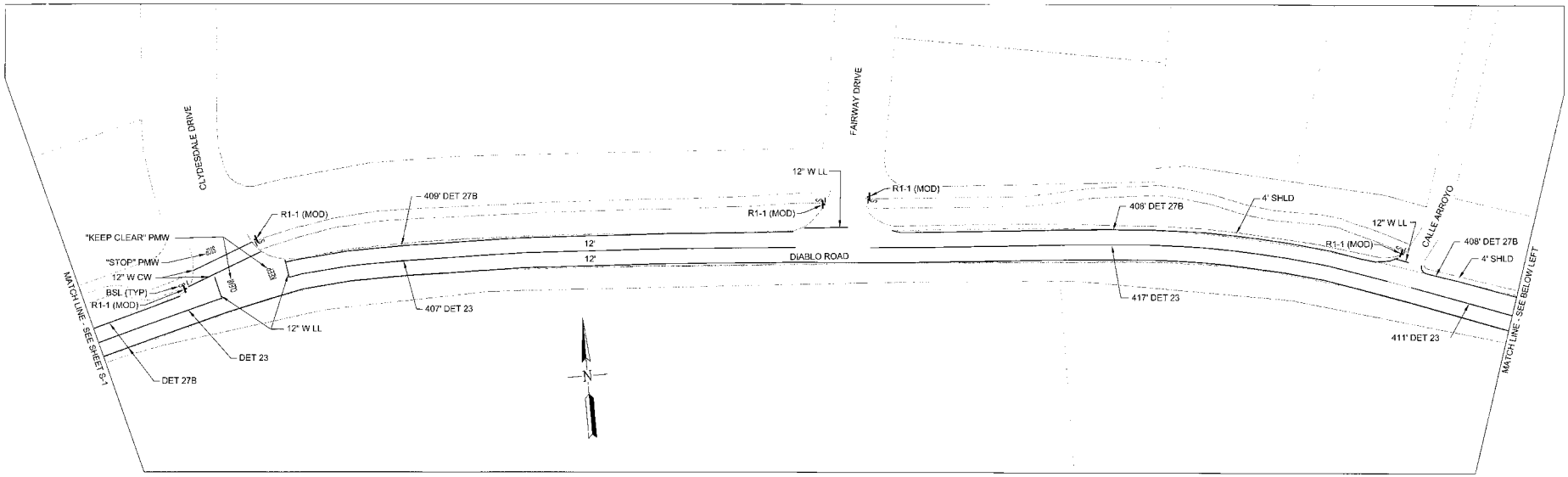


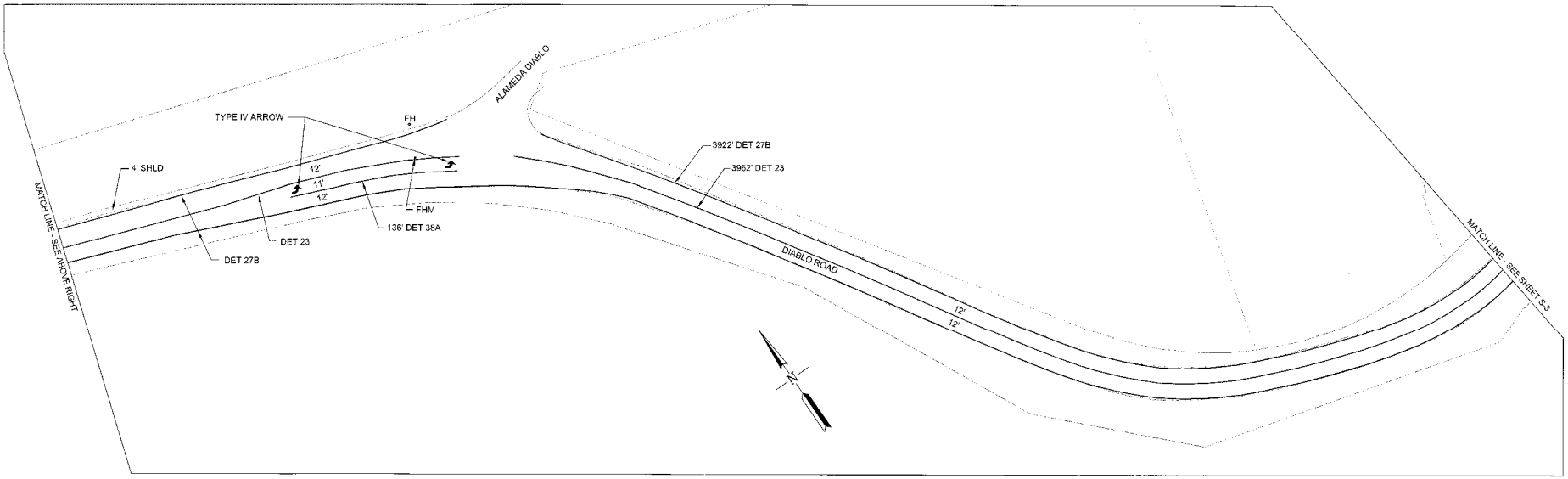


FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. STELLA
No. 54642
Exp. 12-31-09
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
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DANVILLE, CA 94526
(925) 314-3310

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AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## DIABLO ROAD
## S-2

SCALE: 1" = 40' | SHEET 18 OF 27

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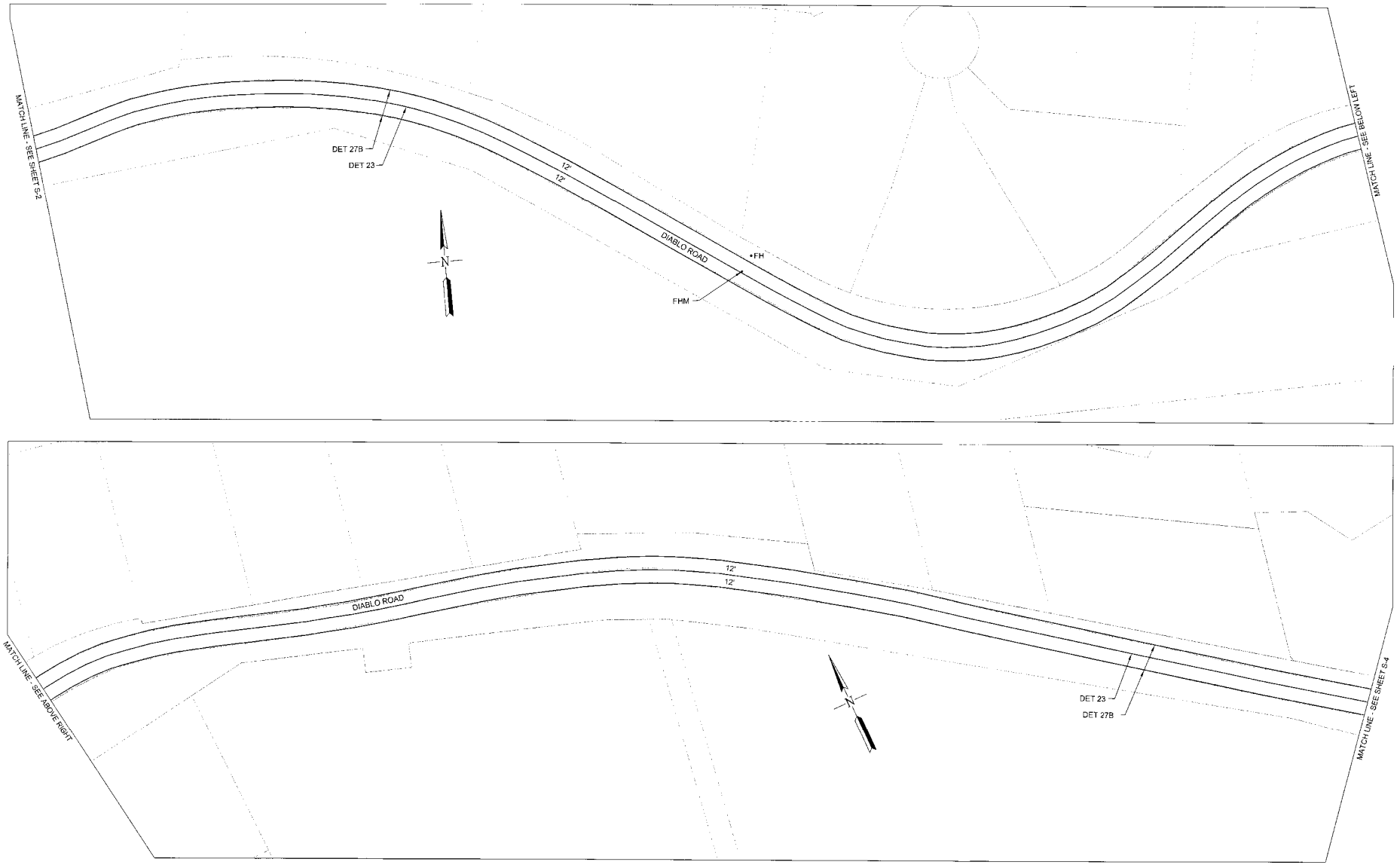


FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

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|---|---|---|---|
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| DESIGNED: | R. ALLEN |
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DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## DIABLO ROAD
## S-3

SCALE: 1" = 40' | SHEET 17 OF 27

\\FLASH\DevServ\Engineering\Pavement Management\2008-09 PY\Diablo Rd - Green Valley Rd Rehab Project (Federal Stimulus Project)\Autosheet S3.dwg@ 02:33:22 PM

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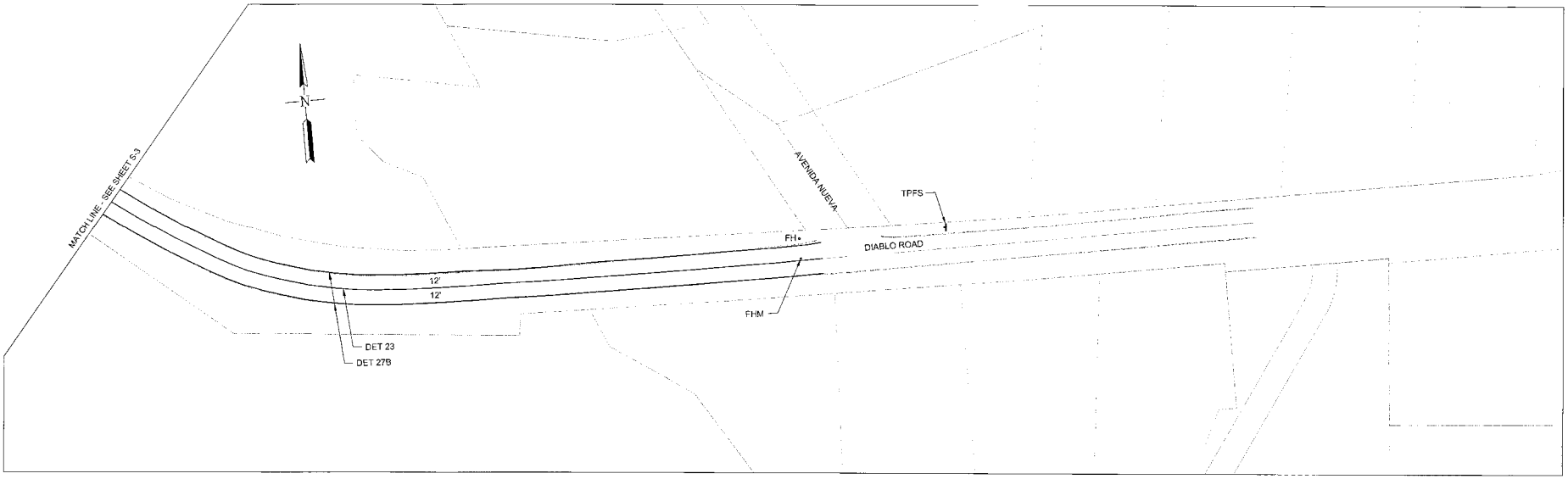


FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO | DATE | APPD | REVISION |
|---|---|---|---|
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|---|---|
| DESIGNED: | R. ALLEN |
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| DATE: | 5-1-2009 |

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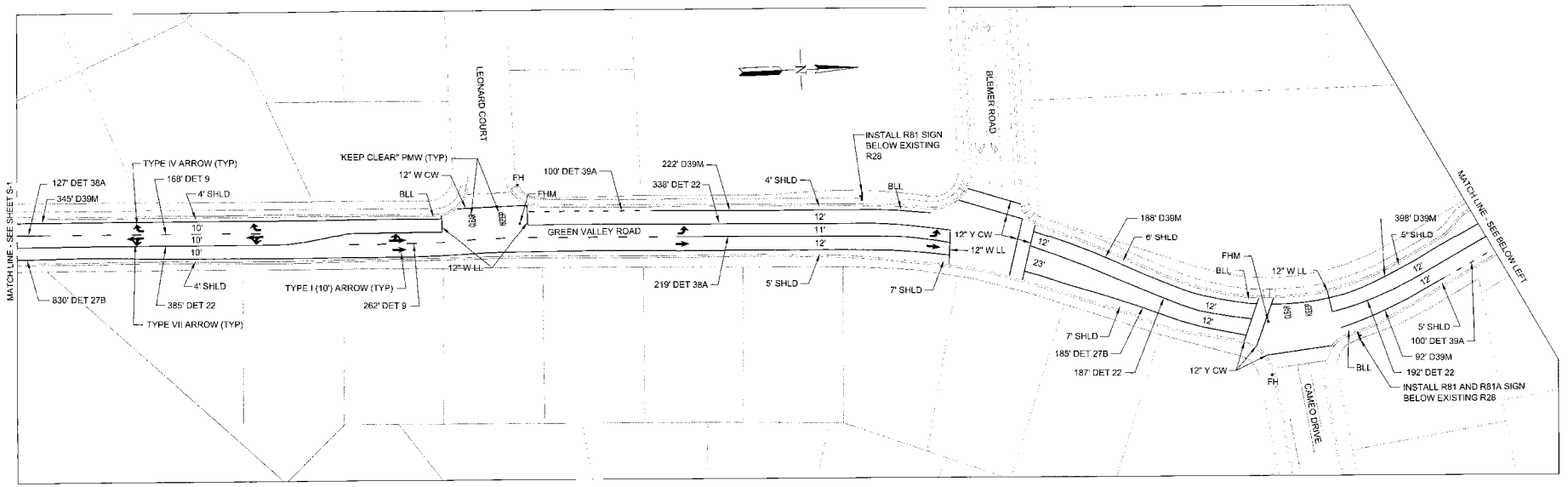
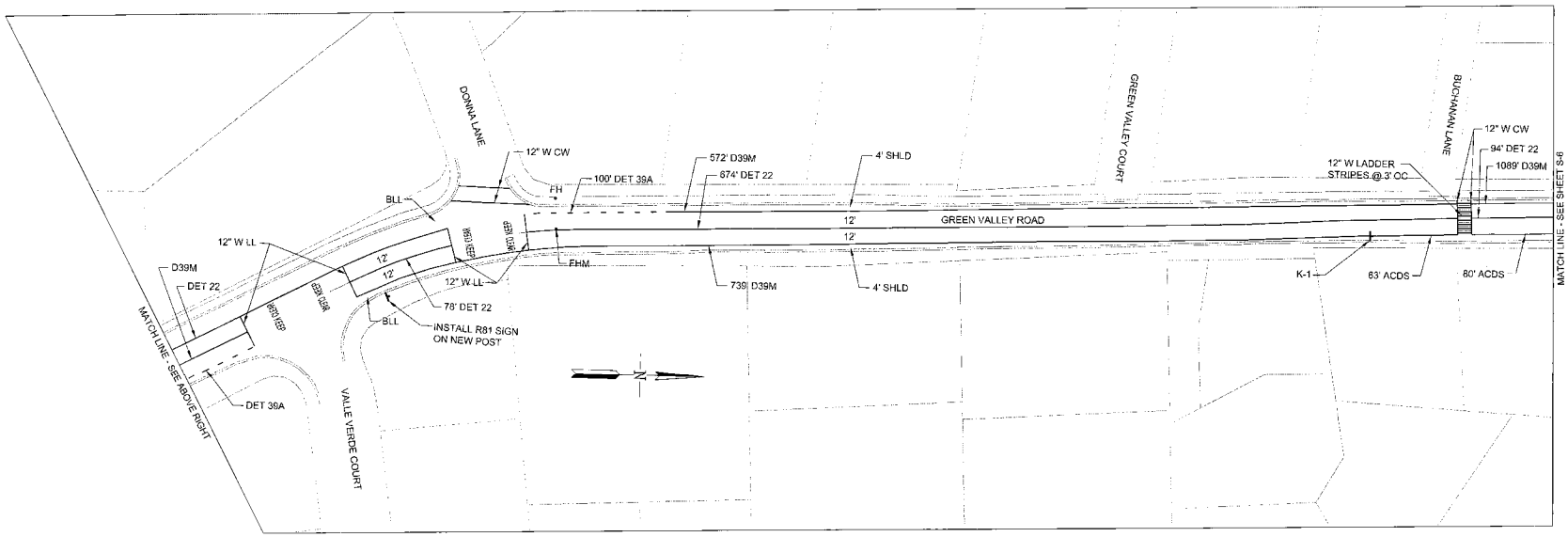
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## DIABLO ROAD
## S-4

SCALE: 1" = 40 | SHEET 18 OF 27

Plotted on: 09/05/09 @ 02:24:05 PM




FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. STELLA No. 54642 Exp. 12-31-09 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES 12/31/09
5/04/09
DATE

DANVILLE

# TOWN OF DANVILLE

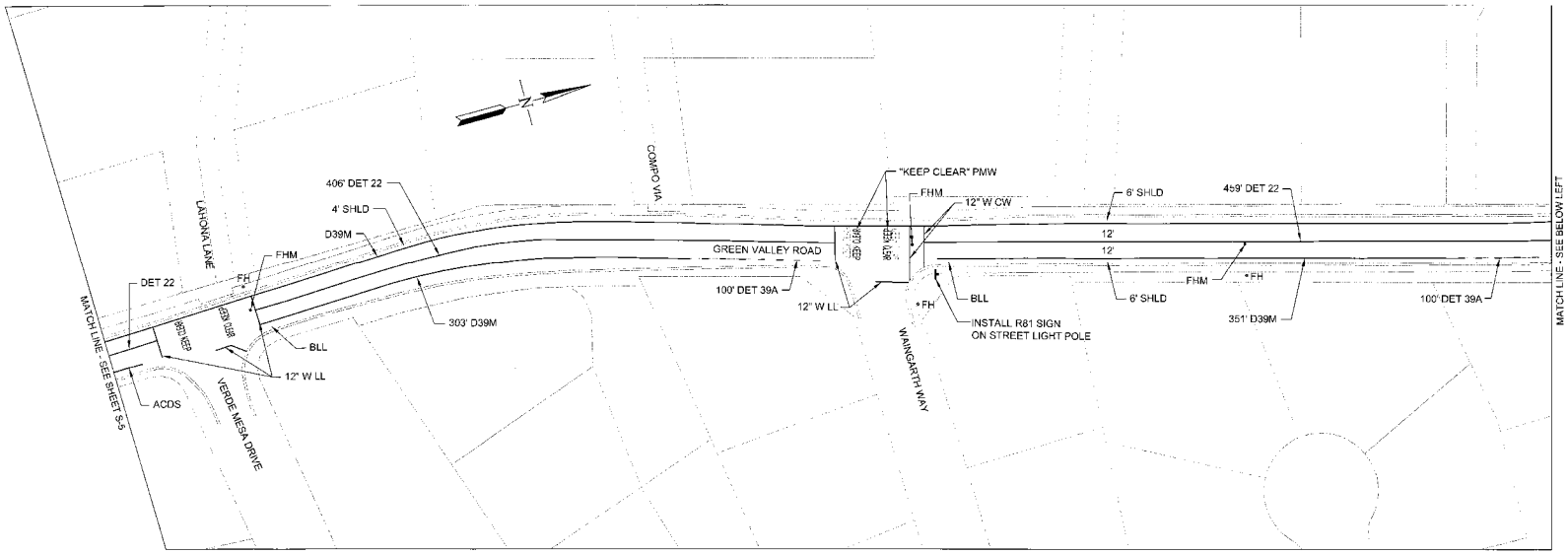
**AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009**

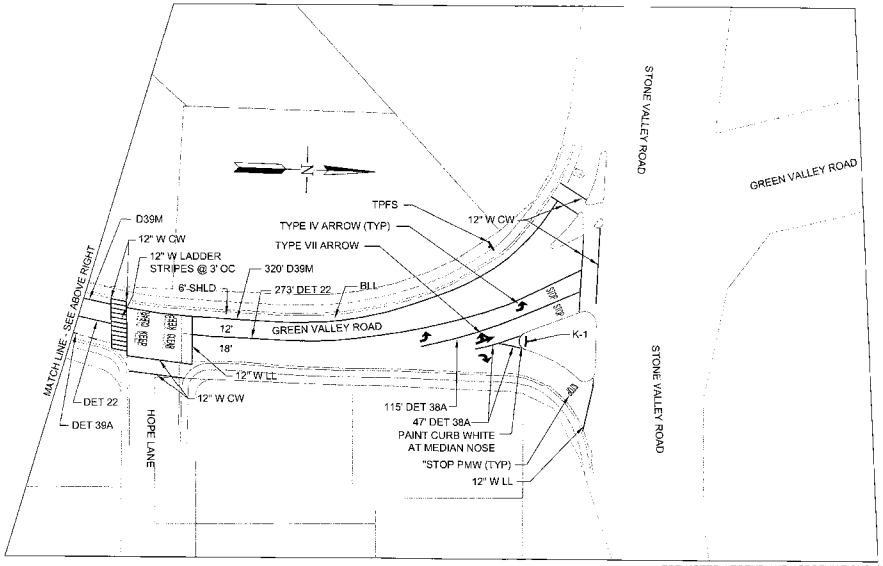
**DIABLO ROAD /GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT CIP NOS. C-511 AND A-365**

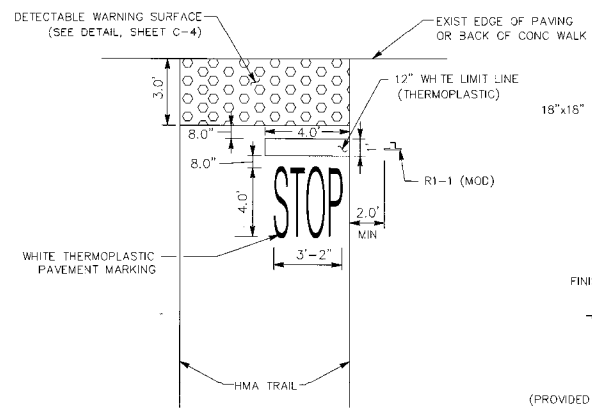
## SIGNING AND STRIPING PLAN GREEN VALLEY ROAD S-5

SCALE: 1" = 40' | SHEET 10 OF 27

Plotted on: 01/5/09 @ 12:31:28 PM



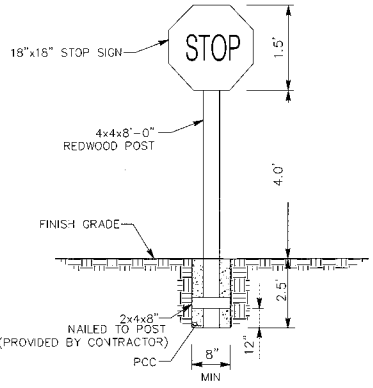




PLAN

BIKEWAY STOP LEGEND (BSL) DETAIL

NTS




ELEVATION

R1-1 (MOD) DETAIL

NTS

FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | R. ALLEN |
| DRAWN: | R. ALLEN |
| CHECKED: | M. STELLA |
| REVIEWED: | S. LAKE |
| DATE: | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. STELLA
No. 54642
Exp. 12-31-09
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY: TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES 12/31/09
5/06/09
DATE

DANVILLE

**TOWN OF DANVILLE**
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

**SIGNING AND STRIPING PLAN**
**GREEN VALLEY ROAD**
**S-6**

SCALE: 1" = 40' | SHEET 20 OF 27

\\PLASH-Co\Gen\Engineering\Pavement Management\2008-09 FY\Diablo Rd - Green Valley Rd Rehab Project (Federal Stimulus Project)\Aucshoot S6.dwg\9-02-37:25 PM

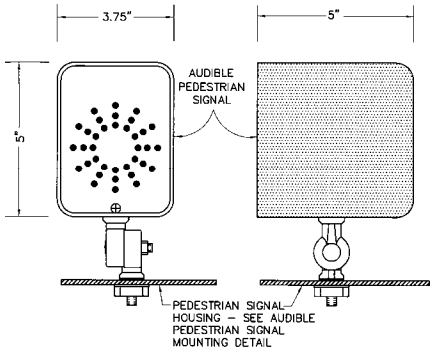
Plotted on: 05/06/09 09:22:37:25 PM

## ELECTRICAL GENERAL NOTES: (FOR SHEETS E-1 TO E-3)

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH CALTRANS STANDARD PLANS AND SPECIFICATIONS DATED MAY 2006 AND SUBSEQUENT REVISED STANDARD PLANS, AND THE SPECIAL PROVISIONS.
2. CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT 1-800-227-2600 AT LEAST 48 HOURS PRIOR TO ALL EXCAVATION WORK.
3. CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES WHICH MAY BE IN CONFLICT WITH THE INSTALLATION OF NEW SIGNAL EQUIPMENT. IF EQUIPMENT CANNOT BE INSTALLED AT THE LOCATION(S) SHOWN ON THE PLAN, NEW LOCATION WILL BE DETERMINED BY THE ENGINEER.
4. THE LOCATION OF ALL PULL BOXES, CONDUITS AND OTHER EQUIPMENT SHOWN ON THE PLAN ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
5. THE CONTRACTOR SHALL COMPLY WITH PG&E CLEARANCE REQUIREMENTS WHILE WORKING NEAR OVERHEAD POWER LINES.
6. THE CONTRACTOR SHALL REPAIR AND REPLACE ALL EXISTING ELECTRICAL EQUIPMENT DAMAGED BY HIS OPERATIONS AT HIS EXPENSE.
7. THE CONTRACTOR SHALL REPAIR AND REPLACE ALL EXISTING LANDSCAPING DAMAGED BY HIS OPERATIONS AT HIS EXPENSE.
8. THE CONTRACTOR SHALL IDENTIFY AND PROTECT THE IRRIGATION SYSTEM IN THE FIELD. IF THE IRRIGATION SYSTEM IS DAMAGED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPAIR THE DAMAGE AT HIS EXPENSE.
9. ALL LOOP DETECTORS SHALL BE 6' x 6' AND INSTALLED IN THE CENTER OF TRAFFIC LANES UNLESS OTHERWISE NOTED ON PLAN.
10. ALL DETECTOR LEAD-IN CABLES SHALL BE CONTINUOUS - NO SPLICING PERMITTED.
11. ALL NEW INDICATIONS FOR PEDESTRIAN SIGNAL HEADS SHALL BE THE LIGHT EMITTING DIODES (LED) TYPE.
12. ALL NEW PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE WITH AUDIBLE PEDESTRIAN SIGNAL.
13. ALL NEW PEDESTRIAN PUSH BUTTONS (PPB) SHALL BE THE LARGE ADA TYPE WITH A 2" DIAMETER BUTTON. PPB SHALL BE MOUNTED AT 40" ABOVE GRADE.
14. ALL SALVAGED MATERIAL SHALL BE DELIVERED TO THE CONTRA COSTA COUNTY SIGNAL MAINTENANCE SHOP AT 2467 WATERBIRD WAY, MARTINEZ.

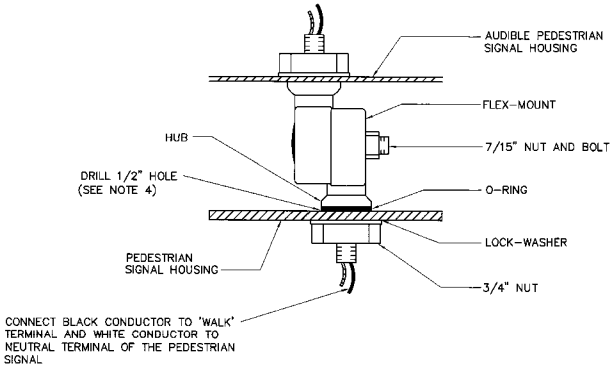
## LEGEND: (FOR SHEETS E-1 TO E-3)

- NEW COUNTDOWN TYPE PEDESTRIAN SIGNAL HEAD WITH AUDIBLE PEDESTRIAN SIGNAL
- EXISTING TYPE A LOOP DETECTOR
- NEW TYPE A LOOP DETECTOR
- EXISTING TYPE D LOOP DETECTOR
- NEW TYPE D LOOP DETECTOR
- EXISTING PULL BOX
- EXISTING CONDUIT
- NEW CONDUIT
- evd(a) EXISTING EMERGENCY VEHICLE DETECTOR (CHANNEL A)




**AUDIBLE PEDESTRIAN SIGNAL DETAIL**

NO SCALE




### NOTES:

1. INSTALLATION OF THE AUDIBLE PEDESTRIAN SIGNAL SHALL BE PER MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS AND THIS DETAIL.
2. MOUNT AUDIBLE PEDESTRIAN SIGNAL ON TOP OF THE PEDESTRIAN SIGNAL WITH THE FACE OF THE UNIT AIMED SLIGHTLY DOWNWARD IN THE DIRECTION OF THE CROSSWALK.
3. NORTH-SOUTH CROSSING SHALL BE "CUCKOO" SIGNAL. EAST-WEST SHALL BE "PEEP-PEEP" SIGNAL.
4. EXACT LOCATION OF THE AUDIBLE PEDESTRIAN SIGNAL SHALL BE DETERMINED AND APPROVED IN THE FIELD BY THE ENGINEER PRIOR TO INSTALLATION.
5. VOLUME LEVEL SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER.
6. AUDIBLE PEDESTRIAN SIGNAL SHALL BE INDICATOR CONTROLS CORP. MODEL APS-10, OR APPROVED EQUAL.

**AUDIBLE PEDESTRIAN SIGNAL MOUNTING DETAIL**

NO SCALE

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | JW |
| DRAWN: | JW |
| CHECKED: | KDY |
| REVIEWED: | KDY |
| DATE | 4-21-09 |

K. DANIEL YAU, No. 46611, REGISTERED PROFESSIONAL ENGINEER, CIVIL, STATE OF CALIFORNIA, 07/16/09


Y&C TRANSPORTATION CONSULTANTS, INC.
3250 RAMOS CIRCLE
SACRAMENTO, CA 95827
(916) 366-8000 FAX: (916) 366-8008


APPROVED
MICHAEL A. SIELEN
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES: 12/31/09
5/06/09
DATE

# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

TRAFFIC SIGNAL GENERAL PLAN

E-1

SCALE: NO SCALE | SHEET 21 OF 27

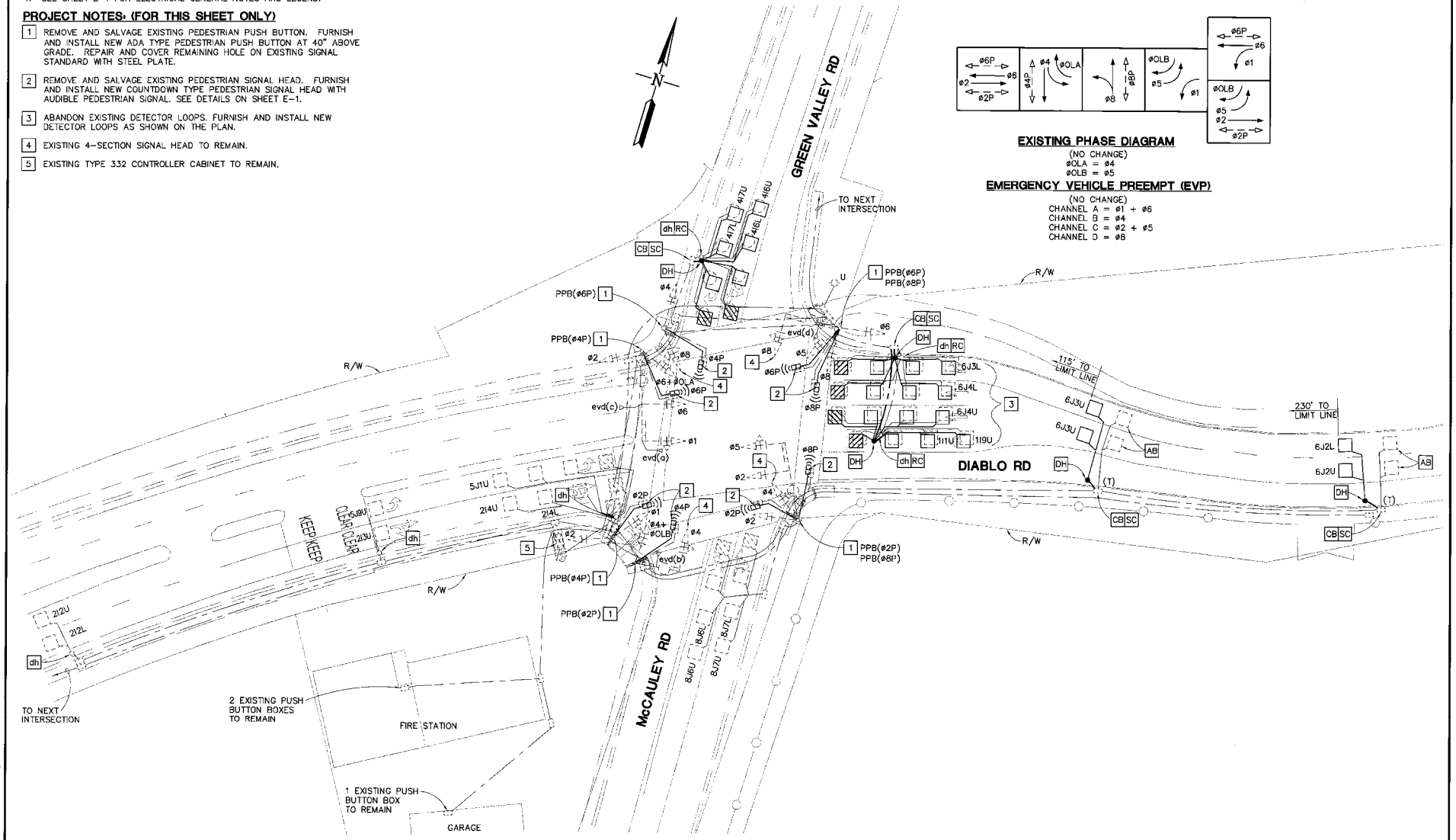

O:\Projects\2008\63109 Economic Stimulus Projects\DGE 1.dwg@ 05:24:09 PM
Plotted on: 05/06/09 at 05:24:09 PM

**NOTE:**

1. SEE SHEET E-1 FOR ELECTRICAL GENERAL NOTES AND LEGEND.

**PROJECT NOTES: (FOR THIS SHEET ONLY)**

1. REMOVE AND SALVAGE EXISTING PEDESTRIAN PUSH BUTTON. FURNISH AND INSTALL NEW ADA TYPE PEDESTRIAN PUSH BUTTON AT 40" ABOVE GRADE. REPAIR AND COVER REMAINING HOLE ON EXISTING SIGNAL STANDARD WITH STEEL PLATE.
2. REMOVE AND SALVAGE EXISTING PEDESTRIAN SIGNAL HEAD. FURNISH AND INSTALL NEW COUNTDOWN TYPE PEDESTRIAN SIGNAL HEAD WITH AUDIBLE PEDESTRIAN SIGNAL. SEE DETAILS ON SHEET E-1.
3. ABANDON EXISTING DETECTOR LOOPS. FURNISH AND INSTALL NEW DETECTOR LOOPS AS SHOWN ON THE PLAN.
4. EXISTING 4-SECTION SIGNAL HEAD TO REMAIN.
5. EXISTING TYPE 332 CONTROLLER CABINET TO REMAIN.







**EXISTING PHASE DIAGRAM**
(NO CHANGE)
øOLA = ø4
øOLB = ø5

**EMERGENCY VEHICLE PREEMPT (EVP)**
(NO CHANGE)
CHANNEL A = ø1 + ø6
CHANNEL B = ø4
CHANNEL C = ø2 + ø5
CHANNEL D = ø8

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | JW |
| DRAWN: | MJL |
| CHECKED: | KDY |
| REVIEWED: | KDY |
| DATE: | 4-21-09 |

PROFESSIONAL ENGINEER — C. DANIEL YAU — No. 34611 — CIVIL — STATE OF CALIFORNIA — 07/16/09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APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES: 12/31/09
5/06/09
DATE

**TOWN OF DANVILLE**
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

TRAFFIC SIGNAL MODIFICATION PLAN
DIABLO ROAD /GREEN VALLEY ROAD

E-2

SCALE: 1" = 20' | SHEET 22 OF 27

C:\Projects\2009\2009109 Economic Stimulus Projects\2009109 Design 09 42 21 PM

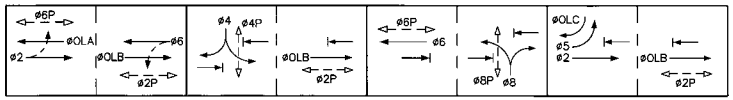
Plotted on: 07/16/09 @ 09:15:21 PM

**NOTE:**

1. SEE SHEET E-1 FOR ELECTRICAL GENERAL NOTES AND LEGEND.

**PROJECT NOTES: (FOR THIS SHEET ONLY)**

1. REMOVE AND SALVAGE EXISTING PEDESTRIAN PUSH BUTTON. FURNISH AND INSTALL NEW ADA TYPE PEDESTRIAN PUSH BUTTON AT 40" ABOVE GRADE. REPAIR AND COVER REMAINING HOLE ON EXISTING SIGNAL STANDARD WITH STEEL PLATE.
2. LOWER EXISTING ADA TYPE PEDESTRIAN PUSH BUTTON TO 40" ABOVE GRADE. REPAIR AND COVER REMAINING HOLE ON EXISTING SIGNAL STANDARD WITH STEEL PLATE.
3. REMOVE AND SALVAGE EXISTING PEDESTRIAN SIGNAL HEAD. FURNISH AND INSTALL NEW COUNTDOWN TYPE PEDESTRIAN SIGNAL HEAD WITH AUDIBLE PEDESTRIAN SIGNAL. SEE DETAILS ON SHEET E-1.
4. ABANDON EXISTING DETECTOR LOOPS. FURNISH AND INSTALL NEW DETECTOR LOOPS AS SHOWN ON THE PLAN.
5. EXISTING 5-SECTION WITH YELLOW AND GREEN LEFT ARROWS SIGNAL HEAD TO REMAIN.
6. FURNISH AND INSTALL PPB POST. BASE PLATE OF PPB POST SHALL ABUTT BACK OF CURB. PPB SIGN SHALL BE ON EAST SIDE OF PPB POST AND ARROW SHALL POINT LEFT.
7. FURNISH AND INSTALL 1½"C, 2#14.
8. REMOVE AND SALVAGE EXISTING PEDESTRIAN PUSH BUTTON. REPAIR AND COVER REMAINING HOLE ON EXISTING SIGNAL STANDARD WITH STEEL PLATE.
9. EXISTING TYPE 332 CONTROLLER CABINET TO REMAIN.

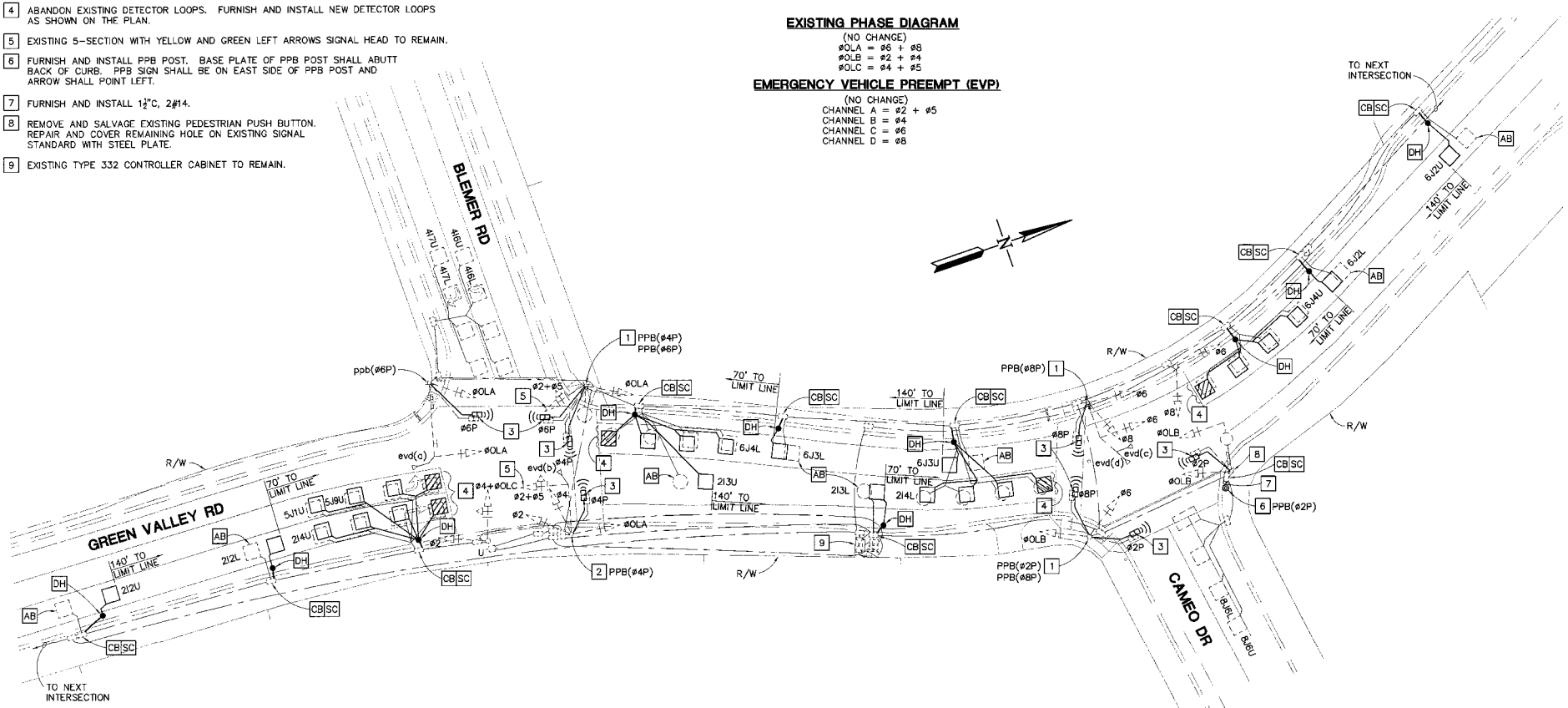



**EXISTING PHASE DIAGRAM**

(NO CHANGE)
øOLA = ø6 + ø8
øOLB = ø2 + ø4
øOLC = ø4 + ø5

**EMERGENCY VEHICLE PREEMPT (EVP)**

(NO CHANGE)
CHANNEL A = ø2 + ø5
CHANNEL B = ø4
CHANNEL C = ø6
CHANNEL D = ø8




THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

| NO. | DATE | APPD | REVISION |
|---|---|---|---|
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| | |
|---|---|
| DESIGNED: | JW |
| DRAWN: | JW |
| CHECKED: | KDY |
| REVIEWED: | KDY |
| DATE: | 4-21-09 |

REGISTERED PROFESSIONAL ENGINEER K. DANIEL YAU No. 46611 Exp. 3/31/09 CIVIL STATE OF CALIFORNIA 07/16/09

Y&C TRANSPORTATION CONSULTANTS, INC.
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(916) 366-8000 FAX: (916) 366-8008

APPROVED
MICHAEL A. S. ELLA
SENIOR CIVIL ENGINEER
RCE 54842
EXPIRES: 12/31/09
5/06/09
DATE

**TOWN OF DANVILLE**
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

TRAFFIC SIGNAL MODIFICATION PLAN
GREEN VALLEY ROAD
AT BLEMER ROAD AND CAMEO DRIVE

E-3

SCALE: 1" = 20' | SHEET 23 OF 27

O:\Projects\2009\63009 Economic Stimulus Project\6305\G2.dwg\6 06 26 32 PM

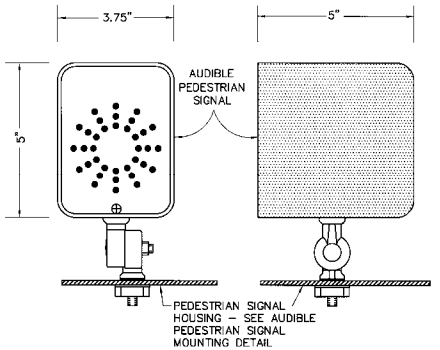
Plotted on: 07/16/09 @ 06:26:32 PM

## ELECTRICAL GENERAL NOTES: (FOR SHEETS E-1A TO E-4A)

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH CALTRANS STANDARD PLANS AND SPECIFICATIONS DATED MAY 2006 AND SUBSEQUENT REVISED STANDARD PLANS, AND THE SPECIAL PROVISIONS.
2. CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT 1-800-227-2600 AT LEAST 48 HOURS PRIOR TO ALL EXCAVATION WORK.
3. CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES WHICH MAY BE IN CONFLICT WITH THE INSTALLATION OF NEW SIGNAL EQUIPMENT. IF EQUIPMENT CANNOT BE INSTALLED AT THE LOCATION(S) SHOWN ON THE PLAN, NEW LOCATION WILL BE DETERMINED BY THE ENGINEER.
4. THE LOCATION OF ALL PULL BOXES, CONDUITS AND OTHER EQUIPMENT SHOWN ON THE PLAN ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
5. THE CONTRACTOR SHALL COMPLY WITH PG&E CLEARANCE REQUIREMENTS WHILE WORKING NEAR OVERHEAD POWER LINES.
6. THE CONTRACTOR SHALL REPAIR AND REPLACE ALL EXISTING ELECTRICAL EQUIPMENT DAMAGED BY HIS OPERATIONS AT HIS EXPENSE.
7. THE CONTRACTOR SHALL REPAIR AND REPLACE ALL EXISTING LANDSCAPING DAMAGED BY HIS OPERATIONS AT HIS EXPENSE.
8. THE CONTRACTOR SHALL IDENTIFY AND PROTECT THE IRRIGATION SYSTEM IN THE FIELD. IF THE IRRIGATION SYSTEM IS DAMAGED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPAIR THE DAMAGE AT HIS EXPENSE.
9. CONTRACTOR SHALL INSTALL WIRELESS VEHICLE SENSOR SYSTEM PER MANUFACTURER'S RECOMMENDATION.
10. LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATION AND ORIENTATION OF WIRELESS VEHICLE SENSOR NODES, REPEATERS AND ACCESS POINTS SHALL BE DETERMINED IN THE FIELD BY THE CERTIFIED TECHNICIAN AS REQUIRED.
11. ALL NEW INDICATIONS FOR PEDESTRIAN SIGNAL HEADS SHALL BE THE LIGHT EMITTING DIODES (LED) TYPE.
12. ALL NEW PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE WITH AUDIBLE PEDESTRIAN SIGNAL.
13. ALL NEW PEDESTRIAN PUSH BUTTONS (PPB) SHALL BE THE LARGE ADA TYPE WITH A 2" DIAMETER BUTTON. PPB SHALL BE MOUNTED AT 40" ABOVE GRADE.
14. ALL SALVAGED MATERIAL SHALL BE DELIVERED TO THE CONTRA COSTA COUNTY SIGNAL MAINTENANCE SHOP AT 2467 WATERBIRD WAY, MARTINEZ.
15. EXISTING DLC NOT IN USE SHALL BE ABANDONED UNLESS OTHERWISE NOTED ON THE PLAN.
16. CONTRACTOR SHALL VERIFY THE SPACE INSIDE THE EXISTING CONTROLLER CABINET TO ENSURE THAT IT HAS ENOUGH ROOM FOR INSTALLING CC AND EX CONTACT CLOSURE CARDS PER EACH INTERSECTION.
17. CONTRACTOR SHALL INSTALL ONE ACCESS BOX AND ONE CC CONTACT CLOSURE CARD FOR EACH ACCESS POINT SENSOR DETECTOR. THE CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING DETECTOR SENSOR UNITS, AND INSTALL NEW EX CONTACT CLOSURE CARDS AS SHOWN ON THE PLANS.

## LEGEND: (FOR SHEETS E-1A TO E-4A)

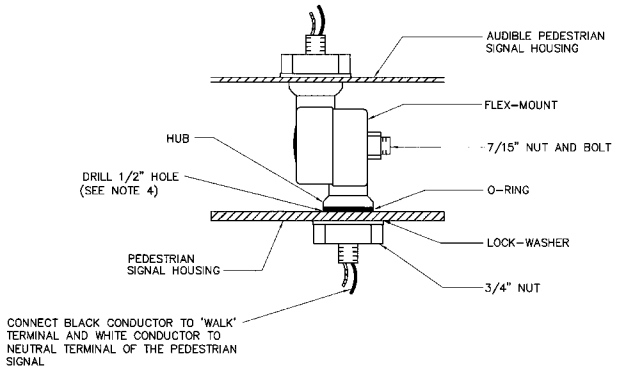
- NEW WIRELESS VEHICLE SENSOR NODE (FRONT AND MIDDLE DETECTOR)
- NEW HIGHLY ACCURATE WIRELESS VEHICLE SENSOR NODE (ADVANCE DETECTOR AND DATA COLLECTION)
- R — NEW REPEATER SENSOR DETECTOR
- AP — NEW ACCESS POINT SENSOR DETECTOR
- NEW COUNTDOWN TYPE PEDESTRIAN SIGNAL HEAD WITH AUDIBLE PEDESTRIAN SIGNAL
- EXISTING PULL BOX
- EXISTING CONDUIT
- NEW CONDUIT
- evd(a) — EXISTING EMERGENCY VEHICLE DETECTOR (CHANNEL A)




FRONT VIEW SIDE VIEW

**AUDIBLE PEDESTRIAN SIGNAL DETAIL**

NO SCALE




**NOTES:**

1. INSTALLATION OF THE AUDIBLE PEDESTRIAN SIGNAL SHALL BE PER MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS AND THIS DETAIL.
2. MOUNT AUDIBLE PEDESTRIAN SIGNAL ON TOP OF THE PEDESTRIAN SIGNAL WITH THE FACE OF THE UNIT AIMED SLIGHTILY DOWNWARD IN THE DIRECTION OF THE CROSSWALK.
3. NORTH-SOUTH CROSSING SHALL BE "CUCKOO" SIGNAL. EAST-WEST SHALL BE "PEEP-PEEP" SIGNAL.
4. EXACT LOCATION OF THE AUDIBLE PEDESTRIAN SIGNAL SHALL BE DETERMINED AND APPROVED IN THE FIELD BY THE ENGINEER PRIOR TO INSTALLATION.
5. VOLUME LEVEL SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER.
6. AUDIBLE PEDESTRIAN SIGNAL SHALL BE INDICATOR CONTROLS CORP. MODEL APS-10, OR APPROVED EQUAL.

**AUDIBLE PEDESTRIAN SIGNAL MOUNTING DETAIL**

NO SCALE

ALTERNATIVE BID PLAN

| NO | DATE | APP'D | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | KYC |
| DRAWN: | JW |
| CHECKED: | KYC |
| REVIEWED: | KDY |
| DATE: | 4-21-09 |

K. DANIEL YAU, No. 44618, REGISTERED PROFESSIONAL ENGINEER, CIVIL, STATE OF CALIFORNIA, 07/16/09


Y&C TRANSPORTATION CONSULTANTS, INC.
3250 RAMOS CIRCLE
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APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
PCE 54642
EXPIRES: 12/31/09
5/26/09
DATE

**TOWN OF DANVILLE**

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

TRAFFIC SIGNAL GENERAL PLAN

E-1A

SCALE: NO SCALE | SHEET 24 OF 27

O:\Projects\2008\08006\Economic Stimulus Projects\SIGE 1A.dwg@ 16:29:35 PM

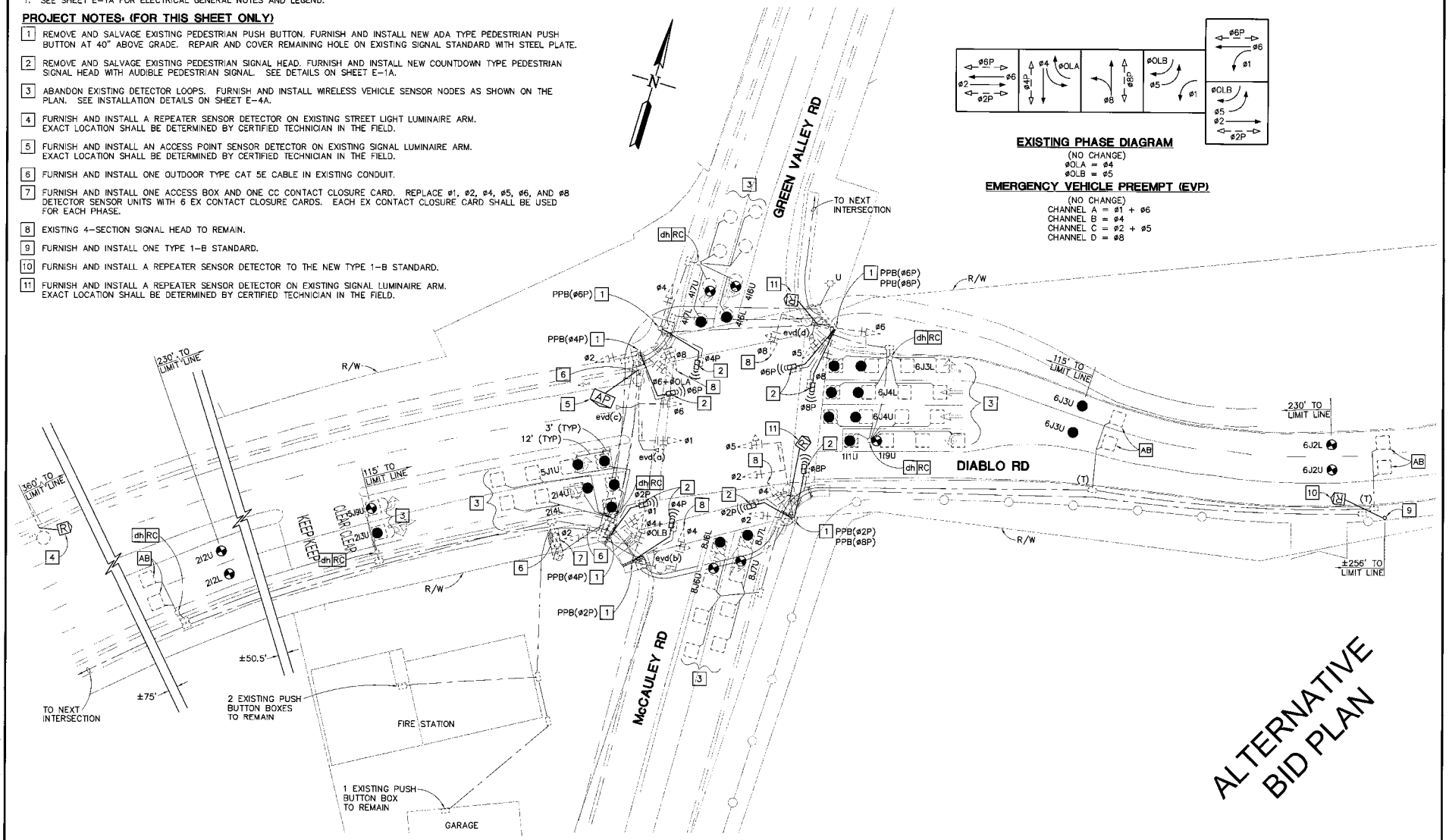
Plotted on: 07/16/09 @ 16:29:35 PM

**NOTE:**

1. SEE SHEET E-1A FOR ELECTRICAL GENERAL NOTES AND LEGEND.

**PROJECT NOTES: (FOR THIS SHEET ONLY)**

1. REMOVE AND SALVAGE EXISTING PEDESTRIAN PUSH BUTTON. FURNISH AND INSTALL NEW ADA TYPE PEDESTRIAN PUSH BUTTON AT 40" ABOVE GRADE. REPAIR AND COVER REMAINING HOLE ON EXISTING SIGNAL STANDARD WITH STEEL PLATE.
2. REMOVE AND SALVAGE EXISTING PEDESTRIAN SIGNAL HEAD. FURNISH AND INSTALL NEW COUNTDOWN TYPE PEDESTRIAN SIGNAL HEAD WITH AUDIBLE PEDESTRIAN SIGNAL. SEE DETAILS ON SHEET E-1A.
3. ABANDON EXISTING DETECTOR LOOPS. FURNISH AND INSTALL WIRELESS VEHICLE SENSOR NODES AS SHOWN ON THE PLAN. SEE INSTALLATION DETAILS ON SHEET E-4A.
4. FURNISH AND INSTALL A REPEATER SENSOR DETECTOR ON EXISTING STREET LIGHT LUMINAIRE ARM. EXACT LOCATION SHALL BE DETERMINED BY CERTIFIED TECHNICIAN IN THE FIELD.
5. FURNISH AND INSTALL AN ACCESS POINT SENSOR DETECTOR ON EXISTING SIGNAL LUMINAIRE ARM. EXACT LOCATION SHALL BE DETERMINED BY CERTIFIED TECHNICIAN IN THE FIELD.
6. FURNISH AND INSTALL ONE OUTDOOR TYPE CAT 5E CABLE IN EXISTING CONDUIT.
7. FURNISH AND INSTALL ONE ACCESS BOX AND ONE CC CONTACT CLOSURE CARD. REPLACE ø1, ø2, ø4, ø5, ø6, AND ø8 DETECTOR SENSOR UNITS WITH 6 EX CONTACT CLOSURE CARDS. EACH EX CONTACT CLOSURE CARD SHALL BE USED FOR EACH PHASE.
8. EXISTING 4-SECTION SIGNAL HEAD TO REMAIN.
9. FURNISH AND INSTALL ONE TYPE 1-B STANDARD.
10. FURNISH AND INSTALL A REPEATER SENSOR DETECTOR TO THE NEW TYPE 1-B STANDARD.
11. FURNISH AND INSTALL A REPEATER SENSOR DETECTOR ON EXISTING SIGNAL LUMINAIRE ARM. EXACT LOCATION SHALL BE DETERMINED BY CERTIFIED TECHNICIAN IN THE FIELD.







**EXISTING PHASE DIAGRAM**
(NO CHANGE)
øOLA = ø4
øOLB = ø5

**EMERGENCY VEHICLE PREEMPT (EVP)**
(NO CHANGE)
CHANNEL A = ø1 + ø6
CHANNEL B = ø4
CHANNEL C = ø2 + ø5
CHANNEL D = ø8

ALTERNATIVE BID PLAN

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

| NO. | DATE | APPD. | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | KYC |
| DRAWN: | JW |
| CHECKED: | KYC |
| REVIEWED: | KDY |
| DATE: | 4-21-09 |

K. DANIEL YAU — No. 5451 — CIVIL — STATE OF CALIFORNIA — 07/16/09


Y&C TRANSPORTATION CONSULTANTS, INC.
3250 RAMOS CIRCLE
SACRAMENTO, CA 95827
(916) 366-8000 FAX: (916) 366-8008


APPROVED
MICHELLA STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES: 12/31/09
5/06/09
DATE

**TOWN OF DANVILLE**
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

TRAFFIC SIGNAL MODIFICATION PLAN
DIABLO ROAD /GREEN VALLEY ROAD

E-2A

SCALE: 1" = 20' | SHEET 25 OF 27

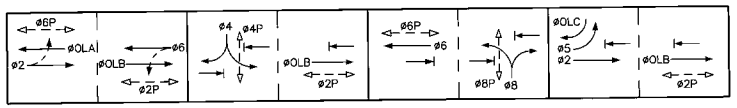

O:\Projects\2009\09209 Economic Stimulus Projects\09209 (wireless).dwg 05/26/09 PW
Plotted on: 07/16/09 @ 04:26:43 PM

**NOTE:**

1. SEE SHEET E-1A FOR ELECTRICAL GENERAL NOTES AND LEGEND.

**PROJECT NOTES: (FOR THIS SHEET ONLY)**

1. REMOVE AND SALVAGE EXISTING PEDESTRIAN PUSH BUTTON. FURNISH AND INSTALL NEW ADA TYPE PEDESTRIAN PUSH BUTTON AT 40" ABOVE GRADE. REPAIR AND COVER REMAINING HOLE ON EXISTING SIGNAL STANDARD WITH STEEL PLATE.
2. LOWER EXISTING ADA TYPE PEDESTRIAN PUSH BUTTON TO 40" ABOVE GRADE. REPAIR AND COVER REMAINING HOLE ON EXISTING SIGNAL STANDARD WITH STEEL PLATE.
3. REMOVE AND SALVAGE EXISTING PEDESTRIAN SIGNAL HEAD. FURNISH AND INSTALL NEW COUNTDOWN TYPE PEDESTRIAN SIGNAL HEAD WITH AUDIBLE PEDESTRIAN SIGNAL. SEE DETAILS ON SHEET E-1A.
4. ABANDON EXISTING DETECTOR LOOPS. FURNISH AND INSTALL WIRELESS VEHICLE SENSOR NODES AS SHOWN ON THE PLAN. SEE INSTALLATION DETAILS ON SHEET E-4A.
5. FURNISH AND INSTALL A REPEATER SENSOR DETECTOR ON EXISTING STREET LIGHT LUMINAIRE ARM. EXACT LOCATION SHALL BE DETERMINED BY CERTIFIED TECHNICIAN IN THE FIELD.
6. FURNISH AND INSTALL A REPEATER SENSOR DETECTOR ON EXISTING SIGNAL MAST ARM. EXACT LOCATION SHALL BE DETERMINED BY CERTIFIED TECHNICIAN IN THE FIELD.
7. FURNISH AND INSTALL AN ACCESS POINT SENSOR DETECTOR ON EXISTING SIGNAL MAST ARM. EXACT LOCATION SHALL BE DETERMINED BY CERTIFIED TECHNICIAN IN THE FIELD.
8. FURNISH AND INSTALL ONE OUTDOOR TYPE CAT 5E CABLE IN EXISTING CONDUIT.
9. FURNISH AND INSTALL TWO OUTDOOR TYPE CAT 5E CABLES IN EXISTING CONDUIT.
10. FURNISH AND INSTALL TWO ACCESS BOXES AND TWO CC CONTACT CLOSURE CARDS. REPLACE ø2, ø4, ø5, ø6, AND ø8 DETECTOR SENSOR UNITS WITH 5 EX CONTACT CLOSURE CARDS. EACH EX CONTACT CLOSURE CARD SHALL BE USED FOR EACH PHASE.
11. EXISTING 5-SECTION WITH YELLOW AND GREEN LEFT ARROWS SIGNAL HEAD TO REMAIN.
12. FURNISH AND INSTALL PPB POST. BASE PLATE OF PPB POST SHALL ABUTT BACK OF CURB. PPB SIGN SHALL BE ON EAST SIDE OF PPB POST AND ARROW SHALL POINT LEFT.
13. FURNISH AND INSTALL 1½"C, 2#14.
14. REMOVE AND SALVAGE EXISTING PEDESTRIAN PUSH BUTTON. REPAIR AND COVER REMAINING HOLE ON EXISTING SIGNAL STANDARD WITH STEEL PLATE.

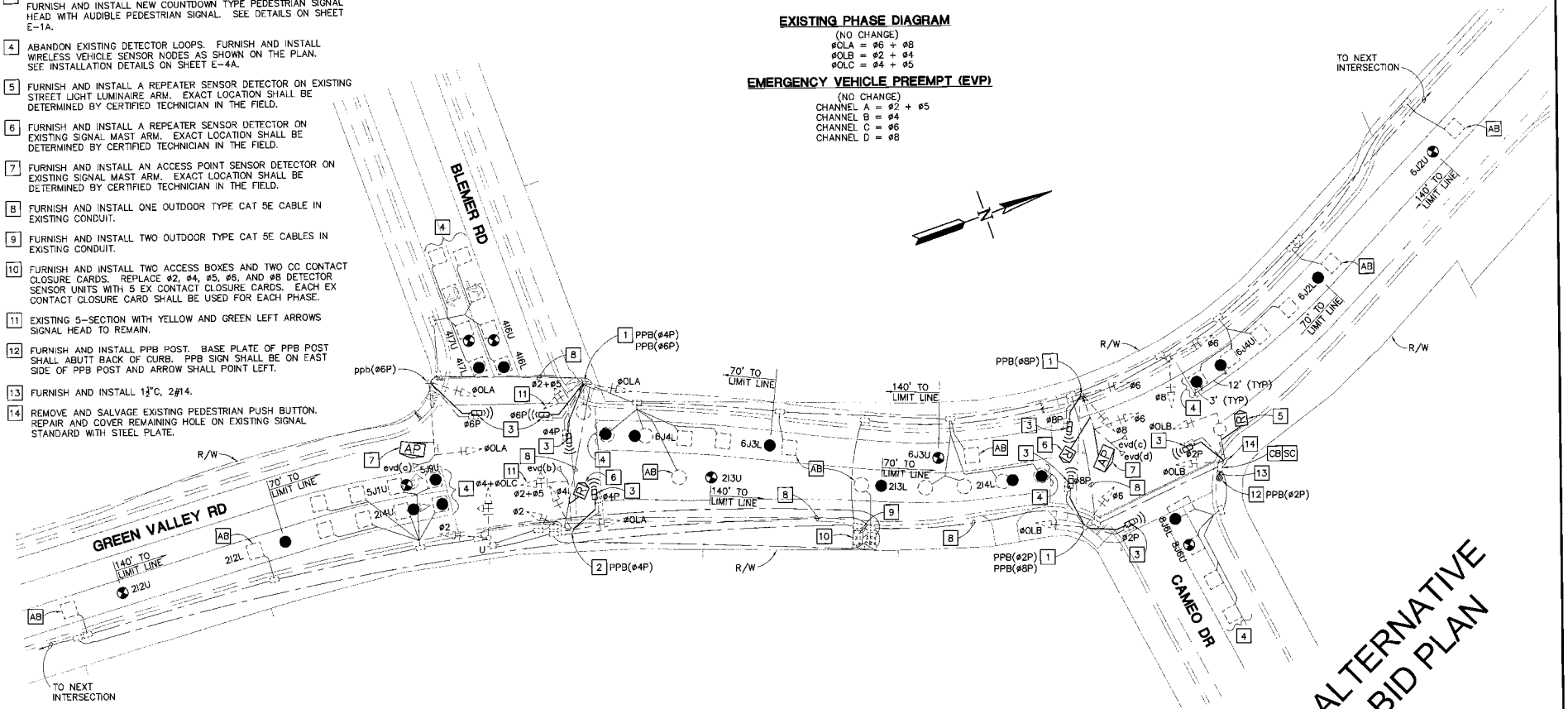



**EXISTING PHASE DIAGRAM**

(NO CHANGE)
øOLA = ø6 + ø8
øOLB = ø2 + ø4
øOLC = ø4 + ø5

**EMERGENCY VEHICLE PREEMPT (EVP)**

(NO CHANGE)
CHANNEL A = ø2 + ø5
CHANNEL B = ø4
CHANNEL C = ø6
CHANNEL D = ø8




ALTERNATIVE BID PLAN

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

| NO. | DATE | APP'D | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED: | KYC |
| DRAWN: | JW |
| CHECKED: | KYC |
| REVIEWED: | KDY |
| DATE: | 4-21-09 |

REGISTERED PROFESSIONAL ENGINEER — K. DANIEL YAU — No. 44511 — CIVIL — STATE OF CALIFORNIA — 07/16/09


Y&C TRANSPORTATION CONSULTANTS, INC.
3250 RAMOS CIRCLE
SACRAMENTO, CA 95827
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APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES: 12/31/09
5/26/09
DATE

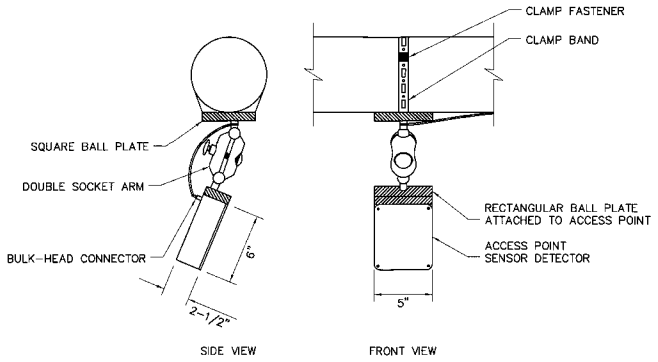
**TOWN OF DANVILLE**
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

**TRAFFIC SIGNAL MODIFICATION PLAN**
**GREEN VALLEY ROAD**
**AT BLEMER ROAD AND CAMEO DRIVE**

**E-3A**

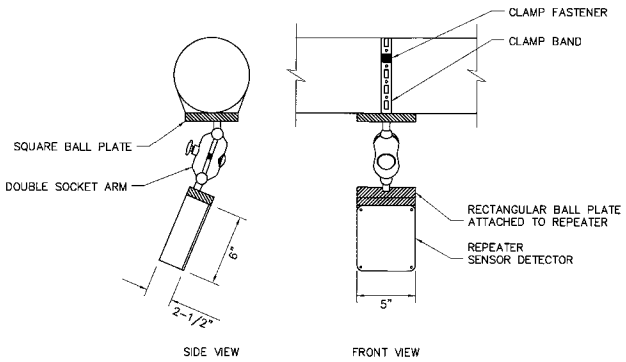
SCALE: 1" = 20' | SHEET 26 OF 27


O:\Projects\2009\09008 Economic Stimulus Projects\DGN\12thwrd1sig.dgn 05-26-09 4:14 PM
Plotted on: 26-MAY-09 04:13:59 PM



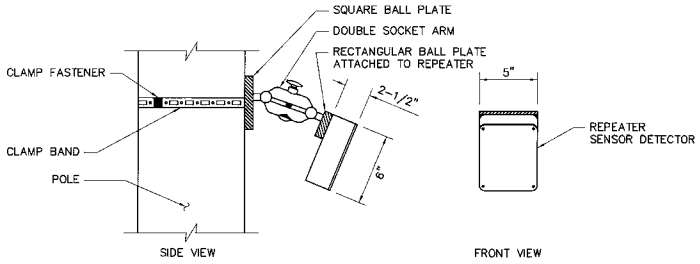

**DETAIL A**

ACCESS POINT MOUNTING DETAIL
FOR LUMINAIRE OR SIGNAL MAST ARMS




**DETAIL B**

REPEATER MOUNTING DETAIL
FOR LUMINAIRE OR SIGNAL MAST ARMS

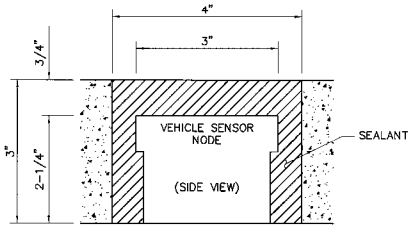



**DETAIL C**

REPEATER MOUNTING DETAIL FOR POLES

## VEHICLE SENSOR NODE INSTALLATION PROCEDURE

1. PRIOR TO INSTALLATION, IDENTIFY VEHICLE SENSOR NODE'S ID, LANE NUMBER AND LOCATION IN LANE.
2. MAKE SURE THE VEHICLE SENSOR NODE INSTALLS FLAT IN THE CORED HOLE AND IS NOT TILTED.
3. USE THE HEAT GUN OR HOT COMPRESSED AIR TO DRY THE INSIDE OF THE CORED HOLE. THERE MUST BE ABSOLUTELY NO MOISTURE ON THE APPLIED SURFACE.
4. FILL THE HOLE ABOUT 1/4 FULL OF THE SEALANT.
5. PLACE VEHICLE SENSOR NODE IN THE HOLE WITH ARROW POINTING IN THE DIRECTION OF TRAFFIC. THE SEALANT SHOULD STILL HAVE WORK TIME, SO THE VEHICLE SENSOR NODE CAN BE ROTATED TO THE CORRECT ORIENTATION. PUSH VEHICLE SENSOR NODE DOWN SO IT LAYS FLAT ON THE BOTTOM OF THE HOLE.
6. FILL THE HOLE WITH THE REMAINING SEALANT TO COVER THE VEHICLE SENSOR NODE. LEVEL SEALANT WITH THE SURFACE OF THE ROAD.
7. AFTER THE FIRST APPLICATION, DO NOT LET THE SEALANT SIT FOR MORE THAN 30 SECONDS BEFORE THE NEXT APPLICATION.
8. DEPENDING ON AMBIENT TEMPERATURE AND HUMIDITY, SEALANT DRYING TIME WILL VARY FROM 5 MINUTES TO 15 MINUTES. VERIFY HARDNESS OF SEALANT BEFORE REOPENING THE LANE FOR TRAFFIC.




VEHICLE SENSOR NODE
INSTALLED IN ROADWAY

ALTERNATIVE BID PLAN

| NO | DATE | APPD | REVISION |
|---|---|---|---|
| | | | |

DESIGNED: KYC
DRAWN: MJL
CHECKED: KYC
REVIEWED: KDY
DATE 4-21-09

REGISTERED PROFESSIONAL ENGINEER K. DANIEL YAU No. 4461 Exp. 3/31/09 CIVIL STATE OF CALIFORNIA 07/16/09

Y&C TRANSPORTATION CONSULTANTS, INC.
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(916) 366-8000 FAX: (916) 366-8008

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES: 12/31/09
5/06/09
DATE

TOWN OF DANVILLE
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

TRAFFIC SIGNAL DETAILS
E-4A
SCALE NO SCALE SHEET 27 OF 27

Plotted on: 6/11/09, 6:06:26 PM

TOWN OF DANVILLE COLLISION REPORT
CORRIDOR: DIABLO ROAD
SEGMENT: GREEN VALLEY RD TO MT. DIABLO SCENIC
DATE RANGE: 01/01/05 - 4/30/18
COLLISION DATA: iSWITRS/PD DATABASE

| CASE or REPORT ID | DATE | TIME | STREET 1 | STREET 2 | COLL TYPE | INVOLVED WITH | PED ACTION | INJURY | VEH 1 VIOL | VEH 2 VIOL | VEH 1 TYPE | VEH 2 TYPE | DIR FROM INT | DISTANCE (FT) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NA | 1/22/2005 | 1:25 | DIABLO RD | ALAMEDA DIABLO | Overturn | Fixed Object | No ped involved | 0 | 23152A/DUI | Not stated | Jeep | Not stated | | |
| NA | 1/26/2005 | 7:10 | DIABLO RD | AVENIDA NUEVA | Head on | Other vehicle | No ped involved | 2 | 21650/wrong side | Not stated | car | car | | |
| NA | 2/7/2005 | 6:48 | GREEN VALLEY RD | DIABLO RD | Sideswipe | Other vehicle | No ped involved | 0 | 22350 | Not stated | car | car | | |
| NA | 2/19/2005 | 9:25 | DIABLO RD | GREEN VALLEY RD | Hit object | Fixed object | No ped involved | 0 | 23152A/DUI | Not stated | car | Not stated | | |
| NA | 5/20/2005 | 16:40 | DIABLO RD | ALAMEDA DIABLO | Broadside | Other vehicle | No ped involved | 2 | 21650/wrong side | Not stated | car | car | | |
| NA | 6/25/2005 | 15:04 | DIABLO RD | ALAMEDA DIABLO | Broadside | Other vehicle | No ped involved | 1 | 21802A/ROW | Not stated | car | car | | |
| 2169790 | 8/16/2005 | 21:40 | DIABLO RD | ALAMEDA DIABLO | Head on | Other vehicle | No ped involved | 0 | Wrong side | Not stated | Not stated | Not stated | | |
| 2303265 | 10/27/2005 | 9:35 | DIABLO RD | GREEN VALLEY RD | Hit object | Other vehicle | No ped involved | 0 | 22350/unsafe speed | Not stated | car | Not stated | | |
| NA | 12/23/2005 | 17:17 | GREEN VALLEY RD | DIABLO RD | Rear end | Other vehicle | No ped involved | 0 | 21703 | Not stated | car | car | | |
| 2434210 | 12/27/2005 | 21:44 | DIABLO RD | ALAMEDA DIABLO | Head on | Fixed object | No ped involved | 1 | Unsafe speed | Not stated | Car | Not stated | | |
| 06-03846 | 2/13/2006 | 12:44 | CLYDESDALE DR | DIABLO RD | Rear end | Bicycle | No ped involved | 1 | Not stated | Not stated | Car | Bicycle | | |
| 06-04125 | 2/14/2006 | 7:20 | DIABLO RD | CLYDESDALE DR | Broadside | Other vehicle | No ped involved | 0 | 21801A/ROW | Not stated | Not stated | Not stated | | |
| 06-04986 | 2/22/2006 | 15:30 | DIABLO RD | CLYDESDALE DR | Rear end | Other vehicle | No ped involved | 0 | 22350/unsafe speed | Not stated | Not stated | car | | |
| 2507524 | 3/1/2006 | 5:30 | BLACKHAWK RD | MT DIABLO SCENIC | Hit object | Other object | No ped involved | 0 | 21560/wrong side | Not stated | Not stated | Not stated | (CCC) | |
| 06-14274 | 6/2/2006 | 15:33 | DIABLO RD | CLYDESDALE DR | Rear end | Other vehicle | No ped involved | 0 | 22350/unsafe speed | Not stated | car | car | | |
| 06-15253 | 6/12/2006 | 18:58 | DIABLO RD | CLYDESDALE DR | Rear end | Other vehicle | No ped involved | 1 | Hit & Run/DUI | Not stated | car | car | | |
| 06-16628 | 6/26/2006 | 10:43 | DIABLO RD | MCCAULEY RD | Other CollType | Other vehicle | No ped involved | 0 | Not stated | Not stated | Not stated | Not stated | | |
| NA | 9/30/2006 | 20:10 | DIABLO RD | AVENIDA NUEVA | Hit object | Fixed object | No ped involved | 0 | 22107 | Not stated | Not stated | Not stated | | |
| 06-27318 | 10/19/2006 | 13:15 | DIABLO RD | CLYDESDALE DR | Rear end | Other vehicle | No ped involved | 1 | Not stated | Not stated | Other bus | Car | | |
| 06-32316 | 12/12/2006 | 16:17 | GREEN VALLEY RD | DIABLO RD | Broadside | Other vehicle | No ped involved | 0 | 22350/unsafe speed | Not stated | Not stated | Not stated | | |
| 3390896 | 9/17/2007 | 18:00 | DIABLO RD | GREEN VALLEY RD | Other CollType | Other vehicle | No ped involved | 0 | 22106/backing | Not stated | car | car | | |
| 07-23958 | 9/18/2007 | 15:03 | DIABLO RD | CLYDESDALE DR | Rear end | Other vehicle | No ped involved | 1 | 22350/unsafe speed | Not stated | Not stated | Car | | |
| 07-28509 | 11/16/2007 | 6:50 | DIABLO RD | ALAMEDA DIABLO | Hit object | Fixed object | No ped involved | 0 | Not stated | Not stated | Car | Not stated | | |
| 07-28609 | 12/16/2007 | 1:00 | DIABLO RD | ALAMEDA DIABLO | Head on | Fixed object | No ped involved | 0 | Not stated | Not stated | Not stated | Not stated | | |
| 08-08883 | 4/21/2008 | 14:35 | DIABLO RD | FAIRWAY DR | Rear end | Other vehicle | No ped involved | 0 | 22350/unsafe speed | Not stated | Not stated | Car | | |
| 08-12987 | 6/10/2008 | 8:28 | GREEN VALLEY RD | DIABLO RD | Rear end | Other vehicle | No ped involved | 0 | Not stated | Not stated | Not stated | Not stated | North | 150 |
| 08-22483 | 10/5/2008 | 11:31 | DIABLO RD | ALAMEDA DIABLO | Hit object | Bicycle | No ped involved | 1 | 22350/unsafe speed | Not stated | Bicycle | Not stated | | |
| 08-23150 | 10/13/2008 | 15:26 | DIABLO RD | CALLE ARROYO | Other vehicle | Bicycle | No ped involved | 1 | 21656/21750 | Not stated | car | Bicycle | | |
| 08-23909 | 10/22/2008 | 15:55 | DIABLO RD | GREEN VALLEY RD | Rear end | Other vehicle | No ped involved | 0 | Not stated | Not stated | Car | Not stated | West | 150 |
| 08-29148 | 12/31/2008 | 17:42 | DIABLO RD | GREEN VALLEY RD | Broadside | Other vehicle | No ped involved | 0 | Not stated | Not stated | Pickup | Not stated | West | 206 |
| 09-00965 | 1/14/2009 | 8:21 | DIABLO RD | CLYDESDALE DR | Rear end | Other vehicle | No ped involved | 0 | Not stated | Not stated | Not stated | Bicycle | | |
| 09-01490 | 1/21/2009 | 14:51 | DIABLO RD | GREEN VALLEY RD | Broadside | Other vehicle | No ped involved | 0 | Not stated | Not stated | Not stated | Not stated | West | 102 |
| 09-05349 | 3/22/2009 | 3:30 | DIABLO RD | CLYDESDALE DR | Hit Object | Fixed Object | No ped involved | 1 | 21650 | Not stated | car | Not stated | | |
| 09-06424 | 4/7/2009 | 13:25 | DIABLO RD | AVENIDA NUEVA | Hit object | Fixed object | No ped involved | 0 | Improper turning (veh) | Not stated | Pickup | Not stated | | |
| 09-19504 | 10/21/2009 | 17:44 | DIABLO RD | GREEN VALLEY RD | Broadside | Bicycle | No ped involved | 0 | Not stated | Not stated | Car | Bicycle | | |
| 09-21606 | 11/20/2009 | 21:30 | DIABLO RD | MCCAULEY RD | Hit object | Fixed object | No ped involved | 0 | Not stated | Not stated | Not stated | Not stated | | |
| 09-23538 | 12/21/2009 | 2:30 | DIABLO RD | GREEN VALLEY RD | Hit object | Fixed object | No ped involved | 0 | Not stated | Not stated | Car | Not stated | | |
| 10-04009 | 3/3/2010 | 12:06 | DIABLO RD | GREEN VALLEY RD | Head on | Other vehicle | No ped involved | 0 | Not stated | Not stated | Not stated | Not stated | West | 74 |
| 10-06042 | 4/2/2010 | 8:34 | DIABLO RD | MCCAULEY RD | Broadside | Bicycle | No ped involved | 1 | Wrong side | Not stated | Bicycle | Not stated | West | 191 |
| 10-14037 | 7/30/2010 | 12:49 | DIABLO RD | CLYDESDALE DR | Rear end | Other vehicle | No ped involved | 2 | 22350/unsafe speed | Not stated | car | car | | |
| NA | 5/9/2011 | 21:10 | DIABLO RD | ALAMEDA DIABLO | Hit Object | Fixed Object | No ped involved | 0 | 22350 | Not stated | Not stated | Not stated | | |
| 11-10432 | 6/13/2011 | 12:10 | DIABLO RD | CLYDESDALE DR | Sideswipe | Other vehicle | No ped involved | 0 | 21801a/ROW auto | Not stated | car | car | | |
| 11-13271 | 7/27/2011 | 16:07 | DIABLO RD | CALLE ARROYO | Rear end | Other vehicle | No ped involved | 0 | 22350/unsafe speed | Not stated | car | Not stated | | |
| NA | 7/28/2011 | 9:29 | DIABLO RD | AVENIDA NUEVA | Rear End | Other vehicle | No ped involved | 0 | Not stated | Not stated | Not stated | Not stated | | |
| 11-21130 | 12/5/2011 | 7:46 | DIABLO RD | AVENIDA NUEVA | Sideswipe | Fixed Object | No ped involved | 0 | 22107/Improper turn | Not stated | car | Not stated | | |
| 11-22128 | 12/22/2011 | 0:01 | DIABLO RD | ALAMEDA DIABLO | Hit Object | Fixed Object | No ped involved | 0 | 23152/DUI | Not stated | Not stated | Not stated | | |
| 12-08088 | 5/15/2012 | 14:11 | DIABLO RD | CLYDESDALE DR | Not stated | Other vehicle | No ped involved | 0 | 22350 | Not stated | Not stated | Not stated | | |
| NA | 8/6/2012 | 17:30 | DIABLO RD | CLYDESDALE DR | Rear end | Other vehicle | No ped involved | 1 | 22350/unsafe speed | Not stated | Jeep | car | | |
| 12-20011 | 11/26/2012 | 14:25 | DIABLO RD | CALLE ARROYO | Not stated | Other vehicle | No ped involved | 0 | 22350 | Not stated | Not stated | Not stated | | |
| 13-04482 | 3/19/2013 | 13:55 | DIABLO RD | ALAMEDA DIABLO | DUI | Not stated | No ped involved | | 23152a/22107/DUI | Not stated | Not stated | Not stated | | |
| 13-12616 | 7/20/2013 | 19:14 | DIABLO RD | GREEN VALLEY RD | Not stated | Not stated | No ped involved | | 21650 | Not stated | Not stated | Not stated | | |
| 13-12832 | 7/24/2013 | 12:49 | DIABLO RD | CLYDESDALE DR | Not stated | Not stated | No ped involved | | 22107 | Not stated | Not stated | Not stated | | |
| 14-00398 | 1/7/2014 | 15:40 | DIABLO RD | CLYDESDALE DR | Broadside | Other vehicle | No ped involved | 1 | 21801A | Not stated | car | car | | |
| 14-01647 | 1/28/2014 | 18:05 | DIABLO RD | FAIRWAY DR | | | | | 22350 | Not stated | Not stated | Not stated | | |
| 14-05088 | 3/24/2014 | 13:14 | DIABLO RD | CLYDESDALE DR | Sideswipe | Bicycle | No ped involved | 1 | 21750/Improper pass | Not stated | car | Bicycle | | |
| 14-07130 | 4/26/2014 | 20:18 | DIABLO RD | 1941 DIABLO RD | 22350 | Not stated | No ped inv | 0 | 22350 | Not stated | Not Stated | Not stated | South of 1941 | 143 |
| 14-13698 | 8/11/2014 | 17:54 | DIABLO RD | AVENIDA NUEVA | 21650 | Not stated | No ped inv | 1 | 21650 | Not stated | Not Stated | Not stated | West | .8 (miles) |
| 15-03485 | 2/28/2015 | 14:06 | DIABLO RD | MCCAULEY RD | 22350 | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not Stated | Not stated | East | 382 |
| Not Stated | 3/14/2015 | 9:30 | DIABLO RD | ALAMEDA DIABLO | Wrong side | Bicycle | No ped inv | 1 | 21650 | Not stated | Vehicle | Bicycle | West | 0 |
| 15-05937 | 4/9/2015 | 15:10 | DIABLO RD | CLYDESDALE DR | 22107 | Bicycle | No ped inv | 1 | 22107 | Not stated | Not Stated | Bicycle | West | 15 |
| 15-08050 | 5/15/2015 | 19:42 | DIABLO RD | AVENIDA NUEVA | 22107 | Not stated | No ped inv | 0 | 22107 | Not stated | Not Stated | Not stated | Not stated | 0 |
| 15-11409 | 5/16/2015 | 19:54 | DIABLO RD | ALAMEDA DIABLO | 22350 | Not stated | No ped inv | 0 | 22350 | Not stated | Not Stated | Not stated | East | Not stated |
| 15-10719 | 6/29/2015 | 13:22 | DIABLO RD | CALLE ARROYO | 22350 | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not Stated | Not stated | Not stated | 0 |
| 15-13428 | 8/15/2015 | 20:54 | DIABLO RD | GREEN VALLEY RD | Medical | Other vehicle | No ped inv | 1 | Medical | Not stated | Not Stated | Not stated | Not stated | 0 |
| 15-17049 | 10/16/2015 | NA | GREEN VALLEY RD | DIABLO RD | DUI | PDO | No ped inv | 0 | 22350 | Not stated | Not stated | Not Stated | Not stated | 0 |
| 15-18802 | 11/18/2015 | 7:35 | DIABLO RD | GREEN VALLEY RD | 22350 | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not stated | Not stated | East | 433 |
| 15-19413 | 11/30/2015 | 12:07 | DIABLO RD | ALAMEDA DIABLO | 22107 | Other vehicle | No ped inv | 0 | 22107 | Not stated | Not stated | Not stated | Not stated | Not stated |
| 16-02525 | 2/17/2016 | NA | DIABLO RD | MT DIABLO SCENIC | 22350 | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not stated | Not stated | West | 24 |
| 16-02651 | 2/19/2016 | | DIABLO RD | MCCAULEY RD | Unsafe speed | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not stated | Not stated | Not stated | 0 |
| 16-06698 | 5/6/2016 | 12:26 | DIABLO RD | GREEN VALLEY RD | 22350 | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not stated | Not stated | Not stated | 0 |
| 16-07958 | 6/2/2016 | 17:13 | DIABLO RD | 1956 DIABLO RD | 22350 | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not stated | Not stated | East | 15 |
| 16-10942 | 8/5/2016 | 12:27 | DIABLO RD | ALAMEDA DIABLO | Improper turn | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not stated | Not stated | East | 513 |
| 16-16903 | 12/6/2016 | 13:09 | DIABLO RD | HARTZ AVE | ROW violation | Other vehicle | No ped inv | 0 | 21800a | Not stated | Not stated | Not stated | West | 412 |
| 17-00752 | 1/20/2017 | 11:14 | DIABLO RD | FAIRWAY DR | Unsafe speed | Other vehicle | No ped inv | 1 | 22350 | Not stated | Not stated | Not stated | West | 57 |
| 17-01467 | 2/3/2017 | 14:45 | DIABLO RD | CALLE ARROYO | Unsafe speed | Other vehicle | No ped inv | 0 | 22350 | Not stated | Not stated | Not stated | Not stated | 0 |
| 17-03181 | 3/12/2017 | 19:28 | DIABLO RD | AVENIDA NUEVA | Improper turn | Other vehicle | No ped inv | 0 | 22107 | Not stated | Not stated | Not stated | East | 842 |
| 17-10256 | 8/7/2017 | 17:30 | DIABLO RD | GREEN VALLEY RD | Improper turn | Fixed Object | No ped inv | 0 | 22107 | Not stated | Pass veh | Not stated | Not stated | 0 |
| 17-13855 | 10/21/2017 | 13:25 | DIABLO RD | AVENIDA NUEVA | Unsafe speed | Bicycle | No ped inv | 1 | 22350 | Not stated | Pass veh | Bicycle | East | 27 |
| 17-13751 | 10/21/2017 | 14:00 | DIABLO RD | CLYDESDALE DR | Unsafe speed | Bicycle (2) | No ped inv | 2 | 22350 | Not stated | Pass veh | Bicycle (2) | West | 769 |

Indicates Bicycle Involved

Law Offices of
**Stuart M. Flashman**
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Oakland, CA 94618-1533
(510) 652-5373 (voice & FAX)
e-mail: stu@stuflash.com

October 2, 2017

Mr. David Crompton,
Principal Planner
Town of Danville
510 La Gonda Way
Danville, CA 94526

Re: Magee Ranches Notice of Preparation for Revised Draft EIR

Dear Mr. Crompton,

I am writing on behalf of my client, SOS Danville Group ("SOS"), to comment on the Notice of Preparation ("NOP") for the Revised Draft Environmental Impact Report ("RDEIR") for the Magee Ranches development project ("Project") in the Diablo Road corridor. These comments are in addition to more specific comments that are being submitted by members of the group.

As the NOP acknowledges, the primary reason that the RDEIR is being prepared is that in *SOS-Danville Group v. Town of Danville et al*. a judgment was entered finding the prior EIR for the Project to be inadequate in its consideration of the Project's potential bicycle safety impacts. Consequently, the court ordered that the issue be revisited. In addition, the Town has wisely decided that since it has been five years since the prior EIR was prepared, several analyses, including specifically the traffic analysis, be revisited based on new data. SOS applauds that decision. However, as has been pointed out in other comments on the NOP, there are other changed circumstances and/or new information affecting several other aspects of the environmental review. The Town needs to carefully consider whether other portions of the EIR also need to be reconsidered and potentially revised.

Specifically in regard to the bicycle safety analysis, the prior EIR did not identify any threshold of significance for bicycle safety impacts. Especially given the direction provided by the court, it is important that the RDEIR identify specific thresholds of significance for bicycle safety impacts. SOS would like to suggest several thresholds that would be appropriate given the specific project, its location, and the surrounding circumstances.

The Project is located just south of Diablo Road and Blackhawk Road in Danville. Its main access from the roadway is just east of where Mt. Diablo Scenic Road turns off to the north, serving as the southern gateway to Mt. Diablo State Park. As a result, there is considerable bicycle traffic on both Diablo Road and Blackhawk Road, especially on weekends, from bicyclists heading to and from the Park.

Diablo Road/Blackhawk Road, despite only being a two-lane road with narrow to nonexistent shoulders, is one of Danville's major east-west thoroughfares and carries a significant volume of traffic both during the peak commute hours and on weekends.

Despite the large amount of bicycle traffic on the road, there are no bicycle lanes. This, plus the large amount of automotive traffic, the road's narrowness, and the fact that in some sections the road is both winding and hilly, already make it rather risky for bicyclists. Indeed, there have been several recent serious bicycle/automobile accidents along this corridor and connected roadways within the last five years.[1] All of these factors play into determining appropriate thresholds of significance for bicycle safety impacts.

SOS would recommend that the Town and its consultants review a Federal Highway administration publication, *Bicycle Road Safety Audit Guidelines and Prompt Lists* (FHWA-SA-12-018), which is available for download at: https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa12018/fhwasa12018.pdf. That publication highlights some of the deficiencies present in the Diablo Road/Blackhawk Road corridor as a route with significant bicyclist use. While the State of California does not yet have guidelines or standards for roadways carrying significant bicycle traffic, the State of New Jersey has issued a publication, *NJ DOT Bicycle Compatible Roadways and Bikeways – Planning and Design Guidelines* (available for download at http://www.state.nj.us/transportation/publicat/pdf/BikeComp/introtofac.pdf), that gives specific recommendations on making roadways bicycle safe. Given that the Magee Ranch will put additional auto traffic on this deficient corridor, the deficiencies in the Diablo/Blackhawk Road corridor need to be addressed in the RDEIR.

The Diablo/Blackhawk Road corridor's deficiencies for bicyclist safety make it important that the Town's bicyclist safety impact guidelines be formulated to provide an effective evaluation of the bicyclist safety impacts from placing additional auto traffic on that corridor. There is little question that the amounts of auto traffic, as well as the amount of bicyclist traffic, significantly affect bicyclist safety. In particular, especially given the fact that auto speeds are typically much higher than bicyclist speeds, there will always be a temptation for auto drivers to try and pass a bicyclist riding on the shoulder. Where the lanes and shoulders are wide enough and there is good visibility of oncoming traffic, this may not be a problem.[2] However, when one or more of these factors is suboptimal, a potentially unsafe situation occurs when an auto driver is behind a slower moving cyclist and there is not adequate room to pass without going into the oncoming traffic lane. The danger increases further when, as is the case with parts of the

[1] Copies of information on two such accidents are attached. The Town should obtain from the relevant authorities updated information on accidents, including specifically bicycle/automobile accidents along the Diablo/Blackhawk Road corridor.

[2] Current guidelines indicate a minimum 1 meter (~3 ft) minimum width for bicycle lanes or their equivalent, and 3.5 - 4 meters (11-13 ft) for traffic lanes. See, e.g., *The Effect of Road Lane Width on Cyclist Safety in Urban Areas*, A. Schramm et al. (2009), available at https://nacto.org/docs/usdg/effect_road_width_on_cyclist_safety_scramm.pdf. A listing of measured widths along portions of Diablo Road is attached hereto.

Diablo/Blackhawk Road corridor, hills and curves obstruct a driver's view of oncoming traffic. In those situations, even when there is a double yellow line, there is a significant risk of an impatient driver attempting to pass a bicyclist with potentially disastrous results.

In such situations, the risk to cyclists increases in proportion to: 1) the frequency of cyclists, 2) the frequency of cars heading in the same direction, and 3) the frequency of cars heading in the opposite direction. As each factor increases, the safety risk also increases. The risk can increase significantly well below vehicle/capacity ("v/c") ratios that would indicate traffic congestion. Even when the v/c ratios are well below 0.5 in both directions, it can be shown mathematically that the likelihood of an unsafe passing maneuver occurring on a section the length of that found on the Diablo/Blackhawk Road corridor (over 1 mile) would be significant. That this is true is also evident from the recent occurrence of multiple bicycle/auto accidents.

SOS could not find any study defining a threshold for when adding additional traffic to such a situation would significantly increase the hazard to bicyclists, but it seems obvious that once the risk to cyclists is significant (e.g., when the v/c ratio on both sides of the road is more than 0.3), adding more traffic will significantly increase the risk to cyclists. As a consequence of this and other factors, SOS would suggest that the following thresholds of significance be used in the RDEIR:

1) If the Project would add automobile trips to a two-lane thoroughfare that is already carrying significant volumes of automotive traffic (e.g., v/c of 0.3 or more in both directions), and is also carrying a significant amount of bicycle traffic (e.g., more than 20 bicyclists per hour) but does not have demarcated bicycle lanes;

2) If the Project would add more automobile trips to a two-lane thoroughfare that is already carrying significant volumes of automotive traffic (e.g., v/c of 0.3 or more in both directions) and has had two or more reported bicycle/automobile accidents within the past five years;

3) If the Project would add automobile trips to a two-lane thoroughfare carrying significant volumes of bicycle traffic where the thoroughfare, due to hills and/or curves, has segments of more than ½ mile in length where passing is prohibited (i.e., double yellow line) but where the shoulders and lanes are too narrow to allow 3-foot clearance between bicyclists and vehicle travel lanes.

4) If the Project, during its construction phase, would result in large, slower moving vehicles traveling along a two-lane thoroughfare without marked bicycle lanes but carrying a significant volume of bicycle traffic.

Under each of these conditions, the Project would have the potential to significantly increase the risk of bicycle accidents with automobiles and/or trucks – a significant adverse impact.

Triggering any of these thresholds should be considered to indicate that the Project has a potentially significant adverse impact on bicycle safety, and that mitigation measures and project alternatives that would reduce or avoid the significant impact must be considered.

Most sincerely,

Stuart Flashman
Attorney for SOS Danville Group

Attachments: information on bicycle/auto accidents in the Diablo/Blackhawk Rd. corridor

# From the Danville San Ramon Updates:
# "Two bicyclists injured, one airlifted after being struck by motorist in Danville

06.22.2017.
Author: mac



UNINCORPORATED DANVILLE – Officers arrested a driver after he allegedly struck two bicyclists on Blackhawk Road Wednesday night.
At approximately 9:20 pm Wednesday, Deputies from the Contra Costa County Sheriff's Office were dispatched to a welfare check on Blackhawk Road in which the caller stated he had just hit something in the roadway, then fled the scene.
At the same time, the San Ramon Valley Fire Protection District received a call from a motorist, reporting that two bicyclists were down on Blackhawk Road, just east of Magee Ranch road.
Paramedics arrived at the scene and found two bicyclists with traumatic injuries. The driver of the vehicle reportedly followed an ambulance back to the scene after calling authorities.
One rider was airlifted by a CALSTAR air ambulance at a nearby soccer field. He was conscious and talking with paramedics. The other rider was transported to a hospital via ambulance.
Officers from the California Highway Patrol conducted a field sobriety test and subsequently arrested the driver of the vehicle.
The vehicle that reportedly struck the bicyclists, a red Volkswagen, appeared to have body damage on the left front panel.

Blackhawk Road remained open for the duration of the incident. Both bicycles at the

scene appeared to be equipped with rear-facing red lights."

NEXTDOOR DIABLO WEBSITE, MARCH 14, 2015 Post in Crime & Safety

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## Car/Bicycle Accident on Diablo Road at Diablo Entrance **14 Mar 15**

**Tom Wander** **from Diablo**

I am sad to say there was a car/bike accident this morning about 9:30 am in front of the entrance to Diablo. The bicyclist was taken to the hospital with face, head and, possibly, other injuries. The car driver, who appears to be at fault for inappropriately taken the right of way from the bicyclist, stopped briefly after seeing that the bicyclist had crashed and then continued on into Diablo per an eye witness of the accident. The bicyclist was going west on Diablo Road when the car turning left into Diablo, from Diablo Road onto Alameda Diablo, cut off the bicyclist who had the legal right of way. The bicyclist lost control and crashed into the white Mehran fence breaking two fence rails and sheering off the front fork of his bicycle. The car was reported to be a gray Mercedes. CHP is investigating based on the information provided by the Diablo Deputy Sheriff and the witness. If anyone has any additional information, please contact the CHP.

Edited on 14 Mar 15 · Shared with Diablo + 2 nearby neighborhoods in Crime & Safety

# DIABLO ROAD MEASUREMENTS* ON THE ONE-MILE WINDING SECTION BETWEEN THE ALAMEDA DIABLO/DIABLO ROAD INTERSECTION AND THE AVENIDA NUEVA/DIABLO ROAD INTERSECTION

| **Location** | **North lane width** | **South lane width** |
|---|---|---|
| 1.Behind 1904 La Cadena | 11 ft. 2 ½ in. | 12 ft. 1 in. |
| 2. Behind 1896 Alameda Diablo | 11 ft. 6 in. | 11 ft. 10.5 in. |
| 3. Behind 1872 Alameda Diablo | 11 ft. | 11 ft. 10 in. |
| 4. Behind 1872 Alameda Diablo at a curve where last fall a landscaper's truck and a car collided, and the truck then struck a power pole just north of the road. | 11 ft. 2 in. | 12 ft. 5 in. |
| 5. Behind 1842 Alameda Diablo where the south lane's edge is caved in. | 12 ft. 3 in. | 11 ft. 9 in. |
| 6. Behind 1826 Alameda Diablo | 11 ft. 7.5 in. | 11 ft. 3 in. |
| 7. Behind 1826 Alameda Diablo | 11 ft. 4.5 in. | 11 ft. 5.5 in. |
| 8. Behind 1826 Alameda Diablo at 30 mph sign by telephone pole | 12 ft. 7 in. | 10 ft. 9 in. |
| 9. Behind 1826 Alameda Diablo just before drain | 12 ft. 4.5 in. | 10 ft. 10 in. |
| 10. Behind 1826 Alameda Diablo at location of apparent crash into a telephone pole by a truck (wreckage and tire marks suggests it was a truck) | 12 ft. 1 in. | 11 ft. 3 in. |

| Location | North lane width | South lane width |
|---|---|---|
| 11. In front of 1783 Diablo Road | 12 ft. 7 in. | 11 ft. 10 in. |
| 12. Behind 1776 Alameda Diablo (site of 1990's $1 million slide repair involving subsidence of the north side of Diablo Road when the south bank of Green Valley Creek East Branch failed) | 12 ft. ½ in. | 11 ft. 5.5 in. |
| 13. Behind 1750 Alameda Diablo | 12 ft. ½ in. | 11 ft. 7 in. |
| 14. Behind 1734 Alameda Diablo at retaining wall | 12 ft. | 11 ft. 11 in. |

*All measurements were taken from the middle of the double yellow lines (yellow boxes) to the inside edge of the outside white lines. The measurements were done when the road was closed for nearly two days this past winter. The closure was due to the falling of a eucalyptus tree across both lanes of Diablo Road just east of the Alameda Diablo intersection. The tree's roots had apparently been destabilized by erosion from Green Valley Creek.

## N.B. We noted that there are almost no shoulders along this stretch!

STATE OF CALIFORNIA

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2005 thru 12/31/2005** | *Total Count: 17* | Jurisdiction(s): Contra Costa County

*Include State Highways cases* | *Report Run On: 11/17/2017*

*Primary Rd* **CAMINO** *Distance (ft)* **235** *Direction* **W** *Secondary Rd* **GLASGOW DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **41523** *Collision Date* **20050427** *Time* **0928** *Day* **WED**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20050825**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 63 | M | | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | A | 21650 | F | - | - |
| 2 | PRKD | 998 | - | | | | PARKED | W | - | - 00 | FORD | 1995 | - | - | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 63 | M | 1 | 1 | - | - |

*Primary Rd* **CAMINO** *Distance (ft)* **609** *Direction* **E** *Secondary Rd* **JASMINE WY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **064** *Type* **0** *CalTrans* *Badge* **41523** *Collision Date* **20050829** *Time* **0750** *Day* **MON**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20060111**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 13 | M | | HNBD | | OTHER | E | L | 0400 | - | | - | 3 | A | 21663 | - | - | - |
| 2 | DRVR | 33 | F | | HNBD | | SLOWING | E | - | - 00 | HONDA | 2004 | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 9 | M | 3 | 0 | P | G |
| PASS | | 13 | M | 6 | 0 | - | - |

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **SYCAMORE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **41523** *Collision Date* **20051025** *Time* **0937** *Day* **TUE**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21453B** *Collision Type* **OTHER** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20060228**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 60 | F | | HNBD | | RGT TURN | W | - | - 00 | LEXUS | 2001 | - | 3 | N | | - | P | G |
| 2 | BICY | 40 | F | | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 4 | F | 5 | 0 | P | Q |

*Primary Rd* **CAMINO** *Distance (ft)* **228** *Direction* **W** *Secondary Rd* **TASSAJARA** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **064** *Type* **0** *CalTrans* *Badge* **41523** *Collision Date* **20050531** *Time* **1456** *Day* **TUE**
*Primary Collision Factor* **WRONG SIDE** *Violation* **21202A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20051129**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 14 | M | | HNBD | | WRONG WY | W | L | 0400 | - | | - | 3 | A | 21663 | - | P | V |
| 2 | DRVR | 41 | F | | HNBD | | RGT TURN | N | - | - 00 | GMC | 2001 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 14 | M | 1 | 0 | P | V |



This report is accepted subject to the Terms of Use. Due to collision records processing backlogs, SWITRS data is typically seven months behind. Data requested for dates seven months prior to the current date will be incomplete.

*Primary Rd* **DANVILLE BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **LA GONDA WY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **65818** *Collision Date* **20050128** *Time* **0813** *Day* **FRI**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21802B** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060125**
*Weather1* **RAINING** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* **FELONY** *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BICY | 17 | M | W | HNBD | | PROC ST | W | - | 0000 | - | | - | D | M | | - | - | - |
| 2F | DRVR | 998 | M | | IMP UNK | IMP UNK | PROC ST | N | - | 0000 | - | | - | - | A | 22350 | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 17 | M | 1 | 0 | P | V |

*Primary Rd* **DANVILLE BL** *Distance (ft)* **2** *Direction* **N** *Secondary Rd* **LA GONDA WY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **51242** *Collision Date* **20050921** *Time* **1657** *Day* **WED**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060207**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 14 | F | W | HNBD | | PROC ST | W | L | 0400 | - | 2005 | - | 3 | N | | - | - | W |
| 2 | DRVR | 25 | F | A | HNBD | | PROC ST | S | A | 0100 | MERCU | 1998 | - | 3 | F | | - | P | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 14 | F | 1 | 1 | - | W |

*Primary Rd* **DIABLO RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **HARTZ AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **62887** *Collision Date* **20050812** *Time* **1940** *Day* **FRI**
*Primary Collision Factor* **IMPROP PASS** *Violation* **21755** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060113**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 20 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 61 | M | W | HNBD | | RGT TURN | W | - | - 00 | BMW | 1999 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 20 | - | 9 | 3 | V | - |
| PASS | | 58 | F | 3 | 0 | M | - |

*Primary Rd* **DIABLO RD** *Distance (ft)* **77** *Direction* **W** *Secondary Rd* **VIA HERMOSA** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **51242** *Collision Date* **20050706** *Time* **1742** *Day* **WED**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20051017**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 16 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | A | 21202 | - | - | - |
| 2 | DRVR | 998 | - | | IMP UNK | IMP UNK | RGT TURN | S | D | 2200 | - | | - | - | N | | - | N | B |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 16 | M | 1 | 0 | P | V |

*Primary Rd* **EL CAPITAN DR** *Distance (ft)* **13** *Direction* **W** *Secondary Rd* **BROOKSIDE DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **43759** *Collision Date* **20050502** *Time* **0800** *Day* **MON**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **AUTO/PED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20050817**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 11 | M | A | HNBD | | ENT TRAF | N | L | 0400 | - | | - | 3 | F | | - | - | - |
| 2 | DRVR | 41 | F | W | HNBD | | PROC ST | E | - | - 00 | VOLVO | 2004 | - | 3 | N | | - | L | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 11 | M | 1 | 1 | P | W |
| PASS | | 13 | M | 3 | 0 | L | G |



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*Primary Rd* **GREENBROOK DR** *Distance (ft)* **133** *Direction* **W** *Secondary Rd* **GREENBROOK CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **63843** *Collision Date* **20051203** *Time* **1335** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20060501**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip | ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 46 | F | A | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - | | | | | | | | |
| 2 | DRVR | 83 | F | W | HNBD | | PROC ST | W | A | 0100 | FORD | 1992 | - | 3 | N | | - | M | G | PASS | | 83 | M | 3 | 0 | M | G |

*Primary Rd* **HARTZ AV** *Distance (ft)* **38** *Direction* **S** *Secondary Rd* **DIABLO RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **51242** *Collision Date* **20050525** *Time* **1257** *Day* **WED**
*Primary Collision Factor* **OTHER HAZ** *Violation* **22517** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20050929**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip | ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | OTHR | 998 | - | | HNBD | | PARKED | S | A | 0100 | GMC | 1997 | - | 3 | N | | - | - | - | PASS | | 29 | M | 1 | 0 | M | P |
| 2 | BICY | 32 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | | - | - | - | | | | | | | | |

*Primary Rd* **RAILROAD AV** *Distance (ft)* **78** *Direction* **S** *Secondary Rd* **CHURCH ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **51242** *Collision Date* **20050104** *Time* **1612** *Day* **TUE**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20050715**
*Weather1* **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip | ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 20 | M | W | HNBD | | LFT TURN | S | D | 2200 | TOYOT | 2004 | - | 3 | N | | - | M | G | | | | | | | | |
| 2 | BICY | 45 | F | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - | BICY | OTH VIS | 45 | F | 1 | 0 | - | - |

*Primary Rd* **RAILROAD AV** *Distance (ft)* **284** *Direction* **S** *Secondary Rd* **PROSPECT AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **51242** *Collision Date* **20050728** *Time* **1721** *Day* **THU**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20051122**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip | ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 35 | F | W | HNBD | | LFT TURN | S | A | 0700 | LEXUS | 2000 | - | 3 | - | | - | M | G | PASS | | 4 | F | 4 | 0 | M | G |
| | | | | | | | | | | | | | | | | | | | | PASS | | 0 | F | 5 | 0 | M | Q |
| 2 | BICY | 61 | F | W | HNBD | | PROC ST | N | L | 0400 | - | 2001 | - | 3 | N | | - | - | - | BICY | COMP PN | 61 | M | 1 | 0 | P | W |

*Primary Rd* **RAMONA DR** *Distance (ft)* **488** *Direction* **W** *Secondary Rd* **GIL BLAS RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **64881** *Collision Date* **20050719** *Time* **1530** *Day* **TUE**
*Primary Collision Factor* **WRONG SIDE** *Violation* **21202A** *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20051201**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip | ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 13 | M | A | HNBD | | WRONG WY | E | L | 0400 | - | | - | 3 | F | | - | - | - | BICY | OTH VIS | 13 | M | 1 | 3 | B | - |
| 2 | DRVR | 16 | M | W | HNBD | | SLOWING | W | - | - 00 | CHEVR | 1990 | - | 3 | N | | - | M | G | PASS | | 50 | F | 3 | 0 | M | G |



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*Primary Rd* **SAN RAMON** *Distance (ft)* **49** *Direction* **N** *Secondary Rd* **SYCAMORE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *VALLEY BL* *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **41523** *Collision Date* **20050321** *Time* **1209** *Day* **MON**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20050817**
*Weather1* **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 49 | M | | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | F | | - | - | - |
| 2 | DRVR | 32 | F | | HNBD | | RGT TURN | N | - | - 00 | HONDA | 2001 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **SYCAMORE** *Distance (ft)* **405** *Direction* **W** *Secondary Rd* **MORNINGHOME** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *VALLEY RD* *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **51242** *Collision Date* **20051012** *Time* **1102** *Day* **WED**
*Primary Collision Factor* **NOT DRIVER** *Violation* *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060304**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **OTHER** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BICY | 65 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 65 | M | 1 | 1 | P | W |

*Primary Rd* **SYCAMORE** *Distance (ft)* **0** *Direction* *Secondary Rd* **MORNINGHOME** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *VALLEY RD* *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **41523** *Collision Date* **20050810** *Time* **0859** *Day* **WED**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060124**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 18 | F | | HNBD | | WRONG WY | E | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 52 | M | | HNBD | | RGT TURN | S | - | - 00 | HONDA | 2003 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 18 | F | 1 | 0 | N | W |



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STATE OF CALIFORNIA

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2006 thru 12/31/2006** *Total Count: 13* Jurisdiction(s): Contra Costa County

*Include State Highways cases* *Report Run On: 11/17/2017*

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **GLASGOW CR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Area* **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **063** *Type* **0** *CalTrans* *Badge* **50994** *Collision Date* **20060515** *Time* **0924** *Day* **MON**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060909**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **CONS ZONE** *Rdwy Cond2* **REDUCED RD** *Spec Cond* **0**
*Hit and Run* **MSDMNR** *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **DRVR** | **45** | **M** | **A** | **HNBD** | | **RGT TURN** | **W** | **A** | **0100** | **BMW** | **1997** | **-** | **3** | **M** | **-** | **M G** | | | | | | | | |
| **2** | **BICY** | **50** | **M** | **W** | **HNBD** | | **PROC ST** | **W** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **- -** | **BICY** | **OTH VIS** | **50** | **M** | **1** | **0** | **P** | **W** |

*Primary Rd* **CAMINO** *Distance (ft)* **202** *Direction* **N** *Secondary Rd* **LOMITAS RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Area* **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **53008** *Collision Date* **20060928** *Time* **2106** *Day* **THU**
*Primary Collision Factor* **UNKNOWN** *Violation* *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20070117**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **OTHER** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **NON-CLSN** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1** | **BICY** | **44** | **M** | **H** | **HNBD** | | **PROC ST** | **S** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **- -** | **BICY** | **COMP PN** | **44** | **M** | **1** | **3** | **A** | **W** |

*Primary Rd* **CAMINO** *Distance (ft)* **76** *Direction* **E** *Secondary Rd* **TASSAJARA LN** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Area* **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **50994** *Collision Date* **20060816** *Time* **0826** *Day* **WED**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060918**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **LOOSE MATRL** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **53** | **M** | **W** | **HNBD** | | **PROC ST** | **W** | **L** | **0400** | **-** | | **-** | **3** | **F** | **-** | **- -** | **BICY** | **OTH VIS** | **53** | **M** | **1** | **0** | **P** | **W** |

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **VALLEY RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Area* **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **43349** *Collision Date* **20061005** *Time* **1525** *Day* **THU**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20070201**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **9** | **M** | **W** | **HNBD** | | **WRONG WY** | **E** | **L** | **0000** | **-** | | **-** | **-** | **N** | **-** | **- -** | **BICY** | **OTH VIS** | **9** | **M** | **1** | **2** | **P** | **W** |
| **2** | **DRVR** | **17** | **F** | **W** | **HNBD** | | **RGT TURN** | **S** | **A** | **0000** | **HONDA** | **2005** | **-** | **-** | **N** | **-** | **M G** | | | | | | | | |



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*Primary Rd* **CLYDESDALE DR** *Distance (ft)* **11** *Direction* **N** *Secondary Rd* **DIABLO RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **43759** *Collision Date* **20060213** *Time* **1244** *Day* **MON**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20060607**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 52 | F | | HNBD | | LFT TURN | N | - | - 00 | MERCE | 2006 | - 3 | F | | - | N | G |
| 2 | BICY | 48 | F | | HNBD | | PROC ST | W | L | 0400 | - | | - 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 48 | F | 1 | 1 | P | W |

*Primary Rd* **EL CAPITAN DR** *Distance (ft)* **11** *Direction* **N** *Secondary Rd* **ST REGIS** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **56088** *Collision Date* **20061106** *Time* **1515** *Day* **MON**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20070313**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* **FELONY** *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BICY | 37 | F | W | HNBD | | PROC ST | S | L | 0400 | - | | - 3 | - | | - | - | - |
| 2F | DRVR | 24 | F | W | IMP UNK | IMP UNK | ENT TRAF | W | - | - 00 | FORD | 2006 | - 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 37 | F | 1 | 1 | A | W |

*Primary Rd* **HARTZ AV** *Distance (ft)* **391** *Direction* **S** *Secondary Rd* **LA GONDA WY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **41523** *Collision Date* **20060406** *Time* **1405** *Day* **THU**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060803**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 53 | F | | HNBD | | RGT TURN | N | - | - 00 | ACURA | 1999 | - 3 | N | | - | N | G |
| 2 | BICY | 56 | M | | HNBD | | PROC ST | N | L | 0400 | - | | - 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 56 | M | 1 | 0 | P | W |

*Primary Rd* **HARTZ AV** *Distance (ft)* **79** *Direction* **S** *Secondary Rd* **LINDA MESA AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **41523** *Collision Date* **20060519** *Time* **1520** *Day* **FRI**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060909**
*Weather1* **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 66 | F | | HNBD | | RGT TURN | N | - | - - | MAZDA | 1990 | - 3 | N | | - | N | G |
| 2 | BICY | 23 | M | | HNBD | | PROC ST | N | L | 0400 | - | | - 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 23 | M | 1 | 0 | P | W |

*Primary Rd* **HARTZ AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **SCHOOL ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **43759** *Collision Date* **20060725** *Time* **1155** *Day* **TUE**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20061114**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 61 | M | | HNBD | | RGT TURN | N | - | - 00 | NISSA | 2001 | - 3 | F | | - | M | G |
| 2 | BICY | 40 | M | | HNBD | | PROC ST | N | L | 0400 | - | | - 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 40 | M | 1 | 1 | P | W |



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*Primary Rd* **HILL MEADOW PL** *Distance (ft)* **2** *Direction* **E** *Secondary Rd* **WILD FLOWER CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **51242** *Collision Date* **20060214** *Time* **1530** *Day* **TUE**
*Primary Collision Factor* **WRONG SIDE** *Violation* **21650** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060603**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 9 | F | W | HNBD | | PROC ST | W | L | 0400 | SCION | | - | 3 | F | - | - | - |
| 2 | PRKD | 998 | - | | | | PARKED | W | D | 2200 | FORD | 2000 | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 9 | F | 0 | 0 | - | - |

*Primary Rd* **MATADERA WY** *Distance (ft)* **150** *Direction* **S** *Secondary Rd* **LA JOLLA CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **43759** *Collision Date* **20060526** *Time* **1930** *Day* **FRI**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20060926**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DRVR | 53 | F | | HNBD | | STOPPED | S | - | - 00 | HONDA | 2006 | - | 3 | N | - | M | G |
| 2F | BICY | 12 | M | | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | F | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 15 | F | 4 | 0 | P | G |
| PASS | | 14 | F | 6 | 0 | P | G |
| BICY | OTH VIS | 12 | M | 1 | 1 | P | W |

*Primary Rd* **RAILROAD AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **SHORT ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20061121** *Time* **1746** *Day* **TUE**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20070313**
*Weather1* **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 57 | M | W | HNBD | | RGT TURN | N | - | - 00 | HONDA | 1996 | - | 3 | N | - | M | G |
| 2 | BICY | 37 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 55 | F | 3 | 0 | M | G |
| PASS | | 93 | F | 6 | 0 | M | G |
| BICY | COMP PN | 37 | M | 1 | 0 | A | W |

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **FOUNTAIN** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **63843** *Collision Date* **20061029** *Time* **1020** *Day* **SUN**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20070227**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 28 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | A | 21208 | - | - | - |
| 2 | DRVR | 54 | F | B | HNBD | | STOPPED | S | A | 0100 | VOLKS | 2000 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|



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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2007 thru 12/31/2007** | *Total Count: 20* | Jurisdiction(s): Contra Costa County

*Include State Highways cases* | *Report Run On: 04/11/2017*

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **HOLBROOK DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville-SASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20070722** *Time* **1713** *Day* **SUN**
*Primary Collision Factor* **STOP SGN|SIG** *Violation* **21453A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20071221**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 60 | M | H | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 50 | M | W | HNBD | | PROC ST | W | A | 0800 | TOYOT | 2006 | - | 3 | N | | - | M | E |
| 3 | DRVR | 42 | M | A | HNBD | | PROC ST | W | A | 0800 | TOYOT | 2006 | - | 3 | N | | - | M | E |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 60 | M | 1 | 2 | N | V |

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **HOLBROOK DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville-SASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **35** *Beat* **063** *Type* **0** *CalTrans* *Badge* **65537** *Collision Date* **20070727** *Time* **1713** *Day* **FRI**
*Primary Collision Factor* **NOT STATED** *Violation* *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20071211**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 60 | M | H | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 50 | M | W | HNBD | | PROC ST | W | A | 0800 | TOYOT | 2006 | - | 3 | N | | - | M | G |
| 3 | DRVR | 42 | M | A | HNBD | | PROC ST | W | A | 0800 | TOYOT | 2006 | - | 3 | N | | - | M | E |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 50 | M | 1 | 2 | N | Y |

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **MESSIAN PL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville-SASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **39** *Beat* **053** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20070913** *Time* **0811** *Day* **THU**
*Primary Collision Factor* **NOT STATED** *Violation* *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20080225**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 12 | M | W | HNBD | | WRONG WY | W | L | 0400 | - | | - | 3 | A | | - | - | - |
| 2 | DRVR | 12 | M | W | HNBD | | LFT TURN | W | - | - 00 | LEXUS | 2006 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **CAMINO** *Distance (ft)* **4** *Direction* **W** *Secondary Rd* **PGE POLE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville-SASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **65818** *Collision Date* **20070331** *Time* **1312** *Day* **SAT**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20070808**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 54 | F | W | | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 54 | F | 1 | 1 | A | W |



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*Primary Rd* **DIABLO RD** *Distance (ft)* **96** *Direction* **W** *Secondary Rd* **CAMINO** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **63636** *Collision Date* **20071013** *Time* **0812** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080421**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DRVR | 998 | M | W | HNBD | | LFT TURN | W | - | - 00 | FORD | 1999 | - | 3 | A | 21209 | - | M | G |
| 2 | BICY | 30 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 30 | M | 1 | 0 | P | - |

*Primary Rd* **DIABLO RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **RT 680** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **56155** *Collision Date* **20070608** *Time* **1505** *Day* **FRI**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20071120**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BICY | 43 | M | W | | | PROC ST | W | L | 0400 | - | | - | 3 | - | | - | - | - |
| 2F | DRVR | 72 | M | W | | | RGT TURN | W | - | - 00 | FORD | 2001 | - | 3 | - | | - | N | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 43 | M | 1 | 3 | - | - |

*Primary Rd* **DIABLO RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **RT 680** *NCIC* **0700** *State Hwy?* **Y** *Route* **680** *Postmile Prefix* **R** *Postmile* **7.719** *Side of Hwy* **N**
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* **4** *Badge* **65937** *Collision Date* **20071028** *Time* **1121** *Day* **SUN**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22100A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080617**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* **R** *Ramp/Int* **4**

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 34 | M | B | HNBD | | RGT TURN | W | - | - 00 | HONDA | 2005 | - | 3 | A | 22107 | J | M | G |
| 2 | BICY | 58 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 58 | M | 1 | 1 | P | W |

*Primary Rd* **DIABLO RD** *Distance (ft)* **528** *Direction* **E** *Secondary Rd* **W EL PINTADO** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **65926** *Collision Date* **20070319** *Time* **1852** *Day* **MON**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **HEAD-ON** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20070725**
*Weather1* **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 16 | M | W | HNBD | | WRONG WY | E | L | 0400 | DAEW | | - | 3 | N | | - | - | - |
| 2 | DRVR | 42 | F | H | HNBD | | RGT TURN | S | - | - 00 | MITSU | 2002 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **EL CERRO BL** *Distance (ft)* **175** *Direction* **E** *Secondary Rd* **DANVILLE BL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20070912** *Time* **1712** *Day* **WED**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20080228**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 70 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 34 | M | W | HNBD | | SLOWING | W | A | 0100 | SUBAR | 2006 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|



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*Primary Rd* **GREENBROOK DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE TRL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **053** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20070623** *Time* **0935** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20071116**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 77 | M | W | HNBD | | PROC ST | N | L | 0400 | - | 2006 | - 3 | A | | - | P | W |
| 2 | DRVR | 66 | M | W | HNBD | | PROC ST | - | A | 0700 | CADIL | 2006 | - 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 77 | M | 1 | 1 | P | W |

*Primary Rd* **GREENBROOK DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE TRL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **55937** *Collision Date* **20070624** *Time* **1656** *Day* **SUN**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20071031**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 39 | M | H | HNBD | | ENT TRAF | S | L | 0400 | - | | - 3 | N | | - | - | - |
| 2 | DRVR | 49 | M | W | HNBD | | STOPPED | E | A | 0700 | GMC | 2007 | - 3 | - | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 39 | M | 1 | 0 | P | V |

*Primary Rd* **HARTZ AV** *Distance (ft)* **105** *Direction* **S** *Secondary Rd* **DIABLO RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20070331** *Time* **1430** *Day* **SAT**
*Primary Collision Factor* **IMPROP PASS** *Violation* **21755** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20070809**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 51 | M | W | HNBD | | PASSING | N | L | 0400 | - | | - 3 | A | 21703 | F | - | - |
| 2 | DRVR | 36 | F | W | HNBD | | STOPPED | N | - | - 00 | GMC | 2007 | - 3 | N | | - | M | C |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **HARTZ AV** *Distance (ft)* **30** *Direction* **S** *Secondary Rd* **E PROSPECT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **6124** *Collision Date* **20070614** *Time* **1517** *Day* **THU**
*Primary Collision Factor* **NOT STATED** *Violation* *Collision Type* **OTHER** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20071031**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DRVR | 68 | M | W | HNBD | | STOPPED | N | D | 2200 | TOYOT | 2005 | - 3 | N | | - | M | G |
| 2 | BICY | 21 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **HARTZ AV** *Distance (ft)* **52** *Direction* **S** *Secondary Rd* **RAILROAD AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20070217** *Time* **1427** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20070609**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 56 | M | W | HNBD | | LFT TURN | S | A | 0100 | FORD | 2000 | - 3 | N | | - | M | C |
| 2 | BICY | 46 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 46 | M | 0 | 1 | P | V |



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*Primary Rd* **HARTZ AV** *Distance (ft)* **72** *Direction* **S** *Secondary Rd* **RAILROAD AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **56088** *Collision Date* **20070425** *Time* **1830** *Day* **WED**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20070829**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1** | **BICY** | **40** | **M** | **W** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **COMP PN** | **40** | **M** | **1** | **0** | **A** | **W** |
| **2F** | **DRVR** | **52** | **F** | **W** | **HNBD** | | **RGT TURN** | **N** | **-** | **- 00** | **VOLVO** | **1998** | **-** | **3** | **N** | **-** | **M** | **G** | **PASS** | | **998** | **F** | **4** | **0** | **M** | **G** |

*Primary Rd* **HARTZ AV** *Distance (ft)* **120** *Direction* **N** *Secondary Rd* **W PROSPECT AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20070818** *Time* **1426** *Day* **SAT**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080123**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **43** | **M** | **A** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **OTH VIS** | **43** | **M** | **1** | **1** | **A** | **W** |
| **2** | **DRVR** | **51** | **F** | **W** | **HNBD** | | **STOPPED** | **N** | **-** | **- 00** | **HONDA** | **2000** | **-** | **3** | **N** | **-** | **M** | **G** | | | | | | | | |

*Primary Rd* **LOVE LN** *Distance (ft)* **0** *Direction* *Secondary Rd* **RAILROAD AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **56088** *Collision Date* **20070611** *Time* **1531** *Day* **MON**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20071031**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **19** | **F** | **O** | **HNBD** | | **PROC ST** | **-** | **L** | **0400** | **-** | | **-** | **3** | **E** | **-** | **-** | **-** | | | | | | | | |
| **2** | **DRVR** | **57** | **F** | **W** | **HNBD** | | **LFT TURN** | **W** | **-** | **- 00** | **ACURA** | **2001** | **-** | **3** | **N** | **-** | **M** | **G** | | | | | | | | |

*Primary Rd* **SAINT HELENA DR** *Distance (ft)* **79** *Direction* **S** *Secondary Rd* **HARLAN DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20071002** *Time* **1510** *Day* **TUE**
*Primary Collision Factor* **STRTNG\|BCKNG** *Violation* **22106** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080417**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **DRVR** | **998** | **F** | **W** | **IMP UNK** | **IMP UNK** | **BACKING** | **E** | **-** | **- 00** | **-** | | **-** | **-** | **N** | **-** | **B** | **-** | | | | | | | | |
| **2** | **BICY** | **11** | **M** | **W** | **HNBD** | | **PROC ST** | **S** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **COMP PN** | **11** | **M** | **1** | **0** | **A** | **W** |

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **10** *Direction* **N** *Secondary Rd* **SYCAMORE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20070825** *Time* **1426** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080215**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **DRVR** | **47** | **M** | **O** | **HNBD** | | **RGT TURN** | **N** | **-** | **- 00** | **KIA** | **2007** | **-** | **3** | **N** | **-** | **M** | **G** | | | | | | | | |
| **2** | **BICY** | **49** | **M** | **W** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **COMP PN** | **49** | **M** | **1** | **2** | **P** | **W** |



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*Primary Rd* **SYCAMORE** *Distance (ft)* **478** *Direction* **W** *Secondary Rd* **BROOKSIDE DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **VALLEY RD** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20070915** *Time* **0711** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080223**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **DRVR** | **16** | **M** | **W** | **HNBD** | | **UNS TURN** | **E** | **A** | **0100** | **BMW** | **1990** | **-** | **3** | **E** | **-** | **M** | **G** | | | | | | | | |
| **2** | **BICY** | **36** | **M** | **H** | **HNBD** | | **PROC ST** | **E** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **SEVERE** | **36** | **M** | **1** | **1** | **V** | **-** |



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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2008 thru 12/31/2008** | *Total Count: 14* | Jurisdiction(s): Contra Costa County

*Include State Highways cases* | *Report Run On: 04/11/2017*

*Primary Rd* **DANVILLE BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **DANVILLE OAKS** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **002** *Type* **0** *CalTrans* *Badge* **RT019** *Collision Date* **20080405** *Time* **1130** *Day* **SAT**
*Primary Collision Factor* **OTHER HAZ** *Violation* **21208A** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20081028**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 14 | F | W | HNBD | | WRONG WY | N | L | 0400 | - | | - | 3 | A | 21202 | - | - | - |
| 2 | DRVR | 43 | M | W | HNBD | | ENT TRAF | W | J | 4800 | FORD | 2008 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 14 | F | 1 | 1 | V | - |

*Primary Rd* **DANVILLE BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **LA GONDA WY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20080716** *Time* **1515** *Day* **WED**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **OVERTURNED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20090203**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 34 | F | W | HNBD | | UNS TURN | N | A | 0700 | LEXUS | 2001 | - | 3 | N | | - | M | G |
| 2 | BICY | 21 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 21 | M | 1 | 1 | P | V |

*Primary Rd* **DEL AMIGO RD** *Distance (ft)* **153** *Direction* **W** *Secondary Rd* **GLEN RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20081010** *Time* **1536** *Day* **FRI**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20090528**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 19 | M | W | HNBD | | ENT TRAF | N | L | 0400 | HONDA | 2004 | - | 3 | N | | - | P | V |
| 2 | DRVR | 17 | M | W | HNBD | | PROC ST | E | A | 0100 | HONDA | 2004 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 19 | M | 1 | 1 | P | V |

*Primary Rd* **DIABLO RD** *Distance (ft)* **88** *Direction* **E** *Secondary Rd* **ALAMEDA DIABLO** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN** *Beat* **061** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20081005** *Time* **1131** *Day* **SUN**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20090530**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **HOLES** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **NON-CLSN** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 46 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 46 | M | 1 | 0 | A | W |

*Primary Rd* **DIABLO RD** *Distance (ft)* **214** *Direction* **N** *Secondary Rd* **WILLOWMERE RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **56088** *Collision Date* **20080818** *Time* **1248** *Day* **MON**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20090226**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 13 | M | W | HNBD | | PROC ST | - | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 13 | M | 1 | 1 | W | - |



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| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2** | **DRVR** | **44** | **F** | **W** | **HNBD** | | **ENT TRAF** | **E** | **A** | **0100** | **BMW** | **1995** | **-** | **3** | **N** | | **-** | **M** | **G** |

*Primary Rd* **GREENBROOK DR** *Distance (ft)* **136** *Direction* **E** *Secondary Rd* **MUSTANG DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20080117** *Time* **1344** *Day* **THU**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20080723**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1F** | **BICY** | **998** | **-** | | **IMP UNK** | **IMP UNK** | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **N** | | **-** | **-** | **-** |
| **2** | **DRVR** | **45** | **F** | **W** | **HNBD** | | **PROC ST** | **E** | **-** | **- 00** | **FORD** | **2007** | **-** | **3** | **N** | **-** | **M** | **G** |
| **3** | **DRVR** | **17** | **M** | **W** | **HNBD** | | **PROC ST** | **E** | **-** | **- 00** | **NISSA** | **2005** | **-** | **3** | **N** | **-** | **M** | **G** |

Victim Info

| *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
|---|---|---|---|---|---|---|---|

*Primary Rd* **HARTZ AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **PROSPECT AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20080521** *Time* **1723** *Day* **WED**
*Primary Collision Factor* **WRONG SIDE** *Violation* **21202A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20081124**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1F** | **BICY** | **14** | **M** | **W** | **HNBD** | | **PROC ST** | **W** | **L** | **0400** | **-** | **2007** | **-** | **3** | **A** | **-** | **A** | **V** |
| **2** | **DRVR** | **82** | **M** | **W** | **HNBD** | | **PROC ST** | **S** | **-** | **- 00** | **FORD** | **2003** | **-** | **3** | **N** | **-** | **M** | **G** |

Victim Info

| *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
|---|---|---|---|---|---|---|---|
| **BICY** | **OTH VIS** | **14** | **M** | **1** | **1** | **A** | **V** |
| **PASS** | | **79** | **F** | **3** | **0** | **M** | **G** |

*Primary Rd* **PARAISO DR** *Distance (ft)* **298** *Direction* **W** *Secondary Rd* **LIBERTA CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **43349** *Collision Date* **20081009** *Time* **0813** *Day* **THU**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20090528**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **OTHER** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1F** | **BICY** | **17** | **M** | **A** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** |
| **2** | | **67** | **M** | **W** | **HNBD** | | **PROC ST** | **E** | **-** | **- 00** | **FORD** | **2003** | **-** | **3** | **E** | **-** | **M** | **G** |

Victim Info

| *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
|---|---|---|---|---|---|---|---|
| **BICY** | **OTH VIS** | **17** | **M** | **9** | **1** | **P** | **W** |
| **PASS** | | **67** | **F** | **3** | **0** | **M** | **G** |

*Primary Rd* **RAILROAD AV** *Distance (ft)* **323** *Direction* **N** *Secondary Rd* **LINDA MESA** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **062** *Type* **0** *CalTrans* *Badge* **56088** *Collision Date* **20080210** *Time* **1513** *Day* **SUN**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080922**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1F** | **DRVR** | **25** | **M** | **W** | **HNBD** | | **ENT TRAF** | **E** | **-** | **- 00** | **TOYOT** | **1998** | **-** | **3** | **N** | **-** | **M** | **G** |
| **2** | **BICY** | **28** | **M** | **H** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** |

Victim Info

| *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
|---|---|---|---|---|---|---|---|
| **BICY** | **COMP PN** | **28** | **M** | **1** | **1** | **P** | **W** |

*Primary Rd* **RAILROAD AV** *Distance (ft)* **323** *Direction* **N** *Secondary Rd* **LINDA MESA** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **56088** *Collision Date* **20080216** *Time* **1513** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080814**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1F** | **DRVR** | **25** | **M** | **W** | **HNBD** | | **ENT TRAF** | **E** | **-** | **- 00** | **TOYOT** | **1998** | **-** | **3** | **N** | **-** | **M** | **G** |
| **2** | **BICY** | **28** | **M** | **H** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** |

Victim Info

| *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
|---|---|---|---|---|---|---|---|
| **BICY** | **COMP PN** | **28** | **M** | **1** | **1** | **P** | **W** |



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*Primary Rd* **RAILROAD AV** *Distance (ft)* **40** *Direction* **N** *Secondary Rd* **SCHOOL ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **062** *Type* **0** *CalTrans* *Badge* **62929** *Collision Date* **20080419** *Time* **1050** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20081030**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 52 | F | W | | | RGT TURN | N | A | 0700 | LEXUS | 1999 | - | 3 | N | - | M | G |
| 2 | BICY | 35 | M | W | | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 35 | M | 1 | 0 | P | W |

*Primary Rd* **RAILROAD AV** *Distance (ft)* **282** *Direction* **S** *Secondary Rd* **W PROSPECT AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **43349** *Collision Date* **20080619** *Time* **1110** *Day* **THU**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20081218**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 30 | F | H | HNBD | | WRONG WY | N | L | 0400 | - | | - | 3 | N | - | - | - |
| 2 | DRVR | 55 | M | W | HNBD | | ENT TRAF | E | - | - 00 | CHEVR | 2005 | - | 3 | N | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 30 | F | 1 | 2 | P | - |

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **412** *Direction* **S** *Secondary Rd* **DANVILLE OAK PL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **62887** *Collision Date* **20080418** *Time* **1536** *Day* **FRI**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20081231**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 16 | M | W | HNBD | | LFT TURN | N | - | - 00 | CHEVR | 2000 | - | 3 | - | - | L | G |
| 2 | BICY | 40 | F | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | - | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 41 | M | 1 | 1 | P | W |

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **367** *Direction* **N** *Secondary Rd* **JEWEL TER** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20080126** *Time* **1334** *Day* **SAT**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20080723**
*Weather1* **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 68 | F | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | F | - | - | - |
| 2 | PRKD | 998 | - | | | | PARKED | S | - | - 00 | CHEVR | 1997 | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 68 | F | 1 | 1 | P | W |



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STATE OF CALIFORNIA

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2009 thru 12/31/2009** *Total Count: 16* Jurisdiction(s): Contra Costa County

*Include State Highways cases* *Report Run On: 04/11/2017*

*Primary Rd* **CAMINO RAMON** *Distance (ft)* **521** *Direction* **S** *Secondary Rd* **EL CAPITAN DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **43349** *Collision Date* **20090519** *Time* **1405** *Day* **TUE**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **OVERTURNED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20100112**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 52 | M | W | HNBD | | WRONG WY | S | L | 0400 | - | | - | 3 | A | 21663 | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 52 | M | 1 | 1 | P | V |

*Primary Rd* **CAMINO TASSAJARA** *Distance (ft)* **889** *Direction* **E** *Secondary Rd* **SHERBURNE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **064** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20091126** *Time* **1044** *Day* **THU**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **OVERTURNED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20100816**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 46 | M | O | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 46 | M | 1 | 1 | P | W |

*Primary Rd* **DANVILLE BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **EL PORTAL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20091104** *Time* **0933** *Day* **WED**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20100806**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 82 | F | W | HNBD | | LFT TURN | S | - | - 00 | BMW | 1999 | - | 3 | A | 22107 | E | M | G |
| 2 | BICY | 67 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| BICY | OTH VIS | 67 | M | 1 | 1 | A | W |

*Primary Rd* **DIABLO RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **EL CAJON DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **061** *Type* **0** *CalTrans* *Badge* **61357** *Collision Date* **20090131** *Time* **1725** *Day* **SAT**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20090905**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 12 | M | H | HNBD | | WRONG WY | W | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 53 | M | W | HNBD | | RGT TURN | N | A | 0700 | TOYOT | 2004 | - | 3 | N | | - | M | G |
| | | | | | | | | | | | | | | | | | | | |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 12 | M | 1 | 1 | V | - |
| PASS | | 13 | F | 6 | 0 | M | G |
| PASS | | 14 | F | 4 | 0 | M | G |



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*Primary Rd* **DIABLO RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **GREEN VALLEY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20091021** *Time* **1744** *Day* **WED**
*Primary Collision Factor* **OTHER HAZ** *Violation* **21451B** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20100708**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 65 | M | A | HNBD | | RGT TURN | W | A | 0100 | MERCE | 1999 | - | 3 | E | | - | M | G |
| 2 | BICY | 7 | F | O | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **EL CAPITAN DR** *Distance (ft)* **265** *Direction* **W** *Secondary Rd* **ORANGE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20090904** *Time* **0802** *Day* **FRI**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20100609**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 13 | M | W | HNBD | | ENT TRAF | N | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 47 | F | W | HNBD | | PROC ST | E | A | 0700 | FORD | 2007 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 13 | M | 1 | 1 | - | - |
| PASS | | 13 | F | 3 | 0 | - | - |

*Primary Rd* **GREENBROOK DR** *Distance (ft)* **133** *Direction* **E** *Secondary Rd* **GREENBROOK CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **43349** *Collision Date* **20090623** *Time* **0913** *Day* **TUE**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20100213**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 56 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | A | 22450 | - | - | - |
| 2 | DRVR | 67 | F | A | HNBD | | PROC ST | E | - | - 00 | INFIN | 2001 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 56 | M | 1 | 1 | P | W |

*Primary Rd* **GREENBROOK DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **HARLAN DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **063** *Type* **0** *CalTrans* *Badge* **64778** *Collision Date* **20090422** *Time* **1611** *Day* **WED**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20091210**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DRVR | 59 | F | O | HNBD | | PROC ST | E | B | 0707 | CHEVR | 1999 | - | 3 | N | | - | M | G |
| 2F | BICY | 70 | M | A | HNBD | | LFT TURN | W | L | 0400 | - | | - | 3 | A | 22450 | N | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 70 | M | 1 | 1 | P | - |

*Primary Rd* **HARTFORD RD** *Distance (ft)* **187** *Direction* **W** *Secondary Rd* **GLEN RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **033** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20090904** *Time* **1042** *Day* **FRI**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20100528**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 62 | F | W | HNBD | | ENT TRAF | S | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 55 | F | W | HNBD | | PROC ST | E | A | 0100 | TOYOT | 2007 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|



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*Primary Rd* **HARTZ AV** *Distance (ft)* **145** *Direction* **N** *Secondary Rd* **CHURCH ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20090228** *Time* **1150** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20090930**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 83 | M | W | HNBD | | ENT TRAF | S | A | 0100 | LINCO | 2007 | - | N | | - | M | G |
| 2 | BICY | 44 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **HARTZ AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **LINDA MESA AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **62573** *Collision Date* **20090905** *Time* **1645** *Day* **SAT**
*Primary Collision Factor* **WRONG SIDE** *Violation* **21650** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20100528**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 14 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | - | - | - | - |
| 2 | DRVR | 66 | F | W | HNBD | | LFT TURN | N | A | 0100 | BMW | 1998 | - | 3 | - | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **HARTZ AV** *Distance (ft)* **100** *Direction* **S** *Secondary Rd* **RAILROAD AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20090802** *Time* **1144** *Day* **SUN**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **N** *Process Date* **20100419**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 17 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |
| 2 | BICY | 60 | M | W | HNBD | | SLOWING | N | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 17 | M | 1 | 1 | P | W |
| BICY | OTH VIS | 60 | - | 1 | 1 | P | W |

*Primary Rd* **HARTZ AV** *Distance (ft)* **80** *Direction* **S** *Secondary Rd* **SHORT ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN/3** *Beat* **062** *Type* **0** *CalTrans* *Badge* **62887** *Collision Date* **20090625** *Time* **1835** *Day* **THU**
*Primary Collision Factor* **IMPROP PASS** *Violation* **21755** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20100213**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 25 | M | W | HNBD | | PASSING | N | L | 0400 | - | | - | 3 | G | - | - | - |
| 2 | DRVR | 48 | F | W | HNBD | | PROC ST | N | - | - 00 | CHEVR | 1998 | - | 3 | G | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 25 | M | 9 | 3 | - | - |
| PASS | | 49 | M | 2 | 0 | L | G |

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **BOONE CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **43349** *Collision Date* **20090324** *Time* **1314** *Day* **TUE**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20091110**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 28 | M | W | HNBD | | LFT TURN | S | - | - 00 | DODGE | 2003 | - | 3 | - | - | M | G |
| 2 | BICY | 50 | F | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | - | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 33 | F | 3 | 0 | M | G |
| PASS | | 22 | M | 6 | 0 | M | G |
| BICY | COMP PN | 50 | F | 1 | 1 | P | - |



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*Primary Rd* **SAN RAMON** *Distance (ft)* **3** *Direction* **W** *Secondary Rd* **SYCAMORE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **VALLEY BL** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **69568** *Collision Date* **20090313** *Time* **1721** *Day* **FRI**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20091110**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **DRVR** | **51** | **M** | **W** | **HBD-NUI** | | **RGT TURN** | **N** | **A** | **0100** | **FORD** | **1999** | **-** | **3** | **F** | **-** | **M** | **B** | | | | | | | | |
| **2** | **BICY** | **35** | **M** | **W** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **OTH VIS** | **35** | **M** | **9** | **3** | **P** | **-** |

*Primary Rd* **TUNBRIDGE RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **SYCAMORE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **063** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20090115** *Time* **1634** *Day* **THU**
*Primary Collision Factor* **UNKNOWN** *Violation* *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20090827**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **NON-CLSN** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1** | **BICY** | **50** | **M** | **W** | **HNBD** | | **STOPPED** | **S** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **COMP PN** | **50** | **M** | **1** | **3** | **-** | **-** |



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STATE OF CALIFORNIA

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2010 thru 12/31/2010** *Total Count: 13* Jurisdiction(s): Contra Costa County

*Include State Highways cases* *Report Run On: 04/11/2017*

*Primary Rd* **DANVILLE BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **DANVILLE OAK PL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **43349** *Collision Date* **20100801** *Time* **1003** *Day* **SUN**
*Primary Collision Factor* **DRVR ALC|DRG** *Violation* **23153B** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **4** *Tow Away?* **Y** *Process Date* **20110908**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* **FELONY** *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* **IN RD,** *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| 1F | DRVR | 23 | M | W | HBD-UI | | PROC ST | S | - | - 00 | DODGE | 1997 | - | 3 | A | 22350 | M | L | B | | | | | | | | |
| 2 | BICY | 51 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | | - | - | - | BICY | OTH VIS | 51 | M | 1 | 1 | P | W |
| 3 | PED | 33 | M | H | HNBD | | PROC ST | S | N | 6000 | - | | - | 3 | N | | - | - | - | PED | COMP PN | 33 | M | 0 | 0 | P | - |
| 4 | DRVR | 53 | M | W | HNBD | | PROC ST | S | - | - 00 | FORD | 2000 | - | 3 | N | | - | M | G | | | | | | | | |
| 5 | DRVR | 66 | F | W | HNBD | | PROC ST | S | - | - 00 | LEXUS | 2002 | - | 3 | N | | - | M | G | DRVR | COMP PN | 66 | F | 1 | 0 | M | G |
| | | | | | | | | | | | | | | | | | | | | PASS | COMP PN | 68 | M | 3 | 0 | M | G |

*Primary Rd* **DANVILLE BL** *Distance (ft)* **296** *Direction* **S** *Secondary Rd* **LAS BARRANCAS** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20100710** *Time* **1247** *Day* **SAT**
*Primary Collision Factor* **OTHER HAZ** *Violation* **21209A** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **N** *Process Date* **20110718**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| 1F | DRVR | 80 | F | W | HNBD | | PROC ST | S | A | 0100 | TOYOT | 2003 | - | 3 | N | | - | M | G | | | | | | | | |
| 2 | BICY | 37 | F | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | | - | - | - | BICY | COMP PN | 37 | F | 1 | 1 | P | W |
| 3 | BICY | 37 | F | | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | | - | - | - | BICY | COMP PN | 37 | F | 1 | 1 | P | W |

*Primary Rd* **DIABLO RD** *Distance (ft)* **178** *Direction* **E** *Secondary Rd* **HARTZ AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **69567** *Collision Date* **20100828** *Time* **1752** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110829**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| 1F | DRVR | 17 | M | W | HNBD | | ENT TRAF | N | - | - 00 | ACURA | 2007 | - | 3 | N | | - | M | G | | | | | | | | |
| 2 | BICY | 54 | M | H | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | | - | - | - | BICY | OTH VIS | 54 | M | 9 | 1 | P | V |

*Primary Rd* **DIABLO RD** *Distance (ft)* **191** *Direction* **W** *Secondary Rd* **MCCAULEY RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20100402** *Time* **0834** *Day* **FRI**
*Primary Collision Factor* **OTHER HAZ** *Violation* **21208A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110311**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| 1F | BICY | 6 | M | W | HNBD | | WRONG WY | W | L | 0400 | - | | - | 3 | A | 21202 | - | - | - | BICY | OTH VIS | 6 | M | 1 | 1 | A | W |
| 2 | DRVR | 41 | M | O | HNBD | | ENT TRAF | N | A | 0700 | FORD | 2005 | - | 3 | N | | - | M | G | | | | | | | | |



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*Primary Rd* **EL CERRO BL** *Distance (ft)* **54** *Direction* **E** *Secondary Rd* **ADOBE DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71008** *Collision Date* **20100728** *Time* **1916** *Day* **WED**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110810**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 52 | F | W | HNBD | | CHANG LN | E | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 20 | M | W | HNBD | | PROC ST | E | A | 0100 | TOYOT | 1996 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 52 | F | 1 | 1 | M | V |

*Primary Rd* **FRONT ST** *Distance (ft)* **318** *Direction* **N** *Secondary Rd* **HARTZ WY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **64778** *Collision Date* **20100218** *Time* **1743** *Day* **THU**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110103**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 47 | M | W | HNBD | | PARKING | N | B | 0101 | PORSC | 2008 | - | 3 | N | | - | M | G |
| 2 | BICY | 25 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 56 | M | 3 | 0 | M | G |
| BICY | COMP PN | 25 | M | 9 | 3 | - | - |

*Primary Rd* **GREENBROOK DR** *Distance (ft)* **125** *Direction* **W** *Secondary Rd* **GREENBROOK CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20100605** *Time* **0937** *Day* **SAT**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **N** *Process Date* **20110614**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 53 | F | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | BICY | 54 | M | W | HNBD | | SLOWING | E | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 53 | F | 1 | 1 | P | W |
| BICY | SEVERE | 54 | M | 1 | 1 | P | W |

*Primary Rd* **HARTZ AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **LINDA MESA AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20100917** *Time* **1246** *Day* **FRI**
*Primary Collision Factor* **IMPROP PASS** *Violation* **21755** *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20111026**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 23 | F | W | HNBD | | PASSING | S | L | 0400 | - | | - | 3 | A | 21801 | - | - | - |
| 2 | DRVR | 44 | F | W | HNBD | | LFT TURN | N | - | - 00 | GMC | 2007 | - | 3 | N | | - | M | G |
| 3 | DRVR | 57 | F | W | HNBD | | STOPPED | W | - | - 00 | HONDA | 1998 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 23 | F | 1 | 1 | A | V |

*Primary Rd* **HARTZ AV** *Distance (ft)* **100** *Direction* **S** *Secondary Rd* **SHORT ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **62887** *Collision Date* **20100817** *Time* **1745** *Day* **TUE**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110817**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 45 | M | W | HNBD | | LFT TURN | S | - | - 00 | SUBAR | 2003 | - | 3 | N | | - | A | G |
| 2 | BICY | 35 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 35 | M | 0 | 1 | P | - |



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*Primary Rd* **PROSPECT AV** *Distance (ft)* **83** *Direction* **E** *Secondary Rd* **EL DORADO AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **69594** *Collision Date* **20100821** *Time* **1405** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110817**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 58 | F | W | HNBD | | BACKING | N | A | 0700 | MITSU | 2002 | - | 3 | N | - | B | G |
| 2 | BICY | 53 | M | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 55 | M | 2 | 0 | M | G |
| BICY | OTH VIS | 53 | M | 1 | 0 | A | W |

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **HARTZ WY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **69568** *Collision Date* **20100724** *Time* **1820** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110715**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 67 | F | W | HNBD | | RGT TURN | N | A | 0100 | ACURA | 2005 | - | 3 | N | - | M | B |
| 2 | BICY | 21 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 2 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 21 | M | 9 | 3 | P | - |

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **64886** *Collision Date* **20100214** *Time* **1415** *Day* **SUN**
*Primary Collision Factor* **STOP SGN\|SIG** *Violation* **21453A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110103**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 23 | M | O | HNBD | | PROC ST | N | B | 0101 | MITSU | 2006 | - | 3 | F | - | M | G |
| 2 | BICY | 56 | M | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 56 | M | 1 | 1 | P | W |

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **543** *Direction* **S** *Secondary Rd* **SYCAMORE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **43349** *Collision Date* **20100825** *Time* **0853** *Day* **WED**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20110816**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 42 | F | W | HNBD | | LFT TURN | E | - | - 00 | HONDA | 2010 | - | 3 | M | - | M | G |
| 2 | BICY | 64 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 64 | M | 0 | 1 | P | W |



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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2011 thru 12/31/2011** | *Total Count: 10* | Jurisdiction(s): Contra Costa County

*Include State Highways cases* | *Report Run On: 04/11/2017*

*Primary Rd* **DANVILLE BL** *Distance (ft)* **11** *Direction* **N** *Secondary Rd* **EL PORTAL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **56088** *Collision Date* **20110818** *Time* **1215** *Day* **THU**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20121205**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 34 | M | W | HNBD | | LFT TURN | E | - | - 00 | TOYOT | 1999 | - | 3 | N | - | M | G |
| 2 | BICY | 56 | F | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 56 | F | 1 | 3 | N | W |

*Primary Rd* **DEL AMIGO RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DANVI** *Beat* **062** *Type* **0** *CalTrans* *Badge* **69564** *Collision Date* **20110415** *Time* **1541** *Day* **FRI**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20120502**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **OTHER** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DRVR | 84 | M | W | HNBD | | PROC ST | W | - | - 00 | HYUND | 2007 | - | 3 | M | - | M | G |
| 2F | BICY | 41 | F | H | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 41 | F | 1 | 1 | P | W |

*Primary Rd* **EL CAPITAN DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DANVI** *Beat* **063** *Type* **0** *CalTrans* *Badge* **69564** *Collision Date* **20110516** *Time* **2001** *Day* **MON**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20121205**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 51 | M | B | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | - | - | - |
| 2 | DRVR | 63 | M | W | HNBD | | PROC ST | E | - | - 00 | TOYOT | 2008 | - | 3 | N | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 52 | M | 1 | 1 | P | W |

*Primary Rd* **EL CAPITAN DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DANVI** *Beat* **063** *Type* **0** *CalTrans* *Badge* **69564** *Collision Date* **20110825** *Time* **1625** *Day* **THU**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20121204**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 55 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |
| 2 | DRVR | 47 | F | W | HNBD | | PROC ST | W | - | - 00 | CHEVR | 2004 | - | 3 | N | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 55 | M | 1 | 3 | P | - |



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*Primary Rd* **GREENBROOK DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **71130** *Collision Date* **20111026** *Time* **0744** *Day* **WED**
*Primary Collision Factor* **OTHER HAZ** *Violation* **21457B** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20130116**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 45 | M | A | HNBD | | ENT TRAF | S | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 48 | M | W | HNBD | | PROC ST | E | A | 0100 | CHEVR | 1993 | - | 3 | E | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 45 | M | 1 | 0 | P | V |

*Primary Rd* **HARTZ AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **CHURCH ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **64778** *Collision Date* **20110523** *Time* **1732** *Day* **MON**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20120613**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 54 | F | W | HNBD | | LFT TURN | N | A | 0100 | BMW | 1993 | - | 3 | E | | - | M | G |
| 2 | BICY | 40 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 40 | - | 0 | 1 | P | W |

*Primary Rd* **HARTZ AV** *Distance (ft)* **202** *Direction* **S** *Secondary Rd* **PROSPECT AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20110903** *Time* **1138** *Day* **SAT**
*Primary Collision Factor* **TOO CLOSE** *Violation* **21703** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **N** *Process Date* **20121211**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 44 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | A | 21203 | - | - | - |
| 2 | BICY | 42 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | A | 21703 | - | - | - |
| 3 | DRVR | 68 | M | W | HNBD | | PROC ST | N | A | 0100 | MITSU | 2002 | - | 3 | A | 22400 | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 44 | M | 1 | 0 | P | W |
| BICY | COMP PN | 42 | M | 1 | 1 | P | W |
| PASS | | 67 | F | 3 | 0 | M | G |

*Primary Rd* **HARTZ AV** *Distance (ft)* **155** *Direction* **N** *Secondary Rd* **PROSPECT AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **64778** *Collision Date* **20111123** *Time* **1902** *Day* **WED**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20130508**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 26 | M | W | HNBD | | PROC ST | N | A | 0100 | CHEVR | 2008 | - | 3 | N | | - | M | G |
| 2 | BICY | 48 | M | W | HNBD | | STOPPED | N | L | 0400 | - | | - | 3 | A | 21202 | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **HARTZ AV** *Distance (ft)* **92** *Direction* **S** *Secondary Rd* **SCHOOL ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **63406** *Collision Date* **20111224** *Time* **1350** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20130201**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 41 | M | W | HNBD | | ENT TRAF | N | A | 0100 | MERCE | 2006 | - | 3 | N | | - | M | G |
| 2 | BICY | 63 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 63 | M | 1 | 1 | P | W |



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*Primary Rd* **LAWRENCE RD** *Distance (ft)* **345** *Direction* **N** *Secondary Rd* **HIDDEN HILLS PL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **064** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20111129** *Time* **0730** *Day* **TUE**
*Primary Collision Factor* **OTHER HAZ** *Violation* **22111A** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20130129**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **28** | **M** | **W** | **HNBD** | | **LFT TURN** | **S** | **L** | **0400** | **-** | | **-** | **3** | **A** | **21202** | **-** | **-** | **-** | **BICY** | **COMP PN** | **28** | **M** | **1** | **1** | **P** | **V** |
| **2** | **DRVR** | **50** | **M** | **W** | **HNBD** | | **PROC ST** | **S** | **D** | **2200** | **DODGE** | **2005** | **-** | **3** | **N** | | **-** | **M** | **G** | | | | | | | | |



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STATE OF CALIFORNIA

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2012 thru 12/31/2012** *Total Count: 12* Jurisdiction(s): Contra Costa County

*Include State Highways cases* *Report Run On: 04/11/2017*

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **BLACKHAWK PLZ** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20120428** *Time* **0742** *Day* **SAT**
*Primary Collision Factor* **STOP SGN|SIG** *Violation* **21453A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20130820**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 67 | F | W | HNBD | | LFT TURN | E | A | 0100 | TOYOT | 1995 | - | 3 | N | | - | M | G |
| 2 | BICY | 37 | M | A | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 37 | M | 1 | 1 | P | W |

*Primary Rd* **CAMINO** *Distance (ft)* **439** *Direction* **E** *Secondary Rd* **LIVERPOOL ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **64778** *Collision Date* **20120926** *Time* **2106** *Day* **WED**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20131210**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 60 | F | W | HBD-NUI | | PROC ST | E | A | 0700 | BMW | 2005 | - | 3 | N | | - | M | G |
| 2 | BICY | 23 | M | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 23 | M | 1 | 1 | P | W |

*Primary Rd* **CAMINO** *Distance (ft)* **486** *Direction* **W** *Secondary Rd* **SYCAMORE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **70914** *Collision Date* **20121127** *Time* **1100** *Day* **TUE**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140106**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 60 | M | A | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | F | | - | - | - |
| 2 | PRKD | 998 | - | | | | | - | - | - 00 | FORD | 2001 | - | - | M | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 60 | M | 9 | 3 | - | - |

*Primary Rd* **DANVILLE BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **RAILROAD AV** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **061** *Type* **0** *CalTrans* *Badge* **63757** *Collision Date* **20121104** *Time* **1216** *Day* **SUN**
*Primary Collision Factor* **OTHER HAZ** *Violation* **21208B** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140318**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 36 | F | W | HNBD | | LFT TURN | S | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 66 | M | W | HNBD | | RGT TURN | S | - | - 00 | CHEVR | 2009 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 36 | - | 9 | 3 | - | - |
| PASS | | 60 | F | 9 | 3 | - | - |



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*Primary Rd* **HARTZ AV** *Distance (ft)* **32** *Direction* **S** *Secondary Rd* **LINDA MESA** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20120614** *Time* **1257** *Day* **THU**
*Primary Collision Factor* **PED VIOL** *Violation* **21954A** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20131008**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* **NOT IN RD** *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | PED | 11 | M | W | HNBD | | PROC ST | N | N | 6000 | - | | - | 3 | N | - | - | - |
| 2 | BICY | 63 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |
| 3 | PRKD | 998 | - | | HNBD | | PARKED | N | A | 0100 | MERCE | 2009 | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 66 | M | 1 | 1 | P | W |

*Primary Rd* **PARAISO DR** *Distance (ft)* **218** *Direction* **E** *Secondary Rd* **PARAISO CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **062** *Type* **0** *CalTrans* *Badge* **64778** *Collision Date* **20120515** *Time* **1550** *Day* **TUE**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20130919**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 14 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | - | - | - |
| 2 | DRVR | 17 | M | W | HNBD | | PROC ST | E | D | 2200 | TOYOT | 1995 | - | 3 | N | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 14 | M | 1 | 1 | P | W |

*Primary Rd* **PROSPECT AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **061** *Type* **0** *CalTrans* *Badge* **63757** *Collision Date* **20120915** *Time* **1702** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20131203**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 17 | M | B | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | A | N | - | - |
| 2 | DRVR | 67 | M | W | HNBD | | PROC ST | W | A | 0100 | NISSA | 2002 | - | 3 | N | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 17 | - | 1 | 3 | - | - |

*Primary Rd* **RICHARD LN** *Distance (ft)* **600** *Direction* **E** *Secondary Rd* **DIABLO RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN** *Beat* **062** *Type* **0** *CalTrans* *Badge* **72360** *Collision Date* **20121229** *Time* **1453** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20140606**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 12 | M | O | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | E | N | - | - |
| 2 | DRVR | 17 | M | W | HNBD | | PROC ST | E | A | 0100 | HONDA | 2009 | - | 3 | N | - | M | B |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|

*Primary Rd* **SAN RAMON VALLEY BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **BOONE CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20120807** *Time* **1331** *Day* **TUE**
*Primary Collision Factor* **WRONG SIDE** *Violation* **216501** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20131125**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 48 | M | W | HNBD | | WRONG WY | S | L | 0400 | - | | - | 3 | N | - | - | - |
| 2 | DRVR | 60 | F | W | HNBD | | RGT TURN | W | - | - 00 | HONDA | 2005 | - | 3 | N | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 48 | M | 1 | 1 | P | W |



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*Primary Rd* **SAN RAMON** *Distance (ft)* **0** *Direction* *Secondary Rd* **BOONE CT** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *VALLEY BL* *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **061** *Type* **0** *CalTrans* *Badge* **63757** *Collision Date* **20121013** *Time* **1028** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140416**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 55 | M | W | HNBD | | ENT TRAF | W | A | 0100 | MERCE | 2008 | - | 3 | F | - | M | G |
| 2 | BICY | 57 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 57 | - | 1 | 1 | P | W |

*Primary Rd* **SAN RAMON** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *VALLEY BL* *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* **061** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20120210** *Time* **1659** *Day* **FRI**
*Primary Collision Factor* **STOP SGN\|SIG** *Violation* **21453A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20130713**
*Weather1* **RAINING** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 45 | F | W | HNBD | | PROC ST | S | A | 0700 | NISSA | 2005 | - | 3 | N | - | M | G |
| 2 | BICY | 15 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 15 | M | 1 | 1 | P | W |

*Primary Rd* **SAN RAMON** *Distance (ft)* **39** *Direction* **S** *Secondary Rd* **IRON HORSE TRL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *VALLEY RD* *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **65937** *Collision Date* **20120407** *Time* **0925** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20130810**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 24 | M | W | HNBD | | RGT TURN | N | A | 0100 | NISSA | 2010 | - | 3 | N | - | M | G |
| 2 | BICY | 30 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 30 | - | 1 | 1 | P | W |



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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2013 thru 12/31/2013** | *Total Count: 5* | Jurisdiction(s): Contra Costa County

*Include State Highways cases* | *Report Run On: 04/11/2017*

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **SHERBURNE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Location* **ASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20131026** *Time* **1151** *Day* **SAT**
*Primary Collision Factor* **STOP SGN|SIG** *Violation* **21453A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140428**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **DRVR** | **50** | **M** | **O** | **HNBD** | | **RGT TURN** | **S** | **D** | **2200** | **FORD** | **2000** | **-** | **3** | **N** | **-** | **M G** | | | | | | | | |
| **2** | **BICY** | **54** | **M** | **W** | **HNBD** | | **PROC ST** | **W** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **- -** | **BICY** | **COMP PN** | **54** | **M** | **1** | **1** | **P** | **W** |

*Primary Rd* **DANVILLE BLVD** *Distance (ft)* **38** *Direction* **N** *Secondary Rd* **GENTLE CREEK** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20130209** *Time* **0945** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140130**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **HOLES** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **50** | **M** | **W** | **HNBD** | | **PROC ST** | **S** | **L** | **0400** | **-** | | **-** | **3** | **A** | **22350** | **J - -** | | | | | | | | |
| **2** | **BICY** | **48** | **M** | **W** | **HNBD** | | **PROC ST** | **S** | **L** | **0400** | **-** | | **-** | **3** | **A** | **22350** | **J - -** | **BICY** | **SEVERE** | **58** | **M** | **1** | **1** | **P** | **W** |

*Primary Rd* **FRONT ST** *Distance (ft)* **90** *Direction* **S** *Secondary Rd* **DIABLO RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN 3** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20131218** *Time* **0905** *Day* **WED**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140515**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **13** | **M** | **W** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **A** | **-** | **- -** | **BICY** | **OTH VIS** | **13** | **M** | **1** | **1** | **P** | **V** |

*Primary Rd* **SYCAMORE** *Distance (ft)* **19** *Direction* **E** *Secondary Rd* **CAMINO RAMON** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Location* **VALLEY RD** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20131010** *Time* **0719** *Day* **THU**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140426**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **14** | **M** | **W** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **- -** | **BICY** | **OTH VIS** | **14** | **M** | **1** | **1** | **P** | **W** |
| **2** | **DRVR** | **48** | **M** | **H** | **HNBD** | | **RGT TURN** | **E** | **D** | **2200** | **FORD** | **2011** | **-** | **3** | **N** | **-** | **M G** | | | | | | | | |

*Primary Rd* **SYCAMORE** *Distance (ft)* **414** *Direction* **W** *Secondary Rd* **MORNINGHOME** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Location* **VALLEY RD** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **64778** *Collision Date* **20131102** *Time* **1137** *Day* **SAT**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140512**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **OTHER** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **35** | **M** | **W** | **HNBD** | | **PROC ST** | **W** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **- -** | **BICY** | **OTH VIS** | **35** | **M** | **1** | **1** | **P** | **W** |


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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2014 thru 12/31/2014** | *Total Count: 7* | Jurisdiction(s): Contra Costa County

*Include State Highways cases* | *Report Run On: 04/11/2017*

*Primary Rd* **CAMINO** *Distance (ft)* **173** *Direction* **W** *Secondary Rd* **PARKHAVEN DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **CASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20141128** *Time* **1311** *Day* **FRI**
*Primary Collision Factor* **NOT DRIVER** *Violation* *Collision Type* **OVERTURNED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20150120**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **NON-CLSN** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BICY | 13 | M | A | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 13 | M | 1 | 1 | P | W |

*Primary Rd* **CAMINO** *Distance (ft)* **336** *Direction* **E** *Secondary Rd* **WOODRANCH RD** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **CASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20140223** *Time* **1146** *Day* **SUN**
*Primary Collision Factor* **OTHER HAZ** *Violation* **21209A** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **N** *Process Date* **20140610**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 34 | M | O | HNBD | | PROC ST | E | A | 0100 | ACURA | 2005 | - 3 | A | 22107 | F | M | G |
| 2 | BICY | 55 | M | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | | - | - | - |
| 3 | BICY | 59 | M | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| BICY | SEVERE | 58 | M | 1 | 1 | P | W |
| BICY | SEVERE | 59 | M | 1 | 1 | P | W |

*Primary Rd* **DIABLO RD** *Distance (ft)* **25** *Direction* **S** *Secondary Rd* **CLYDESDALE DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **70914** *Collision Date* **20140324** *Time* **1314** *Day* **MON**
*Primary Collision Factor* **IMPROP PASS** *Violation* **21750** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140709**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **REDUCED RD** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 70 | M | W | HNBD | | PROC ST | E | A | 0100 | DODGE | 2004 | - 3 | N | | - | M | G |
| 2 | BICY | 63 | M | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| BICY | OTH VIS | 63 | M | 0 | 0 | P | W |

*Primary Rd* **GREENBROOK DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE TRL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20140712** *Time* **1032** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140912**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 56 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | A | | - | - | - |
| 2 | DRVR | 46 | M | H | HNBD | | PROC ST | W | D | 2200 | FORD | 1997 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 56 | M | 1 | 1 | P | W |
| | | | | | | | |



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*Primary Rd* **HARTZ AV** *Distance (ft)* **200** *Direction* **N** *Secondary Rd* **HARTZ WY** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **77016** *Collision Date* **20140323** *Time* **1140** *Day* **SUN**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20150302**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 42 | M | W | HNBD | | RGT TURN | S | B | 0101 | DODGE | 2008 | - | 3 | N | - | M | G |
| 2 | BICY | 24 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 40 | F | 3 | 0 | M | G |

*Primary Rd* **HARTZ AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **SHORT ST** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **3** *Beat* **062** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20140324** *Time* **1203** *Day* **MON**
*Primary Collision Factor* **UNSAFE SPEED** *Violation* **22350** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20140709**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 20 | F | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 1 | F | - | - | - |
| 2 | PRKD | 998 | - | | | null | | N | - | 0000 | CADIL | 2013 | - | - | - | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 20 | F | 1 | 1 | V | - |

*Primary Rd* **OCHO RIOS DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **PODVA LN** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN** *Beat* **062** *Type* **0** *CalTrans* *Badge* **71772** *Collision Date* **20141014** *Time* **1200** *Day* **TUE**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22103** *Collision Type* **OTHER** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20150606**
*Weather1* *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 51 | F | W | HNBD | | U-TURN | N | A | 0100 | TOYOT | 2009 | - | 3 | J | - | M | G |
| 2 | BICY | 54 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|



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STATE OF CALIFORNIA

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2015 thru 12/31/2015** | *Total Count: 8* | Jurisdiction(s): Contra Costa County

*Include State Highways cases* | *Report Run On: 04/11/2017*

*Primary Rd* **CAMINO** *Distance (ft)* **116** *Direction* **W** *Secondary Rd* **BLACKHAWK** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20150620** *Time* **0900** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20150713**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 57 | M | W | HNBD | | PASSING | W | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 35 | F | A | HNBD | | PROC ST | W | A | 0100 | TOYOT | 2014 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 57 | M | 1 | 1 | P | W |

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **SYCAMORE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20150321** *Time* **1111** *Day* **SAT**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20150421**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* **FELONY** *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 998 | - | | IMP UNK | IMP UNK | RGT TURN | N | A | 0100 | BMW | | - | 3 | N | | - | - | - |
| 2 | BICY | 43 | M | W | HNBD | | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 43 | M | 1 | 1 | P | W |

*Primary Rd* **CROW CANYON RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **TASSAJARA** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **70914** *Collision Date* **20150505** *Time* **1637** *Day* **TUE**
*Primary Collision Factor* **UNKNOWN** *Violation* **21483A** *Collision Type* **BROADSIDE** *Severity* **FATAL** *#Killed* **1** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20150711**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 26 | F | W | HNBD | | PROC ST | N | A | 0100 | TOYOT | 1997 | - | 3 | F | | - | M | G |
| 2 | BICY | 55 | M | W | IMP UNK | IMP UNK | PROC ST | W | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | KILLED | 55 | M | 1 | 1 | P | W |

*Primary Rd* **DIABLO RD** *Distance (ft)* **15** *Direction* **W** *Secondary Rd* **CLYDESDALE DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20150409** *Time* **1510** *Day* **THU**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20150702**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 49 | M | B | HNBD | | LFT TURN | N | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 65 | F | W | HNBD | | PROC ST | E | - | 0000 | MERCE | 2006 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 49 | M | 1 | 1 | P | W |



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*Primary Rd* **EL PINTADO RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **DOLPHIN DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20150901** *Time* **1003** *Day* **TUE**
*Primary Collision Factor* **UNKNOWN** *Violation* *Collision Type* **OVERTURNED** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20151006**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **NON-CLSN** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BICY | 68 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 68 | M | 1 | 1 | P | W |

*Primary Rd* **GREENBROOK DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **70914** *Collision Date* **20150803** *Time* **1515** *Day* **MON**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20150918**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 59 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | A | N | - | - |
| 2 | DRVR | 16 | F | W | HNBD | | PROC ST | - | A | 0100 | HONDA | 2008 | - | 3 | N | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 16 | M | 1 | 1 | P | W |

*Primary Rd* **RAILROAD AV** *Distance (ft)* **77** *Direction* **S** *Secondary Rd* **LOVE LN** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **70914** *Collision Date* **20150915** *Time* **1528** *Day* **TUE**
*Primary Collision Factor* **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20151010**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 50 | F | W | HNBD | | LFT TURN | W | A | 0100 | LEXUS | 2015 | - | 3 | G | - | M | G |
| 2 | BICY | 30 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | G | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 13 | F | 3 | 0 | M | G |
| BICY | OTH VIS | 30 | M | 1 | 1 | P | W |

*Primary Rd* **SUMMERFIELD ST** *Distance (ft)* **165** *Direction* **W** *Secondary Rd* **JENNIFERS PL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20150905** *Time* **1145** *Day* **SAT**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20151007**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 24 | M | W | HNBD | | BACKING | N | A | 0700 | GMC | 2001 | - | 3 | N | - | M | G |
| 2 | BICY | 48 | M | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 24 | F | 2 | 0 | M | G |
| BICY | OTH VIS | 48 | M | 1 | 1 | P | W |



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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2016 thru 12/31/2016** | *Total Count: 7* | Jurisdiction(s): Contra Costa County

*Include State Highways cases* | *Report Run On: 11/17/2017*

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **LOMITAS DR** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Area* **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20160717** *Time* **1257** *Day* **SUN**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20160919**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 11 | M | W | HNBD | | ENT TRAF | S | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 17 | M | W | HNBD | | PROC ST | W | A | 0100 | TOYOT | 2006 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | SEVERE | 11 | M | 1 | 1 | P | W |

*Primary Rd* **CAMINO** *Distance (ft)* **0** *Direction* *Secondary Rd* **MESSIAN PL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *Area* **TASSAJARA** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **063** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20161220** *Time* **0911** *Day* **TUE**
*Primary Collision Factor* **STOP SGN\|SIG** *Violation* **21453A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20170210**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | BICY | 62 | F | W | HNBD | | PROC ST | E | L | 0400 | - | | - | 3 | N | | - | - | - |
| 2 | DRVR | 28 | F | W | HNBD | | PROC ST | N | - | 0000 | NISSA | 2007 | - | 3 | N | | - | M | G |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | COMP PN | 62 | F | 1 | 1 | P | W |

*Primary Rd* **DANVILLE BL** *Distance (ft)* **0** *Direction* *Secondary Rd* **EL PORTAL** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20160711** *Time* **1148** *Day* **MON**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20160921**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 27 | M | W | HNBD | | LFT TURN | S | - | 0000 | TOYOT | 1999 | - | 3 | N | | - | M | G |
| 2 | BICY | 33 | M | W | HNBD | | PROC ST | N | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| PASS | | 28 | M | 3 | 0 | M | G |

*Primary Rd* **EL CAPITAN DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20160920** *Time* **1257** *Day* **TUE**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801B** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20161014**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

| Party | Type | Age | Sex | Race | Sobriety1 | Sobriety2 | Move Pre | Dir | SW Veh | CHP Veh | Make | Year | SP Info | OAF1 | Viol | OAF2 | Safety | Equip |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1F | DRVR | 53 | F | W | HNBD | | PROC ST | E | - | 0000 | TOYOT | 2015 | - | 3 | N | | - | M | G |
| 2 | BICY | 16 | M | W | HNBD | | PROC ST | S | L | 0400 | - | | - | 3 | N | | - | - | - |

Victim Info

| ROLE | Ext Of Inj | AGE | Sex | Seat Pos | Safety | EQUIP | Ejected |
|---|---|---|---|---|---|---|---|
| BICY | OTH VIS | 16 | M | 1 | 1 | P | W |



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*Primary Rd* **GREENBROOK DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20160824** *Time* **1226** *Day* **WED**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804B** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20160919**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **DRVR** | **64** | **F** | **W** | **HNBD** | | **PROC ST** | **E** | **-** | **0000** | **LEXUS** | **2010** | **-** | **3** | **N** | **-** | **M** | **G** | | | | | | | | |
| **2** | **BICY** | **61** | **M** | **W** | **HNBD** | | **PROC ST** | **S** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **OTH VIS** | **61** | **M** | **1** | **1** | **P** | **W** |

*Primary Rd* **PARAISO DR** *Distance (ft)* **0** *Direction* *Secondary Rd* **IRON HORSE** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **062** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20161103** *Time* **0941** *Day* **THU**
*Primary Collision Factor* **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20170424**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **76** | **F** | **W** | **HNBD** | | **PROC ST** | **N** | **L** | **0400** | **-** | | **-** | **3** | **M** | **-** | **-** | **-** | **BICY** | **OTH VIS** | **76** | **F** | **1** | **1** | **P** | **W** |
| **2** | **DRVR** | **47** | **F** | **W** | **HNBD** | | **PROC ST** | **W** | **-** | **0000** | **CHEVR** | **2007** | **-** | **3** | **N** | **-** | **M** | **G** | | | | | | | | |

*Primary Rd* **SYCAMORE VALLEY RD** *Distance (ft)* **13** *Direction* **E** *Secondary Rd* **CAMINO RAMON** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **60701** *Collision Date* **20160707** *Time* **1424** *Day* **THU**
*Primary Collision Factor* **PED VIOL** *Violation* **21456B** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20160916**
*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
*Hit and Run* *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

| Party Info | | | | | | | | | | | | | | | | | Victim Info | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* | *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
| **1F** | **BICY** | **34** | **M** | **W** | **HNBD** | | **PROC ST** | **S** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** | **BICY** | **OTH VIS** | **34** | **M** | **1** | **2** | **P** | **W** |
| **2** | **DRVR** | **41** | **F** | **W** | **HNBD** | | **LFT TURN** | **W** | **-** | **0000** | **BUICK** | **2015** | **-** | **3** | **N** | **-** | **M** | **G** | | | | | | | | |



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STATE OF CALIFORNIA

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2017 thru 12/31/2017** *Total Count: 1* Jurisdiction(s): Contra Costa County

*Include State Highways cases* *Report Run On: 11/17/2017*

*Primary Rd* **GREEN VALLEY RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **DONNA LN** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*

*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20170518** *Time* **1538** *Day* **THU**

*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20170608**

*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**

*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1F** | **DRVR** | **55** | **M** | **W** | **HNBD** | | **LFT TURN** | **N** | **D** | **2200** | **CHEVR** | **2001** | **-** | **3** | **N** | **-** | **M** | **G** |
| **2** | **BICY** | **54** | **M** | **W** | | | **PROC ST** | **S** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** |

Victim Info

| *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
|---|---|---|---|---|---|---|---|
| **BICY** | **OTH VIS** | **54** | **M** | **1** | **1** | **P** | **W** |



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STATE OF CALIFORNIA

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

# REPORT 7 - BICYCLE INVOLVED COLLISIONS

**01/01/2017 thru 12/31/2017** *Total Count: 1* Jurisdiction(s): Contra Costa County

*Include State Highways cases* *Report Run On: 05/15/2018*

*Primary Rd* **GREEN VALLEY RD** *Distance (ft)* **0** *Direction* *Secondary Rd* **DONNA LN** *NCIC* **0700** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*

*City* **Danville** *County* **Contra Costa** *Population* **4** *Rpt Dist* **DAN33** *Beat* **061** *Type* **0** *CalTrans* *Badge* **71124** *Collision Date* **20170518** *Time* **1538** *Day* **THU**

*Primary Collision Factor* **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20170608**

*Weather1* **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**

*Hit and Run* *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

| *Party* | *Type* | *Age* | *Sex* | *Race* | *Sobriety1* | *Sobriety2* | *Move Pre* | *Dir* | *SW Veh* | *CHP Veh* | *Make* | *Year* | *SP Info* | *OAF1* | *Viol* | *OAF2* | *Safety* | *Equip* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1F** | **DRVR** | **55** | **M** | **W** | **HNBD** | | **LFT TURN** | **N** | **D** | **2200** | **CHEVR** | **2001** | **-** | **3** | **N** | **-** | **M** | **G** |
| **2** | **BICY** | **54** | **M** | **W** | | | **PROC ST** | **S** | **L** | **0400** | **-** | | **-** | **3** | **N** | **-** | **-** | **-** |

Victim Info

| *ROLE* | *Ext Of Inj* | *AGE* | *Sex* | *Seat Pos* | *Safety* | *EQUIP* | *Ejected* |
|---|---|---|---|---|---|---|---|
| **BICY** | **OTH VIS** | **54** | **M** | **1** | **1** | **P** | **W** |



This report is accepted subject to the Terms of Use. Due to collision records processing backlogs, SWITRS data is typically seven months behind. Data requested for dates seven months prior to the current date will be incomplete.

# Town of Danville

**From 1/1/2010 to 4/30/2018**

**Total Collisions: 93**

**Injury Collisions: 73**

**Fatal Collisions: 1**

## Collision Summary Report

**5/15/18**



| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10-02870 | 2/14/2010 | 14:15 | Sunday | SAN RAMON VALLEY BLVD - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Traffic Signals and Signs | 21453a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 24 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 56 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 10-03170 | 2/18/2010 | 17:43 | Thursday | FRONT ST - HARTZ AVE | 318' | Direction: North | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Improper Turning | 22107 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 47 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 25 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 10-06042 | 4/2/2010 | 08:34 | Friday | DIABLO RD - MC CAULEY RD | 191' | Direction: West | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | 21208a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 6 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 41 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 10-10335 | 6/5/2010 | 09:37 | Saturday | GREENBROOK DR - GREENBROOK CT | 125' | Direction: West | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Unsafe Speed | 22350 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 53 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 54 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 10-11333 | 6/19/2010 | 13:29 | Saturday | RAILROAD AVE - CHURCH ST | 187' | Direction: North | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Improper Turning | 22107 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 71 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 37 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 10-12762 | 7/10/2010 | 12:47 | Saturday | DANVILLE BLVD - LAS BARRANCAS DR | 296' | Direction: South | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | 21209a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |

Party 1 Driver Not S Not Stated Not Sta Age: 81
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 37
Veh Type: Sobriety: Assoc Factor:
Party 3 Driver Not S Not Stated Not Sta Age: 37
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10-13699 | 7/24/2010 | 18:20 | Saturday | SAN RAMON VALLEY BLVD - HARTZ AVE | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Improper Turning | 22107 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |

Party 1 Driver Not S Not Stated Not Sta Age: 67
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 21
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10-13935 | 7/28/2010 | 19:16 | Wednesday | EL CERRO BLVD - ADOBE CT | 54' | Direction: East | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Improper Turning | 22107 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |

Party 1 Driver Not S Not Stated Not Sta Age: 53
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 20
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10-15206 | 8/17/2010 | 17:45 | Tuesday | HARTZ AVE - SCHOOL ST | 100' | Direction: South | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21801a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |

Party 1 Driver Not S Not Stated Not Sta Age: 45
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 35
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10-15470 | 8/21/2010 | 14:05 | Saturday | PROSPECT AVE - EL DORADO AVE | 83' | Direction: East | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21804a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |

Party 1 Driver Not S Not Stated Not Sta Age: 58
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 53
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10-15627 | 8/23/2010 | 19:13 | Monday | TASSAJARA RANCH DR - ZENITH RIDGE DR | 7' | Direction: North | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | 21650.1 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |

Party 1 Driver Not S Not Stated Not Sta Age: 14
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 66
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10-15728 | 8/26/2010 | 08:53 | Thursday | SAN RAMON VALLEY BLVD - SYCAMORE VALLEY RD | 543' | Direction: South | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21801a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |

Party 1 Driver Not S Not Stated Not Sta Age: 42
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 64
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 10-16029 | 8/28/2010 | 17:52 | Saturday | DIABLO RD - HARTZ AVE | 178' | Direction: East | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21804a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 17 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 54 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 10-17270 | 9/17/2010 | 12:46 | Friday | HARTZ AVE - LINDA MESA AVE | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Improper Passing | 21755 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 23 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 44 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 3 Driver | Not S | Not Stated | | Not Sta Age: 57 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1114549 | 8/16/2011 | 20:01 | Tuesday | EL CAPITAN DR - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21804a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 52 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 63 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1114654 | 8/18/2011 | 12:15 | Thursday | DANVILLE BLVD - EL PORTAL | 11' | Direction: East | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21801a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 34 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 56 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1115147 | 8/25/2011 | 16:25 | Thursday | EL CAPITAN DR - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21804a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 55 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 47 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1115251 | 8/27/2011 | 09:47 | Saturday | DANVILLE BLVD - EL CERRO BLVD | 413' | Direction: South | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | 21207 | Hit & Run: No | Property Damage Only | # Inj: 0 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 51 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 48 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1114796 | 8/28/2011 | 13:09 | Saturday | SYCAMORE VALLEY RD - BROOKSIDE DR | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | 21206 | Hit & Run: No | Property Damage Only | # Inj: 0 | # Killed: 0 |

Party 1 Driver Not S Not Stated Not Sta Age: 37
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 32
Veh Type: Sobriety: Assoc Factor:

1115712 9/3/2011 11:38 Saturday HARTZ AVE - PROSPECT AVE 202' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Following Too Closely 21703 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 44
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 42
Veh Type: Sobriety: Assoc Factor:
Party 3 Driver Not S Not Stated Not Sta Age: 68
Veh Type: Sobriety: Assoc Factor:

1117799 10/8/2011 08:30 Saturday RAILROAD AVE - SCHOOL ST 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21802a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 51
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 57
Veh Type: Sobriety: Assoc Factor:

1118857 10/26/2011 07:44 Wednesday GREENBROOK DR - IRON HORSE TRL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21457b Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 45
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 48
Veh Type: Sobriety: Assoc Factor:

1120492 11/23/2011 19:02 Wednesday HARTZ AVE - PROSPECT AVE 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Unsafe Speed 22350 Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 26
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 47
Veh Type: Sobriety: Assoc Factor:

1120789 11/29/2011 07:30 Tuesday LAWRENCE RD - HIDDEN HILLS PL 345' Direction: North Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Not Stated 22111a Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 28
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 50
Veh Type: Sobriety: Assoc Factor:

1122271 12/24/2011 13:50 Saturday HARTZ AVE - SCHOOL ST 92' Direction: South Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Turning 22107 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 41
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 63
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1202408 | 2/10/2012 | 16:59 | Friday | SAN RAMON VALLEY BLVD - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Traffic Signals and Signs | 21453a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 45 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 15 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1205698 | 4/4/2012 | 09:25 | Saturday | SAN RAMON VALLEY BLVD - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Improper Turning | 22107 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 24 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 30 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1207019 | 4/28/2012 | 07:42 | Saturday | CAMINO TASSAJARA - BLACKHAWK PLAZA CIR | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Traffic Signals and Signs | 21453c | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 67 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 37 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1207702 | 5/9/2012 | 15:25 | Wednesday | SAN RAMON VALLEY BLVD - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Traffic Signals and Signs | 21453a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 27 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 15 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1213366 | 8/7/2012 | 13:31 | Tuesday | SAN RAMON VALLEY BLVD - BOONE CT | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | 21650.1 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 48 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 60 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1215756 | 9/15/2012 | 17:02 | Saturday | PROSPECT AVE - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21804a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 17 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 67 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1218765 | 11/4/2012 | 12:16 | Sunday | DANVILLE BLVD - HARTZ AVE | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Unsafe Lane Change | 21208b | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 36 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |

Party 2 Bicyclist Not S Not Stated Not Sta Age: 66
Veh Type: Sobriety: Assoc Factor:

1221299 12/18/2012 09:17 Tuesday EL CAPITAN DR - ORANGE BLOSSOM WAY 280' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21800a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 42
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 11
Veh Type: Sobriety: Assoc Factor:

1302351 2/9/2013 09:45 Saturday DANVILLE BLVD - GENTLE CREEK 38' Direction: North Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Turning 22107 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 50
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 48
Veh Type: Sobriety: Assoc Factor:

1306591 4/22/2013 08:10 Monday GREENBROOK DR - IRON HORSE TRL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21804a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 13
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 49
Veh Type: Sobriety: Assoc Factor:

1309057 5/28/2013 15:35 Tuesday LOVE LN - RAILROAD AVE 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Not Stated 21208a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 41
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 82
Veh Type: Sobriety: Assoc Factor:

1316035 9/12/2013 15:24 Thursday DEL AMIGO RD - IRON HORSE TRL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21804a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 15
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 42
Veh Type: Sobriety: Assoc Factor:

1317103 9/30/2013 06:45 Monday DIABLO RD - ALAMATOS DR (W) 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21801a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 56
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 41
Veh Type: Sobriety: Assoc Factor:

1317671 10/10/2013 07:19 Thursday SYCAMORE VALLEY RD - CAMINO RAMON 19' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21804a Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 14
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 48
Veh Type: Sobriety: Assoc Factor:

1319026 11/2/2013 11:37 Saturday SYCAMORE VALLEY RD - MORNINGHOME RD 414' Direction: West Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Unsafe Speed 22350 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 35
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age:
Veh Type: Sobriety: Assoc Factor:

1321773 12/18/2013 09:05 Wednesday FRONT ST - DIABLO RD 90' Direction: South Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Turning 22107 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 13
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age:
Veh Type: Sobriety: Assoc Factor:

1400901 1/16/2014 08:30 Thursday EL CERRO BLVD - LA GONDA WAY 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Traffic Signals and Signs 21451a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 15
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age:
Veh Type: Sobriety: Assoc Factor:

1403235 2/23/2014 11:46 Sunday CAMINO TASSAJARA - WOOD RANCH RD 336' Direction: East Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Not Stated 21209 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 34
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 55
Veh Type: Sobriety: Assoc Factor:
Party 3 Driver Not S Not Stated Not Sta Age: 59
Veh Type: Sobriety: Assoc Factor:

1405081 3/24/2014 12:03 Monday HARTZ AVE - SHORT ST 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Unsafe Speed 22350 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 21
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age:
Veh Type: Sobriety: Assoc Factor:

1405088 3/24/2014 13:14 Monday DIABLO RD - CLYDESDALE DR 25' Direction: South Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Passing 21750 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 70
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 63
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1411729 | 7/12/2014 | 10:32 | Saturday | GREENBROOK DR - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | 21804 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 56 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 46 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1414913 | 8/31/2014 | 13:00 | Sunday | DEL AMIGO RD - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21804a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 63 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 60 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1415024 | 9/2/2014 | 13:36 | Tuesday | RAILROAD AVE - HARTZ AVE | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21801a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 24 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 46 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1416584 | 9/27/2014 | | Saturday | HARTZ AVE - LINDA MESA AVE | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Unsafe Speed | 22350 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 33 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1416585 | 9/27/2014 | 12:57 | Saturday | HARTZ AVE - LINDA MESA AVE | 32' | Direction: South | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Other Hazardous Movement | 22517 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 38 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: 51 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1417579 | 10/16/2014 | 07:45 | Thursday | TOWN AND COUNTRY DR - SORRENTO CT | 33' | Direction: East | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Unsafe Speed | 22350 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 7 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta Age: | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1420390 | 12/4/2014 | 20:50 | Thursday | SYCAMORE VALLEY RD - CAMINO RAMON | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Driving Under Influence | | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta Age: 65 | | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |

Party 2 Bicyclist Not S Not Stated Not Sta Age: 33
Veh Type: Sobriety: Assoc Factor:

1421728 12/28/2014 14:45 Sunday HARTZ AVE - PROSPECT AVE 25' Direction: North Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Turning 22102 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 35
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 36
Veh Type: Sobriety: Assoc Factor:

1503024 2/21/2015 12:42 Saturday CAMINO TASSAJARA - BLACKHAWK RD 94' Direction: East Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Unsafe Speed 22350 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 69
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 55
Veh Type: Sobriety: Assoc Factor:

1503757 3/5/2015 07:14 Thursday GREENBROOK DR - IRON HORSE TRL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Not Stated 21804 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 14
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 57
Veh Type: Sobriety: Assoc Factor:

1504312 3/13/2015 14:30 Friday TOWN AND COUNTRY DR - SAN RAMON VALLEY BL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Traffic Signals and Signs 21453a Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 89
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 13
Veh Type: Sobriety: Assoc Factor:

1505937 4/9/2015 15:10 Thursday DIABLO RD - CLYDESDALE DR 15' Direction: West Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Turning 22107 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 49
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 65
Veh Type: Sobriety: Assoc Factor:

1507031 4/29/2015 12:15 Wednesday HARTZ AVE - LINDA MESA AVE 260' Direction: North Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Turning 22107 Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 41
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 49
Veh Type: Sobriety: Assoc Factor:

1510180 6/20/2015 09:00 Saturday CAMINO TASSAJARA - BLACKHAWK PLAZA CIR 116' Direction: West Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Turning 22107 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 57
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 35
Veh Type: Sobriety: Assoc Factor:

1512688 8/3/2015 15:15 Monday GREENBROOK DR - IRON HORSE TRL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21804a Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 59
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 16
Veh Type: Sobriety: Assoc Factor:

1512903 8/6/2015 10:09 Thursday CAMINO TASSAJARA - MESSIAN PL 266' Direction: East Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Unsafe Speed 22350 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 65
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 44
Veh Type: Sobriety: Assoc Factor:

1514381 9/1/2015 10:03 Tuesday EL PINTADO RD - DOLPHIN DR 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Not Stated Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 68
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age:
Veh Type: Sobriety: Assoc Factor:

1516483 10/7/2015 15:35 Wednesday FRANCISCAN DR - CAMINO RAMON (N) 45' Direction: East Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21802a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 17
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 11
Veh Type: Sobriety: Assoc Factor:

1519455 12/1/2015 12:35 Tuesday DEL AMIGO RD - IRON HORSE TRL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Not Stated 40988kEBP Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 76
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 86
Veh Type: Sobriety: Assoc Factor:

1606574 5/3/2016 17:29 Tuesday FRONT ST - HARTZ AVE 10' Direction: West Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Not Stated Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 72
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 40
Veh Type: Sobriety: Assoc Factor:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1607478 | 5/23/2016 | 08:12 | Monday | ORANGE BLOSSOM WAY - EL CAPITAN DR | 5' | Direction: North | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | 21650.1 | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 14 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 47 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1608971 | 6/23/2016 | 18:19 | Thursday | GREENBROOK DR - SAN RAMON VALLEY BLVD | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Traffic Signals and Signs | 21451a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 78 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 12 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1609550 | 7/7/2016 | 14:24 | Thursday | SYCAMORE VALLEY RD - CAMINO RAMON | 13' | Direction: East | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Pedestrian Violation | 21456b | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 34 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 41 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1609704 | 7/11/2016 | 11:48 | Monday | DANVILLE BLVD - EL PORTAL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21801a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 27 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 33 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1610446 | 7/25/2016 | 20:00 | Monday | GARDEN CREEK PL - | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Not Stated | | Hit & Run: No | Property Damage Only | # Inj: 0 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 10 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1611886 | 8/24/2016 | 12:26 | Wednesday | GREENBROOK DR - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21804b | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 64 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| Party 2 Bicyclist | Not S | Not Stated | | Not Sta | Age: 61 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |
| 1613211 | 9/20/2016 | 12:57 | Tuesday | EL CAPITAN DR - IRON HORSE TRL | 0' | Direction: Not Stated | Not Stated | Not Stated | Pty at Fault:1 |
| | Not Stated | | Bicycle | Auto R/W Violation | 21804a | Hit & Run: No | Complaint of Pain | # Inj: 1 | # Killed: 0 |
| Party 1 Driver | Not S | Not Stated | | Not Sta | Age: 53 | | | | |
| Veh Type: | | Sobriety: | | Assoc Factor: | | | | | |

Party 2 Bicyclist Not S Not Stated Not Sta Age: 16
Veh Type: Sobriety: Assoc Factor:

1613647 9/25/2016 07:45 Sunday CAMEO DR - GREEN VALLEY RD 88' Direction: East Not Stated Not Stated Pty at Fault:
Not Stated Bicycle Unsafe Speed 22350 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 51
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age:
Veh Type: Sobriety: Assoc Factor:

1613766 10/1/2016 14:17 Saturday HARTZ AVE - DIABLO RD 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Unsafe Speed 22350 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 55
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 66
Veh Type: Sobriety: Assoc Factor:

1614740 10/21/2016 11:40 Friday CAMINO TASSAJARA - TASSAJARA LN 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:
Not Stated Bicycle Improper Turning 22107 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 42
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 72
Veh Type: Sobriety: Assoc Factor:

1615357 11/3/2016 09:41 Thursday PARAISO DR - IRON HORSE TRL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Auto R/W Violation 21804a Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 76
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 47
Veh Type: Sobriety: Assoc Factor:

1615919 11/15/2016 08:59 Tuesday DIABLO RD - ACKERMAN DR 28' Direction: East Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Improper Turning 22107 Hit & Run: Felony Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age:
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 62
Veh Type: Sobriety: Assoc Factor:

1617502 12/20/2016 09:11 Tuesday CAMINO TASSAJARA - MESSIAN PL 0' Direction: Not Stated Not Stated Not Stated Pty at Fault:1
Not Stated Bicycle Traffic Signals and Signs 21453a Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver Not S Not Stated Not Sta Age: 62
Veh Type: Sobriety: Assoc Factor:
Party 2 Bicyclist Not S Not Stated Not Sta Age: 28
Veh Type: Sobriety: Assoc Factor:

17-9804 7/29/2017 11:45 Saturday LOVE LN - VERONA AVE 162' Direction: East Daylight Clear Pty at Fault:1
Broadside Bicycle Auto R/W Violation 21804A Hit & Run: No Severe Injury # Inj: 1 # Killed: 0

Party 1 Bicyclist North Proceeding Straight Male Age: 52 2015 FUJI OVAL Bicycle Severe Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Required Cell Phone Not In Use
Party 2 Driver East Proceeding Straight Male Age: 57 2006 FORD RANGER Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

17-10188 8/6/2017 10:23 Sunday GREEN VALLEY RD - DONNA LN 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Broadside Bicycle Auto R/W Violation 21804A Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver East Proceeding Straight Male Age: 25 2017 FORD VAN Other Commercial No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist North Proceeding Straight Male Age: 66 2014 TREK DOMANE Bicycle No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Stated Cell Phone Not In Use

17-10395 8/10/2017 17:11 Thursday DIABLO RD - EL PINTADO RD 566' Direction: East Daylight Clear Pty at Fault:2
Broadside Bicycle Wrong Side of Road 216501 Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver South Making Right Turn Male Age: 62 2014 MERCEDES-BENZ C55 Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap Belt Used Cell Phone Not In Use
Party 2 Bicyclist East Traveling Wrong Way Male Age: 13 Bicycle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Helmet Driver - No Cell Phone Not In Use

17-10621 8/15/2017 08:27 Tuesday DANVILLE BLVD - DANVILLE OAK PL 436' Direction: South Daylight Clear Pty at Fault:1
Broadside Bicycle Auto R/W Violation 21801A Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver North Making Left Turn Female Age: 50 2015 LEXUS RX350 Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist South Proceeding Straight Male Age: 37 PARLEE DEDA Bicycle Complaint of Pain
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Helmet Driver - Yes Cell Phone Not In Use

17-11180 8/26/2017 11:44 Saturday RAILROAD AVE - SAN RAMON VALLEY BLVD 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Other Bicycle Improper Turning 22100A Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver East Making Right Turn Male Age: 70 2009 BENTLEY SD Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist East Making Right Turn Male Age: 71 2005 LITESPEED Bicycle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Helmet Driver - Yes Cell Phone Not In Use

17-13855 10/21/2017 13:25 Saturday DIABLO RD - AVENIDA NUEVA 27' Direction: East Daylight Clear Pty at Fault:1
Broadside Bicycle Unsafe Speed 22350 Hit & Run: Felony Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Driver West Proceeding Straight Male Age: 83 2006 FORD ESCAPE Sport Utility Vehicle No Injury
Veh Type: Sobriety: Impairment Not Kno Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist West Proceeding Straight Female Age: 57 2017 TREK SILQUE Bicycle Other Visible Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Not Stated Cell Phone Not In Use

17-13751 10/21/2017 14:00 Saturday DIABLO RD - CLYDESDALE DR 769' Direction: West Daylight Clear Pty at Fault:1
Rear-End Bicycle Unsafe Speed 22350 Hit & Run: Felony Severe Injury # Inj: 2 # Killed: 0

Party 1 Driver East Proceeding Straight Male Age: 83 2006 FORD ESCAPE Sport Utility Vehicle No Injury
Veh Type: Sobriety: Impairment Not Kno Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist East Proceeding Straight Male Age: 26 FUJI 770 Bicycle Severe Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Not Stated Cell Phone Not In Use
Party 3 Bicyclist East Proceeding Straight Male Age: 57 CANNONDALE ROAD BIKE Bicycle Severe Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Not Stated Cell Phone Not In Use

17-14469 11/5/2017 13:01 Sunday HARTZ AVE - PROSPECT AVE 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Other Bicycle Unsafe Speed 22350 Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Bicyclist North Making Right Turn Male Age: 53 2014 GIANT DEFY Bicycle Complaint of Pain
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Stated Cell Phone Not In Use
Party 2 Driver North Proceeding Straight Male Age: 29 2004 CHEVROLET CHEVY VAN Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

17-16042 12/12/2017 08:30 Tuesday LOVE LN - RAILROAD AVE 185' Direction: West Daylight Clear Pty at Fault:1
Broadside Bicycle Improper Turning 22107 Hit & Run: No Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Driver North Making Right Turn Female Age: 17 2016 NISSAN ROGUE Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist West Proceeding Straight Male Age: 11 TREK 820 Bicycle Other Visible Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Not Stated Cell Phone Not In Use

18-641 1/15/2018 14:56 Monday HIGHLAND DR. - LONESOME RD. 17' Direction: West Daylight Clear Pty at Fault:0
Other Bicycle Unknown Hit & Run: No Fatal # Inj: 0 # Killed: 1

Party 1 Bicyclist East Proceeding Straight Male Age: 73 2017 FUJI E-TRAVERSE Bicycle Fatal Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Helmet Driver - Yes Cell Phone Not In Use

18-777 1/18/2018 09:53 Thursday DANVILLE BLVD - EL PORTAL 0' Direction: Not Stated Daylight Cloudy Pty at Fault:1
Broadside Bicycle Auto R/W Violation 21801A Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver South Making Left Turn Female Age: 42 2017 TOYOTA PRIUS Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: Vision Obscureme Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist North Proceeding Straight Male Age: 52 2017 GIANT COMAX 1 Bicycle Complaint of Pain
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Helmet Driver - Yes Cell Phone Not In Use

18-2245 2/17/2018 13:56 Saturday 1000 SYCAMORE VALLEY RD - PARK AND RIDE - CA 0' Direction: Not Stated Daylight Cloudy Pty at Fault:1
Other Bicycle Unsafe Starting or Backing 22106 Hit & Run: No Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Driver West Backing Female Age: 49 2006 ACURA MDX Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist North Proceeding Straight Female Age: 58 Bicycle Other Visible Injury
Veh Type: Sobriety: HNBD Assoc Factor: Violation Unknown Cell Phone Not In Use

18-3628 3/19/2018 08:03 Monday MUSTANG DR. - ST. PATRICKS DR 23' Direction: North Daylight Clear Pty at Fault:0
Other Bicycle Unknown Hit & Run: No Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Bicyclist East Making Left Turn Male Age: 12 TERRA Bicycle Other Visible Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Helmet Driver - Yes Cell Phone Not In Use
Party 2 Driver North Proceeding Straight Female Age: 18 2010 JEEP WRANGLER Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

18-4761 4/12/2018 16:55 Thursday 589 SAN RAMON VALLEY BLVD - TOWN AND COUN 221' Direction: South Daylight Clear Pty at Fault:1
Broadside Bicycle Other Improper Driving Hit & Run: No Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Driver West Making Left Turn Male Age: 49 2000 TOYOTA 4RUNNER Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Bicyclist East Proceeding Straight Male Age: 15 TREK 730 Bicycle Other Visible Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Helmet Driver - No Cell Phone Not In Use

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 18-5019 | 4/18/2018 | 13:48 | Wednesday | PLOT 1001 DIABLO ROAD - MATADERA WAY | | 423' | Direction: East | Daylight | Clear | Pty at Fault:1 |
| | Broadside | | Bicycle | Other Improper Driving | | | Hit & Run: No | Other Visible Injury | # Inj: 1 | # Killed: 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Party 1 | Bicyclist | North | Proceeding Straight | Male | Age: 8 | FITBIKE | BF 22 | Bicycle | | Other Visible Injury |
| Veh Type: | | | Sobriety: HNBD | Assoc Factor: None Apparent | | | Not Stated | | Cell Phone Not In Use | |
| Party 2 | Driver | East | Entering Traffic | Female | Age: 45 | 2014 MERCEDES-BENZ | GL550 | Sport Utility Vehicle | | No Injury |
| Veh Type: | | | Sobriety: HNBD | Assoc Factor: None Apparent | | | Lap/Shoulder Harness Used | | Cell Phone Not In Use | |

**Settings for Query:**

**Involved With: Bicycle**
**Sorted By: Date and Time**

David Crompton

Thank you Chairman Haberl and Commissioners. We appreciate your volunteer efforts for our community.

I am Maryann Cella, commenting on behalf of SOS-Danville Group.

We believe the draft revised EIR is unacceptable in many respects. I will highlight a few, and include more with additional written comments:

1. **BICYCLIST SAFETY IMPACTS, NOT BLOS, NEEDS TO BE ASSESSED AND MITIGATED** . The Bicyclist Level of Service analysis fails to comply with the CA Court of Appeal's order to assess bicyclist safety impacts from the project. Prior speakers have explained why.

2. **DIABLO ROAD IMPROVEMENTS NEEDED**. Please listen to the following quote carefully: [quote "Impact 6" section from the Magee Diablo Ranch 1987 EIR].

That is a quote from the Final EIR for the 1987 Magee Diablo Ranch project, now known simply as Magee Ranch.

To date, the community is still waiting for completion of Diablo Road improvements promised as part of the approval of that 1987 project. To pay for those improvements, the Town created the Northeast Roadway Improvement Assessment District ("NERIAD") to tax owners of the new Magee Ranch homes. One such improvement project was Town of Danville Capital Improvement Project C-55B for the substandard Diablo Road segment between Green Valley Road and Mt. Diablo Scenic Blvd. [hold up the Plans] It specified uniform 12 feet wide lanes, with two-feet wide shoulders. Per a 1994 Town Council resolution, C-55B was accepted as having been completed per the plans, yet a comparison between the plans and the roadway between Green Valley and Mt. Diablo Scenic Blvd. shows that the promised minimum two-wide shoulders were never built, and the lanes were not standardized to 12-feet widths. [hold up the plans]

Amazingly and wrongly, the revised EIR's traffic impact analysis concludes that no improvements will be required for Diablo Road despite the additional project traffic expected to approach 1000 more cartrips per day. The lack of road improvements is simply unacceptable. Let's start by requiring that the improvements promised over 30 years ago in Contract C-55B be part of any project approval of this Magee Ranch #2 project, and also require an additional 2 more feet of bicyclist-usable shoulders on each side to account for the incredible bicyclist traffic----100,000 bicyclist trips per year--- that the road now carries, unimaginable 30 years ago.

3. **TRAFFIX BUSES COSTS RISING. REALISTIC ASSESSMENT OF TRAFFIC NEEDED** .According to press reports (provided to you) and the minutes of the January San Ramon Valley Unified School District Board meeting, there is a risk that the number of TRAFFIX buses serving 11

schools within the District might need to be reduced. According to my conversation today with School Board Director Ken Mintz, the SRVUSD will not be taking on the program to try to get lower costs. It is unclear what is happening now in that the buses are currently operating under a contract for only 2018-2019. Four schools accessed from the Diablo Road corridor are currently served by TRAFFIX---Green Valley Elementary, Vista Grande Elementary, Los Cerros Middle, and Monte Vista High Schools. The entire traffic study in the draft revised EIR is premised on the shaky assumption that TRAFFIX buses, in place for only 9 years, will continue forever. We believe the Town should require an assessment of traffic WITHOUT THE TRAFFIX SCHOOL BUSES to at least understand what will happen if they are discontinued.

4. **UNDERSIZED AND FAILING CULVERT FLOODING IMPACTS NEED TO BE ASSESSED, AND THE CULVERT NEEDS TO BE REPLACED**. The EIR fails to assess the new information that the 12 feet diameter failing culvert under Diablo Road just east of the Alameda Diablo intersection (according to estimates from the City Engineer, its capacity is about 1700 cfs) is too small to carry the expected peak flows in the East Branch of Green Valley Creek during a 100- year, 6 hour storm event, which the County Flood Department has recently determined will be 1879 cfs at the culvert. That's a shortfall of nearly 200 cfs, a LOT of water. The Project is expected to increase peak flow duration (see attached letter from Questa Engineering) during storms and would exacerbate the already-expected flooding. More analysis needs to be done.

Flooding is not a theoretical issue. During the 2013 review of this project, much evidence regarding existing, recurrent flooding downstream from the project was reported. An extensive Diablo- corridor -wide flood occurred in the winter of 1966 long before any of the hundreds of homes east of Mt. Diablo Scenic, were built. A resident of Roan Drive, in the St. Timothy Church neighborhood has stated that the 1966 flooding "was so bad it reached the doorstep next to my house.... And filled the streets to the point that people were wearing rubber boots to get around the neighborhood." Residents of the Diablo community reported that floodwaters were running down Alameda Diablo, toward the main entrance. Quite possibly the two-small culvert built around 1960 by the County exacerbated the flooding that occurred in 1966. It simply is unacceptable to approve this project and just "hope for the best" regarding the too-small culvert. As a condition of any project approval, the culvert must be replaced with one of adequate size. Don't waste money on just repairing culvert.

SummerHill Homes℠

May 9, 2011

David Crompton
Principal Planner
Town of Danville
510 La Gonda Way
Danville, CA 94526

David,

I have reviewed the letter dated April 22, 2010 regarding the public trail issue related to the Magee Ranches/SummerHill Development application.

As you know, SummerHill has been working with the Town of Danville since January on several trail concepts. These studies have been at SummerHill's cost. To receive the best guidance possible we have sought the advice of numerous consultants to outline civil, geotechnical, arboriculture, biological, and legal (such as ADA) constraints along the Town-proposed portion of trail.

While we understand that the Town is desirous of trail connectivity and, specifically, a regional trail on the Magee Ranches property, after much consultation with the experts in the above referenced fields, SummerHill respectfully disagrees with the feasibility an 8' wide paved regional trail on any portion of the property, but particularly on the Magee West portion which is topographically difficult and faces many environmental challenges, including ground movement and unknown biology. It is also important to note that during my outreach with the adjacent neighbors there was great disdain concerning ANY trail that backs to their rear yard, including the aggregate base or decomposed granite neighborhood trail that SummerHill proposed as a part of the development application.

The Magee Ranches Development Proposal has experienced EIR delays and additional significant cost during the process of studying the feasibility of a regional trail on the Magee Ranches property. SummerHill is now at a critical point where we must come to a resolution with the Town on this matter in order for the entire project to move forward.

Below are my comments on the Town's requests, as outlined in the April 22nd letter:

1) Public Trail Easements:
    a. SummerHill is agreeable to the construction of a trail on our portion of the development, and the development of an EVA, as originally proposed in the Development Proposal. SummerHill can dedicate to the Town of Danville the portion of

the trail from Dialo/Blackhawk Road, along the panhandle, and to the EVA. Because the EVA's primary role is to be for Emergency Vehicle Access and will not connect to anything until the future development of a trail by the Town, SummerHill proposes that we dedicate to the Town of Danville the EVA concurrent with the dedication of the other public right-of-ways within the development. SummerHill will seek to ensure that the most areas possible along the EVA are ADA compliant in the event that in the future the Town designates the EVA (or a portion of the EVA) as a trail (see Section 5a below)

b. SummerHill and the property owner are also generally agreeable to the easement dedication to the Town for the future construction of a trail by the Town of Danville from the termination of the EVA to near the creek culvert under Diablo Road across from Alameda Diablo. This trail should be better defined in width and minimize the impact of the proposed lots along Magee West to clearly define an easement dedication. Based on the advice from Engeo, SummerHill feels that at most a 6' wide aggregate base or decomposed granite trail is feasible in this location.

c. SummerHill and the property owner are NOT agreeable to any further trail easements on the Magee Ranches Property ~~from Alameda~~ Diablo to the McCauley Road/Blackhawk Road intersection. The topography of this portion of the property limit development in this region to very specific areas, which are the areas reflected in SummerHill's Development Proposal. Large portions of this side of the property are extremely hilly and have dense trees, and trail construction on this portion of Magee West would have severe impacts including the need for tree removal, multiple bridges, and walls. Further, any trail in this region would be duplicate in nature to the trail on the north side of Diablo Road. Frankly put, while we understand that this portion of trail is in the Town of Danville's Master Trail Plan, it is not actually feasible to construct without severe measures, cost, and maintenance. Finally, since a trail already exists on the north side of Diablo Road, there is no need for this easement.

2) Trail Construction:

a. The 8' wide asphalt trail that the Town has requested will completely change the aesthetic of the natural, meandering trail that SummerHill has proposed on our portion of the property. We stand by our proposal for an 8' wide aggregate base or decomposed granite trail along the "panhandle region" and adjacent to the creek. We feel this will provide a surface that is capable of both foot and bicycle traffic, allows for appropriate drainage/filtration as per current stormwater standards, and is in keeping with the natural setting adjacent to the creek.

b. SummerHill also does not feel that the remaining portion of trail to be constructed by the Town should be 8' wide minimum or asphalt, for all of the reasons mentioned above. As the Town would be developing this trail, it would ultimately be the Town's design to defend; however, a better defined width is necessary to secure easements on this portion of property. Any trail developed would have to work in conjunction with the proposed lots on this portion of property (such as, allowing driveway access across a trail).

# CHAPTER 1000 BICYCLE TRANSPORTATION DESIGN

## Topic 1001 - Introduction

### Index 1001.1 – Bicycle Transportation

The needs of nonmotorized transportation are an essential part of all highway projects. Mobility for all travel modes is recognized as an integral element of the transportation system. Therefore, the guidance provided in this manual complies with Deputy Directive 64-R2: Complete Streets - Integrating the Transportation System. See AASHTO, "Guide For The Development Of Bicycle Facilities".

Design guidance for Class I bikeways (bike paths), Class III bikeways (bike routes) and Trails are provided in this chapter. Design guidance that addresses the mobility needs of bicyclists on all roads as well as on Class II bikeways (bike lanes) is distributed throughout this manual where appropriate. Design guidance for Class IV bikeways (separated bikeways) is provided in DIB 89. The AASHTO Guide for the Development of Bicycle Facilities also provides additional bikeway guidance not included in this chapter. In addition, bikeway publications and manuals developed by organizations other than FHWA and AASHTO also provide guidance not covered in this manual.

See Topic 116 for guidance regarding bikes on freeways.

### 1001.2 Streets and Highways Code References

The Streets and Highways Code Section 890.4 defines a "bikeway" as a facility that is provided primarily for bicycle travel. Following are other related definitions, found in Chapter 8 Nonmotorized Transportation, from the Streets and Highway Code:

(a) Section 887 -- Definition of nonmotorized facility.

(b) Section 887.6 -- Agreements with local agencies to construct and maintain nonmotorized facilities.

(c) Section 887.8 -- Payment for construction and maintenance of nonmotorized facilities approximately paralleling State highways.

(d) Section 888 -- Severance of existing major non-motorized route by freeway construction.

(e) Section 888.2 -- Incorporation of nonmotorized facilities in the design of freeways.

(f) Section 888.4 -- Requires Caltrans to budget not less than $360,000 annually for nonmotorized facilities used in conjunction with the State highway system.

(g) Section 890.4 -- Class I, II, III, and cycle tracks or separated bikeway definitions.

(h) Section 890.6 - 890.8 -- Caltrans and local agencies to develop design criteria and symbols for signs, markers, and traffic control devices for bikeways and roadways where bicycle travel is permitted.

(i) Section 891 -- Local agencies must comply with design criteria and uniform symbols.

(j) Section 892 -- Use of abandoned right-of-way as a nonmotorized facility.

### 1001.3 Vehicle Code References

(a) Section 21200 -- Bicyclist's rights and responsibilities for traveling on highways.

(b) Section 21202 -- Bicyclist's position on roadways when traveling slower than the normal traffic speed.

(c) Section 21206 -- Allows local agencies to regulate operation of bicycles on pedestrian or bicycle facilities.

(d) Section 21207 -- Allows local agencies to establish bike lanes on non-State highways.

(e) Section 21207.5 -- Prohibits motorized bicycles on bike paths or bike lanes.

(f) Section 21208 -- Specifies permitted movements by bicyclists from bike lanes.

(g) Section 21209 -- Specifies permitted movements by vehicles in bike lanes.

(h) Section 21210 -- Prohibits bicycle parking on sidewalks unless pedestrians have an adequate path.

bicyclists is required when the route changes character. Also, wrong-way bicycle travel will occur on the street beyond the ends of bike paths because of the inconvenience of having to cross the street. However, alternating from Class IV to Class II may be appropriate due to the presence of many driveways or turning movements. The highway context or community setting may also influence the need to alternate bikeway classifications.

# Topic 1003 - Bikeway Design Criteria

## 1003.1 Class I Bikeways (Bike Paths)

Class I bikeways (bike paths) are facilities with exclusive right of way, with cross flows by vehicles minimized. Motor vehicles are prohibited from bike paths per the CVC, which can be reinforced by signing. Class I bikeways, unless adjacent to an adequate pedestrian facility,(see Index 1001.3(n)) are for the exclusive use of bicycles and pedestrians, therefore any facility serving pedestrians must meet accessibility requirements, see DIB 82. However, experience has shown that if regular pedestrian use is anticipated, separate facilities for pedestrians maybe beneficial to minimize conflicts. Please note, sidewalks are not Class I bikeways because they are primarily intended to serve pedestrians, generally cannot meet the design standards for Class I bikeways, and do not minimize vehicle cross flows. See Index 1003.3 for discussion of the issues associated with sidewalk bikeways.

*(1) Widths and Cross Slopes.* See Figure 1003.1A for two-way Class I bikeway (bike path) width, cross slope, and side slope details. The term "shoulder" as used in the context of a bike path is an unobstructed all weather surface on each side of a bike path with similar functionality as shoulders on roadways with the exception that motor vehicle parking and use is not allowed. The shoulder area is not considered part of the bike path traveled way.

Experience has shown that paved paths less than 12 feet wide can break up along the edge as a result of loads from maintenance vehicles.

(a) Traveled Way. **The minimum paved width of travel way for a two-way bike path shall be 8 feet**, 10-foot preferred. **The minimum paved width for a one-way bike path shall be 5 feet.** It should be assumed that bike paths will be used for two-way travel. Development of a one-way bike path should be undertaken only in rare situations where there is a need for only one-direction of travel. Two-way use of bike paths designed for one-way travel increases the risk of head-on collisions, as it is difficult to enforce one-way operation. This is not meant to apply to two one-way bike paths that are parallel and adjacent to each other within a wide right of way.

Where heavy bicycle volumes are anticipated and/or significant pedestrian traffic is expected, the paved width of a two-way bike path should be greater than 10 feet, preferably 12 feet or more. Another important factor to consider in determining the appropriate width is that bicyclists will tend to ride side by side on bike paths, and bicyclists may need adequate passing clearance next to pedestrians and slower moving bicyclists.

See Index 1003.1(16) Drainage, for cross slope information.

(b) Shoulder. **A minimum 2-foot wide shoulder, composed of the same pavement material as the bike path or all weather surface material that is free of vegetation, shall be provided adjacent to the traveled way of the bike path when not on a structure**; see Figure 1003.1A. A shoulder width of 3 feet should be provided where feasible. A wider shoulder can reduce bicycle conflicts with pedestrians. Where the paved bike path width is wider than the minimum required, the unpaved shoulder area may be reduced proportionately. If all or part of the shoulder is paved with the same material as the bike path, it is to be delineated from the traveled way of the bike path with an edgeline.

See Index 1003.1(16), Drainage, for cross slope information.

*(2) Bike Path Separation from a Pedestrian Walkway.* The CVC requires a pedestrian to

## Table 1003.1
## Bike Path Design Speeds

| Type of Facility | Design Speed (mph)(1) |
|---|---|
| Bike Paths with Mopeds Prohibited | 20 |
| Bike Paths with Mopeds Permitted | 30 |
| Bike Paths on Long Downgrades (steeper than 4%, and longer than 500') | 30 |

NOTE:

(1) On bike paths with mopeds prohibited, a lower design speed can be used for the crest vertical curve, equivalent to 1 mile per hour per percent grade for grades exceeding a vertical rise of 10 feet, when at a crest in path.

*(10) Horizontal Alignment and Superelevation.* The minimum radius of curvature negotiable by a bicycle is a function of the superelevation of the bicycle path surface, the coefficient of friction between the bicycle tires and the bicycle path surface, and the speed of the bicycle.

For all bicycle path applications the maximum superelevation rate is 2 percent.

The minimum radius of curvature should be 90 feet for 20 miles per hour, 160 feet for 25 mile per hour and 260 feet for 30 miles per hour. No superelevation is needed for radius of curvature meeting or exceeding 100 feet for 20 miles per hour, 180 feet for 25 miles per hour, and 320 feet for 30 miles per hour. When curve radii smaller than those given because of right of way, topographical or other considerations, standard curve warning signs and supplemental pavement markings should be installed. The negative effects of nonstandard curves can also be partially offset by widening the pavement through the curves.

*(11) Stopping Sight Distance.* To provide bicyclists with an opportunity to see and react to the unexpected, a bicycle path should be designed with adequate stopping sight distances. **The minimum stopping sight distance based on design speed shall be 125 feet for 20 miles per hour, 175 feet for 25 miles per hour and 230 feet for 30 miles per hour.** The distance required to bring a bicycle to a full controlled stop is a function of the bicyclist's perception and brake reaction time, the initial speed of the bicycle, the coefficient of friction between the tires and the pavement, and the braking ability of the bicycle.

Stopping sight distance is measured from a bicyclist's eyes, which are assumed to be 4 ½ feet above the pavement surface to an object ½-foot high on the pavement surface.

*(12) Length of Crest Vertical Curves.* Figure 1003.1C indicates the minimum lengths of crest vertical curves for varying design speeds.

*(13) Lateral Clearance on Horizontal Curves.* Figure 1003.1D indicates the minimum clearances to line of sight obstructions, *m*, for horizontal curves. It is assumed that the bicyclist's eyes are 4 ½ feet above the pavement surface to an object ½-foot high on the pavement surface.

Bicyclists frequently ride abreast of each other on bicycle paths, and on narrow bicycle paths, bicyclists have a tendency to ride near the middle of the path. For these reasons, lateral clearances on horizontal curves should be calculated based on the sum of the stopping sight distances for bicyclists traveling in opposite directions around the curve. Where this is not possible or feasible, the following or combination thereof should be provided: (a) the path through the curve should be widened to a minimum paved width of 14 feet; and(b) a yellow center line curve warning sign and advisory speed limit signs should be installed.

*(14) Grades.* Bike path grades must meet DIB 82. The maximum grade rate recommended for bike paths should be 5 percent. Sustained grades should be limited to 2 percent.

*(15) Pavement Structure.* The pavement material and structure of a bike path should be designed in the same manner as a highway, with a recommendation from the District Materials Branch. It is important to construct and

maintain a smooth, well drained, all-weather riding surface with skid resistant qualities, free of vegetation growth. Principal loads will normally be from maintenance and emergency vehicles.

*(16) Drainage.* For proper drainage, the surface of a bike path should have a minimum cross slope of 1 percent to reduce ponding and a maximum of 2 percent per DIB 82. Sloping of the traveled way in one direction usually simplifies longitudinal drainage design and surface construction, and accordingly is the preferred practice. **The bike path shoulder shall slope away from the traveled way at 2 percent to 5 percent to reduce ponding and minimize debris from flowing onto the bike path.** Ordinarily, surface drainage from the path will be adequately dissipated as it flows down the gently sloping shoulder. However, when a bike path is constructed on the side of a hill, a drainage ditch of suitable dimensions may be necessary on the uphill side to intercept the hillside drainage. Where necessary, catch basins with drains should be provided to carry intercepted water under the path. Such ditches should be designed in such a way that no undue obstacle is presented to bicyclists.

Culverts or bridges are necessary where a bike path crosses a drainage channel.

*(17) Entry Control for Bicycle Paths.* Obstacle posts and gates are fixed objects and placement within the bicycle path traveled way can cause them to be an obstruction to bicyclists. Obstacles such as posts or gates may be considered only when other measures have failed to stop unauthorized motor vehicle entry. Also, these obstacles may be considered only where safety and other issues posed by actual unauthorized vehicle entry are more serious than the safety and access issues posed to bicyclists, pedestrians and other authorized path users by the obstacles.

The 3-step approach to prevent unauthorized vehicle entry is:

(a) Post signs identifying the entry as a bicycle path with regulatory signs prohibiting motor vehicle entry where roads and bicycle paths cross and at other path entry points.

(b) Design the path entry so it does not look like a vehicle access and makes intentional access by unauthorized users more difficult. Dividing a path into two one-way paths prior to the intersection, separated by low plantings or other features not conducive to motor vehicle use, can discourage motorists from entering and reduce driver error.

(c) Assess whether signing and path entry design prevents or minimizes unauthorized entry to tolerable levels. If there are documented issues caused by unauthorized motor vehicle entry, and other methods have proven ineffective, assess whether the issues posed by unauthorized vehicle entry exceed the crash risks and access issues posed by obstacles.

If the decision is made to add bollards, plantings or similar obstacles, they should be:

- Yielding to minimize injury to bicyclists and pedestrians who may strike them.
- Removable or moveable (such as posts, bollards or gates) for emergency and maintenance access must leave a flush surface when removed.
- Reflectorized for nighttime visibility and painted, coated, or manufactured of material in a bright color to enhanced daytime visibility.
- Illuminated when necessary.
- Spaced to leave a minimum of 5 feet of clearance of paved area between obstacles (measured from face of obstacle to face of adjacent obstacle). Symmetrically about the center line of the path.
- Positioned so an even number of bicycle travel lanes are created, with a minimum of two paths of travel. An odd number of openings increase the risk of head-on collisions if traffic in both directions tries to use the same opening.
- Placed so additional, non-centerline/lane line posts are located a minimum of 2 feet from the edge of pavement.

SOS-Danville Group :

DAVID CROMPTON
Comments on the draft revised Magee Ranches EIR

FINAL

# ENVIRONMENTAL IMPACT REPORT

# MAGEE DIABLO RANCH

STATE CLEARINGHOUSE

# 85102909

Prepared For:

Town of Danville Development Services Department


Final EIR Prepared by:

Donaldson Associates
627 Spokane Ave.
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In association with:

Baseline Environmental Consulting
Charles Abrams, Traffic Engineer
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Douglas Donaldson, Project Manager and Principal-in-Charge

Draft EIR Prepared by:

Planning Analysis and Development
530 Chestnut St.
San Francisco, CA 94133

Gloria Root, Principal-in-Charge



April 1987

o Traffic on Blackhawk Road between Mt. Diablo Scenic Road and Green Valley Road would increase about 5,800 vehicles per day.

o Traffic on Camino Tassajara between Blackhawk Road and Sycamore Valley Road would increase by almost 36,000 daily trips and traffic on Sycamore Valley Road would increase by 32,000 vehicles per day.

Table F-5 presents the projected traffic volumes on these roads for the Year 2000 and indicates the expected levels of service on each road, with and without improvements.

**Mitigation Measures:** The following improvements should be made, as recommended in the citywide traffic study. The project applicant should contribute to an assessment district or other funding mechanism for these improvements.

(5a) Diablo Road between Green Valley Road and El Cerro Boulevard should be widened to four lanes.

(5b) Sycamore Valley Road should be widened to four lanes with shoulders. This is being accomplished as a part of the Sycamore Valley Assessment District.

(5c) Camino Tassajara, between Sycamore Valley Road and Blackhawk Road, should be widened to four lanes with shoulders. This is being accomplished as a part of the Sycamore Valley Assessment District.

(5d) Green Valley Road between Diablo Road and Stone Valley Road should be widened and realigned.

(5e) El Cerro Boulevard between I-680 and Diablo Road requires safety improvements, i.e., a median.

(Responsibility: Town of Danville, applicant, property owners in assessment district if and when one is formed.)

**Impact 6:** The portion of Diablo Road most affected by cumulative traffic would be the section from west of Mt. Diablo Scenic Boulevard to the beginning of the improved segment of Blackhawk Road. Single family homes front on this section of Diablo Road, making widening of the roadway or right-of-way infeasible. The overall condition of Diablo Road is substandard. Limitations of sight distance create hazardous conditions along portions of the roadway. Additional traffic would exacerbate safety problems. The City's proposed Capital Improvements Program would allocate approximately $700,000 for for repaving, some realignment work and the addition of wider shoulders along this length of road.

**Mitigation Measures:** (6a) Implememnt the staff proposed Capital Improvment



Contract C-55b, NERIAD-funded, was never completed per specs.

Project for the one-half mile portion of Diablo Road between Mt. Diablo Scenic Boulevard and the improved segment of Blackhawk Road should.

(Responsibility: Town of Danville, applicant property owners through development fees.)

**Impact 7:** The newly improved Camino Tassajara and Sycamore Valley Roads should be able to accommodate cumulative traffic volumes generated by the Magee Diablo Ranch project. The two freeway interchanges (I-680/Diablo Road and I-680/Sycamore Valley Road) can handle future volumes due to cumulative residential development, with no significant decrease in levels of service.

**Mitigation Measures:** None would be required.

**Impact 8:** The neighborhoods most impacted by cumulative traffic would be those near the intersection of Diablo/Green Valley and Diablo Road between El Cerro and I-680. With project and cumulative traffic, average daily traffic volumes (ADT) would be 11,200, and 16,300 respectively, on this section of Diablo Road.

The Crow Canyon Road extension will divert some traffic from Diablo Road and Camino Tassajara. These vehicle trips would most likely be those that travel southbound on I-680. Most existing northbound traffic using Diablo Road would continue to do so, even after completion of the Crow Canyon Road extension.

**Mitigation Measures:** See measures listed for Impacts No. 4 and 5.

**Impact 9:** Green Valley School is located on the south side of Diablo Road just west of the Diablo Road/Green Valley Road intersection. With cumulative traffic, the traffic volumes on Diablo Road, south of Green Valley Road, would increase by 4,000 vehicles per day, approaching the capacity of the road, and increasing existing safety concerns in the vicinity of the school.

**Mitigation Measure:** See Impact No. 4

**Impact 10:** The proposed project and cumulative projects in the site vicinity would have a slight increase in demand for public transit for commute trips as well as for access to everyday needs such as shopping. Demand for school bus transportation would be accommodated by the San Ramon Valley Unified School District.

The six mile distance of the project site from the BART express (D Line) bus stop would result in some project residents driving their cars to the bus stop or directly to the Walnut Creek BART station. The nearest BART station (Walnut Creek) is about 11 miles north of the site. It is not expected that project-generated ridership on the D Line would exceed available capacity.

SOS-Danville Group: Comments on the draft revised Magee Ranches EIR

January 14, 2013

Mr. Kevin Gailey
Chief of Planning
Planning Division, Town of Danville
510 La Gonda Way
Danville, CA 94526

Subject: Comments on the Summerhill Development's Magee Ranch DEIR Hydrology Sections

Mr. Gailey,

I have been asked to review and comment on the DEIR for the Magee Ranches (SCH # 2010112042) on behalf of the Diablo Community Services District.

The segment of Green Valley Creek adjacent to the proposed subdivision has seen numerous examples of bank instability, channel erosion, and flooding over the past 20 years. These issues have been documented by the Town of Danville as well as to the Contra Costa County Flood Control and Water Conservation District. Many of these on-going problems have been caused by the slow and steady urbanization of the watershed.

The Magee Ranch DEIR and supporting documents provide a generally accurate depiction of watershed hydrology and hydraulics. Overall, the hydrologic results presented by ENGEO for 10-year and 100-year storm events were consistent with flows determined by Questa using an independent HEC-HMS model for the study area. In addition, the detention basin concept utilized for this project appears to mitigate the increase in peak flows generated by the proposed subdivision. However, upon reviewing the DEIR and relevant appendices, I find that certain potential project impacts are omitted and additional information is necessary to fully evaluate the impacts of the proposed subdivision.

- The DEIR should include a discussion of the proposed project's effect on storm flow duration and not only peak flows. According to the HEC-HMS output hydrographs presented in the DEIR Appendix G, additional storm flow duration within the range of 15 minutes is generated from the proposed detention basins. The exact change in duration is difficult to determine based on the information provided in Appendix G. Considering that channel erosion is often driven by storm flow duration and peak flows, this factor should be closely examined in the DEIR. Based on the output hydrograph, storm flow durations are extended for flows between 300 and 800 cfs. Flows within this range are likely to cause channel erosion based on our observations following storm events in the December 2012 storm.

- The diagram describing the outfall structure for Bioretention Area "A" does not provide sufficient detail to fully evaluate the proposed project. There is no description of the "two-

square-foot emergency spillway" or location and placement details for the "rock scour protection". These are critical aspects of the project that should be included with the DEIR.

- There is little mention of how this basin will be managed. Its function is dependent upon maintaining its original design. Has sediment accumulation in the basin been modeled? Is there a threshold in which the basin needs to be desilted? Was the basin designed to accommodate some sediment accumulation? A detailed management plan and performance criteria should be analyzed and prepared as mitigation for potential hydrologic impacts.

In summary, I believe that the DEIR is inadequate because it does not specifically address the critical nature of storm flow durations in Green Valley Creek. The DEIR also fails to supply adequate detail to fully assess the functionality of "Bioretention Area A"

Thank you for the chance to comment on DEIR.

Sincerely,

Sydney Temple P.E.
Questa Engineering Corporation

I believe the draft revised EIR is unacceptable in many respects. Below are just a few:

1. **BICYLCIST SAFETY IMPACTS, NOT BLOS, NEEDS TO BE ASSESSED AND MITIGATED** . The Bicyclist Level of Service analysis fails to comply with the CA Court of Appeal's order to assess bicyclist safety impacts from the project. The draft needs to be revised accordingly.

2. **DIABLO ROAD IMPROVEMENTS NEEDED AS A CONDITION OF PROJECT APPROVAL.**

To date, the community is still waiting for completion of Diablo Road improvements promised as part of the approval of the 1987 Magee Ranch 250 -home project. To pay for those improvements, the Town created the Northeast Roadway Improvement Assessment District ("NERIAD") to tax owners of the new Magee Ranch homes. One such improvement project was Town of Danville Capital Improvement Project C-55B for the substandard Diablo Road segment between Green Valley Road and Mt. Diablo Scenic Blvd. It specified uniform 12- feet- wide lanes, with two-feet- wide shoulders. Per a 1994 Town Council resolution, C-55B was accepted as having been completed per the plans, yet a comparison between the plans and the roadway between Green Valley and Mt. Diablo Scenic Blvd. shows that the promised minimum two-wide shoulders were never built, and the lanes were not standardized to 12-feet widths.

Amazingly and wrongly, the revised EIR's traffic impact analysis concludes that no improvements will be required for Diablo Road despite the additional project traffic expected to approach 1000 more cartrips per day. The lack of road improvements is simply unacceptable. Let's start by requiring that the improvements promised over 30 years ago in Contract C-55B be part of any project approval of this Magee Ranch #2 project, and also require an additional 2 more feet of bicyclist-usable shoulders on each side to account for the incredible bicyclist traffic----100,000 bicyclist trips per year--- that the road now carries, unimaginable 30 years ago.

3. **TRAFFIX BUSES COSTS RISING. REALISTIC ASSESSMENT OF TRAFFIC NEEDED**. According to press reports and the minutes of the January San Ramon Valley Unified School District Board meeting, there is a risk that TRAFFIX buses serving 11 schools within the District might need to be reduced. Four schools accessed from the Diablo Road corridor are currently served by TRAFFIX---Green Valley Elementary, Vista Grande Elementary, Los Cerros Middle, and Monte Vista High Schools. For now, the buses are continuing under a contract for the 2018-2019 school year only. The entire traffic study in the draft revised EIR is premised on the shaky assumption that TRAFFIX buses, in place for only 9 years, will continue forever. We believe the Town should require an assessment of traffic WITHOUT THE TRAFFIX SCHOOL BUSES to at least understand what will happen if they are discontinued.

4. **UNDERSIZED FAILING CULVERT FLOODING IMPACTS NEED TO BE ASSESSED, AND THE CULVERT NEEDS TO BE REPLACED**. The EIR fails to assess the new information that the 12 feet diameter failing culvert under Diablo Road just east of the Alameda Diablo intersection (according to estimates from the City Engineer, its capacity is about 1700 cfs) is too small to carry the expected peak flows in the East Branch of Green Valley Creek during a 100- year, 6 hour storm event, which the County Flood Department has recently determined will be 1879 cfs at the culvert. That's a shortfall of nearly 200 cfs, a LOT of water. The Project is expected to increase peak flow duration during storms and would exacerbate the already-expected flooding. More analysis needs to be done. As a condition of any project approval, the failing culvert must be replaced with one of adequate size.

SOS-Danville [redacted] Comments on the draft revised EIR

Dear Danville officials, and Magee Ranches EIR consultant and applicant:

According to recent press reports (see below) and the minutes of the January San Ramon Valley Unified School District Board meeting, the TRAFFIX buses serving 11 schools within the District are in jeopardy. Four schools accessed from the Diablo Road corridor are currently served by TRAFFIX---Green Valley Elementary, Vista Grande Elementary, Los Cerros Middle, and Monte Vista High Schools.

Please tell me whether the upcoming draft revised EIR for the Magee Ranches project will be assessing the project's traffic impact on the traffic that would exist without the TRAFFIX school buses for the 4 above-listed schools.

Thank you for your assistance.

Sincerely,
Maryann Cella
SOS-Danville Group

From the Danville San Ramon Express
**News**

"Updated: Sun, Jan 14, 2018, 2:52 pm
Uploaded: Fri, Jan 12, 2018, 5:02 pm

# SRVUSD debates becoming service provider for TRAFFIX bus transportation

## School board votes 3-2 to move forward with more insourcing analysis

by Erika Alvero

TRAFFIX buses currently provide transportation service to 11 schools throughout the district. (Photo courtesy of SRVUSD)
The school board discussed the possibility of becoming the bus service provider for the San Ramon Valley's traffic congestion relief program Tuesday night.

TRAFFIX is operated by the town of Danville, city of San Ramon, Contra Costa County and the San Ramon Valley Unified School District through a joint powers authority, and it provides bus transportation to and from certain schools in the district. It is not a school bus program, but a traffic congestion relief program -- the school district stopped providing school bus service in 2007 due to a lack of funding.

Tuesday's discussion, which preceded both open and closed board meetings, revolved around a two-phase analysis on bringing TRAFFIX bus service in-house to the school district. School board trustees were deciding whether to move ahead with a second, more in-depth analysis of potential insourcing for final consideration.

Currently, TRAFFIX contracts with student transportation operator First Student for bus service. The contract with First Student was set to expire at the end of this year, but it was extended through the 2018-19 school year.

After some spirited debate among the board during the hour-long meeting, the board ultimately voted 3-2 to move ahead with Phase 2 of the analysis, with board president Ken Mintz and board member Denise Jennison voting against the motion.

"If the numbers work, we believe it will save routes," said board member Rachel Hurd, who serves on the TRAFFIX board along with fellow trustee Greg Marvel. "What we are fairly convinced is that if we go out to bid, the bids will all come in way higher than what we're paying right now and the program will be forced to reduce routes."

TRAFFIX service is funded by Measure J, the half-cent sales tax approved by county voters in 2004. Measure J doesn't completely cover the service, though, and participating families pay $310 annually for bus transportation -- $210 during the district's promotional period, which is less than half of the district's previous program, according to the TRAFFIX website.

After a traffic analysis determined the most congested intersections throughout the San Ramon Valley and district parents were surveyed on their interest in bus transportation for their students, TRAFFIX chose seven schools for service in the 2009-10 school year, adding four more in subsequent years after additional studies.

TRAFFIX currently services Los Cerros and Pine Valley middle schools; Country Club, Green Valley, Walt Disney, Neil Armstrong, Vista Grande and Coyote Creek elementary schools; and California, Monte Vista and San Ramon Valley high schools.

Phase 1 of the insourcing analysis was surface level, said district spokeswoman Elizabeth Graswich in an opening presentation, focused on possible operating facilities for bus transportation services, and to determine how the school district could serve as both a service provider and a member of the TRAFFIX JPA.

In terms of facility options for bus storage, Phase 1 considered leasing space, purchasing space, or using a district-owned location, potentially as stand-alone operations, parking only operations or through multiple parking sites, Graswich said.

Phase 1 also examined what the governance structure would look like if SRVUSD were to become service provider. A conflict of interest would be created if this were to happen, Graswich said, and steps would need to be taken in order to avoid this conflict: potential board members recusal, alternate form of representation, directors as ex officio, non-voting members, or eliminate board positions.

Legally, she said, the district would need to acquire insurance. Financial risk for both the district and TRAFFIX would be determined through contract negotiations -- a contract, she said, would also need to define risk-management relationships, roles and expectations and compensation to all those who provide the service.

Regardless of what happens, Graswich said, the district's board member and staff representatives have conveyed to TRAFFIX that any action should in no way impact the SRVUSD general funds.

Since the board approved the motion, the TRAFFIX board will now move forward with the more detailed Phase 2, which will explore more technical, programmatic-level structures required for insourcing operations.

Hurd and Marvel were both in favor of proceeding with Phase 2. Marvel said that the second phase of the analysis would demonstrate whether the district could possibly provide better service for cheaper.

"The whole thing comes down to, you have a finite amount of money to provide this service," Marvel said. "Can we provide it at a cost that reduces the outlay for the TRAFFIX board, which means more services can be provided to our students. We could add more buses, more routes, more schools could be serviced."

But Mintz expressed caution about moving forward, in particular voicing concerns regarding perception issues and community reaction. He felt that Phase I should have explored physical logistics at greater length, as the construction of a bus facility in, for example the Monte Vista parking lot, could draw neighbors' opposition.

Mintz also brought up that TRAFFIX buses might start to seem even more like school buses, rather than as part of a traffic congestion relief program -- something which could pose problems since not all schools are serviced by TRAFFIX.

"If it were to hit our general fund...someone can come back to the school district and say, 'you're not providing equal access to services,'" he said.

Superintendent Rick Schmitt also advised against moving forward with Phase II without additional information. He presented to the board the staff recommendation, which was to ask the TRAFFIX board to release the RFP for service providers, to determine if there actually is a problem, to see if bids will be so high as to require bus routes to be cut.

"I'd like more information on what the true cost is, on what the true problem is," he said.

Marvel and Hurd vehemently opposed this option.

"We've already asked for extension, we got it," Marvel said. "To ask for another one in my opinion would be inappropriate."

According to Graswich, the decision to move forward with Phase II of the insourcing analysis will now go back to the TRAFFIX board for approval on Tuesday. This phase is expected to take two or three months."

SOS-Danville Group : Comments on the Draft Revised EIR for Magee Ranches project

**From:** Steve Lake <SLake@danville.ca.gov>
**Subject: RE: DP 404-15, 1700 Alameda Diablo - Pedestrian Bridge**
**Date:** April 24, 2017 at 12:55:45 PM PDT
**To:** Gary Rich <garylrich12@gmail.com>

Hi Gary,

Culvert velocity is based on the diameter, type and slope of the pipe and the depth of flow. For example, a 12-foot diameter culvert at a 1% slope (1 foot fall in 100 feet), flowing 90% full, will have a velocity of about 16 feet per second and a capacity of about 1,700 cubic feet per second. The culvert can carry higher velocities than the ditch.

The maximum ditch velocity is generally based on the type of material from which the ditch is made. For dirt ditches (creeks) the maximum velocity is 5 to 8 feet per second. Weed lined ditches will have a higher resistance to erosion and could carry a higher velocity. A trapezoidal ditch (creek) with a bottom width of 8 feet, a longitudinal slope of 1%, side slopes of 2.5H to 1V, and flowing 8 feet deep will have a capacity of about 1,700 cubic feet per second at a velocity of about 8 feet per second.

Remember that the upstream detention basins will reduce peak flows.

Steve

**Steven C. Lake**
**Development Services Director and City Engineer**
Town of Danville 510 La Gonda Way Danville, CA 94526
d (925) 314-3319 m (925) 858-1692 f (925) 838-0360 o (925) 314-3310
slake@danville.ca.gov www.danville.ca.gov
***Stay Connected with us!***

SOS Danville Group: Comments on the draft revised Mazee Ranches EIR

April 23, 2013

I apologize for not being able to read the following in person, but I have a family commitment that prevents me from attending tonight's meeting.

As a representative of the St. Timothy neighborhood of over one hundred homes I try to keep my neighbors informed about the Summerhill proposed projects.

In that capacity I want to make two points, first, please consider installing a traffic control light at the corner of Diablo and Clydesdale. I have witnessed accidents at that location that could have been avoided with the proper controls. I have also watched in fear as trucks and cars have on occasion come to a screeching stop inches from my rear bumper while I was waiting for that space between cars.

I myself came within seconds of taking out a motorcyclist as it looked like there was a space behind a car coming west and I was ready, as you have to be, to take advantage of a space between cars to gun it into the St. Timothy neighborhood. I still think about how close that call was.

The above also illustrates the degree of difficulty that driving on Diablo is during many busy hours with existing traffic patterns.

The second point is in regard to potential flooding. I have confirmed that a flood in 1966, long before many homes east of Clydesdale were built, a flood occurred in our neighborhood that was so bad it reached the doorstep next to my house at 166 Roan Dr. and filled the streets to the point that people were wearing rubber boots to get around the neighborhood.

I apologize if I missed it or didn't understand the wording but I couldn't find anything in the Environmental Report that properly addresses the possibility of that being properly addressed in the past or in the future with the additional homes built since that time much less the proposed Summerhill Project.

Thank you for your proper consideration for these matters.

Richard J Smith

Richard Smith
166 Roan Dr.
Danville, CA
94526

838-7142
smithe5@sbcglobal.net

## 17: RESPONSE TO MARYANN CELLA – SOS-DANVILLE GROUP (1)

**17A-F:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety, including a discussion of the BLOS methodology. Although the comment letter and most attached materials focus on bicycle safety, several attachments concern hydrology. Please refer to the Master Responses in Section 2.4.5 regarding hydrology and erosion.

## 17A: RESPONSE TO MARYANN CELLA ATTACHMENT (7/1/18)

**17A1:** This comment indicates a concern that the Town does not understand how CEQA works and that the analysis of bicycle safety will not conform with the requirements of CEQA. It should be noted that this concern is apparently based on one sentence from a page-long email sent in 2017. The process being used by the Town to analyze the potential for environmental impacts of the proposed project on bicycle safety meets all CEQA requirements, including those highlighted in the comment. Specifically, the RDEIR:

- Identifies existing bicycle facilities (RDEIR, p. 4.3.4)
- Explains the methodology to be used to evaluate bicycle safety (RDEIR, p. 4.3-8 and 9)
- Establishes existing baseline conditions for bicyclists (RDEIR, p. 4-3.14 and 15)
- Provides information on bicycle collision history (RDEIR p. 4.3-15, Appendix E)
- Identifies thresholds of significance (RDEIR, p. 4.3-16)
- Identifies project (RDEIR, p. 4.3-26, Tables 4.3-11 and 4.3-12), cumulative (RDEIR, p. 4.3-33, Table 4.3-14) and cumulative plus project conditions (RDEIR, pp. 4.3-39 and 4.3-42, Tables 4.3-17 and 4.3-18).

The detailed facts supporting this analysis can be found in Appendix E to the RDEIR. As explained in Master Response 2.4.2, the HCM BLOS methodology is a widely accepted, appropriate methodology for evaluating bicycling conditions, including safety, and the question of whether the proposed project would have a significant impact on bicycle safety.

All other concerns raised in this letter are addressed in the Master Responses in Section 2.4.2 regarding bicycle safety.

**17A2:** This comment characterizes SOS-Danville's purpose in filing their CEQA litigation in 2013. The motivation or purposes of prior litigation are irrelevant to the current RDEIR. As stated on page 1-2 of the RDEIR, "[t]he purpose of the EIR is to inform the public generally of the significant environmental effects of the project, identify possible ways to minimize the significant effects, and describe reasonable alternatives that support the objectives of the project."

This section of the comment letter also contains two more specific comments. The first addresses the status of the feasibility study of the proposed trail that would be constructed by the Town on the Magee property. That study has been completed and was made public in August 2018. Please refer to the Master Responses in Section 2.4.2 for further detail. Please note that the project applicant's proposed offer to dedicate an easement for the Town's potential trail is not an environmental mitigation.

Secondly, the comment states that the Town has sufficient existing right-of-way to add bicycle lanes to Diablo Road. As detailed in Master Response in Section 2.4.2, the extent of right-of-way dedications to add bike lanes and the environmental and fiscal costs are identified. Again, it is also important to note that the RDEIR does not identify any project

impacts that would justify requiring the applicant to provide such bike lanes as environmental mitigation. The Master Response further identifies alternative bike routes with bike lanes to reach the entrance to Mt. Diablo Scenic Boulevard.

The letter includes a number of references to the width of Diablo Road. First, the comment refers to a 1994 Capital Improvement Project, C-55-B. That project, which included pavement overlay and some other improvements to Diablo Road, contained language that indicated a typical lane width of 12 feet. That plan did not guarantee a uniform lane width. Appendix K to Appendix E of the RDEIR does contain average lane and shoulder widths for successive 100-foot segments of Diablo Road based on actual measurements in the field taken at 100-foot intervals (RDEIR, p. 4.3-9)

**17A3:** As a preliminary matter, it should be noted that while the comment states that it is addressing the potential impacts of the Magee Preserve project, it primarily addresses existing conditions on Diablo Road and suggests actions to be taken by the Town that have nothing to do with the proposed project ("there are imminent safety hazards that can and must be alleviated immediately.") Therefore, while the following response attempts to focus on comments regarding the project, much of the response by necessity will also include information regarding issues unrelated to the RDEIR and potential project impacts. As previously indicated, the RDEIR contains accurate baseline information regarding bicycle accidents on Diablo Road, traffic volumes, lane and shoulder widths, and existing facilities. These answer the CEQA-related portion of this comment.

There are two other important points to note in response to this comment. First, the commenter again refers to a 1994 capital improvement project that included work on Diablo Road (CIP Project C-55B). This issue is addressed in Master Response 2.4.2 regarding bicycle safety. Second, the commenter alleges that the Town has a responsibility to maintain all of its arterial roads to be safe for bicyclists. Although it is true that the California Vehicle Code permits cyclists to ride on any public street, not all public streets are designated as bike routes. The Caltrans Highway Design Manual Section 1002.1 provides guidance as to how and when to designate a Class III bike route: "…designation of bike routes should indicate to bicyclists that there are particular advantages to using these routes as compared with alternative routes. This means that responsible agencies have taken actions to assure that these routes are suitable as shared routes and will be maintained in a manner consistent with the needs of bicyclists."

While Danville has designated 11.8 miles of roadway as Class III bike routes, it has not done so for the stretch of Diablo Road between Green Valley/McCauley and Mt. Diablo Scenic Boulevard. This is because in addition to the limitations of the existing roadway section, there is an alternative, albeit longer, alternative to reach Mt. Diablo Scenic Boulevard using Class II and Class III bike facilities.

**17A4:** The commenter suggests that the lane widths on Diablo Road are substandard. As previously stated, for purposes of CEQA, the RDEIR identifies the existing road widths in Appendix K to Appendix E of the RDEIR. Those actual lane widths are a factor used in the BLOS methodology, meaning that the results of the BLOS account for road width. In

the broader perspective, the fact that lane widths in some locations are less than 12 feet does not make them substandard. The Caltrans Highway Design Manual (Section 301.1, provides for a minimum lane width of 11 feet, while the ASSHTO Geometric Design Manual finds that lane widths of 10-12 feet are acceptable for arterials.

The question of what was or was not built in 1994 is addressed in the Master Response in Section 2.4.2 regarding bicycle safety.

The letter states that the existing Bicycle Symbol/SHARE THE ROAD (CA MUTCD Sign Nos. W11-1/W16-1P) warning sign assemblies are inadequate and should be replaced with BICYCLES MAY USE FULL LANE signage (2014 CA MUTCD sign No. R4-11). The letter references other locations in Danville where the R4-11 sign has been utilized. The 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD) allows for the use of either of the referenced signs to convey the message to road users of the potential presence of bicyclists within the traveled way. Further, the CA MUTCD defines the practice and application of the referenced signs as "guidance" or "options" and allows for engineering judgement to serve the roadway conditions.

As referenced in this comment, the Town of Danville utilized the R4-11 sign in conjunction with Shared Lane Markings or "sharrows" along a short roadway segment within its downtown. However, the prevailing conditions (on-street parking, frequent driveways, 25 mph speed limit, a short gap in the Class II bike lane network) of that particular segment vary significantly from the prevailing conditions on Diablo Road; the Town determined that the R4-11 sign was most appropriate for the combined downtown conditions.

Further, the letter states that the frequency of existing Shared Lane Marking (2014 CA MUTCD Section 9C.07) pavement legends (sharrows) that the Town added along Diablo Road in 2015 are inadequate and should be increased in frequency. In 2019, the Town installed additional shared lane markings on Diablo Road east of the Green Valley Road intersection to Calle Arroyo, adding to the existing network of shared lane pavement markings. The CA MUTCD prescribes "guidance" on the spacing of the Shared Lane Markings that allows for the latitude to apply engineering judgment appropriate to the roadway conditions. Currently, there are a total of 12 Bicycle Warning/SHARE THE ROAD sign assemblies and 36 shared lane pavement markings on Diablo Road between Green Valley Road and Avenida Nueva.

With regards to limited sightlines, the commenter suggests warning signs for driveways along Diablo Road. However, while the MUTCD (Section 2C.46) does provide for the option of "Intersection Warning Signs), Section 1A.13.94 specifically states that the junction of a road and a driveway is not an intersection, meaning new warning signs for such situations are not permitted.

The commenter notes that there are no Class II bike lanes on this stretch of Diablo Road, which is accurate. However, as explained in the Master Responses in Section 2.4.2, the installation of bike lanes is not feasible due to both cost and resulting environmental impacts. As noted above, the Town has intentionally not designated Diablo Road as even

a Class III bike route as there is an existing alternative route (Camino Tassajara to Blackhawk Road), which does provide Class II lanes and Class III markings for the entire distance.

The commenter raises concerns with the utility and safety of the existing path on the north side of Diablo Road between Green Valley Road and Calle Arroyo, beginning with the assertion that it does not qualify as a Class 1 bike path. Please refer to the Master Responses in Section 2.4.2 for additional discussion.

With regards to police enforcement, please refer to the Master Responses in Section 2.4.2.

The commenter suggests that the installation of radar speed display signs with changeable messages indicating "No Passing Bicyclists" should occur. Please refer to the Master Responses in Section 2.4.2.

The Town cannot exclusively prohibit passing of bicyclists along Diablo Road (whether it be another bicycle, motorized vehicle, etc.).

With regards to roadside hazards, please refer to the Master Responses in Section 2.4.2.

The commenter states that the condition of Diablo Road causes In-Vehicle Collision Alert Systems to activate. Such systems often activate under conditions that present no risk of collision. As explained in the Master Responses in Section 2.4.2, the vehicle accident rate on Diablo Road is below average.

The commenter suggests that lowering the speed limit to 25 mph would improve bicycle safety. Regulatory speed limits and speed zones are established according to California Vehicle Code (CVC) Sections 627, 22350, 22352 and 22358 (for local roadways). Speed limits are determined through Engineering and Traffic Surveys and are conducted per requirements mandated in CVC Section 627 and CA MUTCD Section 2B.13. Arbitrary lowering of posted speed limits is not allowed, and lowering of posted speed limits must be justified and in compliance with CVC Sections 627 and 22358 and CA MUTCD Section 2B.13. There is no survey or engineering data that would support lowering the speed limit consistent with the Vehicle Code.

**17A5** As indicated throughout this response, the RDEIR focuses on the potential impacts of the proposed project, not on the ultimate action to be taken by the Town Council. As set forth in the RDEIR, the project has no significant impacts on bicycle safety on Diablo Road. Based on this conclusion, there are no CEQA mitigation measures required or imposed. However, as explained elsewhere, the proposed project would construct more than 3,000 linear feet of off-street bicycle and pedestrian paths and dedicate easements to the Town that would create the opportunity for the Town to construct a path to the west. The combination of these two paths would be a contiguous, off-road bike/pedestrian trail paralleling the segment of Diablo Road described by the commenter.

The commenter also raises the question of where the proposed homes are to be located on the property, suggesting that spreading them out would reduce bike safety issues. Leaving aside the other potential environmental impacts of such a plan (addressed elsewhere), this suggestion would actually have the potential for making both vehicular and bicycle travel more difficult. The BLOS methodology looks at the number of driveways and intersections as a factor in evaluating bike safety. The greater the number of such conflict points, the less safe the main route is. Thus, adding additional driveways along Diablo Road to serve smaller numbers of homes would in fact make the road more dangerous. This was also a factor in the Town's initial review of the 2013 proposal for the site because any additional driveways or roadways add to the potential for vehicular conflict involved in turning motions.

## 17B: RESPONSE TO FLASHMAN LETTER ATTACHMENT (10/2/17)

**17B1:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

## 17C: RESPONSE TO MARYANN CELLA MEMO ATTACHMENT (UNDATED)

**17C1:** Please refer to the Master Responses in Section 2.4.1 regarding traffic (including TRAFFIX), Section 2.4.2 regarding bicycle safety (BLOS analysis and Diablo Road conditions), and Section 2.4.5 regarding hydrology.

**David Crompton**

| | |
|---|---|
| **From:** | Maryann Cella <maryann.cella@gmail.com> |
| **Sent:** | Wednesday, September 26, 2018 4:00 PM |
| **To:** | Randy Haberl |
| **Cc:** | Robert Combs; Mark Graham; Archie Bowles; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; David Crompton; Rob Ewing; lhumble@ddaplanning.com; Stuart Flashman; John Ciccarelli; Todd B. Gary; Clelen Tanner; jonpat@sbcglobal.net; CHARLES S WAITMAN; cklsouthard@sbcglobal.net; Anthony Geisler; Roger Tuma |
| **Subject:** | Answers to Planning Commission questions raised last night re: the Bicyclist Safety Analysis in the Magee Ranches DREIR |
| **Attachments:** | Proposed Thresholds of Significance for evaluating Bicyclist Safety Impacts from Magee Ranches project.pdf |

Hi, Planning Commission Chairman and Commissioners. Thanks again to Chairman Haberl for the extra time he allotted to several members of SOS-Danville Group last night to facilitate cohesive, succinct presentations. Thanks to all Planning Commissioners for their thoughtful and incisive questions concerning our presentations and the DREIR's methodologies, conclusions, and remaining uncertainties. We appreciate all the time and effort you volunteer for our community.

Here are our responses to some of the questions you raised last night:

1. **Cartrips generated by the project.** We were referencing the "nearly 1000" or "approaching 1000" number from the 2013 EIR. I attach a photo of the relevant page, which shows **949** cartrips generated, assuming 78 homes and and about 19 (25%) having attached second residential units. As Todd stated in his email earlier today, the **draft revised EIR shows 841 car trips per day,** which reflects the reduction in homes and related attached second units to 69 and 17. We apologize for creating confusion. A

2. **Diablo Road in context.** Other important numbers that bear emphasizing are the current car trips every day between Mt. Diablo Scenic Blvd. and Green Valley Road. I attach photos of the relevant pages from the 2030 General Plan. **In 2010, the cartrips were around 13,000 every day.** The bicycle trips are stated by the Danville Bicycle Advisory Committee to be about **100,000**. The conclusion from the RDEIR using Bicycle Level of Service is that Diablo Road between Green Valley and Avenida Nueva, just west of Mt. Diablo Scenic, **is BLOS D, currently acceptably safe for bicyclists**. That conclusion is patently wrong to anyone that regularly travels that segment, whether in a car or on a bicycle.

Using the inappropriate BLOS methodology to further claim that the additional hundreds of cartrips per day on that dangerous road will not significantly worsen the current situation only compounds the absurdity of the analysis. Can a bad situation never be made worse? **I would like to know how it can ever be acceptable to the Town in a truly dangerous situation----and this is one---- to make it any worse?** B

Please do not accept BLOS as an acceptable tool to measure bicycle safety. If the road is acceptably safe now, why do bicyclists mostly avoid it by traveling through the Diablo community? If the Town of Danville consider Diablo Road acceptably safe for bicyclists, why does the Town recommend that bicyclists avoid it by traveling through the Diablo community's residential streets (see email below from Andrew Jensen to Clelen Tanner, emphasis added) ? As Dave Campbell of Bike East Bay has stated, the perception among bicyclists of safety on Diablo Road is zero.

3. **SOS-Danville's recommendation for an appropriate way to measure bicyclist safety.** About a year ago, SOS's attorney sent a letter to Town staff (attached) with some options for measuring bicyclist safety. Please consider these options. We never received a response to the letter. C

We would be happy to meet individually with each of you to discuss this issue, review the information we have compiled, and let us show you important spots.

Thank you again for your concern for the safety and quality of life of those that live and travel within the Diablo Road corridor.

Sincerely,
Maryann Cella
SOS-Danville Group
925-980-6170

Dear Clelen,

Your request # 17-3913 was recently closed with an option to complete our customer service survey. The survey takes less than 60 seconds to complete and we would greatly appreciate your feedback.

Please click on the link below to access this online survey.
http://user.GovOutreach.com/danvilleca/survey.php?cid=3483168&access=6466653732363731

This is in reference to the Problem you submitted on 10/25/2017 5:51 PM
Description: For Diablo Road between Green Valley/McCauley and Scenic Mt. Diablo Blvd, is it permissible for a car to cross over the double yellow line to pass a bicycle traveling in the same direction?
Reason Closed: Hello sir,
In short, the letter of the law states no driver shall pass left of the double yellow lines with only limited exceptions (bikes not being one of them). That stated, this is more about courtesy than anything else. That is a challenging section of road and cyclist and motorist each share a part in making that section of road safe. Bikes should remain as far to the right as possible so vehicles can safely pass them. On Diablo, this can be a challenge in some sections that are narrow. **We recommend that cyclists use the bike trail from Green Valley and then divert through the Diablo area for optimum safety, however not all cyclists are willing to divert.** I have attached the vehicle codes for cars as well as bikes to this note for your reference.

Law Offices of
**Stuart M. Flashman**
5626 Ocean View Drive
Oakland, CA 94618-1533
(510) 652-5373 (voice & FAX)
e-mail: stu@stuflash.com

October 2, 2017

Mr. David Crompton,
Principal Planner
Town of Danville
510 La Gonda Way
Danville, CA 94526

Re: Magee Ranches Notice of Preparation for Revised Draft EIR

Dear Mr. Crompton,

I am writing on behalf of my client, SOS Danville Group ("SOS"), to comment on the Notice of Preparation ("NOP") for the Revised Draft Environmental Impact Report ("RDEIR") for the Magee Ranches development project ("Project") in the Diablo Road corridor. These comments are in addition to more specific comments that are being submitted by members of the group.

As the NOP acknowledges, the primary reason that the RDEIR is being prepared is that in *SOS-Danville Group v. Town of Danville et al.* a judgment was entered finding the prior EIR for the Project to be inadequate in its consideration of the Project's potential bicycle safety impacts. Consequently, the court ordered that the issue be revisited. In addition, the Town has wisely decided that since it has been five years since the prior EIR was prepared, several analyses, including specifically the traffic analysis, be revisited based on new data. SOS applauds that decision. However, as has been pointed out in other comments on the NOP, there are other changed circumstances and/or new information affecting several other aspects of the environmental review. The Town needs to carefully consider whether other portions of the EIR also need to be reconsidered and potentially revised.

Specifically in regard to the bicycle safety analysis, the prior EIR did not identify any threshold of significance for bicycle safety impacts. Especially given the direction provided by the court, it is important that the RDEIR identify specific thresholds of significance for bicycle safety impacts. SOS would like to suggest several thresholds that would be appropriate given the specific project, its location, and the surrounding circumstances.

The Project is located just south of Diablo Road and Blackhawk Road in Danville. Its main access from the roadway is just east of where Mt. Diablo Scenic Road turns off to the north, serving as the southern gateway to Mt. Diablo State Park. As a result, there is considerable bicycle traffic on both Diablo Road and Blackhawk Road, especially on weekends, from bicyclists heading to and from the Park.

Diablo Road/Blackhawk Road, despite only being a two-lane road with narrow to nonexistent shoulders, is one of Danville's major east-west thoroughfares and carries a significant volume of traffic both during the peak commute hours and on weekends.

Despite the large amount of bicycle traffic on the road, there are no bicycle lanes. This, plus the large amount of automotive traffic, the road's narrowness, and the fact that in some sections the road is both winding and hilly, already make it rather risky for bicyclists. Indeed, there have been several recent serious bicycle/automobile accidents along this corridor and connected roadways within the last five years.[1] All of these factors play into determining appropriate thresholds of significance for bicycle safety impacts.

SOS would recommend that the Town and its consultants review a Federal Highway administration publication, *Bicycle Road Safety Audit Guidelines and Prompt Lists* (FHWA-SA-12-018), which is available for download at: https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa12018/fhwasa12018.pdf. That publication highlights some of the deficiencies present in the Diablo Road/Blackhawk Road corridor as a route with significant bicyclist use. While the State of California does not yet have guidelines or standards for roadways carrying significant bicycle traffic, the State of New Jersey has issued a publication, *NJ DOT Bicycle Compatible Roadways and Bikeways – Planning and Design Guidelines* (available for download at http://www.state.nj.us/transportation/publicat/pdf/BikeComp/introtofac.pdf), that gives specific recommendations on making roadways bicycle safe. Given that the Magee Ranch will put additional auto traffic on this deficient corridor, the deficiencies in the Diablo/Blackhawk Road corridor need to be addressed in the RDEIR.

The Diablo/Blackhawk Road corridor's deficiencies for bicyclist safety make it important that the Town's bicyclist safety impact guidelines be formulated to provide an effective evaluation of the bicyclist safety impacts from placing additional auto traffic on that corridor. There is little question that the amounts of auto traffic, as well as the amount of bicyclist traffic, significantly affect bicyclist safety. In particular, especially given the fact that auto speeds are typically much higher than bicyclist speeds, there will always be a temptation for auto drivers to try and pass a bicyclist riding on the shoulder. Where the lanes and shoulders are wide enough and there is good visibility of oncoming traffic, this may not be a problem.[2] However, when one or more of these factors is suboptimal, a potentially unsafe situation occurs when an auto driver is behind a slower moving cyclist and there is not adequate room to pass without going into the oncoming traffic lane. The danger increases further when, as is the case with parts of the

[1] Copies of information on two such accidents are attached. The Town should obtain from the relevant authorities updated information on accidents, including specifically bicycle/automobile accidents along the Diablo/Blackhawk Road corridor.

[2] Current guidelines indicate a minimum 1 meter (~3 ft) minimum width for bicycle lanes or their equivalent, and 3.5 - 4 meters (11-13 ft) for traffic lanes. See, e.g., *The Effect of Road Lane Width on Cyclist Safety in Urban Areas*, A. Schramm et al. (2009), available at https://nacto.org/docs/usdg/effect_road_width_on_cyclist_safety_scramm.pdf. A listing of measured widths along portions of Diablo Road is attached hereto.

Diablo/Blackhawk Road corridor, hills and curves obstruct a driver's view of oncoming traffic. In those situations, even when there is a double yellow line, there is a significant risk of an impatient driver attempting to pass a bicyclist with potentially disastrous results.

In such situations, the risk to cyclists increases in proportion to: 1) the frequency of cyclists, 2) the frequency of cars heading in the same direction, and 3) the frequency of cars heading in the opposite direction. As each factor increases, the safety risk also increases. The risk can increase significantly well below vehicle/capacity ("v/c") ratios that would indicate traffic congestion. Even when the v/c ratios are well below 0.5 in both directions, it can be shown mathematically that the likelihood of an unsafe passing maneuver occurring on a section the length of that found on the Diablo/Blackhawk Road corridor (over 1 mile) would be significant. That this is true is also evident from the recent occurrence of multiple bicycle/auto accidents.

SOS could not find any study defining a threshold for when adding additional traffic to such a situation would significantly increase the hazard to bicyclists, but it seems obvious that once the risk to cyclists is significant (e.g., when the v/c ratio on both sides of the road is more than 0.3), adding more traffic will significantly increase the risk to cyclists. As a consequence of this and other factors, SOS would suggest that the following thresholds of significance be used in the RDEIR:

1) If the Project would add automobile trips to a two-lane thoroughfare that is already carrying significant volumes of automotive traffic (e.g., v/c of 0.3 or more in both directions), and is also carrying a significant amount of bicycle traffic (e.g., more than 20 bicyclists per hour) but does not have demarcated bicycle lanes;

2) If the Project would add more automobile trips to a two-lane thoroughfare that is already carrying significant volumes of automotive traffic (e.g., v/c of 0.3 or more in both directions) and has had two or more reported bicycle/automobile accidents within the past five years;

3) If the Project would add automobile trips to a two-lane thoroughfare carrying significant volumes of bicycle traffic where the thoroughfare, due to hills and/or curves, has segments of more than ½ mile in length where passing is prohibited (i.e., double yellow line) but where the shoulders and lanes are too narrow to allow 3-foot clearance between bicyclists and vehicle travel lanes.

4) If the Project, during its construction phase, would result in large, slower moving vehicles traveling along a two-lane thoroughfare without marked bicycle lanes but carrying a significant volume of bicycle traffic.

Under each of these conditions, the Project would have the potential to significantly increase the risk of bicycle accidents with automobiles and/or trucks – a significant adverse impact.

Triggering any of these thresholds should be considered to indicate that the Project has a potentially significant adverse impact on bicycle safety, and that mitigation measures and project alternatives that would reduce or avoid the significant impact must be considered.

Most sincerely,

Stuart M. Flashman

Stuart Flashman
Attorney for SOS Danville Group

Attachments: information on bicycle/auto accidents in the Diablo/Blackhawk Rd. corridor

# From the Danville San Ramon Updates: "Two bicyclists injured, one airlifted after being struck by motorist in Danville

06.22.2017.
Author: mac



UNINCORPORATED DANVILLE – Officers arrested a driver after he allegedly struck two bicyclists on Blackhawk Road Wednesday night.

At approximately 9:20 pm Wednesday, Deputies from the Contra Costa County Sheriff's Office were dispatched to a welfare check on Blackhawk Road in which the caller stated he had just hit something in the roadway, then fled the scene.

At the same time, the San Ramon Valley Fire Protection District received a call from a motorist, reporting that two bicyclists were down on Blackhawk Road, just east of Magee Ranch road.

Paramedics arrived at the scene and found two bicyclists with traumatic injuries. The driver of the vehicle reportedly followed an ambulance back to the scene after calling authorities.

One rider was airlifted by a CALSTAR air ambulance at a nearby soccer field. He was conscious and talking with paramedics. The other rider was transported to a hospital via ambulance.

Officers from the California Highway Patrol conducted a field sobriety test and subsequently arrested the driver of the vehicle.

The vehicle that reportedly struck the bicyclists, a red Volkswagen, appeared to have body damage on the left front panel.

Blackhawk Road remained open for the duration of the incident. Both bicycles at the scene appeared to be equipped with rear-facing red lights."

NEXTDOOR DIABLO WEBSITE, MARCH 14, 2015 Post in Crime & Safety

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## Car/Bicycle Accident on Diablo Road at Diablo Entrance 14 Mar 15

**Tom Wander from Diablo**

I am sad to say there was a car/bike accident this morning about 9:30 am in front of the entrance to Diablo. The bicyclist was taken to the hospital with face, head and, possibly, other injuries. The car driver, who appears to be at fault for inappropriately taken the right of way from the bicyclist, stopped briefly after seeing that the bicyclist had crashed and then continued on into Diablo per an eye witness of the accident. The bicyclist was going west on Diablo Road when the car turning left into Diablo, from Diablo Road onto Alameda Diablo, cut off the bicyclist who had the legal right of way. The bicyclist lost control and crashed into the white Mehran fence breaking two fence rails and sheering off the front fork of his bicycle. The car was reported to be a gray Mercedes. CHP is investigating based on the information provided by the Diablo Deputy Sheriff and the witness. If anyone has any additional information, please contact the CHP.

Edited on 14 Mar 15 · Shared with Diablo + 2 nearby neighborhoods in Crime & Safety

# DIABLO ROAD MEASUREMENTS* ON THE ONE-MILE WINDING SECTION BETWEEN THE ALAMEDA DIABLO/DIABLO ROAD INTERSECTION AND THE AVENIDA NUEVA/DIABLO ROAD INTERSECTION

| Location | North lane width | South lane width |
|---|---|---|
| 1.Behind 1904 La Cadena | 11 ft. 2 ½ in. | 12 ft. 1 in. |
| 2. Behind 1896 Alameda Diablo | 11 ft. 6 in. | 11 ft. 10.5 in. |
| 3. Behind 1872 Alameda Diablo | 11 ft. | 11 ft. 10 in. |
| 4. Behind 1872 Alameda Diablo at a curve where last fall a landscaper's truck and a car collided, and the truck then struck a power pole just north of the road. | 11 ft. 2 in. | 12 ft. 5 in. |
| 5. Behind 1842 Alameda Diablo where the south lane's edge is caved in. | 12 ft. 3 in. | 11 ft. 9 in. |
| 6. Behind 1826 Alameda Diablo | 11 ft. 7.5 in. | 11 ft. 3 in. |
| 7. Behind 1826 Alameda Diablo | 11 ft. 4.5 in. | 11 ft. 5.5 in. |
| 8. Behind 1826 Alameda Diablo at 30 mph sign by telephone pole | 12 ft. 7 in. | 10 ft. 9 in. |
| 9. Behind 1826 Alameda Diablo just before drain | 12 ft. 4.5 in. | 10 ft. 10 in. |
| 10. Behind 1826 Alameda Diablo at location of apparent crash into a telephone pole by a truck (wreckage and tire marks suggests it was a truck) | 12 ft. 1 in. | 11 ft. 3 in. |

| Location | North lane width | South lane width |
|---|---|---|
| 11. In front of 1783 Diablo Road | 12 ft. 7 in. | 11 ft. 10 in. |
| 12. Behind 1776 Alameda Diablo (site of 1990's $1 million slide repair involving subsidence of the north side of Diablo Road when the south bank of Green Valley Creek East Branch failed) | 12 ft. ½ in. | 11 ft. 5.5 in. |
| 13. Behind 1750 Alameda Diablo | 12 ft. ½ in. | 11 ft. 7 in. |
| 14. Behind 1734 Alameda Diablo at retaining wall | 12 ft. | 11 ft. 11 in. |

*All measurements were taken from the middle of the double yellow lines (yellow boxes) to the inside edge of the outside white lines. The measurements were done when the road was closed for nearly two days this past winter. The closure was due to the falling of a eucalyptus tree across both lanes of Diablo Road just east of the Alameda Diablo intersection. The tree's roots had apparently been destabilized by erosion from Green Valley Creek.

**N.B. We noted that there are almost no shoulders along this stretch!**

## 18: RESPONSE TO MARYANN CELLA – SOS-DANVILLE GROUP (2)

**18A:** This comment correctly indicates that the project would generate approximately 841 daily vehicle trips, as set forth on page 4.3-18 of the RDEIR, rather than 1,000.

**18B**: Please refer to the Master Responses in Section 2.4.1 regarding traffic and 2.4.2 regarding bicycle safety.

**David Crompton**

**From:** Maryann Cella <maryann.cella@gmail.com>
**Sent:** Thursday, October 4, 2018 2:59 PM
**To:** jonpat@sbcglobal.net
**Cc:** David Crompton
**Subject:** Re: Magee /Preserve/EIR

Further to Mrs. Isom's point, the Contra Costa County Flood Control Department has stated in letters to the Town (previously entered into the record for the Magee Ranches 2012 draft EIR) that the East Branch of Green Valley Creek does not have sufficient capacity to contain a 25 year flood event. A

Please enter this as a comment on the Magee Ranches DREIR.

Maryann Cella
SOS-Danville Group

On Thu, Oct 4, 2018 at 12:10 PM JON ISOM <jonpat@sbcglobal.net> wrote:

Danville Municipal Code 31-25.7

Under the Danville Municipal Code, (a) Major channels must have sufficient capacity for a a 50 year flood. (b) Secondary channels should be able to contain a 25 yr flood event (c) Minor drainage facilities shall be able to contain a 10 yr flood event.

With all of the construction that has occurred the last years, and the proposed construction, we believe that the down stream drainage will no longer comply with the Danville Municipal Code 31-25.7.

Pat Isom

## 19: RESPONSE TO MARYANN CELLA – SOS-DANVILLE GROUP (3)

**19A:** Please refer to the Master Responses in Section 2.4.5 regarding hydrology.

**David Crompton**

**From:** Maryann Cella <maryann.cella@gmail.com>
**Sent:** Monday, October 15, 2018 4:18 PM
**To:** David Crompton
**Subject:** Re: COMMENTS ON THE DREIR FOR THE MAGEE RANCHES PROJECT (NOW KNOWN AS THE MAGEE PRESERVE PROJECT)
**Attachments:** Richard Smith's comments about flooding in the St. Timothy's Church neighborhood.jpg

PLEASE ACKNOWLEDGE RECEIPT OF THESE COMMENTS. THANK YOU.

MARYANN CELLA

On Mon, Oct 15, 2018 at 4:14 PM Maryann Cella <maryann.cella@gmail.com> wrote:

Dear Mr. Crompton:

Please accept these comments on behalf of SOS-Danville Group.

We believe the draft revised EIR ("DREIR") is unacceptable in many respects.

**1. USE OF LEGALLY NON-COMPLIANT ANALYTICAL TOOL.** The DREIR's reliance on a Bicycle Level of Service ("BLOS") measurement to assess bicyclist safety impacts to the Diablo Road/Blackhawk Road corridor from the development's projected increased traffic does not comply with the Court's order. The order required that bicyclist safety, not BLOS, be assessed. They are two different things. BLOS does not directly address bicyclist safety. To the contrary, BLOS downplays bicyclist safety, only considering it as one of a number of components. Moreover, the BLOS doesn't even factor in bicyclists accidents (discussed in detail in the separately submitted Diablo Road Bicyclist Safety Report) or the fact that over 13,000 cartrips per day and 100,000 bicyclists per year share the especially dangerous Diablo Road segment (the "segment") between Green Valley and Mt. Diablo Scenic Blvd., the gateway to the Mt. Diablo State Park destination of most of the corridor's bicyclists. The sheer numbers of cyclists coupled with the huge numbers of cars show that cars and cyclists are constantly at risk of collisions in that the narrow, substandard road, does not allow for safety passing of slower-moving bicyclists almost anywhere on the entire segment. The addition of another 550 cartrips per day on the segment, will significantly heighten that collision risk. A

Why was the BLOS tool chosen? Apparently to counterbalance practically nonexistent bicyclist safety on the segment, which will be significantly worsened by the project, with other non-safety factors. **A fair assessment would conclude that any additional traffic in the segment should be considered to cause a significant negative bicyclist safety impact and therefore substantial mitigation (four-feet wide bicyclist-usable shoulders) should be required as a project condition of approval.**

The current lack of safety is most obvious on the approximately one mile beginning at Alameda Diablo and continuing to Avenida Nueva, at the Danville Town limit (the "mile"). The Town's BLOS evaluates that mile as BLOS "D", *acceptable* to the Town. Hard to believe. **Contradicting that absurd conclusion are the actions of the road bicyclists themselves. Obviously, they don't consider the mile safe in that perhaps 90% of the 100,000 bicyclists that use the Diablo Road corridor to reach and return from Mt. Diablo State Park every**

**year divert onto Calle Arroyo, and to a lesser extent, onto Alameda Diablo, both narrow residential roads in the Diablo community, rather than risk their lives in that mile.** They travel longer, circuitous residential roads most with no lane markings, stopping at several stop signs, to reach upper Alameda Diablo, where they use a short, unpaved path across private property to reach Mt. Diablo Scenic Blvd.. The return trip is done in reverse to avoid the mile. The only bicyclists that brave that mile, particularly on the uphill side heading east, are either (1) extremely strong cyclists; (2) from outside the Bay Area and don't know the mile and its dangers. After all, Mt. Diablo State Park is a must-ride for bicyclists from around the U.S., particularly since the Amgen Tour of California was recently held there for four years in a row; or (3) they have followed one of the bicyclist maps available on the internet that direct them to use the mile. (please see the maps included with our comments on the 2013 Final EIR) A Cont'd

The Town itself agrees with cyclists, except for purposes of the Town's DREIR. It recommends that cyclists divert onto residential Diablo community roads rather than the use the unsafe mile.

**The DREIR needs to be redone and recirculated using a fair and accurate assessment of the development's negative impacts on bicyclist safety.**

**2.** DIABLO ROAD IMPROVEMENTS NEEDED. The 4/1987 Final EIR for the Magee Diablo Ranch development stated as follows:

"Impact 6: The portion of Diablo Road most affected by cumulative traffic would the section from west of Mt. Diablo Scenic Boulevard to the to the beginning of the improved segment of Blackhawk Road. Single family homes front on this section of Diablo Road, making widening of the roadway or right-of-way infeasible. The overall condition of Diablo Road is substandard. Limitations of sight distance create hazardous conditions along portions of the roadway. Additional traffic would exacerbate safety problems. The City's proposed Capital Improvements Program would allocate approximately $700,000 for for [sic] repaving, some realignment work and the addition of wider shoulders along this length of road." (FINAL EIR page 1-44).

To date, the community is still waiting for completion of Diablo Road improvements promised as part of the approval of that 1987 project, now known simply as "Magee Ranch". To pay for those improvements, the Town created the Northeast Roadway Improvement Assessment District ("NERIAD") to tax owners of the new Magee Ranch homes. One such improvement project was Town of Danville Capital Improvement Project C-55B for the substandard Diablo Road segment between Green Valley Road and Mt. Diablo Scenic Blvd. It specified **uniform** 12 feet wide lanes, with **two-feet -wide shoulders**. Per a 1994 Town Council resolution, C-55B was accepted as having been completed per the plans, yet a comparison between the plans and the roadway between Green Valley and Mt. Diablo Scenic Blvd. **shows that the promised minimum two-feet wide shoulders were never built, and the lanes were not standardized to 12-feet widths.**

Amazingly and wrongly, the draft revised EIR's traffic impact analysis concludes that no improvements will be required for Diablo Road despite the additional project traffic expected (per the DREIR) to be 850 more cartrips per day, 65% heading west using Diablo Road (we believe it will be a greater percentage). The lack of road improvements is simply unacceptable. Let's start by requiring that the improvements promised over 30 years ago in Contract C-55B be part of any approval of this project, "Magee Ranch #2", and also require an additional 2 more feet of bicyclist-usable shoulders (bringing the total usable shoulder width to four feet on

each side, as requested for bicyclist safety in the above section #1.) on each side to account for the incredible bicyclist traffic----100,000 bicyclist trips per year--- that the road now carries, unimaginable 30 years ago. A Cont'd

**3. TRAFFIX BUSES COSTS RISING. REALISTIC ASSESSMENT OF TRAFFIC NEEDED** .According to press reports (submitted at the 9/25 Planning Commission hearing ) and the minutes of the January San Ramon Valley Unified School District Board meeting, due to rising costs there is a risk that the number of TRAFFIX buses serving 11 schools within the District might need to be reduced. According to my conversation on September 25th 2018 with San Ramon Valley Unified School District Board Director Ken Mintz, the SRVUSD will not be taking on the bus program to try to get lower costs. It is unclear what is happening now in that the buses are currently operating under a contract for only 2018-2019. Four schools accessed from the Diablo Road corridor are currently served by TRAFFIX---Green Valley Elementary, Vista Grande Elementary, Los Cerros Middle, and Monte Vista High Schools. The entire traffic study in the draft revised EIR is premised on the shaky assumption that TRAFFIX buses, in place for only 9 years, will continue forever. As it is, the Measure J funding for the program expires in 2034, and must be re-approved by County-wide vote. We believe the Town should require an assessment of traffic WITHOUT THE TRAFFIX SCHOOL BUSES so the decision-makers and the public may understand what will happen if they are discontinued, and what the increased harm from the project's 850 more cartrips per day will do then. B

**4. UNDERSIZED AND FAILING CULVERT FLOODING IMPACTS NEED TO BE ASSESSED, AND THE CULVERT NEEDS TO BE REPLACED**. The EIR fails to assess the new information that the 12 feet diameter failing culvert under Diablo Road just east of the Alameda Diablo intersection (according to estimates from the City Engineer, its capacity is about 1700 cfs) is too small to carry the expected peak flows in the East Branch of Green Valley Creek during a 100- year, 6 hour storm event, which the County Flood Department has recently determined will be 1879 cfs at the culvert. That's a shortfall of nearly 200 cfs, a LOT of water. The Project is expected to increase peak flow duration (see attached letter from Questa Engineering) during storms and would exacerbate the already-expected flooding. More analysis needs to be done.

Flooding is not a theoretical issue. During the 2013 review of this project, much evidence regarding existing, recurrent flooding downstream from the project was reported. An extensive Diablo- corridor -wide flood occurred in the winter of 1966 long before any of the hundreds of homes east of Mt. Diablo Scenic, were built. A resident of Roan Drive in the St. Timothy Church neighborhood has stated that the 1966 flooding "was so bad it reached the doorstep next to my house.... And filled the streets to the point that people were wearing rubber boots to get around the neighborhood." (see attached 2013 letter from Richard Smith) Longtime residents of the Diablo community report that floodwaters were running down Alameda Diablo, toward the main entrance. Quite possibly the two-small culvert built around 1960 by the County exacerbated the flooding that occurred in 1966. It simply is unacceptable to approve this project and just "hope for the best" regarding the too-small culvert. As a condition of any project approval, the culvert must be replaced with one of adequate size. The 2013 EIR required that the culvert be merely repaired. Don't waste money on just repairing culvert----replace it. C

**5. THE DREIR FAILS TO CONSIDER OTHER REASONABLE ALTERNATIVES TO THE CURRENT PROJECT AND WE BELIEVE IT SHOULD**. We understand that the Town is not legally required to consider all alternatives to the project. But the few alternatives chosen in the DREIR appear to be part of a strategy to make the alternatives D

look unreasonable, extreme, or undesirable compared to the project. Whose interest is being served by that? Only the developers and the landowners.

**a. One alternative is simply a reduced project size**. A reduced size would lessen all the negative project impacts. DREIR finds that the project will have a significant traffic congestion impact at the Diablo Road/Blackhawk Road/Mt. Diablo Scenic Blvd. intersection. The DREIR admits that a suggested mitigation of a traffic light at Mt. Diablo Scenic cannot be done by the Town because it has no jurisdiction over that intersection. We believe a signal would merely move the congestion to the next bottleneck at Green Valley Road. **In any case, however, the Town Planner David Crompton admitted at the 9/25/18 Planning Commission hearing that Contra Costa County, which has jurisdiction over that intersection, "is not inclined to install a signal".** **Please explain why the DREIR did not so state**. Commissioner Heusler elicited that statement from Mr. Crompton at the September 25th Planning Commission hearing when she asked him what progress had been made since the project's 2013 approval in getting the County to agree to install a Mt. Diablo Scenic Blvd./Diablo Road intersection signal.

So, why not simply reduce the number of homes to reduce the traffic impact, along with all the other impacts? **PLEASE STATE HOW MANY HOMES WOULD HAVE TO BE REMOVED FROM THE PROJECT TO REDUCE THE IMPACT TO 'LESS THAN SIGNIFICANT' AT MT. DIABLO SCENIC BLVD.?** Impacts to bicyclist safety would also be reduced. So would impacts to flooding downstream.

**PLEASE CONSIDER THIS REASONABLE ALTERNATIVE. PLEASE STATE HOW MANY HOMES WOULD HAVE TO BE REMOVED FROM THE PROJECT TO BRING THE IMPACT AT MT. DIABLO SCENIC TO "LESS THAN SIGNIFICANT" UNDER THE TOWN'S STANDARDS FOR SIGNIFICANT IMPACTS?**

D Cont'd

**b. Another alternative is the following:**

Create separate locations for clusters of homes, as suggested by the 2030 General Plan, within each land use designation instead of concentrating almost all of the development potential from the entire 400 acre ranch on 30+ contiguous acres of the Agricultural Open Space portion. Keep the Agricultural Open Space land in that use. The project puts 66+ of its 69+ homes on the Magee East portion accessed from Blackhawk Road. That serves only the interests of 2 parties: Davidon Homes, and the land owners. They want the easiest, cheapest, most easily accessible land to put all the homes. Theirs is not the same interest as that of local residents and those that travel through the corridor. Developing that 30+ acres will MAXIMIZE THE NEGATIVE ENVIRONMENTAL IMPACT FROM THE PROJECT on local residents and local travelers. The project's transfer to the Ag. Land of all the homes that could theoretically be built elsewhere on the 400 acre ranch ensures that all of the 69+ homes will be built. Otherwise, most surely would never be built.

Here's specifics:

(1) for the 200 acres of Agricultural Open Space use and General Open Space use land: keep as is, with A-4 zoning; only 9 homes on twenty acre lots would be possible, and most would never be built.

(2) for the other 200 acres of mostly Rural Residential use land, including a small, 5-acre parcel across from Clydesdale Drive designated for Single-family, low-density use, most of which lies in a canyon south of the project's intended primary location: only 43 potential homes could theoretically be built on all of those acres under existing zoning; most would never be built due to the geotechnical challenges and economics. If the 125 acres of Rural Residential parcels to the south of the Ag. Parcels were rezoned to P-1, a maximum of 19 homes could be built (according to the Town's "five-acre study"). Any homes built on those parcels could be accessed from the four-lane road Camino Tassajara instead of from the Diablo/Blackhawk road corridor, greatly reducing traffic congestion and bicyclist safety impacts. Only a few would ever be built on the Rural Residential and Single-family low-density parcels along the Diablo Road hillsides---cluster those in one spot, perhaps in the single-family –low-density -designated area across from Clydesdale Drive; most of those theoretically possible homes wouldn't be built. A traffic signal could be used for their access road, which has been requested by some Clydesdale residents as a safety measure due to the many accidents that occur at that intersection and the difficulty of ingress and egress from Clydesdale. Under that reasonable alternative, there would be far fewer homes built and thus far fewer environmental impacts to traffic, particularly Diablo Road corridor traffic, bicyclist safety, flooding and erosion, emergency evacuation and response times in the Diablo/Blackhawk Road corridor; and critical habitat of endangered species.

D Con'td

Instead of this reasonable alternative, the Town continues to press the false narrative in the EIR that the only real alternatives are "do nothing", the project "as is"---transferring all the 400 acres of potential homes to the Agricultural Open Space parcels, or "5- acre lots" sprawled across the 400 acre ranch, which requires upzoning the Ag. parcels to A-2, one home per five acres density, to allow for 35 homes, then transferring all the potential homes from the other 200 acres of the ranch to the Ag. Acres, to allow a total of 66 homes +7 second residential units to be built on the Agricultural Open Space parcels.

5 acre lots across the entire 400 acres of hilly, slide-ridden, stream and spring crossed, geotechnically-challenged ranch simply would never happen and needn't happen. The project's transfer of all potential homes to the Ag. Open Space parcels closest to Blackhawk Road ensures that nearly 69 of the possible 78 homes that could theoretically be built across the 400 acre ranch *will be built*. **Please do not accept the current project as the best alternative.**

**6. <u>REMOVE THE 3 "MAGEE WEST" HOMES FROM MCCAULEY ROAD. THE DREIR FAILS TO SUFFICIENTLY CONSIDER THE EXISTING DANGERS IN THAT AREA AND WHAT THE INCREASED CONFUSION/DANGER OF ADDING EAST-SIDE MCCAULEY ROAD TRAFFIC INTERSECTIONS WILL DO.</u>**The Planning Commission wisely removed those 3 Magee West homes from the project when they approved it in 2013. The Town Council added them back in when they subsequently approved the project. The 24-home development potential from the parcels of the ranch comprising the "Magee West" portion of the project have already contributed substantially to enable 66+ homes to be built on the "Magee East" portion of the project. The 3 remaining Magee West McCauley Homes will further complicate an already dangerous segment of McCauley Road. That segment is the sole ingress and egress from the 200-home Hidden Valley neighborhood; it is the sole ingress and egress for the Green Valley School primary parking lot; children, parents, teachers, staff, and many other pedestrians walk across or in the vicinity of that small segment; cars even do u-turns to

E

avoid the congested Diablo Road intersection nearby; a fire station is between the parking lot and Diablo Road. There is too much congestion already! As one of the Planning Commissioners said, the developer already has plenty of homes. Those three extra are three too many.

E Cont'd

Thank you for your consideration of these comments.

Sincerely,

Maryann Cella, on behalf of SOS-Danville Group

April 23, 2013

I apologize for not being able to read the following in person, but I have a family commitment that prevents me from attending tonight's meeting.

As a representative of the St. Timothy neighborhood of over one hundred homes I try to keep my neighbors informed about the Summerhill proposed projects.

In that capacity I want to make two points, first, please consider installing a traffic control light at the corner of Diablo and Clydesdale. I have witnessed accidents at that location that could have been avoided with the proper controls. I have also watched in fear as trucks and cars have on occasion come to a screeching stop inches from my rear bumper while I was waiting for that space between cars.

I myself came within seconds of taking out a motorcyclist as it looked like there was a space behind a car coming west and I was ready, as you have to be, to take advantage of a space between cars to gun it into the St. Timothy neighborhood. I still think about how close that call was.

The above also illustrates the degree of difficulty that driving on Diablo is during many busy hours with existing traffic patterns.

The second point is in regard to potential flooding. I have confirmed that a flood in 1966, long before many homes east of Clydesdale were built, a flood occurred in our neighborhood that was so bad it reached the doorstep next to my house at 166 Roan Dr. and filled the streets to the point that people were wearing rubber boots to get around the neighborhood.

I apologize if I missed it or didn't understand the wording but I couldn't find anything in the Environmental Report that properly addresses the possibility of that being properly addressed in the past or in the future with the additional homes built since that time much less the proposed Summerhill Project.

Thank you for your proper consideration for these matters.

Richard J Smith

Richard Smith
166 Roan Dr.
Danville, CA
94526

838-7142
smithe5@sbcglobal.net

## 20: RESPONSE TO MARYANN CELLA – SOS-DANVILLE GROUP (4)

**20A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**20B:** Please refer to the Master Responses in Section 2.4.1 regarding TRAFFIX.

**20C:** Please refer to the Master Responses in Section 2.4.5 regarding hydrology, which address the culvert.

**20D:** Please refer to the Master Responses in Section 2.4.6 regarding alternatives.

**20E:** Please refer to the Master Responses in Section 2.4.6 regarding alternatives.

**David Crompton**

**From:** Maryann Cella <maryann.cella@gmail.com>
**Sent:** Monday, October 15, 2018 4:50 PM
**To:** David Crompton
**Subject:** COMMENTS ON THE DREIR FOR THE MAGEE PRESERVE PROJECT

Dear Mr. Crompton:

Please accept these comments on the DREIR for the Magee Ranches project, now called the Magee Preserve project.

THE MAGEE PRESERVE PROJECT DREIR FAILS TO ACCOUNT FOR THE 2030 GENERAL PLAN'S REQUIREMENT OF A LAND USE DESIGNATION CHANGE FROM AGRICULTURAL TO A RESIDENTIAL DESIGNATION. THE PROJECT REQUIRES P-1 ZONING, WHICH IS **NOT CONSISTENT WITH THE AGRICULTURAL LAND USE DESIGNATION**. THUS, THERE NEEDS TO BE A REDESIGNATION OF AGRICULTURAL LAND TO A RESIDENTIAL LAND USE. ACCORDINGLY, THE DREIR FAILS, AND MUST BE REVISED AND RECIRCULATED. ONCE SUCH A LAND USE DESIGNATION CHANGE IS APPROVED BY THE TOWN COUNCIL, A MEASURE S VOTE WILL BE REQUIRED. HERE IS WHY:

1. The 2015 Court of Appeal decision in SOS-Danville Group v. Danville Town Council was decided under the 2010 General Plan, which is no longer in effect. In that case, the trial court ruled that the Council had violated CA Planning and Zoning law in its circumvention of Measure S by rezoning Agricultural Open Space Land to an inconsistent Residential ("P-1") zoning. The Court of Appeal reversed, but did not rule that Measure S didn't apply, rather it only ruled that the Council had not "abused its discretion" (a very forgiving standard of review) in doing the "problematic" rezoning of Ag. land to a a Residential zoning, which had the effect of circumventing Measure S.

2. The Magee "Preserve" project application is being reviewed under the 2030 General Plan, passed in 2013. **As stated above, the court case was decided under the 2010 General Plan, which is no longer applicable.** The Town is now considering whether the *2030 General Plan* allows the rezoning of Ag. land to P-1 zoning. In 2012, when the Magee Ranches project was under review, the Town attempted to add P-1 zoning as an allowable Ag. zoning in the draft 2030 General Plan. At the 2013 hearings on the 2030 Plan, and in a substantial number of public comments and legal opinions submitted at that time, SOS-Danville Group, with supporters from all over the Danville area, opposed that addition, so as to protect Measure S and prevent the Town from circumventing it. A

**PLEASE INCORPORATE BY REFERENCE TO THESE COMMENTS ALL THE COMMENTS, LEGAL OPINIONS, AND ORAL COMMENTARY SUBMITTED ON THE DRAFT 2030 GENERAL PLAN , AND AT THE HEARINGS THEREFORE, INCLUDING THE FOLLOWING EMAIL EXCHANGE BETWEEN MARYANN CELLA/SOS-DANVILLE GROUP AND THEN-MAYOR NEWELL ARNERICH.**

The Town backed down, and the P-1 zoning addition to the Ag. land use category was removed before the 2030 General Plan was passed by the Town Council. It appeared that SOS-Danville Group and its supporters had succeeded in preventing the Town from adding P-1 as a consistent zoning for Agricultural Open Space land.

Fast forward to 2018. Now the Town is arguing that even though it took P-1 OUT OF THE 2030 GENERAL PLAN as an allowable Ag. zoning, P-1 is still allowable, and Measure S can therefore be circumvented !! Such behavior is further evidence that the Town cannot be relied upon to deal fairly and honestly with its residents.

The Town plans to again circumvent a Measure S public vote, and is now asking that we rely on its promise that the Magee "Preserve" development project will "preserve" land. We cannot do that.

A Cont'd

We believe that a Measure S public vote is required for the Magee "Preserve", i.e. "Ranches", development project. Thank you for your consideration of these comments.

Sincerely,
Maryann Cella
SOS-Danville Group

**Newell Arnerich <Arnerich@danville.ca.gov>** Mar 15, 2013, 6:38 AM

to **Robert**, me

Dear Maryann,

Thank you for your email. I believe we are in agreement. Thank you for your efforts and I look forward to further discussing your issues at the Magee Ranch public hearing. Thank you.

[http://static.ideasunplugged.com/signature/s_038/t_1fre4p.jpg?v=29]
Best regards,

Town of Danville

Newell Arnerich, Mayor
t. 510.366.0716 cell
e-mail: Arnerich@Danville.ca.gov<mailto:Arnerich@Danville.ca.gov>
http://www.danville.ca.gov/Danville-Today/
Contra Costa County Mayors Conference, Exec. Committee
Tri-Valley Transporation Council, Chair
CCTA, Contra Costa Transportation Authority, Board Member
TRAFFIX Board Member
Central Contra Costa Solid Waste Authority Board Member
iGATE Inovation Hub, Board Member
Discovery Counseling Center, Board Member
Leadership San Ramon Valley, Board Member
Danville Finance Committee, Chair
San Ramon Valley Unified School District Liaison Committee
San Ramon Valley Street Smarts Committee, Board Member
Danville Area Chamber of Commerce Liaison Committee
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510 LaGonda Way
Danville, CA 94526

"Small Town Atmosphere Outstanding Quality of Life"

P Please consider the environment before printing this email. This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you are not the recipient or the person responsible for delivering the email to the intended recipient, be advised that you have received this email in error, and that any use, dissemination, forwarding, printing or copying of this email is prohibited. This is sent from my iPhone .

On Mar 14, 2013, at 1:31 PM, "Maryann Cella"
<maryann.cella@gmail.com<mailto:maryann.cella@gmail.com>> wrote:

Dear Mayor Arnerich,
I'm writing to you on behalf of SOS - Danville to clarify the format of the March 19th public hearing on the draft 2030 General Plan. You had previously indicated that at that hearing three groups, including SOS - Danville, would be given a dedicated slot of time totalling 15 minutes to present their concerns.
Mike Arata of the Friends of Danville group has now told me that he was informed that the Council believes that the revisions to the draft General Plan noticed just prior to the March 5th hearing fully satisfy the concerns SOS - Danville has raised about the Draft General Plan and that the Council therefore thinks that SOS-Danville will not need a dedicated timeslot. Could you please confirm that this is the Council's understanding? If so, SOS-Danville will cooperate by withdrawing its request to be included with Friends of Danville and Citizens Townhall in the dedicated presentation time.
Thank you.

Maryann Cella
SOS-Danville Steering Committee member

...

[Message clipped] View entire message

## 21: RESPONSE TO MARYANN CELLA – SOS-DANVILLE GROUP (5)

**21A:** Please refer to the Master Responses in Section 2.4.3 regarding Measure S and Open Space.

## Leianne Humble

**From:** Maryann Cella <maryann.cella@gmail.com>
**Sent:** Saturday, November 17, 2018 2:14 PM
**To:** David Crompton; Rob Ewing
**Cc:** rhaberl@danville.ca.gov; Kerri Heusler; Paul Radich; Andrew Verriere; rcombs@danville.ca.gov; mgraham@danville.ca.gov; abowles@danville.ca.gov; dhavlik@danville.ca.gov; Leianne Humble; Sabbs@davidonnewhomes.com; Newell Arnerich; Robert Storer; Karen Stepper; Lisa Blackwell; Renee Morgan
**Subject:** Questions and a Public Records Act request related to the Magee Ranches project

Hi, David and Robert.

1. Please respond to my question from several weeks ago:

How many fewer homes (the current plan is for 66 homes plus 7 second residential units) would there need to be on the Magee East portion of the Magee Ranches project for its significant traffic impact at the Mt. Diablo Scenic Blvd./Diablo Road/Blackhawk Road intersection to be reduced to "less than significant" under the Town's chosen Threshold of Significance? A

2. Pursuant to the Public Records Act, please send me, for the years 2010 to the present, all correspondence, documents, emails, letters, notes (including phone call notes), and records involving or pertaining to the following:

Danville Bicycle Advisory Committee (also known as "DBAC")
Valley Spokesmen
Bike East Bay
Al Kalin
Jeff Eorio
Steve Whelan
Dave Campbell

3. Pursuant to the Public Records Act, please send me, for the years 2013 to the present, all correspondence, documents, emails, letters, notes (including phone call notes), and records involving or pertaining to the following: (a) bike safety improvements on Diablo Road anywhere between Green Valley Road and Diablo Creek Place; (b) a potential hillside trail south of Diablo Road;
(c) bicyclists traveling in the Diablo Road corridor, including bicyclists avoiding dangerous Diablo Road by traveling through the Diablo residential neighborhood (on Calle Arroyo, Alameda Diablo, or Avenida Nueva). B

4. Pursuant to the Public Records Act, please send me all correspondence, documents, emails, letters, notes (including phone call notes), and records involving or pertaining to the following:
the signal proposed in the draft revised EIR to be installed by the County at the Mt. Diablo Scenic/Blackhawk Road/Diablo Road intersection (which is under County jurisdiction).

I note that at the September 25th, 2018 Planning Commission Magee Ranches hearing, David Crompton stated in response to a question from Planning Commissioner Heusler that the County "is *not* inclined" to install a signal at that intersection. Nonetheless,the draft revised EIR holds out the prospect of such a signal, stating that were such a signal to be installed it would mitigate the significant traffic impact at that intersection to "less than significant". C

Thank you for your assistance. I hope you have a happy Thanksgiving holiday.

Sincerely,
Maryann Cella

## 22: RESPONSE TO MARYANN CELLA – SOS-DANVILLE GROUP (6)

**22A:** Please refer to the Master Responses in Section 2.4.6 regarding alternatives.

**22B:** The second and third paragraphs of this letter comprise a Public Records Act request rather than comments on the RDEIR.

**22C:** Please refer to the Master Responses in Section 2.4.1 regarding traffic.

## David Crompton

**From:** Chris Cesio <ccesio@yahoo.com>
**Sent:** Monday, October 15, 2018 7:47 AM
**To:** David Crompton
**Cc:** Archie Bowles; Robert Combs; Mark Graham; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; Rob Ewing; Newell Arnerich; Robert Storer; Karen Stepper; Lisa Blackwell; Renee Morgan
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government. That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead is designed to benefit only special interests---the developers and landowners. The project will be a very negative change to our community.

Respectfully,
Chris Cesio

133 Clydesdale Dr
Danville, CA 94526

925-325-0606

## 23: RESPONSE TO CHRIS CESIO

**23A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Bjoern Christensen <bjoern@nuvve.com>
**Sent:** Saturday, October 13, 2018 4:48 PM
**To:** David Crompton; Archie Bowles; Robert Combs; Mark Graham; Randy Haberl; hkheusler@danville.ca.gov; Paul Radich; Andrew Verriere; David Havlik
**Subject:** Magee Preserve Project

Lady and Gentlemens,

Our family moved from South Bay to Danville in 2013 after careful planning for more than a year.

Key parameters for our decision were the good schools, the beautiful environment, living in nature (close to Mt. Diablo) and the daily traffic situation.

However, we have since experienced that when we drive to our respective work places including bringing our 8 year old son to school, the traffic is backed up from the crossing of Blackhawk Road to Mt. Diablo Scenic Blvd. almost the way to the entrance of Hidden Oaks.

It often taks us 8-10 minutes from Still Creek Rd. just to get to the intersection Blackhawk Road to Mt. Diablo Scenic Blvd. not to mention to get to the 680. We often count more than 100 cars waiting in line to get to the intersection. A

Adding more traffic to the small and winding road will make the traffic situation worse not to speak of lack of natural resources like water may be a big issue in the years to come due to the warming of the climate. We have not forgotten the last drought as a forewarning of what to come maybe even more extreme.

We fail to understand why the Town of Danville considers the development of additional 66 homes in this area and what is the incentive. B

We implore the commission to vote no on this ill conceived project.

With regards,

The Christensen Family,
2363 Fish Creek Place
Danville

## 24: RESPONSE TO BJOERN CHRISTENSEN

**24A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic. As explained in that response, Mitigation Measure 4.3-1 would improve AM peak hour LOS at the Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard intersection from its current LOS E to LOS A, substantially reducing existing westbound AM delays.

With respect to water supply, as described in RDEIR Appendix A, pages 65 to 66, EBMUD has adequate water supply to serve the project, which would be required to comply with the latest water conservation measures of California Building Code Title 23, including the Model Water Efficient Landscaping Ordinance.

**24B:** The comment does not raise a significant environmental issue and, therefore, does not require response in this Final REIR. The comment is part of the project record and will be available to decisionmakers.

| | |
|---|---|
| **Subject** | Magee Preserve Revised Draft Environmental Impact Report (RDEIR) |
| **From** | John Ciccarelli, Bicycle Solutions |
| **To** | Planning Commission, Town of Danville |
| **Date** | September 25, 2018 |
| **Agenda Item** | 4.2 – Magee Preserver Revised Draft EIR |

Good evening, Chair and Commissioners.

My name is John Ciccarelli. I am the owner of Bicycle Solutions, a bicycle and pedestrian planning, design and safety consultancy based in San Francisco.

During my 25-year transportation I've worked on many bicycle and active transportation master plans, corridor, interchange, intersection and trail studies, and safety analyses. For 16 years I was a statewide engineering evaluator with UC Berkeley's Tech Transfer program. I served 10 years on the national Bicycle Technical Committee and 4 years on the California Traffic Control Devices Committee.

SOS-Danville asked me to advise on safety and potential improvements to Diablo Road between Green Valley Road and the proposed Magee Preserve development. I drove, bicycled and walked the entire corridor, and observed, photographed and measured cross sections east of Alameda Diablo.

I agree with the conclusions of Stuart Flashman's letter regarding the inappropriateness and misleading calculation of Bicycle Level of Service (BLOS) for evaluating the existing and with-project level of risk to bicyclists on Diablo Road. I will not repeat those points. Instead, I would like to focus on the segment with the poorest conditions and safety for bicyclists -- the narrow curving stretch between Alameda Diablo and Avenida Nueva.

A
see
responses
to next
letter

The RDEIR's Traffic Impact Analysis (Appendix E) tabulates lane and shoulder widths. This segment has 12-foot lanes but almost no paved shoulder. As Clelan Tanner has described, bicyclists either hug the edge – which invites unsafe passing, or claim the lane but deal with impatient motorists -- especially while ascending slowly eastbound.

On this segment there is also 4 feet of mostly unpaved shoulder on the north side and a 4-foot ditch on the south side -- roughly 32 feet fence-to-fence. A relatively low-cost improvement would dramatically improve safety and operations for both bicyclists and motorists. Paved shoulders just 4 feet wide would let motorists pass bicyclists with the legal 3-foot clearance without crossing the centerline. A 12-foot lane accommodates a 7-foot wide SUV and 3-foot clearance with 2 feet to spare. This only requires 32 feet of pavement – 4+12+12+4. Add just 4 more feet for a

replacement ditch (or an in-roadway trench drain) and you'd have the bicycle safety that the court wanted the EIR to address. And we're not talking about a huge expensive retaining wall.

The philosopher Voltaire said, "The best is the enemy of the good". This applies directly to bicycle safety on this stretch. Here's why.

The County's Two-Lane Rural Road Guidelines which has a table that relates lane and shoulder widths to daily traffic volume. I've attached it to these remarks. At just 1,000 trips a day it calls for 4-foot shoulders. At over 6,000 trips the table specifies 8-foot shoulders, but those are intended for getting disabled vehicles off the road. There's no need for 8 feet for bicycle safety – 4 feet will do, and nationwide engineering standards support this.

Interestingly, the Town actually drew up construction plans for adding paved shoulders to Diablo Road, but these were never implemented.

A Cont'd

Danville is also studying the concept of a hillside trail along Diablo Road. Such a trail – with its steep grades and probable switchbacks – will not attract the bicyclists who use Diablo Road to access Blackhawk and Mt. Diablo. Steep grades would create conflicts between fast downhill bicyclists and other trail users. It might be pleasant for walking, but would be awkward for everyday utility bike trips.

To conclude, I believe that the Planning Commission should find that:

- the RDEIR's use of Bicycle Level of Service does not correctly respond to the Court's directive to focus on bicycle safety
- the proposed development should fund these cost-effective improvements on Diablo Road to mitigate its significant increase in daily vehicle trips and to squarely and address the bicycle safety concern and– namely, adding 4-foot or wider shoulders at least as far west as Alameda Diablo.

I want to thank the Commission for its time, and for its diligence in ensuring that the Revised DEIR squarely addresses this issue that is so important to the residents of Danville and the many people that visit the Town.

###

PUBLIC WORKS DIRECTOR

March 11, 2014

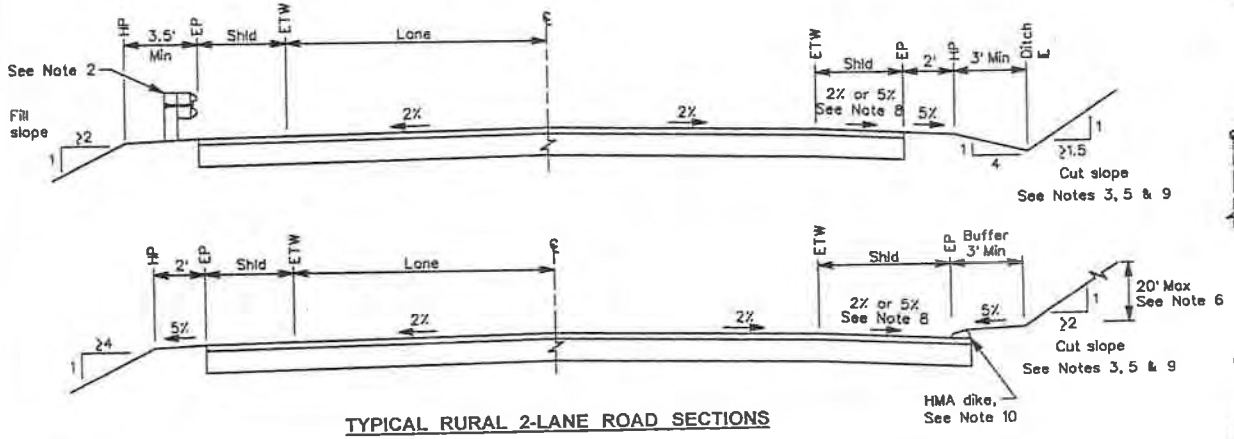
PLANS APPROVAL DATE

The County of Contra Costa or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

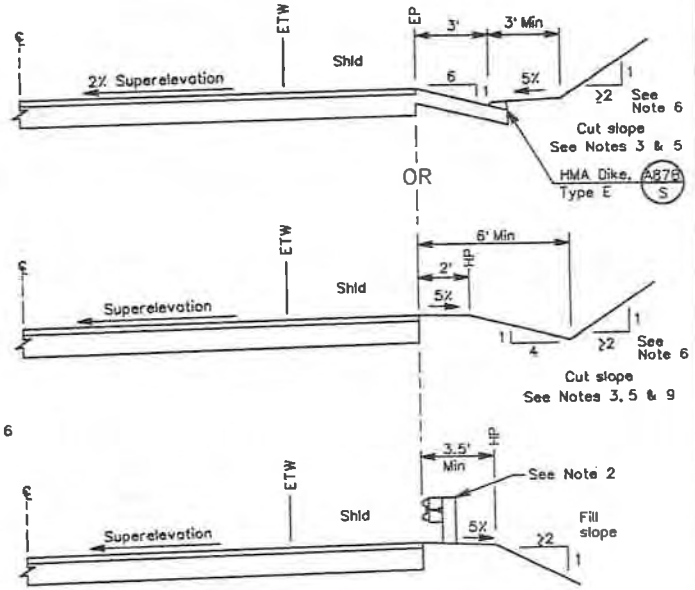
REGISTERED PROFESSIONAL ENGINEER — JULIA R BUEREN — No. 37937 — CIVIL — STATE OF CALIFORNIA

## MINIMUM TWO - LANE RURAL SHOULDER/LANE WIDTHS

| | ADT<200 | <400 | <1000 | <3000 | <6000 | >6000 |
|---|---|---|---|---|---|---|
| Shld/Lane/Lane/Shld | 1'/11'/11'/1' See Note 4 | 2'/11'/11'/2' See Note 4 | 4'/12'/12'/4' | 5'/12'/12'/5' | 6'/12'/12'/6' | 8'/12'/12'/8' |
| TOTAL PAVEMENT WIDTH | 24' | 26' | 32' | 34' | 36' | 40' |




TYPICAL RURAL 2-LANE ROAD SECTIONS




TYPICAL RURAL 2-LANE ROAD SUPERELEVATED SECTION

### NOTES:

1. These guidelines do not override County Ordinance Code requirements for development projects. Based on various factors such as accident history, alignment and traffic speed, the County Traffic Engineer may require paved shoulders wider than these minimums in isolated locations or for long segments of roadway.
2. Guardrail may be required, depending on embankment height and steepness of slope. (See Chapter 7 of the California Department of Transportation's Traffic Manual).
3. Distance to cut slope from ETW shall be increased for sight distance in curves. (See Chapter 200 of the California Department of Transportation's Highway Design Manual).
4. Paved shoulders shall be 4', if shoulders are designated as bike lanes.
5. A wider swale and/or buffer between toe of slope and roadway should be considered where there is potential rock fall, the slope is highly erosive or there is significant longitudinal surface flows.
6. If cut slope is > 20' vertically to bench or top of cut, buffer width shall be increased.
7. Design ADT shall be approved by the Public Works Department.
8. 5% cross slope for shoulders greater than 4 ft wide, typical.
9. Cut slopes steeper than 2 horizontal to 1 vertical require geotechnical engineer's approval.
10. HMA dikes shall be Type E or F per A87B S or as specified on the plans.

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

COUNTY OF CONTRA COSTA
PUBLIC WORKS DEPARTMENT
MARTINEZ, CALIFORNIA

STANDARD PLAN

# TWO LANE RURAL ROAD GUIDELINES

SCALE: NO SCALE | DATE: 3/14

DRAWN BY: L. COSTA | PLAN NO CA53

CHECKED BY: M. HOLLINGSWORTH

STD. PLAN CA53

# High Volume Roadway Drains

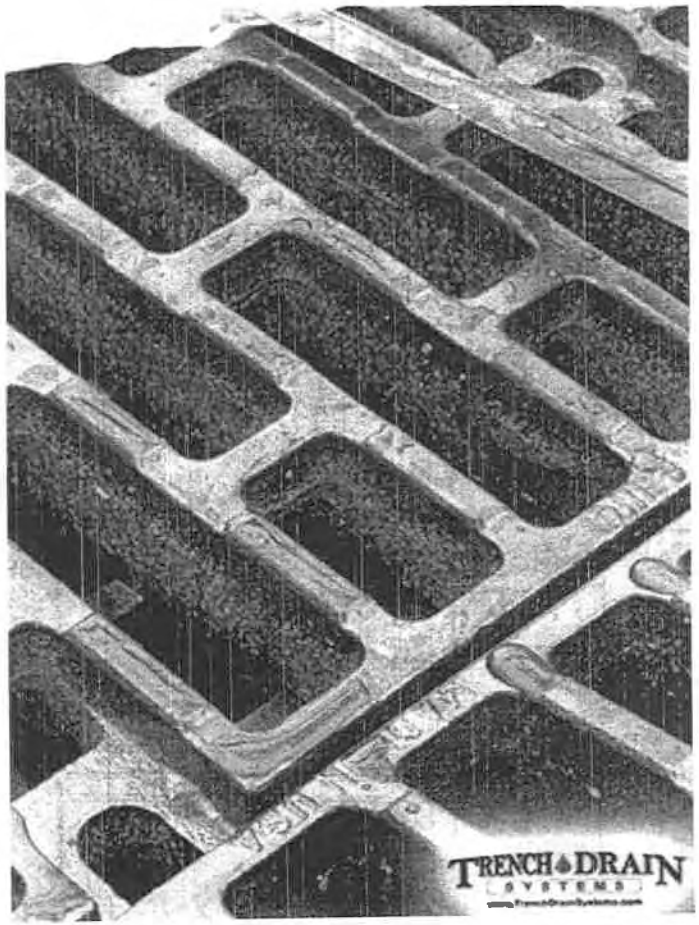
Request Quote Now

## Road Drain Considerations

**Water flow rates**

Drain size should be large enough to accomodate size of area and rainfall amounts for the region

Trench drain systems for highway use need to be approved by the Department of Transportation of the local State. The approved products from state to state are similar and have a few similar properties.




### Think about this:

- **High Strength Grating.** Class D load requirements are a standard specification. Government projects will need to meet AASHTO or DIN load standards.
- **Open Area.** The more open space which a grate has, the more water that drain can handle until the channel physically reaches its capacity.
- **High flow capacity.** The first criteria in designing a trench drain system is to determine what capacity is required to handle a large storm. For large watershed surfaces, large capacity drains are required.
- **Cleaning.** Bolt-down systems increase a trench drain's strength but also make maintenance harder. If possible, choose a drain that offers cleanout sections.



### Where to find Roadway Trench Drains:

- Toll booths
- Weigh stations
- Tunnel entrances / exits
- Roadside shoulders

Got a Question?

Give us a call!
610-638-1221

**From:** John Ciccarelli <johnc@bicyclesolutions.com>
**Sent:** Monday, October 15, 2018 3:39 PM
**To:** David Crompton <dcrompton@danville.ca.gov>
**Cc:** abowles@danville.ca.gov; rcombs@danville.ca.gov; mgraham@danville.ca.gov; kheusler@danville.ca.gov; pradich@danville.ca.gov; averriere@danville.ca.gov; dhavlik@danville.ca.gov; rewing@danville.ca.gov; narnerich@danville.ca.gov; rstorer@danville.ca.gov; kstepper@danville.ca.gov; lblackwell@danville.ca.gov; rmorgan@danville.ca.gov; Leianne Humble <lhumble@ddaplanning.com>; sabbs@davidonnewhomes.com
**Subject:** RE: John Ciccarelli comments on Magee Preserve RDEIR -- ATTACHMENT

David,

My comments on the Magee Preserve RDEIR, submitted by email earlier today, referenced but did not include a copy of Contra Costa County's Two-Lane Rural Road Guidelines, which is a one-page illustrated sheet containing a table of lane and shoulder widths related to motor traffic volume. The earlier version of my comments, presented at the September 25 Planning Commission meeting, did include a copy of that page.

For completeness I have attached the County's document to this message. Please consider it part of my submittal. The file name is:

CoCoCo Two Lane Rural Road Guidelines CA53_201403171711307982.pdf

This document is also linked as item CA53 on the County's Standard Plans page:

http://www.co.contra-costa.ca.us/342/County-Standard-Plans

Regards,

John Ciccarelli
Bicycle Solutions -- Planning, Design, Parking/Storage, Education/Training, Expert Witness
511 Anderson Street
San Francisco, CA 94110-6004
415-912-6999 mobile/text

www.BicycleSolutions.com

PUBLIC WORKS DIRECTOR

March 11, 2014

PLANS APPROVAL DATE

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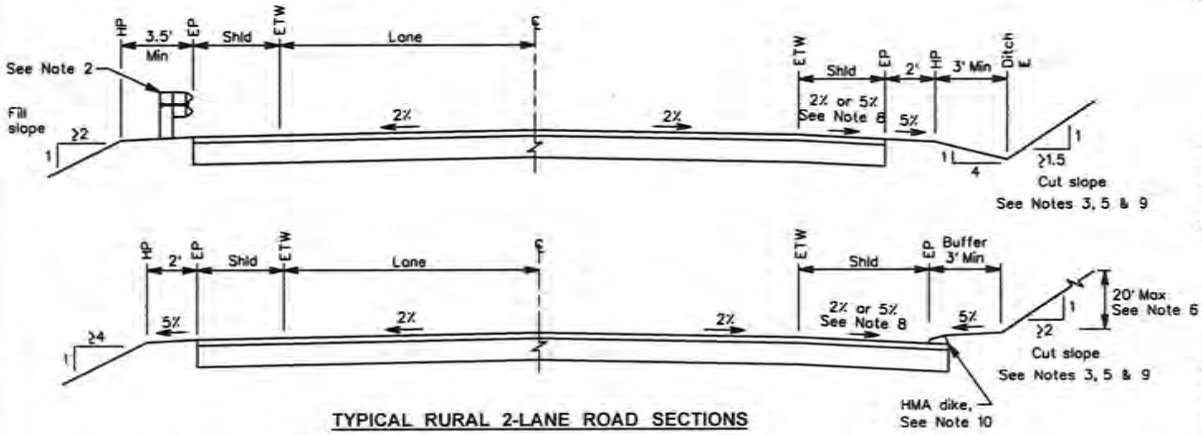
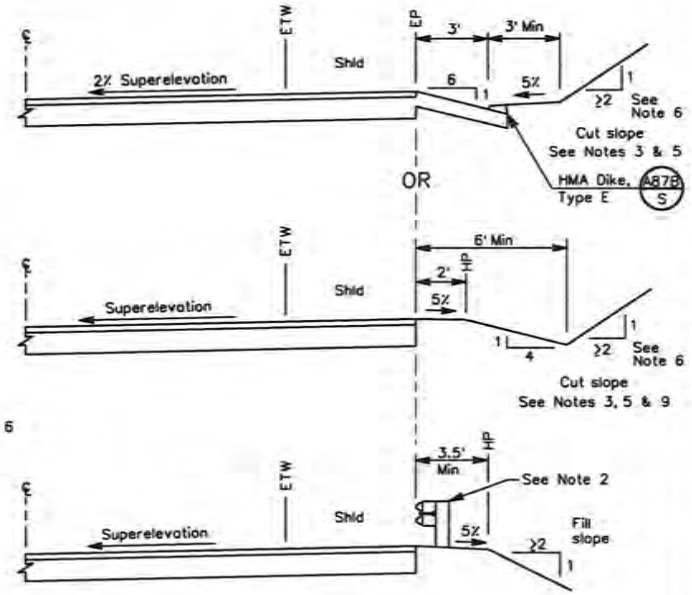
REGISTERED PROFESSIONAL ENGINEER — JULIA R BUEREN — No. 37937 — CIVIL — STATE OF CALIFORNIA

## MINIMUM TWO - LANE RURAL SHOULDER/LANE WIDTHS

| | ADT<200 | <400 | <1000 | <3000 | <6000 | >6000 |
|---|---|---|---|---|---|---|
| Shld/Lane/Lane/Shld | 1'/11'/11'/1' See Note 4 | 2'/11'/11'/2' See Note 4 | 4'/12'/12'/4' | 5'/12'/12'/5' | 6'/12'/12'/6' | 8'/12'/12'/8' |
| TOTAL PAVEMENT WIDTH | 24' | 26' | 32' | 34' | 36' | 40' |




TYPICAL RURAL 2-LANE ROAD SECTIONS




TYPICAL RURAL 2-LANE ROAD SUPERELEVATED SECTION

**NOTES:**

1. These guidelines do not override County Ordinance Code requirements for development projects. Based on various factors such as accident history, alignment and traffic speed, the County Traffic Engineer may require paved shoulders wider than these minimums in isolated locations or for long segments of roadway.
2. Guardrail may be required, depending on embankment height and steepness of slope. (See Chapter 7 of the California Department of Transportation's Traffic Manual).
3. Distance to cut slope from ETW shall be increased for sight distance in curves. (See Chapter 200 of the California Department of Transportation's Highway Design Manual).
4. Paved shoulders shall be 4', if shoulders are designated as bike lanes.
5. A wider swale and/or buffer between toe of slope and roadway should be considered where there is potential rock fall, the slope is highly erosive or there is significant longitudinal surface flows.
6. If cut slope is > 20' vertically to bench or top of cut, buffer width shall be increased.
7. Design ADT shall be approved by the Public Works Department.
8. 5% cross slope for shoulders greater than 4 ft wide, typical.
9. Cut slopes steeper than 2 horizontal to 1 vertical require geotechnical engineer's approval.
10. HMA dikes shall be Type E or F per A87B S or as specified on the plans.

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

COUNTY OF CONTRA COSTA
PUBLIC WORKS DEPARTMENT
MARTINEZ, CALIFORNIA

STANDARD PLAN

# TWO LANE RURAL ROAD GUIDELINES

SCALE: NO SCALE | DATE: 3/14
DRAWN BY: L. COSTA | PLAN NO. CA53
CHECKED BY: M. HOLLINGSWORTH

STD. PLAN CA53

## 25: RESPONSE TO JOHN CICCARELLI (1)

**25A:** Please refer to responses to Letter 26, which updates this letter.

| | |
|---|---|
| **Subject** | Comments on the Magee Preserve Revised Draft Environmental Impact Report (RDEIR) |
| **From** | John Ciccarelli, Bicycle Solutions |
| **To** | Town of Danville Planning Commission, Town Council, and Town Staff |
| **Date** | October 15, 2018<br>(additional comments were presented at the 9/25/18 Planning Commission meeting) |

My name is John Ciccarelli. I am the owner of Bicycle Solutions, a bicycle and pedestrian planning, design and safety consultancy based in San Francisco.

During my 25-year career as a bicycle and pedestrian transportation planner and designer I've worked on many bicycle and active transportation master plans, corridor, interchange, intersection and trail studies, and safety analyses. For 16 years I was a statewide engineering evaluator with UC Berkeley's Tech Transfer program. I served 10 years on the national Bicycle Technical Committee and 4 years on the California Traffic Control Devices Committee.

SOS-Danville asked me to advise on safety and potential improvements to Diablo Road between Green Valley Road and the proposed Magee Preserve development. I drove, bicycled and walked the entire corridor, and observed, photographed and measured cross sections east of Alameda Diablo. You have already received from SOS-Danville Group members the Bicyclist Safety Report for Diablo Road that I contributed to preparing.

I agree with the conclusions in the letter submitted by Stuart Flashman, SOS-Danville Group's Attorney, regarding the inappropriateness and misleading calculation of Bicycle Level of Service (BLOS) for evaluating the existing and with-project level of risk to bicyclists on Diablo Road. I will not repeat those points. Instead, I would like to focus on the segment with the poorest conditions and safety for bicyclists -- the narrow curving stretch between Alameda Diablo and Avenida Nueva.

The RDEIR's Traffic Impact Analysis (Appendix E) tabulates lane and shoulder widths. This segment has lanes that are 12 feet wide or less, and almost no paved shoulder. As Clelen Tanner has described, bicyclists either hug the edge – which invites unsafe passing, or claim the lane but deal with impatient motorists -- especially while ascending slowly eastbound. This is shown in the videos submitted by Mr. Tanner on a USB flash (thumb) drive.

A

On this segment there is also 4 feet of mostly unpaved shoulder on the north side and a 4-foot ditch on the south side -- roughly 32 feet of usable width. A relatively low-cost improvement using that available width would dramatically improve safety and operations for both bicyclists and motorists. Paved shoulders just 4 feet wide would let motorists pass bicyclists with the legal 3-foot clearance without crossing the centerline. If lanes were brought to a uniform 12-foot width, the extra four feet of paved shoulders would

accommodate a 7-foot wide SUV and 3-foot clearance entirely outside of the shoulder with 2 feet to spare. This would require only 32 feet of pavement; – 4+12+12+4. Add just 4 more feet for a replacement ditch (or an in-roadway trench drain) and you'd have the bicycle safety that the court wanted the EIR to address. And we're not talking about a huge expensive retaining wall.

A Cont'd

The philosopher Voltaire said, "The best is the enemy of the good". This applies directly to bicycle safety on this stretch. Here's why.

The County's Two-Lane Rural Road Guidelines has a table that relates lane and shoulder widths to daily traffic volume. I've attached it to these remarks. At just 1,000 trips a day it calls for 4-foot shoulders. At over 6,000 trips the table specifies 8-foot shoulders, but those are intended for getting disabled vehicles off the road. There's no need for 8 feet for bicycle safety – 4 feet will do, and nationwide engineering standards support this.

B

Interestingly, the Town actually specified that 2-feet paved shoulders be added to Diablo Road as part of a 1994 capital improvement project, but the project was accepted as having been completed despite the fact that the shoulders were not added (see the specifications for the 1994 Capital Improvement Project C-55b) .

Danville is also studying the concept of a hillside trail along the south side of Diablo Road. Such a trail – with its steep grades (comments at the 9/25 Planning Commission hearing estimated sustained 9-10% grades, twice the maximum Highway Design Manual's recommended maximum grade for bikeways) and probable switchbacks – will not attract the bicyclists who use Diablo Road to access Blackhawk and Mt. Diablo. Moreover, even if some road bicyclists chose to use the trail, the steep grades would create conflicts between fast downhill bicyclists and other trail users. Such a trail might be pleasant for walking/hiking, but would be awkward even for everyday utility bike trips.

C

To conclude, I believe that the Planning Commission should find that:

- the RDEIR's use of Bicycle Level of Service does not correctly respond to the Court's directive to focus on bicycle safety
- the proposed development should fund the following cost-effective improvements on Diablo Road to mitigate its significant increase in daily vehicle trips and to squarely address the bicycle safety concern: adding 4-foot or wider shoulders from Avenida Nueva (where the Town's maintenance responsibility for the road begins), at least as far west as Calle Arroyo or Fairway Drive, and preferably beyond to Green Valley Road.

D

I want to thank the Commission, Council, and Staff for their time and diligence in ensuring that the Revised DEIR squarely addresses this issue that is so important to the residents of the Danville area, and to the many people that visit that area.

## 26: RESPONSE TO JOHN CICCARELLI (2)

**26A:** Please refer to the Master Responses in Section 2.4.1 and 2.4.2 regarding traffic and bicycle safety.

**26B:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety. As noted in those responses, the Town approved plans for 2-foot aggregate, not paved, shoulders along Diablo Road in 1994.

**26C:** The commenter is referring to the proposed multi-purpose trail that the Town proposes to construct on an easement to be dedicated by the project applicant. The feasibility study prepared on behalf of the Town (Alta Planning and Design) identified three feasible options to locate the trail to traverse the stepper portion of the property. The study concluded that all three alternatives are feasible, subject to design and environmental review. Whether individual bicyclists would choose to use the trail once it is constructed is speculative. Please refer to the Master Response in Section 2.4.2 regarding bicycle safety.

**26D:** As described in the Master Responses, BLOS analysis, as identified in Highway Capacity Manual 2010 (HCM 2010) methodology, was selected as an appropriate assessment tool since it measures and quantifies bicycle safety elements and produces a consistent comparison that highlights how a project affects existing bicycle safety conditions.

Because the project would not result in a significant impact on bicycle safety based on the BLOS evaluation, no improvements to Diablo Road are necessitated that would require funding by the project applicant.

**David Crompton**

**From:** Bogdan Cojocaru <bogdan.cojocaru@yahoo.com>
**Sent:** Monday, September 17, 2018 6:49 AM
**To:** David Crompton
**Subject:** Rezoning Magee Ranch

Please DO NOT APPROVE rezoning. Please save our kids and give them air. A

Regards
Bogdan

Sent from Yahoo Mail on Android

## 27: RESPONSE TO BOGDAN COJOCARU

**27A:** The comment does not raise a significant environmental issue and, therefore, does not require response in this Final REIR. The comment is part of the project record and will be available to decisionmakers. The project would provide 381 acres of permanently protected open space as well as approximately two miles of EBRPD hillside trails and a 3,000-foot creekside trail, which would be open to the public including children.

## David Crompton

**From:** Ruth Collins <ruthecollins55@gmail.com>
**Sent:** Tuesday, September 18, 2018 8:26 AM
**To:** David Crompton
**Subject:** Magee Oasis for

Sanity

Do not degrade Danville's
Precious Open Space.
No houses!!!
I speak for human animals and wildlife. No encroachment on critically important ecosystems!
Ruth Collins
654 Adobe Drive

A

Sent from my iPhone

## 28: RESPONSE TO RUTH COLLINS

**28A:** Please refer to the Master Responses in Section 2.4.8 regarding biology.

## David Crompton

**From:** Alyce Cozine <cozineff@gmail.com>
**Sent:** Sunday, September 16, 2018 6:45 PM
**To:** Newell Arnerich; David Crompton
**Subject:** Magee Preserve Residential Development

Dear Mayor Arnerich and Mr. Crompton -

I am a resident of Danville and I'm very concerned about the proposed rezoning of Magee Ranch. First, I think change the project name from Magee Ranches to Magee Preserve seems like a suspicious way to confuse the general public to thinking this activity is to help the environment when it's clearly not so. A

I'm concerned how dangerous the traffic is today, even without putting 69 new home, for bikers and for automobiles since the narrow one lane road. I've have seen many close calls where a bicyclist and/or automobile on Diablo road could have collided. The numerous driveways with motorists trying to pull into existing traffic is already very dangerous since there are multiple blind spots and drivers usually are going faster than speed limit. Increase the traffic flow by adding 69 new homes (each home usually has 3 or 4 cars each) will make it much harder for existing residents to pull out from their driveway. B

I moved into Danville in 2014 because the town was small and it was a neighborhood that was not congested. Putting 69 more homes will lessen the attractiveness of Danville and will bring down the real estate value for residents! We do not want Danville to become like other congested cities! C

The planned development will also hurt the wildlife currently in that area, including the rare red-leg frog. Killing the wildlife that currently reside in this open space is not acceptable! D

This initiative was stopped several times previously due to the same concerns above so I think it's ridiculous that the city would use taxpayer funds, and residents' time, to revisit this again.

Please tell me how the city and county plans to address the concerns above. I would appreciate a reply as soon as possible.

Regards,
Alyce Cozine

## 29: RESPONSE TO ALYCE COZINE

**29A:** The comment does not raise a significant environmental issue and, therefore, does not require response in this Final REIR. The comment is part of the project record and will be available to decisionmakers.

**29B:** Please refer to the Master Responses in Section 2.4.1 regarding traffic.

**29C:** Appendix A of the RDEIR addresses potential impacts to biological resources, including the California red-legged frog and other wildlife. The RDEIR includes mitigation to avoid and minimize harm, injury, or mortality to individual frogs, including pre-construction surveys and monitoring during construction. In addition, mitigation includes restoration of portions of the East Branch of Green Valley Creek and the preservation of approximately 381 acres of habitat as open space, providing habitat for the red-legged frog. See also the Master Response in Section 2.4.8 regarding biological resources.

**29D:** The comment does not raise a significant environmental issue and therefore does not require response in this FREIR. The comment is part of the project record and will be available to decisionmakers.

**David Crompton**

**From:** Susan Cross <susan-cross7@sbcglobal.net>
**Sent:** Monday, October 15, 2018 8:11 AM
**To:** David Crompton
**Subject:** Magee Ranches project

Please accept these comments on the DREIR for the Magee Ranches project.
I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The project will be a very negative change to our community.
Respectfully,
Susan & David Cross

Sent from my iPhone

## 30: RESPONSE TO SUSAN & DAVID CROSS

**30A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Christopher Cross <chris@fourpointeducation.com>
**Sent:** Monday, October 15, 2018 9:03 AM
**To:** David Crompton
**Cc:** Archie Bowles; Robert Combs; Mark Graham; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; Rob Ewing; Newell Arnerich; Robert Storer; Karen Stepper; Lisa Blackwell; Renee Morgan
**Subject:** Comments on the DREIR for Magee Ranches Project

We stand firmly in opposition to this project. The infrastructure, especially with respect to bike traffic, is simply inadequate. In my regular travels on Diablo Road I often encounter bikes that I cannot pass as there is not the three-foot safety zone--required by state law--and opposing traffic means that I am unable to cross the center line to achieve the three-foot safety zone. While I am very careful about that, I often see cars ahead of me that ignore that and speed by in ways that will surely cause an eventual accident, perhaps even fatal. A

I also note that when we do have rain, the drainage system is not adequate, adding further safety issues. B

This development must be denied or be subject to a Measure S vote where the town can vote on the measure and there can be public consideration of the issues. C

I would also note that in the event there is ever a natural disaster in the area (fire, earthquake, major storm), the issues posed by this development could become tragic. D

Diane and Christopher Cross
109 Sunhaven Rd.
Danville, CA 94506

FourPoint Education Partners

EDUCATION COMMISSION OF THE STATES

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Chairman and Co-Founder
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## 31: RESPONSE TO DIANE & CHRISTOPHER CROSS

**31A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**31B:** Please refer to the Master Responses in Section 2.4.5 regarding hydrology.

**31C:** Please refer to the Master Responses in Section 2.4.3 regarding Measure S.

**31D:** Please refer to the Master Responses in Section 2.4.9 regarding wildfire and emergency access and evacuation.

.

## David Crompton

**From:** Nancy Daetz <nancy@firestormcap.com>
**Sent:** Sunday, September 16, 2018 9:22 PM
**To:** David Crompton; Newell Arnerich
**Subject:** Comment on Magee Preserve

To Whom It May Concern:

I oppose the proposed Magee Preserve development.

The Magee Ranch land should be preserved as Agricultural Open Space as it was designated by Measure S by public vote. Any decision to develop this property should NOT circumvent the decision of Danville residents unless they decided **by public vote** to change the designation. This project is unacceptable on many counts:

- It is in violation of Measure S, passed by an overwhelming majority of Danville residents.
- P-1 should not be allowable zoning for "agricultural open space"
- The project will cause unacceptable congestion on Diablo Road, which is already one of the most congested roads in the Contra Costa County.
- The project has no mitigation for the thousands of bicyclists who access Diablo Road on their way to the state park.
- Diablo Road conditions are dangerously unacceptable to bicyclists. Bicycle safety improvements must be considered on this narrow, winding, heavily trafficked and dangerous road.
- Flooding and erosion has not been mitigated.
- Emergency response and evacuation for fires, flood or power outages has not been addressed, despite recent and imminent threats.

A

I will be actively involved in the opposition to this proposal.

Sincerely,

Nancy Daetz

622 Glen Rd Danville, CA

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## 32: RESPONSE TO NANCY DAETZ

**32A:** Please refer to the Master Responses in Sections 2.4.1 regarding traffic, 2.4.2 regarding bicycle safety, 2.4.3 regarding Measure S, 2.4.5 regarding hydrology, and 2.4.7 regarding wildfire, emergency access, and evacuation.

**David Crompton**

**From:** Jerry Davis <jerry94528@gmail.com>
**Sent:** Sunday, October 14, 2018 7:40 PM
**To:** David Crompton
**Subject:** Magee Ranches development

I am opposed to further development of Magee Ranch. Ruth Magee was a friend and a patient of mine. She was able to sell enough of her land to enjoy the rest of her life and benefit her family. I applaud that. I think her intent was to preserve the rest of her land for open space and possibly for her daughter to run cattle on- all part of Danville's heritage.

It's my understanding that development of agricultural space has to be voted up or down by the citizens of Danville and that the Town's government has no right to make that decision. Considering the numbers of voters against this arbitrary decision and the patently unacceptable sequelae of this development (discussed below), it really makes me wonder just what factors are motivating the planners and Town Council. What is the payback for taking a stance which is both unpopular and can be easily shown to be deleterious to the community? A

According to DREIR,Diablo Road will see 850 more car trips daily, increasing the already intolerable traffic tie ups at the Mt Diablo, Diablo Scenic intersections, not to mention Green Valley and Diablo Rds. 100,000 cyclists per year utilize the beautiful old country road between Green Valley Rd and Diablo Scenic. The DREIR doesn't even acknowledge the present dangers to cyclists, much less the hazard engendered by adding 850 cars per day to a road which is already overloaded. B

This is a flawed development even if the town had the right to approve it- which they don't. So withdraw the "approval", pending a vote in favor of developing the agricultural parcel.

Respectfully,

Jerome Davis MD

## 33: RESPONSE TO JEROME DAVIS

**33A:** Please refer to the Master Responses in Section 2.4.3 regarding Measure S and open space.

**33B:** Please refer to the Master Responses in Section 2.4.1 regarding traffic and Section 2.4.2 regarding bicycle safety.

## David Crompton

**From:** Angela Dew <angdew1227@yahoo.com>
**Sent:** Sunday, October 7, 2018 12:01 PM
**To:** David Crompton
**Subject:** Magee Ranch Preserve Development

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

>
>
> Mr. Crompton,
>
> What are the plans to mitigate the imminent traffic impacts that will be the result of adding in a significant number of new houses to an already congested traffic area?
>
> It currently takes me over 20 mins to get from the entrance of Magee Ranch to Green Valley Road each weekday. This congestion is present despite buses that already run for all levels of schools ( elementary, middle and high). The two lane Diablo road is already incapable of handling the current traffic load and it seems unreasonable to add another subdivision without significant proactive planning for added traffic on this road. A
>
> Regards,
> Angela Dew
> Magee Ranch Resident
>
>
> Sent from my iPad

## 34: RESPONSE TO ANGELA DEW

**34A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic. As noted in the Master Responses, signalization of the Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard intersection (Mitigation Measure 4.3.1) would significantly improve traffic flow compared to existing conditions, and would be required to be fully implemented by the project applicant if ultimately approved by Contra Costa County.

## David Crompton

**From:** Susan Douglass-Jones <firedan@aol.com>
**Sent:** Sunday, September 16, 2018 11:12 AM
**To:** David Crompton
**Subject:** Re-zoning of Magee Ranch

To Whom It May Concern,

The idea of building masses of new homes without considering the impact on roadways is devastating to my neighborhood. My home backs up to Diablo Road, and as is over the 20+ years I've lived here the volume of traffic has increased. Not to mention just trying to get in out of the only access to our neighborhood at Clydesdale & Diablo Road, difficult and dangerous- because of the upward volume of traffic. Now add more homes to an already overburdened two lane road. Then, in the near future you decide to add even more homes...because we all know how this story goes. I'm not against new homes, but I don't understand how you think a two lane road such as Diablo will be able to sustain even more traffic than it already can handle? And seriously no consideration for not only the homeowners trying to get in and out of our neighborhood, but there's a church that also holds many functions. This all comes down to money, very sad.
Susan Jones

A

## 35: RESPONSE TO SUSAN DOUGLASS-JONES

**35A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic. As noted in that response, signalization of the Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard intersection would create gaps in vehicle traffic that would ease entry onto Diablo Road from cross streets and driveways.

**David Crompton**

**From:** Stefanie Dowdy <stef8247@hotmail.com>
**Sent:** Monday, September 24, 2018 9:37 PM
**To:** Newell Arnerich; David Crompton
**Cc:** mayanncella@gmail.com
**Subject:** Opposition to Magee Development

Dear Mr. Compton/Danville Planning,

I am writing in regards to the possible housing development that is being considered for Magee Ranch.

We have lived on Diablo Creek Place since early 2015 and even bought knowing this development was a possibility. I guess you hope that it won't go through or that the Environmental Impact Report will persuade the city otherwise.

The EIR will address the traffic, which is manageable at today's standards even though most mornings there is a line of cars backed up from Mt. Diablo Scenic Blvd. to the Blackhawk Meadows development, which clogs up right outside our court. On some special event days such as the end of the school year I have even been backed up from the light at Green Valley all the way down Diablo Road to as far as Mt. Diablo Scenic Blvd.!

If the proposed project is for 69 lots, conservatively we can say that there will be 138 additional cars added to Diablo Road/Blackhawk Road (2 cars per household). Since we live in an affluent area and most households have more than two cars and most likely children that will be driving at some point that will add to our conservative estimate.

The EIR will also address the impact on bicyclists - three cyclists being injured in the last year.

But what also disturbs me is that there will be 4 years of construction behind our house from excavation to completion. In other words, the residents that this affects will be impacted for as long as it takes a teen to enter and then graduate high school.

But, I digress - I choose to write not because of the stats above but because yes, we love our property and the fact that it opens up to pasture land and I would like to keep it that way. It allows my family to see cows, horses, turkeys, deer and more go by our back window each day. As I'm sure many feel that having this serenity literally right in our back yard is something special, yet something we obviously take for granted each day.

Being a new mother, we have a 7 month old, it has made me appreciate our set up even more. I want my daughter to experience what I have in the last few years. The ability to have suburbia in the front and the enjoyment of the open space and nature out our back door.

If you want to know what I consider the best part of our home's location it would be the creek right behind our fence. I can't get to it, it has junk in it and probably needs to be cleaned out but in the evening hearing the frogs and crickets sing together is like magic from a Disney movie. It transforms you to a place that you do not expect from Danville, California yet are amazed at how loud and vivid the sound is when the sun goes down.

A

And I know that when construction begins these things will be the first to go and will most likely never return because on the development proposal drawing a road will be built right behind our back fence and that makes me sad to think our way of life will change in that aspect and nature once again will be a second thought to progress.

I know this is not the end of the world. I have lived through this same scenario as a child in Concord, area code 94521. My parents' home is on a 1/2 acre lot, there was open space behind us and a developer came in and built homes right in our backyard. During this construction time our way of life was altered by the construction, noise, atmosphere, view, and animals attempting to escape from the old landscape down to the neighbors below.

Am I less of a person for losing the space behind us, no I don't believe so but I do wish we would make an effort to save open spaces, keep small towns from becoming big(Danville from turning into today's Walnut Creek), and keep families values as best we can.

A Cont'd

Experiencing the past development does not excite me about the potential future development and dealing with a noisy road behind us going forward. This development may drive out current owners and drive down home values(potentially our family included), and those families will be replaced by new owners who won't know and understand what we fought for.

I feel I have much more to say but hope this letter reads as heartfelt as I truly feel about the area of Danville that we call home.

Please make sure that this goes to a public vote. The town's residents should be included in the decision and the direction they want to see their city grow in the future.

Thank you for your time and consideration,

Stefanie Dowdy
Diablo Creek Place

## 36: RESPONSE TO STEFANIE DOWDY

**36A:** The traffic impacts of the project are evaluated in Section 4.3 Transportation & Circulation of the RDEIR, which notes that the proposed project would add approximately four percent to average daily vehicle trips on the eastern Diablo Road/Blackhawk Road corridor. As explained in the RDEIR and the Master Response in Section 2.4.1 regarding traffic, if Contra Costa County approves signalization of the Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard intersection, which the project applicant would be required to fund in full, then the existing failing congestion grades for that intersection (AM LOS E and School PM LOS F) would improve to LOS A. This would significantly reduce existing delay along the corridor.

Please see Master Response Section 2.4.2 regarding bicycle safety.

Construction impacts are analyzed in the RDEIR and Appendix A of the RDEIR, which notes that the project's 3.5-year overall construction schedule would not involve construction for a *continuous* 3.5-year period adjacent to any existing residence.

Regarding the project description, the project includes habitat restoration and enhancement in Green Valley Creek behind the rear fence lines of Diablo Creek Place residences, with the express goal of preserving and improving existing creek habitat. The enhanced Green Valley Creek habitat would not adjoin a new street, as the comment suggests, but rather would adjoin a new creekside pedestrian and bicycle trail from the project entrance, along the creek, and via an emergency vehicle access road to Diablo Road. This entire creekside trail would be open to the public.

Measure S and its relation to this project and a voter referendum on the project are addressed in the Master Responses in Section 2.4.3.

## David Crompton

**From:** Kathleen Dunphy <kydunphy@yahoo.com>
**Sent:** Monday, October 15, 2018 4:19 PM
**To:** David Crompton
**Subject:** Re: Magee Preserve DREIR - Danville resident's opposition to development

Dear Sir or Madam,

Please accept these comments on the DREIR for the Magee Ranches project.

As a Danville resident, I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more car trips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. A

The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review.

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government, which is what Measure S promised. Of the community members who are aware of this not widely-publicized re-zoning from agricultural/open space to planned unit developments, most are opposed to it.

This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The consequences of THEIR actions are OURS to live with. The project will be a very negative change to our community.

Respectfully yours,

Kathleen Dunphy
14 MacPherson Place
Danville, CA 94526

## 37: RESPONSE TO KATHLEEN DUNPHY

**37A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Nadine Durant <nadine1938@icloud.com>
**Sent:** Sunday, September 16, 2018 7:15 PM
**To:** David Crompton
**Subject:** Rezoning McGee Ranch Land

Dear Sir

I am registering a definite NO on the question of rezoning the above noted land off Diablo Rd. Why would you even consider such a decision in the face of the vote to preserve this land by a 75% vote of the people of Danville. Dishonest, sneaky, and greedy. Rethink this. A

Sincerely
Dr Nadine Durant
324 Fontaine Dr
94506
Sent from my iPhone

## 38: RESPONSE TO NADINE DURANT

**38A:** Please refer to Master Responses in Section 2.4.3 regarding Measure S and open space.

## David Crompton

**From:** Rick Edmondson <rickedmon@yahoo.com>
**Sent:** Sunday, October 14, 2018 8:25 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead is designed to benefit only special interests---the developers and landowners. The project will be a very negative change to our community.

Respectfully,

Eric Edmondson
638 Sheri Lane
Danville, CA 94526

## 39: RESPONSE TO ERIC EDMONDSON

**39A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Elena Fischer <emfischer99@yahoo.com>
**Sent:** Sunday, October 14, 2018 6:51 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure, according to the DREIR, about 850 more car trips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd intersection will be significant, and not mitigated. That is simply unacceptable!

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd and Green Valley Road. Many cyclists use these streets and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead is designed to benefit only special interests---the developers and landowners. The project will be a very negative change to our community.

Respectfully,

Elena Fischer

Danville Resident

## 40: RESPONSE TO ELENA FISCHER

**40A:** Please refer to the responses to Letter 6.

Law Offices of
Stuart M. Flashman
5626 Ocean View Drive
Oakland, CA 94618-1533
(510) 652-5373 (voice & FAX)
e-mail: stu@stuflash.com

**Submitted via e-mail**

October 14, 2018

Mr. David Crompton,
Principal Planner
Town of Danville
510 La Gonda Way
Danville, CA 94526

Re: Magee Preserve Revised Draft EIR (SCH # 2010112042)

Dear Mr. Crompton,

I am writing on behalf of my client, SOS Danville Group ("SOS"), to comment on the Revised Draft Environmental Impact Report ("RDEIR") for the Magee Preserve residential development project ("Project") in the Diablo Road corridor. These comments amplify on my comments submitted at the Planning Commission public hearing on the RDEIR and are in addition to other comments being submitted by members of the group.

As the RDEIR acknowledges, the primary reason that it is being prepared is that, in *SOS-Danville Group v. Town of Danville et al*. (Contra Costa County Superior Court Case No. MSN13-1151, First District Court of Appeal Case No. A143010 [unpublished decision issued 9/11/2015]), a judgment was entered finding that the prior EIR for the Project was inadequate in its consideration of the Project's potential bicyclist safety impacts. Consequently, the court ordered that the issue be revisited. In addition, the Town wisely decided that, since it has been five years since the prior EIR was prepared, several analyses, including specifically the traffic analysis, needed to be revisited based on new data. SOS applauds that decision. However, there are also changed circumstances and/or new information affecting other aspects of the environmental review. Unfortunately, the RDEIR gives these changes short shrift in its analysis.

A

Specifically in regard to the bicyclist safety analysis, the prior EIR did not identify any threshold of significance for bicyclist safety impacts, and merely asserted that, because the project was not modifying the roadways used by bicyclists, it would have no effect on bicyclist safety. However, the RDEIR does not include any specific bicyclist safety analysis. Instead, its analysis is focused on bicycle level of service ("BLOS") as defined in the 2010 Highway Design Manual ("HDM"). While BLOS calculation does include several factors that affect bicyclist safety, BLOS is not, per se, a measure of bicyclist safety.

The RDEIR includes several thresholds of significance for transportation impacts (bullet points on page 4.3-16). As pertinent to bicyclist safety, two are potentially applicable.

The fourth bullet point identifies "causes unsafe conditions for pedestrians or bicyclists" as a threshold. This is certainly a potentially valid threshold. Unfortunately, however, the RDEIR provides no further information about how the RDEIR might determine that the project might cause such unsafe conditions; nor does it discuss how the project might exacerbate already unsafe conditions and what the threshold would be for such exacerbation. For example, if the project might tend to increase the frequency and/or severity of accidents involving bicyclists, this would seem an appropriate threshold. But the RDEIR does not appear to take into account[1] the past, current, or expected frequency of accidents involving bicyclists in evaluating whether the project will make any segment of Diablo Road less safe for bicyclists.

Instead, the only threshold that the RDEIR actually uses to evaluate bicyclist safety is whether the project would results in a 5% quantitative degradation in the BLOS for a roadway segment where the BLOS was already equal or greater than 4.25 (= BLOS of E), or whether it would change the BLOS from between 3.5- 4.25 (BLOS = D) to greater than 4.25 (BLOS = E). The RDEIR's only rationale for choosing these thresholds of significance is that they are "analogous" to the thresholds that the RDEIR (and the Town) uses for evaluating a project's effect on the motor vehicle Level of Service ("LOS") at an intersection. That rationale does not withstand scrutiny.

A Cont'd

Motor vehicle LOS is designed as a way to measure vehicle delay and congestion. It has little if anything to do with vehicle safety. Consequently, there is no rational basis for considering thresholds of significance for motor vehicle LOS and bicyclist safety analogous. Further, because BLOS, in itself, is not a measure of bicyclist safety, but is also influenced by bicyclist "comfort," including such factors as running speed (faster is better) and delay at intersections (more delay is worse), there is not necessarily any direct correlation between changes in BLOS and changes in bicyclist safety.

For example, replacing a traffic signal by a stop sign on a side street would, all other factors remaining unchanged, ***improve*** that intersection's BLOS score, because it would decrease bicyclists' delay and increase their overall running speed. However, that same change, having side street traffic merge onto the main street controlled only by a stop sign instead of a traffic signal, would ***degrade*** bicyclist safety on the main street, because it would increase the likelihood of a bicyclist colliding with a vehicle turning onto the main street without seeing a bicyclist entering the intersection. This just reflects the more general fact that BLOS is not an appropriate alternative to direct evaluation of bicyclist safety.

Factors that affect bicyclist safety, and therefore would seem proper factors to include in defining a threshold for significant bicyclist safety impacts, include lane width, frequency of automotive traffic (in both directions) and speed of automotive traffic. These are, indeed, included in the 2010 HCM's BLOS calculations. However, many other

[1] The RDEIR does identify at least some of the history of bicycle accidents in the project vicinity (RDEIR at p. 4.3-15. ) It characterizes the frequency of such accidents as "not substantial," but does not explain the basis for that determination.

significant factors affecting bicyclist safety that would be relevant to bicyclist safety on Diablo Road are not included in BLOS. These include: width of shoulders, sideways slope of shoulders, pavement stability and smoothness for both lanes and shoulders, roadway slope (in direction of travel), sight distances along roadway, and frequency of bicycle/motor vehicle accidents. In addition, while the RDEIR's BLOS calculation included lane widths and vehicle speeds, it considered only averages for each roadway segment. But neither cars nor bicycles travel on average lanes at average speeds. If the average lane width is 13 feet, but actual lane width varies from 10 feet to 15 feet, that variation is highly significant. A 15-foot wide lane provides adequate room for a car to safely pass a bicyclist riding in the lane. A ten-foot wide lane absolutely does not.

Similarly, if the average automotive speed is 30 mph, but some cars travel as fast as 50 mph, those latter vehicles pose a significantly greater hazard to bicyclists. Not only would a collision between a bicyclist and a car going 50 mph cause more serious injury than if the car were only going 30 mph, but a faster car allows the driver less time to react to the bicyclist and potentially avoid the collision.

A Cont'd

As the Town is well aware, both roadway width and lane width on Diablo Rd. vary widely. Traffic speed also varies with the road's slopes and curves. Specific properties of each portion of the roadway, and particularly the most dangerous segments, need to be identified and analyzed for bicyclist safety. The frequency of accidents along the roadway can help with this. None of this, however, was considered in the RDEIR.

In fact, there are many ways to set a threshold of significance for changes affecting bicyclist safety. My comment letter on the Notice of Preparation for this RDEIR (copy attached as Exhibit A)) presented several possible thresholds. In addition, the Federal Highway Administration has published a booklet, "Bicycle Road Safety Audit Guidelines and Prompt List," (copy attached as Exhibit B) that could form the basis for identifying appropriate thresholds of significance for bicyclist safety. The State of New Jersey Department of Transportation has published a set of planning and design guidelines for bicycle compatible roadways and bikeways (copy attached as Exhibit C) that also lays out factors affecting bicyclist safety and could serve as the basis for appropriate thresholds of significance. These are just a few examples of resources that were available to the Town and its EIR consultants to identify appropriate thresholds for bicyclist safety impacts. Unfortunately, none were used.

The RDEIR's deficiency in analyzing bicyclist safety is understandable, because neither the Town, not its EIR consultant, Denise Duffy & Associates, nor its transportation subconsultant, Stantec Consultants, appeared to have anyone involved in the preparation of the RDEIR with a background of expertise in bicyclist safety.[2] That is in

B

[2] The RDEIR does not provide any background information on the professional credentials of either the Town Staff, Denise Duffy staff, nor Stantec Consultants staff who worked on the RDEIR. However, perusal of the respective websites: www.ddaplanning.com www.danville.ca.gov/ or www.stantec.com/en.html did not indicate anyone with expertise in bicyclist safety. By contrast, SOS retained an expert with specific expertise in bicyclist safety evaluation to comment on the RDEIR.

spite of the fact that both the trial court and the court of appeal specifically identified a lack of analysis of bicyclist safety as a critical flaw in the prior EIR. B Cont'd

As I stated in my comments prepared for the Planning Commission hearing on the RDEIR, the Town's use of BLOS to evaluate the significance of bicyclist safety impacts was inappropriate. If a specific Danville bar had had five murders in a year, you would not analyze the overall crime rate in Danville to decide if there was a problem. You'd look at murders at that bar. The same principle applies here. BLOS might be an appropriate metric for evaluating bicyclist comfort in Downtown Danville. It is an inappropriate metric to assess bicyclist safety on Diablo Road, or the effect this project's additional traffic will have on that bicyclist safety.

In fact, given the narrowness of existing traffic lanes, the near total lack of shoulder width sufficient for safe bicyclist use, the speed and frequency of automotive traffic in both directions, the curviness and steep grades on portions of Diablo Rd., the popularity of Diablo Rd. as a route for bicyclists to reach Mt. Diablo State Park, the lack of signage even warning drivers of the need for extra caution due to the high volume of bicyclist traffic, and the amount of traffic the project will add to Diablo Rd., one would have to say that these factors, taken together, appear to indicate that the project will significantly further decrease the already low level of bicyclist safety along Diablo Road. C

I also want to address some other problems with the RDEIR.

First, the overall traffic analysis chose to use 4-6 PM as the peak PM travel time, and measures average LOS over that entire period. However, it provides no evidence to support those decisions. In the Bay Area, it is well understood that peak travel hours have been expanding steadily as the number of cars on the road at peak hours has increased. In part this is because commuters are adjusting their workday schedules trying to avoid the peak levels of congestion. It also reflects the fact that congestion at peak travel hours increases the amount of time needed for commuters to reach their destinations. The RDEIR's analysis fails to take these factors into account.

For example, according to Waze, a popular GPS wayfinding application for mobile phones that uses data obtained from its users to provide its users with real-time traffic congestion information and recommended routes to avoid that congestion, a trip from Union Square in San Francisco to Mt. Diablo Scenic Boulevard in the vicinity of the project would take about 45 minutes without major congestion (for example, leaving San Francisco on a weekday at 7:45 PM). That same trip, however, if begun at 5:10 PM, would take an hour and 20 minutes, and would not reach Danville until 6:30 PM – outside of the RDEIR's identified peak travel time. In fact, in order to reach Danville at 6:00 PM, a San Francisco commuter would have to leave by 4:37 PM, before most workdays end. From Silicon Valley, the situation is even worse. Leaving Cupertino at 5 PM, a commuter would not reach the project until 6:45 PM, well beyond the RDEIR's defined peak travel time. (With minimal congestion, the travel time would again be a little more than 45 minutes.) While admittedly not every commuter from the project D

would be working in San Francisco or Silicon Valley, these are two popular commute destinations. A 4 PM – 6 PM peak hour is neither accurate nor realistic for commutes such as these to/from Danville.
Further, by lumping together the entire time from 4-6 PM, the RDEIR may have masked greater congestion within that two-hour time block. As a result of these errors, the RDEIR is likely to have underestimated the level of congestion at the peak commute time. The peak commute times should be identified based on measured traffic patterns around Danville, most notably on Diablo Road itself and on I-680, the likely conduit for most non-local commuters to and from the project – and Danville in general. It would be helpful for the RDEIR to include data on traffic flows in and around Danville for both morning (6 -10 AM) and evening (3:30 – 7:30 PM) peak travel periods.[3]

D Cont'd

In terms of the project's expected contribution to GHG emissions, the RDEIR notes that the project has been modified to include electric car chargers for all homes. Based on that change, the RDEIR ***assumes*** that 50% of project homes will have electric cars and that 50% of vehicle miles driven will be via electric car. (RDEIR at p. 4.1-126.) The RDEIR does not explain what, if any, data those assumptions are based on. The EIR needs to provide data on recent East Bay housing developments that have included electric car chargers as standard and show what percentage of cars in such a development are electric and what percentage of miles driven are by electric car. In choosing comparable developments, the locations should be similar to Danville's in terms of proximity to major job centers. Most electric vehicles (especially moderately priced vehicles) still have a limited mileage range[4], and a daily commute to a location such as Cupertino (51 miles each way) or Redwood City (41 miles each way) may not be feasible for many electric vehicles, at least not without a charging station at the worksite.[5]

E

Given the significant flaws in the current RDEIR, it needs to be revised to correct its deficiencies and then recirculated to allow the public to comment on the revised analyses.

Most sincerely,

Stuart Flashman
Attorney for SOS Danville Group

[3] According to Waze, peak southbound weekday I-680 traffic in the vicinity of Danville runs from 7:30 AM to 9:45 AM, while northbound traffic begins increasing at 3:45 PM, peaks from 5 PM to 6:15 PM, and does not subside until 7 PM. (Waze iphone application, accessed on October 9, 2018.)

[4] See attached listing of ranges for 2018 electric vehicles, Exhibit D. For vehicles with a list price of less than $35,000, the average maximum range was 109 miles.

[5] Further, driving at highway speeds (e.g., 65 mph) reduces the range of an electric vehicle by roughly 25% compared to an optimal driving speed of approximately 40 mph. (See Exhibit E – graphs of range versus speed and outside temperature.)

# Exhibit A

Law Offices of
**Stuart M. Flashman**
5626 Ocean View Drive
Oakland, CA 94618-1533
(510) 652-5373 (voice & FAX)
e-mail: stu@stuflash.com

October 2, 2017

Mr. David Crompton,
Principal Planner
Town of Danville
510 La Gonda Way
Danville, CA 94526

Re: Magee Ranches Notice of Preparation for Revised Draft EIR

Dear Mr. Crompton,

I am writing on behalf of my client, SOS Danville Group ("SOS"), to comment on the Notice of Preparation ("NOP") for the Revised Draft Environmental Impact Report ("RDEIR") for the Magee Ranches development project ("Project") in the Diablo Road corridor. These comments are in addition to more specific comments that are being submitted by members of the group.

As the NOP acknowledges, the primary reason that the RDEIR is being prepared is that in *SOS-Danville Group v. Town of Danville et al*. a judgment was entered finding the prior EIR for the Project to be inadequate in its consideration of the Project's potential bicycle safety impacts. Consequently, the court ordered that the issue be revisited. In addition, the Town has wisely decided that since it has been five years since the prior EIR was prepared, several analyses, including specifically the traffic analysis, be revisited based on new data. SOS applauds that decision. However, as has been pointed out in other comments on the NOP, there are other changed circumstances and/or new information affecting several other aspects of the environmental review. The Town needs to carefully consider whether other portions of the EIR also need to be reconsidered and potentially revised.

Specifically in regard to the bicycle safety analysis, the prior EIR did not identify any threshold of significance for bicycle safety impacts. Especially given the direction provided by the court, it is important that the RDEIR identify specific thresholds of significance for bicycle safety impacts. SOS would like to suggest several thresholds that would be appropriate given the specific project, its location, and the surrounding circumstances.

The Project is located just south of Diablo Road and Blackhawk Road in Danville. Its main access from the roadway is just east of where Mt. Diablo Scenic Road turns off to the north, serving as the southern gateway to Mt. Diablo State Park. As a result, there is considerable bicycle traffic on both Diablo Road and Blackhawk Road, especially on weekends, from bicyclists heading to and from the Park.

Diablo Road/Blackhawk Road, despite only being a two-lane road with narrow to nonexistent shoulders, is one of Danville's major east-west thoroughfares and carries a significant volume of traffic both during the peak commute hours and on weekends.

Despite the large amount of bicycle traffic on the road, there are no bicycle lanes. This, plus the large amount of automotive traffic, the road's narrowness, and the fact that in some sections the road is both winding and hilly, already make it rather risky for bicyclists. Indeed, there have been several recent serious bicycle/automobile accidents along this corridor and connected roadways within the last five years.[1] All of these factors play into determining appropriate thresholds of significance for bicycle safety impacts.

SOS would recommend that the Town and its consultants review a Federal Highway administration publication, *Bicycle Road Safety Audit Guidelines and Prompt Lists* (FHWA-SA-12-018), which is available for download at: https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa12018/fhwasa12018.pdf. That publication highlights some of the deficiencies present in the Diablo Road/Blackhawk Road corridor as a route with significant bicyclist use. While the State of California does not yet have guidelines or standards for roadways carrying significant bicycle traffic, the State of New Jersey has issued a publication, *NJ DOT Bicycle Compatible Roadways and Bikeways – Planning and Design Guidelines* (available for download at http://www.state.nj.us/transportation/publicat/pdf/BikeComp/introtofac.pdf), that gives specific recommendations on making roadways bicycle safe. Given that the Magee Ranch will put additional auto traffic on this deficient corridor, the deficiencies in the Diablo/Blackhawk Road corridor need to be addressed in the RDEIR.

The Diablo/Blackhawk Road corridor's deficiencies for bicyclist safety make it important that the Town's bicyclist safety impact guidelines be formulated to provide an effective evaluation of the bicyclist safety impacts from placing additional auto traffic on that corridor. There is little question that the amounts of auto traffic, as well as the amount of bicyclist traffic, significantly affect bicyclist safety. In particular, especially given the fact that auto speeds are typically much higher than bicyclist speeds, there will always be a temptation for auto drivers to try and pass a bicyclist riding on the shoulder. Where the lanes and shoulders are wide enough and there is good visibility of oncoming traffic, this may not be a problem.[2] However, when one or more of these factors is suboptimal, a potentially unsafe situation occurs when an auto driver is behind a slower moving cyclist and there is not adequate room to pass without going into the oncoming traffic lane. The danger increases further when, as is the case with parts of the

[1] Copies of information on two such accidents are attached. The Town should obtain from the relevant authorities updated information on accidents, including specifically bicycle/automobile accidents along the Diablo/Blackhawk Road corridor.

[2] Current guidelines indicate a minimum 1 meter (~3 ft) minimum width for bicycle lanes or their equivalent, and 3.5 - 4 meters (11-13 ft) for traffic lanes. See, e.g., *The Effect of Road Lane Width on Cyclist Safety in Urban Areas*, A. Schramm et al. (2009), available at https://nacto.org/docs/usdg/effect_road_width_on_cyclist_safety_scramm.pdf. A listing of measured widths along portions of Diablo Road is attached hereto.

Diablo/Blackhawk Road corridor, hills and curves obstruct a driver's view of oncoming traffic. In those situations, even when there is a double yellow line, there is a significant risk of an impatient driver attempting to pass a bicyclist with potentially disastrous results.

In such situations, the risk to cyclists increases in proportion to: 1) the frequency of cyclists, 2) the frequency of cars heading in the same direction, and 3) the frequency of cars heading in the opposite direction. As each factor increases, the safety risk also increases. The risk can increase significantly well below vehicle/capacity ("v/c") ratios that would indicate traffic congestion. Even when the v/c ratios are well below 0.5 in both directions, it can be shown mathematically that the likelihood of an unsafe passing maneuver occurring on a section the length of that found on the Diablo/Blackhawk Road corridor (over 1 mile) would be significant. That this is true is also evident from the recent occurrence of multiple bicycle/auto accidents.

SOS could not find any study defining a threshold for when adding additional traffic to such a situation would significantly increase the hazard to bicyclists, but it seems obvious that once the risk to cyclists is significant (e.g., when the v/c ratio on both sides of the road is more than 0.3), adding more traffic will significantly increase the risk to cyclists. As a consequence of this and other factors, SOS would suggest that the following thresholds of significance be used in the RDEIR:

1) If the Project would add automobile trips to a two-lane thoroughfare that is already carrying significant volumes of automotive traffic (e.g., v/c of 0.3 or more in both directions), and is also carrying a significant amount of bicycle traffic (e.g., more than 20 bicyclists per hour) but does not have demarcated bicycle lanes;

2) If the Project would add more automobile trips to a two-lane thoroughfare that is already carrying significant volumes of automotive traffic (e.g., v/c of 0.3 or more in both directions) and has had two or more reported bicycle/automobile accidents within the past five years;

3) If the Project would add automobile trips to a two-lane thoroughfare carrying significant volumes of bicycle traffic where the thoroughfare, due to hills and/or curves, has segments of more than ½ mile in length where passing is prohibited (i.e., double yellow line) but where the shoulders and lanes are too narrow to allow 3-foot clearance between bicyclists and vehicle travel lanes.

4) If the Project, during its construction phase, would result in large, slower moving vehicles traveling along a two-lane thoroughfare without marked bicycle lanes but carrying a significant volume of bicycle traffic.

Under each of these conditions, the Project would have the potential to significantly increase the risk of bicycle accidents with automobiles and/or trucks – a significant adverse impact.

Triggering any of these thresholds should be considered to indicate that the Project has a potentially significant adverse impact on bicycle safety, and that mitigation measures and project alternatives that would reduce or avoid the significant impact must be considered.

Most sincerely,

Stuart Flashman
Attorney for SOS Danville Group

Attachments: information on bicycle/auto accidents in the Diablo/Blackhawk Rd. corridor

# From the Danville San Ramon Updates:
# "Two bicyclists injured, one airlifted after being struck by motorist in Danville

06.22.2017.
Author: mac



UNINCORPORATED DANVILLE – Officers arrested a driver after he allegedly struck two bicyclists on Blackhawk Road Wednesday night.
At approximately 9:20 pm Wednesday, Deputies from the Contra Costa County Sheriff's Office were dispatched to a welfare check on Blackhawk Road in which the caller stated he had just hit something in the roadway, then fled the scene.
At the same time, the San Ramon Valley Fire Protection District received a call from a motorist, reporting that two bicyclists were down on Blackhawk Road, just east of Magee Ranch road.
Paramedics arrived at the scene and found two bicyclists with traumatic injuries. The driver of the vehicle reportedly followed an ambulance back to the scene after calling authorities.
One rider was airlifted by a CALSTAR air ambulance at a nearby soccer field. He was conscious and talking with paramedics. The other rider was transported to a hospital via ambulance.
Officers from the California Highway Patrol conducted a field sobriety test and subsequently arrested the driver of the vehicle.
The vehicle that reportedly struck the bicyclists, a red Volkswagen, appeared to have body damage on the left front panel.

Blackhawk Road remained open for the duration of the incident. Both bicycles at the

scene appeared to be equipped with rear-facing red lights."

NEXTDOOR DIABLO WEBSITE, MARCH 14, 2015 Post in Crime & Safety

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## Car/Bicycle Accident on Diablo Road at Diablo Entrance **14 Mar 15**

**Tom Wander** **from Diablo**

I am sad to say there was a car/bike accident this morning about 9:30 am in front of the entrance to Diablo. The bicyclist was taken to the hospital with face, head and, possibly, other injuries. The car driver, who appears to be at fault for inappropriately taken the right of way from the bicyclist, stopped briefly after seeing that the bicyclist had crashed and then continued on into Diablo per an eye witness of the accident. The bicyclist was going west on Diablo Road when the car turning left into Diablo, from Diablo Road onto Alameda Diablo, cut off the bicyclist who had the legal right of way. The bicyclist lost control and crashed into the white Mehran fence breaking two fence rails and sheering off the front fork of his bicycle. The car was reported to be a gray Mercedes. CHP is investigating based on the information provided by the Diablo Deputy Sheriff and the witness. If anyone has any additional information, please contact the CHP.

Edited on 14 Mar 15 · Shared with Diablo + 2 nearby neighborhoods in Crime & Safety

# DIABLO ROAD MEASUREMENTS* ON THE ONE-MILE WINDING SECTION BETWEEN THE ALAMEDA DIABLO/DIABLO ROAD INTERSECTION AND THE AVENIDA NUEVA/DIABLO ROAD INTERSECTION

| **Location** | **North lane width** | **South lane width** |
|---|---|---|
| 1.Behind 1904 La Cadena | 11 ft. 2 ½ in. | 12 ft. 1 in. |
| 2. Behind 1896 Alameda Diablo | 11 ft. 6 in. | 11 ft. 10.5 in. |
| 3. Behind 1872 Alameda Diablo | 11 ft. | 11 ft. 10 in. |
| 4. Behind 1872 Alameda Diablo at a curve where last fall a landscaper's truck and a car collided, and the truck then struck a power pole just north of the road. | 11 ft. 2 in. | 12 ft. 5 in. |
| 5. Behind 1842 Alameda Diablo where the south lane's edge is caved in. | 12 ft. 3 in. | 11 ft. 9 in. |
| 6. Behind 1826 Alameda Diablo | 11 ft. 7.5 in. | 11 ft. 3 in. |
| 7. Behind 1826 Alameda Diablo | 11 ft. 4.5 in. | 11 ft. 5.5 in. |
| 8. Behind 1826 Alameda Diablo at 30 mph sign by telephone pole | 12 ft. 7 in. | 10 ft. 9 in. |
| 9. Behind 1826 Alameda Diablo just before drain | 12 ft. 4.5 in. | 10 ft. 10 in. |
| 10. Behind 1826 Alameda Diablo at location of apparent crash into a telephone pole by a truck (wreckage and tire marks suggests it was a truck) | 12 ft. 1 in. | 11 ft. 3 in. |

| Location | North lane width | South lane width |
|---|---|---|
| 11. In front of 1783 Diablo Road | 12 ft. 7 in. | 11 ft. 10 in. |
| 12. Behind 1776 Alameda Diablo (site of 1990's $1 million slide repair involving subsidence of the north side of Diablo Road when the south bank of Green Valley Creek East Branch failed) | 12 ft. ½ in. | 11 ft. 5.5 in. |
| 13. Behind 1750 Alameda Diablo | 12 ft. ½ in. | 11 ft. 7 in. |
| 14. Behind 1734 Alameda Diablo at retaining wall | 12 ft. | 11 ft. 11 in. |

*All measurements were taken from the middle of the double yellow lines (yellow boxes) to the inside edge of the outside white lines. The measurements were done when the road was closed for nearly two days this past winter. The closure was due to the falling of a eucalyptus tree across both lanes of Diablo Road just east of the Alameda Diablo intersection. The tree's roots had apparently been destabilized by erosion from Green Valley Creek.

## N.B. We noted that there are almost no shoulders along this stretch!

# Exhibit B

MAY 2012








# BICYCLE ROAD SAFETY AUDIT GUIDELINES AND PROMPT LISTS

U.S. Department of Transportation
Federal Highway Administration

Safe Roads for a Safer Future
Investment in roadway safety saves lives

RSA
Making Your Roads Safer

FHWA-SA-12-018

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**16. Abstract**

Road Safety Audits (RSAs) are a formal safety examination of an existing or future roadway or off-road facility and are conducted by an independent, experienced, multidisciplinary team. The purpose of the *Bicycle Road Safety Audit Guidelines and Prompt Lists* is to provide transportation agencies and RSA teams with a better understanding of the safety of cyclists in the transportation system when conducting an RSA. These Guidelines present the RSA team with an overview of basic principles of the safety of cyclists and potential issues affecting cyclists. They also provide information on how to conduct an RSA and effectively assess the safety of cyclists. Prompt lists describe safety considerations when conducting a cyclist-specific RSA. These Guidelines will help RSA teams evaluate and suggest a multimodal approach to safety by improving the safety of cyclists and all roadway users.

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# Chapter 1. Introduction

## 1.1 Cycling in the United States

Cycling has long been an effective method for travel and the primary means of transportation for many. Over the past several decades, the U.S. has experienced somewhat of a renaissance in cycling for recreation, health, and transportation. Adults as well as children are reconnecting with the enjoyment and mobility offered through cycling. Cycling provides an opportunity for regular aerobic exercise, which public health officials stress is necessary for good health. Many commuters have also found cycling to be a permanent and economical option to avoid traffic congestion and parking difficulties.



Cycling is a popular mode of transportation that serves many needs —from commuting to recreation.

Cycling has been an integral part of transportation plans since the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. In that same year, the U.S. Department of Transportation (USDOT) adopted a new national policy that, for the first time, sought to "increase use of bicycling, and encourage planners and engineers to accommodate bicycle and pedestrian needs in designing transportation facilities for urban and suburban areas." In 1991, Congress also commissioned the National Bicycling and Walking Study, which was published by the USDOT in 1994. The study provided key information to understand cycling and walking in the U.S. and to translate ISTEA into action by creating two specific goals:

- Double the percentage of trips made by foot and bicycle.
- Simultaneously reduce the number of traffic crashes involving cyclists and pedestrians by 10 percent.[1]

Subsequent legislation has supported cycling and the need to accommodate cyclists. *The National Bicycling and Walking Study: 15–Year Status Report* released in May 2010, provided an update of the status of biking and walking in the U.S.[1] The report showed the percentage of bicycle trips to increase from 0.7 percent to one percent, whereas the percentage of walking trips increased from 7.2 percent to 10.9 percent. Collectively, cycling and walking accounted for 11.9 percent of all reported trips, falling short of the doubling goal (i.e., 7.9 percent to 15.8 percent). However, between 1990 and 2009, the number of reported bicycle trips more than

doubled from 1.7 billion to 4 billion. This increase shows that, despite the slower than desired nationwide growth in the proportion of bicycle trips, some areas around the country have experienced a much larger increase in the percentage of people walking and bicycling. For example, between 2001 and 2007, Marin County, California experienced an average 66 percent increase in the weekday bicycling rate, a 33 percent increase on weekend days, and an average 8 percent increase in the weekday walking rate.[2] During this period Marin County implemented the Safe Routes to School Program and also participated in the Federal Non-Motorized Transportation Pilot Program. Other areas, such as Washington, D.C. (referred to subsequently as the District), have also seen a large increase in the number of people bicycling. In 2010, 2.2 percent of people biked to work, a rate that had almost doubled over the previous 10 years,[3] and from 2008 to 2011 the number of cyclists in the District increased by over two-thirds.[4] This increase can be attributed in part to an expansion of the facilities available to bicyclists, as well as greater access to bicycles. The District has installed bicycle lanes and bicycle storage facilities and in 2008 initiated the Capital Bikeshare Program, providing public access to rental bicycles throughout the city.

In New York City, commuter cycling doubled between 2007 and 2011.[5] During this period, the New York City Department of Transportation (NYCDOT) launched numerous programs and initiatives to make cycling and walking safer, such as implementing 90 miles of new bicycle lanes in 2008 that contributed to a record 35 percent single-year increase in commuter cycling. In 2012, the city's first bike share program will begin implementing a plan to build 600 stations housing 10,000 bikes. This program should increase commuter cycling even further and increase utilization of the city's nearly 400 bike-lane miles.



The addition of bicycle lanes, bike boxes, and other facilities in New York City has lead to a dramatic increase in cycling (Photographs from NYCDOT).

Overall, the areas with the greatest increases in bicycle trips have been those making a concerted effort to improve infrastructure conditions that are conducive to making cycling a viable and appealing transportation option. This includes not only making improvements in infrastructure, but also better combining land use and transportation initiatives allowing residents to live closer to a variety of destinations, making cycling an effective choice for commuting, recreational, and personal trips. Data from the Nationwide Personal Transportation Survey indicates that almost one-half of all trips are 3 miles or less, which is considered to be within cycling range for most adults in this country.[6]

In terms of safety, the National Bicycling and Walking Study report indicated that the original goal of reducing the number of crashes involving cyclists and pedestrians by 10 percent has been surpassed.[1] Since 1995, the number of cyclist and pedestrian fatalities has decreased by more than 20 percent (from 6,452 to 5,094 fatalities), while the number of cyclist and pedestrian injuries has decreased by over by 16 percent (from 145,000 to 121,000 injuries). Overall, injury trends from national estimates demonstrate a generally more consistent downward trend since 1995, although 2008 appears to be a significant exception, with an increase of more than 20 percent in injury crashes from the previous year.

The increase in bicycle injuries in 2008 demonstrates the uncertainty and variability of these data, which is underscored by the fact that little is known about bicycle volumes and potential crash exposure. Typically, severe crashes causing a fatality are reported; however, less serious cyclist crashes are more frequent and underreported. Adding to the complexity, there are neither consistent roadway inventory nor inventory for off-road areas (e.g. sidewalks, parking lots, paths, parks, and playgrounds), where approximately one-third of bicycle injuries may occur.[7] Nearly three-fourths of the cyclists treated and released by hospital emergency departments were injured in non-roadway or non-motor vehicle incidents and were unlikely to be reported in State traffic records.[8] It is evident that trends—and the current safety status of cyclists—are largely unknown.

What is known is that, over the past decade, between 629 and 786 cyclists were killed annually and an estimated 52,000 have been reported injured annually in the U.S..[9] Bicycle trips are more likely to result in a fatality or injury than motor vehicle trips. The estimated one percent of trips by bicycle accounted for two percent of all fatalities and injuries in 2009. Based on these data, expanded review of safety issues and implementation of countermeasures are necessary to effectively address the safety of cyclists.

Increases in bicycle accommodations by State and local transportation agencies are certainly helping to address safety concerns and reduce cyclists' risks. However, even these agencies are experiencing new and unique challenges never faced before. Road safety audits (RSAs) can be used to help address the safety of cyclists by improving the understanding of both the characteristics of cyclists and the factors that affect cyclist safety. An RSA is a formal safety examination of an existing facility or future roadway plan or project, that is conducted by an independent, experienced, multidisciplinary team. RSAs are a cost-effective method to proactively identify factors affecting safety and make suggestions on strategies and facilities to improve cyclist safety and support a truly multimodal street network for all types of facilities.

## 1.2 Purpose of These Guidelines

The purpose of the *Bicycle Road Safety Audit Guidelines and Prompt Lists* is to provide transportation agencies and RSA teams with a better understanding of the safety of cyclists in the transportation system when conducting an RSA. These Guidelines emphasize considering the context of the cycling environment from a "behind the handlebars" perspective. This document is an expansion of the cyclist-related material in the *FHWA Road Safety Audit Guidelines*[10] previously published by the Federal Highway Administration (FHWA).

## 1.3 Scope of These Guidelines






All elements of the roadway and pathway network where cyclists are permitted are covered in these Guidelines.

The *Bicycle Road Safety Audit Guidelines and Prompt Lists*, a cyclist-specific RSA guide, presents RSA team members with safety elements they should consider when conducting a cyclist-specific RSA. While the authors have made every attempt to be as thorough as possible, persons performing RSAs are reminded that conditions vary from site to site and additional concerns not documented herein may arise. That said, agencies should tailor prompt lists to their individual needs. Not all prompts included in these Guidelines will be applicable for all areas.

RSA team members with an understanding of the RSA principles and process can use this publication to conduct an effective cyclist-oriented review of a facility or help ensure that the cycling component of the RSA is adequately considered. It is important to note, however, that an RSA involves a review of all modal behaviors, needs, and facilities. Other RSA resources, such as the *FHWA Road Safety Audit Guidelines*[10] and the *FHWA Pedestrian Road Safety Audits Guidelines and Prompt Lists*[11], may be helpful in conducting a thorough RSA.

All elements of the roadway and pathway network where cyclists are permitted are covered in these Guidelines. This includes on-road accommodations (e.g., shared roadways and roads with designated bicycle facilities, like marked bicycle lanes) and off-road cycling facilities (e.g., shared used paths and separated bike facilities).

## 1.4 Organization of These Guidelines

The *Bicycle Road Safety Audit Guidelines and Prompt Lists* is organized into the following chapters:

- Chapter 2: Basic Principles of Bicycle Safety—provides an overview of the basic principles of cyclist safety considerations and where potential cycling issues are likely to occur.
- Chapter 3: Cyclists in the Road Safety Audit Process—answers basic questions about conducting RSAs and how that process is applied to effectively assess and enhance cyclist safety.
- Chapter 4: Using the Bicycle RSA Prompt Lists—explains the structure of the prompt lists and describes how to effectively use them when conducting a cyclist-specific safety audit. Also presents the prompt lists and descriptions of the prompts, including examples of safety concerns that may be encountered.
- Prompt Lists—identifies potential safety issues affecting cyclists and the conditions contributing to those issues.

## 1.5 Knowledge Base for Conducting RSAs

Before conducting an RSA, it is critical that some RSA team members have an understanding of the design requirements for a cycling facility as well as the relative safety provided by various design features. Some RSA team members should also have an understanding of the necessary skills to bike, particularly in traffic. The following are resources that are important for the RSA team to understand. This list is not comprehensive, but having an understanding of these will help the RSA team members check for conditions that may create safety issues for cyclists.

## Standards/Guidelines

- AASHTO A Policy on Geometric Design of Highways and Streets "Green Book"
  https://bookstore.transportation.org/Item_details.aspx?id=110
- Manual on Uniform Traffic Control Devices (MUTCD)
  http://mutcd.fhwa.dot.gov/kno_2009.htm

## Successful Practices/Guides

- AASHTO Guide for the Development of Bicycle Facilities
  http://safety.fhwa.dot.gov/ped_bike/docs/b_aashtobik.pdf
- AASHTO Guide for Achieving Flexibility in Highway Design
  https://bookstore.transportation.org/item_details.aspx?ID=103
- NACTO Urban Bikeways Design Guide
  http://nacto.org/cities-for-cycling/design-guide/
- Complete Streets: Best Policy and Implementation Practices
  http://www.planning.org/apastore/search/Default.aspx?p=4060
- ITE Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities
  http://www.ite.org/bookstore/RP036.pdf
- Road Diet Handbook: Setting Trends for Livable Streets
  http://www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=LP-670

## Safety Resources

- BIKESAFE: Bicycle Countermeasure Selection System
  http://www.bicyclinginfo.org/bikesafe/
- Commuter Bicyclist Behavior and Facility Disruption. Final Report (2007)
  http://www.lrrb.org/pdf/200715.pdf
- NCHRP Report 500 Volume 18: A Guide for Reducing Collisions Involving Bicycles
  http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_500v18.pdf
- Orlando Area Bicyclist Crash Study: A Role-Based Approach to Crash Countermeasures (2004)
  http://www.docstoc.com/docs/3785626/Orlando-Area-Bicyclist-Crash-Study-A-Role-Based-Approach-to
- Smart Cycling: Traffic Skills 101 (League of American Bicyclists)
  http://www.bikeleague.org/programs/education/courses.php#101
- The Dilemmas of Bicycle Planning (Bicycle Driving)
  http://bicycledriving.org/about/the-dilemmas-of-bicycle-planning
- Street Smarts (John Allen)
  http://www.bikexprt.com/streetsmarts/usa/index.htm

## State Resources

- Arizona Department of Transportation State Highway Bicycle Safety Action Plan
  http://www.azdot.gov/mpd/systems_planning/bicycle_safety_study.asp
- Massachusetts Highway Department Project Development and Design Guide
  http://www.mhd.state.ma.us/default.asp?pgid=content/designGuide&sid=about
- North Carolina Bicycle Facilities Planning and Design Guidelines (manual and video)
  http://www.ncdot.gov/bikeped/projectdevelopment/design_guidelines/default.html

- Oregon Bicycle and Pedestrian Plan
  http://www.oregon.gov/ODOT/HWY/BIKEPED/planproc.shtml
- Virginia Bicycle Facility Resource Guide
  http://www.virginiadot.org/programs/resources/bk-facresguide.pdf

### RSA Guidance

- FHWA Road Safety Audit Web Site
  http://safety.fhwa.dot.gov/rsa/
- FHWA Road Safety Audit Video
  http://safety.fhwa.dot.gov/rsa/video2009/
- FHWA Road Safety Audit Guidelines (Publication FHWA-SA-06-06)
  http://safety.fhwa.dot.gov/rsa/guidelines/documents/FHWA_SA_06_06.pdf
- FHWA Pedestrian RSA Guidelines and Prompt Lists (Publication FHWA-SA-07-007)
  http://katana.hsrc.unc.edu/cms/downloads/PedRSA.reduced.pdf

### Level of Service (LOS) Tools and Quantitative Assessments

- Bicycle Level of Service (BLOS) tool and guidelines
  http://www.bikelib.org/roads/blos/blosform.htm
- Pedestrian and Bicycle Intersection Safety Indices (Ped and Bike ISI)
  http://www.fhwa.dot.gov/publications/research/safety/pedbike/06130/06130.pdf
- Pedestrian and Bicycle Crash Analysis Tool (PBCAT)
  http://www.walkinginfo.org/facts/pbcat/index.cfm?/pc/pbcat.htm
- NCHRP Report 616: Multimodal Level of Service Analysis for Urban Streets (2008)
  http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_616.pdf

## 1.6 Glossary of Terms

The glossary is intended to identify terms used in these Guidelines referring to bicycle facility planning, design, and engineering. This glossary will help to establish the appropriate and consistent terminology for everyone involved in the RSA process.

- **Bicycle (Bike)**—A pedal-propelled device that is solely human powered and has two or more wheels, including children's bicycles, except a toy vehicle intended for use by young children such as a tricycle.[12]
- **Bicycle Boulevard**—A street segment (or series of contiguous street segments) that has been modified to accommodate through bicycle traffic but discourage through motor traffic.
- **Bicycle (Bike) Box**—A defined and/or colored area at a signalized intersection provided for bicyclists to pull in front of waiting traffic. The box is intended to reduce car-bike conflicts, particularly involving right-turning movements across the path of a bicyclist, and to increase bicyclist visibility.
- **Bicycle Facility**—A general term denoting infrastructure and provisions to accommodate or encourage bicycling, including parking and storage facilities, and shared roadways not specifically designated for bicycle use.[12]
- **Bicycle (Bike) Lane**—A portion of a roadway that has been designated by striping, pavement markings, and signs for the preferential or exclusive use of bicyclists (see Figure 1).[12]

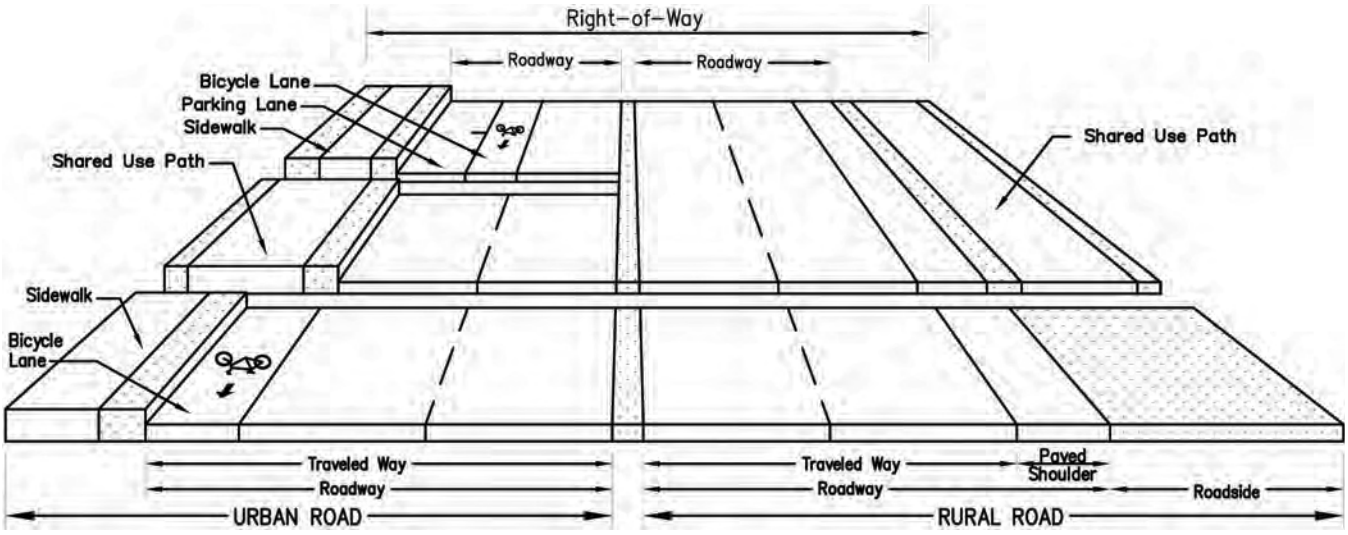



Figure 1. A Depiction of Key Terms Used to Describe Roadway Elements that Relate to Cyclists.

- **Bicycle (Bike) Path**—A pathway that is intended for the exclusive use by bicyclists, where a separate, parallel path is provided for pedestrians and other wheeled users. Most pathways are shared between bicyclists and other uses (See Shared Use Path).[12]
- **Bikeway**—A generic term for any road, street, path, or traveled way that is in some manner specifically or legally designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.[12]
- **Bus/Bikeway**—A marked lane for exclusive use by buses and cyclists. May also be referred to as a bus/bicycle lane.
- **Complete Streets**—Roadways that are designed with the safety of all users in mind, including but not limited to motorists, pedestrians, bicyclists, and transit users.
- **Contraflow Bicycle Lane**—A bicycle lane that allows bicyclists to travel the opposite direction of motor vehicle traffic on a one-way street.
- **Cycle Track**—A bicycle facility, typically unidirectional, that is separated from motor vehicle travel lanes, as well as sidewalks and pedestrians, by a physical barrier such as on-street parking or a curb, or is grade-separated (see Figure 2).

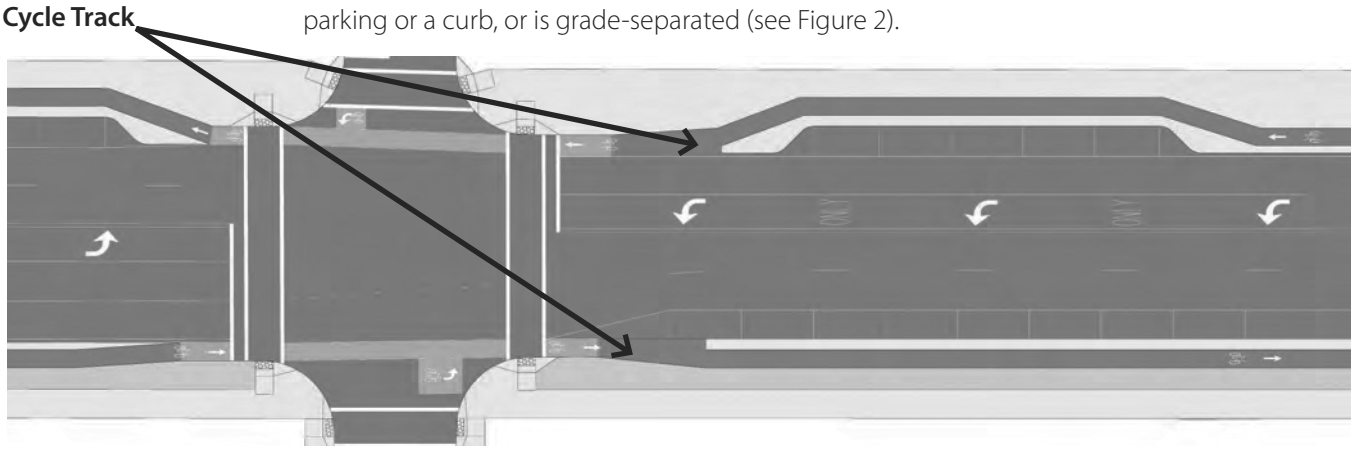



Figure 2. An Example of a Cycle Track on a City Street.

- **Cyclist (Bicyclist, Rider or Bike Rider)**—A person who is riding a bicycle as defined above.
- **Highway**—The entire width between the right-of-way open to the use of the public for purposes of vehicular travel, including paved shoulders.[12]
- **Loop Detector**—An inductive (wire) loop embedded in the pavement that detects the presence of a vehicle at a signalized intersection to activate a signal change. Diagonal quadruple loops typically provide the best bicycle detection.
- **Multi Use Path**—See Shared Use Path.
- **National Bike Routes**—A national network of bike routes that may span multiple States or have national or regional significance.
- **On-road Accommodation**—A facility that is part of the roadway or traveled way that is typically used by bicyclists and/or motor vehicles such as a shared lane, wide curb lane, bicycle lane, or bikeable shoulder.
- **Off-road Accommodation**—A path that is separate from the roadway used by motor vehicles. This may parallel a roadway or may be separate from a road, as it may pass through parks within the public right-of-way or on private right-of-way. This can be separated from pedestrian traffic (bicycle path) or shared with pedestrian traffic (shared use path).
- **Path**—See Shared Use Path. Non-descriptive, general term.
- **Paved Shoulder**—The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of sub-base, base, and surface courses (see Figure 1).[12] Use by cyclists may be allowed or prohibited based upon specific State laws.
- **Roadway**—The portion of a highway, including the shoulder, that is improved, designed, or ordinarily used for vehicular travel (see Figure 1).[12]
- **Separated Bicycle Facility**—A bikeway within or adjacent to the roadway and separated from moving traffic by barriers or curbs, parking lanes, striped buffers, and other means.[13] Separated bicycle facilities may be unidirectional or bidirectional.
- **Shared Lane**—A lane of a traveled way that is open to bicycle travel and motor vehicle use.
  - **Narrow Lane**—A travel lane less than 14 feet in width, which therefore does not allow bicyclists and motorists to travel side-by-side within the same traffic lane and maintain a safe separation distance.
  - **Wide Curb Lane**—A travel lane at least 14 feet wide, adjacent to a curb, which allows bicyclists and motorists to travel side-by-side within the same traffic lane.
- **Shared Lane Marking (SLM or "Sharrow")**—A pavement marking symbol that assists bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side-by-side within the same traffic lane.[14]
- **Shared Roadway**—A roadway that is open to and legally permits both bicycle and motor vehicle travel[12]; any existing street where bicycles are not prohibited.
- **Shared Use Path**—A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way (see Figure 1). Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users.[12] Such facilities are often referred to as "trails."

- **Sidewalk**—The portion of a street or highway right-of-way designed for preferential or exclusive use by pedestrians (see Figure 1).[12]
- **Signed Shared Roadway (Signed Bike Route)**—A shared roadway that has been designated by signing as a preferred route for bicycle use.[12]
- **Traffic Calming**—A way to design or retrofit streets to encourage slower and more uniform vehicle speeds.
- **Trail**—Non-descriptive general term typically referring to off-roadway facilities but with no standardized definition. Use should generally be avoided as it may refer to a range of facilities, including a coarse, unpaved hiking/biking route or a paved urbanized facility.
- **Traveled Way**—The portion of the roadway, excluding shoulders, to be used for the movement of vehicles (see Figure 1).[12]

2

# Chapter 2. Basic Principles of Bicycle Safety

This chapter provides a brief overview of elements that affect cyclists' safety. RSA teams should have an understanding of these elements to better evaluate the cycling environment and improve the quality and safety of facilities that support cycling as a mode of travel.

## 2.1 Cycling as a Mode of Travel

Cyclists are legitimate users of the roadway and an integral part of our transportation system. The USDOT statement on bicycle and pedestrian accommodation regulations and recommendations released in March 2010 articulates this policy foundation.[15] The policy recommends that well-connected bicycle networks should be planned, funded, and implemented, particularly connecting to transit services. The policy encourages "transportation agencies to go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities." In conclusion, the policy states that the "USDOT recognizes that safe and convenient walking and bicycling facilities may be different depending on the context—appropriate facilities in a rural community may be different from a dense, urban area. However, regardless of regional, climate, and population density differences, it is important that pedestrian and bicycle facilities be integrated into transportation systems."

Cycling refers to a range of uses for bicycles, including commuter bicycling, as well as recreational uses, exercise, and children riding bikes to and from school. Cycling has experienced a resurgence by commuters looking for an alternative means to access the workplace, a healthier mode of transportation, and a new way to utilize connections to transit, particularly in cities and suburbs where traffic congestion and rising fuel prices are influencing commuters to consider alternative modes. In some areas, cycling as a commuter choice has doubled in recent years, and investment in infrastructure improvements to accommodate cyclists has increased.[16] Initiatives, such as Complete Streets policies, recognize the importance of cycling in the proper context, and bike share programs have made bicycles more accessible to people, particularly in urban areas, college campuses, and communities pursuing sustainable transportation systems. However, bicycling safety issues persist and will become increasingly relevant as bicycling

activity continues to expand, highlighting the importance of providing appropriate levels of bicycle accommodation on a range of transportation facilities.

## 2.2 Characteristics of Cyclists

There are many factors that affect the safety of bicycling. It is crucial for the RSA team to understand the range of characteristics exhibited by cyclists using various facility types and how designs may or may not accommodate the range of bicycle types and cyclist abilities.



A wide range of bicycle, cyclist, and facility characteristics should be considered as part of an RSA.

In the past, cyclists were categorized corresponding to riding ability and comfort with speed and proximity to other vehicles to simplify considerations in the planning and design process. Now it is better understood that different abilities of cyclists should be considered on all types of facilities. To accommodate a range of cycling characteristics on any bicycle facility, it is important to understand the physical and operational attributes of bicycles and cyclists.

Space—The required width to accommodate a cyclist is the width of the cyclist plus the width to operate or maneuver a bicycle. Similarly, the required height to accommodate a cyclist considers bicycle and rider dimensions. Figure 3 illustrates the unobstructed space needed by a typical cyclist to safely maneuver. The width of a cyclist should be considered as it relates to facility design, as well as surrounding influencing factors. For example, on shared use paths, cyclists may prefer to ride side-by-side, or there may be a large number of bike trailers on the path. These conditions would require operating space beyond the minimums illustrated in Figure 3. Additionally, cyclists will lean into a curve at moderate or higher speeds, resulting in an angled riding axis, lower pedal clearance from the riding surface, and a possible need for greater horizontal clearance. The amount of space afforded to cyclists may directly impact their ability to safely navigate a route, as cyclists expend a high amount of mental effort to maintain course in narrow or constrained conditions rather than paying due attention to potential obstacles or harmful conflicts with other facility users.[17]

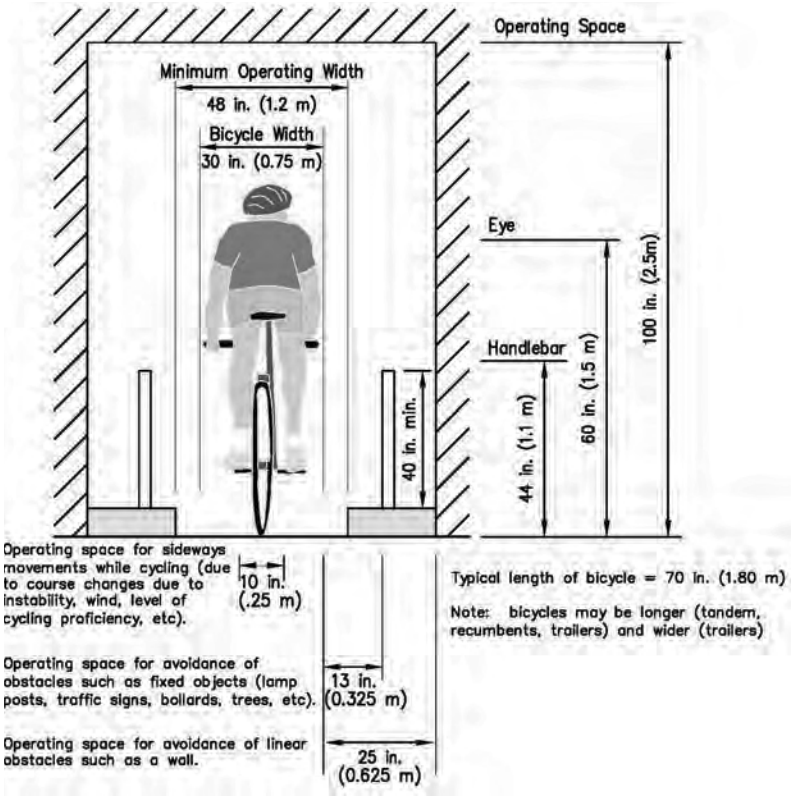
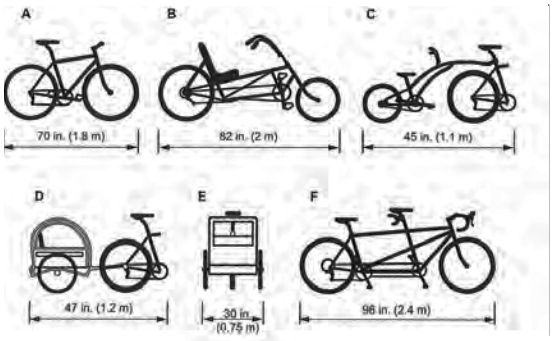



Figure 3. Operating Space for Cyclists.[18]

Length—Relates to space needed for longitudinal clearance, which may be especially critical at intersections where motor vehicles, bicycles, and pedestrians share space. Longitudinal space should consider the varying lengths of bicycles that are expected to use a facility and the impact on safety (see Figure 4). For example, at a midblock crossing of a shared use path, the space dedicated to a cyclist in the refuge area may need to adequately accommodate a bicycle and trailer without encroaching on the roadway.




A. Adult Typical Bike
B. Adult Single Recumbent Bicycle
C. Additional Length for Trailer Bike
D. Additional Length for Child Trailer
E. Width for Child trailer
F. Adult Tandem Bicycle

Figure 4. Variation in Bicycle Dimensions.[12]

Stability— Bicycles are generally unstable vehicles and rely on the user to maintain an upright orientation. The stability of a cyclist is affected by:

- Travel speed.
- Surface conditions.
- Environmental factors.



Facilities used by cyclists should be smoother than those deemed acceptable for motorized traffic. It is also important that debris be cleared from facilities used by cyclists.

Cyclists typically need to maintain a reasonable level of speed to remain stable. At slower speeds, cyclists begin to lose stability and will often "zigzag" to maintain stability. In the context of bicycle control, "zigzagging" is moving from side-to-side (i.e., laterally) in an effort to maintain balance.[17] This behavior is also performed at higher speeds with less lateral deflection. The speed and stability of a bicycle are related to its space requirements (i.e., the wider the zigzag movement, the more unobstructed lateral space required).

Surface conditions can also affect the stability of a cyclist. Rough and slippery surfaces can contribute to a cyclist losing control. The environment can also play a role, with wet and windy conditions affecting traction and stability. Destabilizing wind conditions can be due to environmental conditions or air flow caused by large vehicles passing.

Speed, Deceleration, and Stopping—Travel speed may vary greatly depending on the terrain, type and quality of the bicycle equipment, and the skill and competency level of the cyclist. Often, differences in speed are most pronounced on long uphill gradients, where the relative physical abilities of cyclists are a significant factor. Conversely, on downhill gradients, even novice cyclists can achieve similar speeds to the more experienced cyclists and adjacent motor vehicles. Cyclist speed has a particularly important bearing on line-of-sight considerations at intersections and the ability for cyclists to safely navigate the intersection (including elements such as the distance required to stop, the time needed to decelerate, and surface conditions affecting friction).

Vulnerability—Cyclists are vulnerable road users. Unlike motorists, who are afforded protection within the structure of a vehicle, bicycles offer little or no protection to a cyclist. Cyclists may or may not understand their vulnerability and, as a result, may allow real or perceived environmental factors, such as availability of dedicated bicycle facilities, frequency of conflict points with other users, time of day, surface quality, types of vehicles, and terrain to influence route selection and other riding behaviors. For example, cyclists may choose routes with more conflict points, such as at driveways or intersections, to reduce perceived conflicts with same-direction traffic.

## 2.3 The Cycling Network

Facilities for cyclists, whether on-road or off-road, should be part of a network that connects cyclists to urban, suburban, and rural land uses. The context of the road for a bicycle facility is a key element that should be considered in the design. The type and level of accommodation must be appropriate for the characteristics of the surrounding conditions. A "one-size-fits-all" approach may result in an underutilized facility or a facility that does not improve cycling safety, and, in some instances, may degrade cyclist safety. There are several factors that should be considered in all contexts to provide safe accommodations for cyclists.

Directness—The cycling network should be direct between key destinations, considering both distance and time.[17] On a corridor level, it is important to understand the "desire lines" of cyclists accessing key destinations. While directness typically refers to the shortest path to access destinations, it is influenced by travel time factors (e.g., the speed of a route) that may be influenced by the number of stops, grade, and other factors. Frequent stops and steep, uphill sections along a corridor can be a significant burden to cyclists operating under their own power.

Continuity and Connectivity—The cycling network should be continuous (i.e., without gaps or abrupt changes) and provide convenient linkages to destinations. Often, it is the transition between different land uses and environments where the nature of cycling accommodations changes. For example, a separated facility along public property may become a bicycle lane or an undesignated area where cyclists ride with traffic. Continuity may also relate to any aspect of a facility, such as available riding space or quality.

Comfort—Cyclist comfort level and perceived risk should be considered, as they may influence route choice and riding behaviors. When presented with facilities on high-speed, high-volume roadways, some cyclists may be more comfortable when dedicated space is provided to create separation from motorized traffic. A lack of adequate riding space or a concern for personal safety will often influence route selection and other riding behaviors, including cyclist use of sidewalks. Within an area studied as part of an RSA, it is critical to understand that cyclist behavior is greatly influenced by route preference and the cyclist's perceived risk of the route or path intended for their use.

## 2.4 Crash Data Analysis Considerations

The RSA team should consider that the reported crashes only represent a portion of the bicycle-related crashes that occur.

Crash data analysis is one method to identify factors contributing to collisions and to identify area-wide or location-specific crash trends that warrant further safety audit. However, an RSA team should consider that reported crashes may not capture the entire crash and injury picture. Typically, reported crashes only represent a fraction of the total number of cycling crashes occurring on public roadways. For many jurisdictions, official crash reporting does not include bicycle-only crashes that occur on the roadway, bicycles striking fixed objects, or crashes between cyclists and pedestrians. A multi-State study for FHWA based on hospital emergency department[8] data suggests that typical State crash databases, even with a high rate of reporting, may only capture about one-fourth of the crashes serious enough to require treatment at a hospital emergency department and less than half of the crashes on the roadway that resulted in serious cyclist injuries.

Cycling crashes on sidewalks, parking areas, or off-roadway paths are also unlikely to be included in most State and local reported crash databases. At least one-fourth of the significant injuries in the hospital study resulted from crashes in non-roadway areas; about half of these were on sidewalks. Since the FHWA study was performed, there has been significant expansion in off-roadway infrastructure, including shared use paths. Data on crashes with motor vehicles on roadways or at roadway-path intersections should be available from State or local crash databases. However, data are typically lacking on how many cyclists are being injured in bicycle-only falls, crashes with other non-motorized users or objects, or in crashes in off-road areas, including shared used paths and path junctions. The RSA team should consider that the reported crashes only represent a portion of the crashes that have occurred. The RSA team should consider seeking other sources of data, such as hospital or emergency department records or indications of bicycle crashes from self-reports to area agencies. Local cyclists may be able to provide information on cycling conditions. The team should also focus on conflicts and conditions that are likely to have contributed to unreported crashes.

## 2.5 Factors That Contribute to Bicycle Crashes

National, State, and local studies have highlighted some of the factors frequently associated with reported bicycle crashes with motor vehicles, including pre-crash maneuvers and events leading up to crashes. These descriptive statistics may help to identify crash trends and identify areas where RSAs may be conducted; however, RSAs should include an analysis of site-specific crash data to similarly identify trends in crash locations (e.g., intersections or segments), types (e.g., a vehicle turning into the path of cyclist or wrong-way cycling), injury level, time of day, and roadway and environmental factors that indicate operational or design issues potentially contributing to crashes. Since bicycle crash data may be scarce, detailed crash reports should also be examined to determine specific circumstances that may have contributed to crashes at individual locations.

Finally, observing conditions and behaviors in the field is critical to a comprehensive understanding of the conditions underlying bicycle safety issues, because even detailed crash descriptions may not capture the nature of existing safety issues. RSAs are a useful proactive tool to identify issues on a system-wide or corridor-wide basis, including at locations where crashes may not have yet occurred (or been reported).

### 2.5.1 Location Factors

FHWA initiated a study of cycling crashes from six States in the early 1990s to gain an understanding of types of crashes, locations, and other factors associated with bicycle and pedestrian collisions with motor vehicles (see Figure 5).[7] Key findings from the study include:

- A majority of bicycle-motor vehicle collisions (approximately 70 percent) occurred in urban areas where more cycling occurs.
- Approximately one-half (51 percent) of the bicycle crashes occurred at intersections or were related to intersections, 22 percent occurred at junctions with commercial and private driveways or alleys, and the remaining 27 percent occurred on roadway segments.

In compact urban areas with a dense street grid (and relatively short intersection spacing), an even higher proportion of collisions may occur at intersections. For example, an analysis of bicycle crashes in Cambridge, Massachusetts found that 68 percent occurred at intersection locations (39 percent unsignalized and 29 percent signalized).[19] Other studies have analyzed trends in location by comparing urban and rural environments. Figure 5 compares intersection-related versus non-intersection-related crashes in North Carolina. In urban areas intersection-related crashes involving a cyclist were more prevalent than non-intersection crashes while in rural areas non-intersection related crashes were higher.

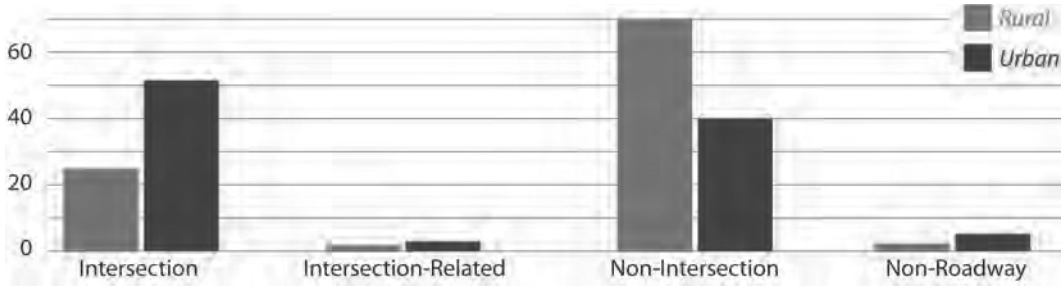



Figure 5. Percentage of Bicycle-Motor Vehicle Crashes by Urban or Rural Locations in North Carolina.[20]

Geographic information systems (GIS) or other spatial analyses can help to identify area-wide crash concentrations, and corridors or intersections that may benefit from an RSA. For example, in the Orlando metropolitan area, one-fourth of bicycle crashes with motor vehicles were concentrated on 19 corridors that made up less than one percent of the street centerline miles. These corridors may represent high motor vehicle and high bicycle volume corridors and may present an opportunity to make corridor-wide safety improvements.

Spatial analyses of specific crash locations may range from simple, such as creating a push-pin map, to more detailed analyses using GIS or other software. Examples of spatial crash analyses using GIS are shown in Figure 6.

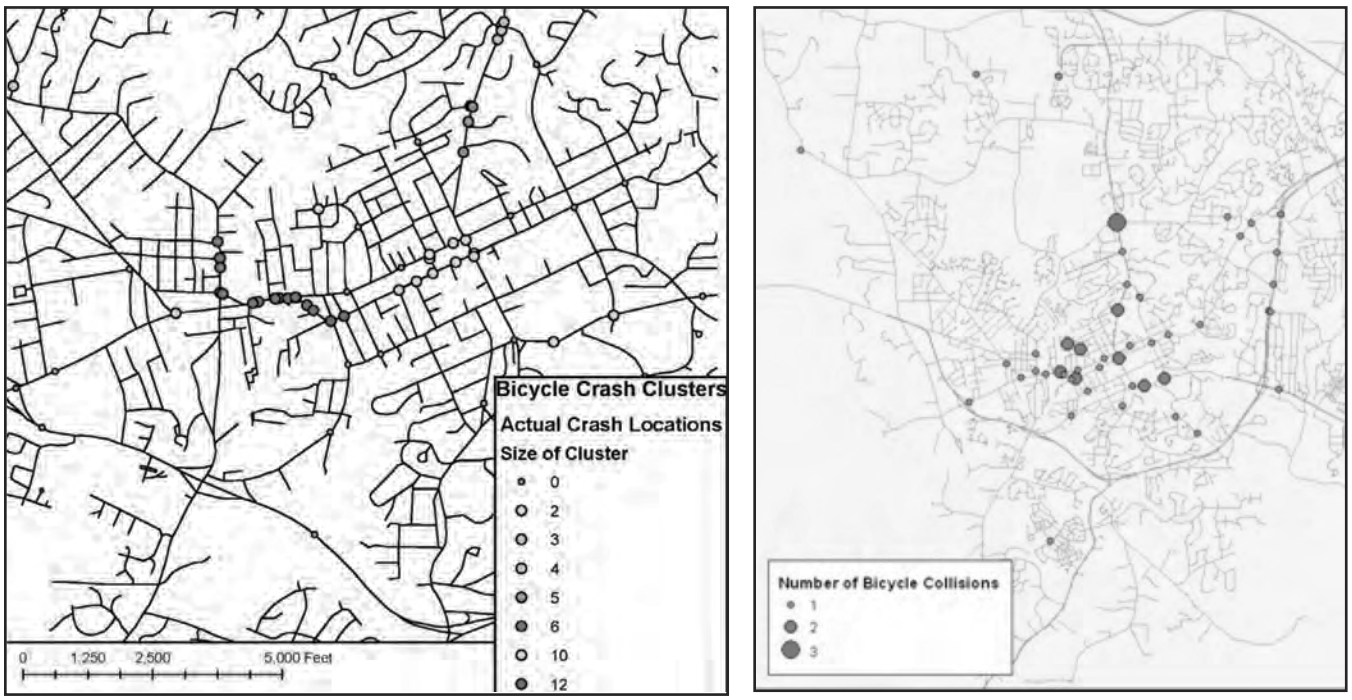



Figure 6. Examples of Spatial Analyses of Mapped Crash Locations. Different types of spatial analyses are available to help identify high-crash zones, corridors, or intersections for RSAs. Areas with similar characteristics, but which have not yet experienced crashes, may be considered for similar treatments proactively.[21]

### 2.5.2 Speed Factors

The speed differential between vehicles and bicycles on higher speed roadways is greater than on lower speed roadways, which may present additional challenges for cyclists and motorists, such as judging gaps between vehicles when crossing the road or the time and distance required for vehicles to stop or overtake a cyclist. Figure 7 illustrates the relationship between the posted speed limit of a road and the severity of a crash involving cyclists. The severity of a crash involving a cyclist and motorist increases exponentially with speed. In rural areas, many two-lane highways are designed for relatively high speeds and provide few separate accommodations or alternative lower-speed routes between destinations for cyclists. Although the overall frequency of bicycle crashes tends to be higher in urban areas, where more cycling takes place, crashes in rural areas more often result in fatal or serious injuries. For example, in North Carolina, fatalities resulted 3.5 times more often from a crash in rural areas compared with those in urban areas of the State.[22]

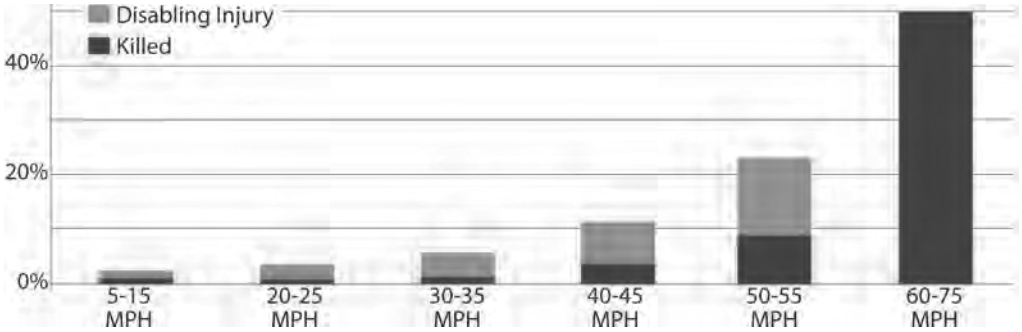



Figure 7. Percentage of Bicyclists Killed or Seriously Injured in Bicycle-Motor Vehicle Crashes by Posted Speed Limit in North Carolina.[22]

### 2.5.3 Seasonal Factors, Weather, and Surface Conditions

The occurrence of bicycle crashes varies substantially by season, as the prevailing weather has a significant impact on the number of bicycle trips, surface conditions, and visibility. The multi-State FHWA study noted a strong seasonal trend in crashes, with 69 percent of collisions occurring over the months of April to September (spring and summer).[7] These trends are likely associated with variation in level of riding activity across the seasons but could also incorporate other risk factors that vary by season. For example, some regions would likely see different trends depending on year-round temperatures, rainfall, snow and ice, and other seasonal factors, such as presence of college campuses and trends in tourism. In high-tourist areas, both drivers and cyclists may be unfamiliar with roadways, traffic patterns, or local traffic laws, and may need more wayfinding assistance, among other possible remedies.

Agencies with access to crash data may find it useful to use the Pedestrian and Bicycle Crash Analysis Tool (PBCAT). PBCAT is a crash typing software intended to assist practitioners with improving walking and bicycling safety through the development and analysis of a database containing details associated with crashes between motor vehicles and pedestrians or bicyclists. http://www.walkinginfo.org/facts/

### 2.5.4 Behavioral Factors

Behavioral factors of cyclists and motorists are often identified through a process called crash typing. Most crash report forms and the resultant crash databases do not capture details of cyclist and motorist maneuvers, pre-crash position, or other factors leading up to the crash. Crash typing was developed to enhance the understanding of events leading up to bicycle and motor vehicle collisions and the factors associated with such events. This knowledge may be used to better target countermeasures or aid in development of new countermeasures for common crash scenarios.[23]

The most common types of crashes found in both rural and urban areas from the six States in the early 1990s study by FHWA[7] are shown in Table 1, with more recent data from North Carolina[22] and the Orlando metropolitan area included, as well.[24] The data from Orlando represent crash distributions in a large metropolitan area, while the data from North Carolina represent trends from all urban areas (municipalities) and from all rural areas of North Carolina. The crash

types shown in Table 1 accounted for nearly 89 percent of all crashes in the six-State FHWA study, approximately 84 and 90 percent of crashes in urban and rural areas of North Carolina, and 76 percent of crashes in the Orlando metropolitan area.

As the data in the table illustrate, the distribution of crash types may be different for each area and will depend on site-specific conditions. The RSA team should consider ways that the environment and roadway conditions may have contributed to such crashes as well as behaviors that should be addressed through enforcement and education.

Table 1. Bicycle-Motor Vehicle Crash Types from FHWA's Six-State Study[7], North Carolina, and Orlando, Florida Metropolitan Planning Organization (MPO).

| Bicycle Crash Type Groups | Percentage of Crashes | | | |
|---|---|---|---|---|
| | FHWA (early '90s) | North Carolina Urban ('04-'08) | North Carolina Rural ('04-'08) | Orlando Metropolitan Area ('03-'04) |
| **CROSSING PATHS** | | | | |
| **Motorist failure to yield – intersection** | 14.4 | 13.9 | 5.5 | 14.0 |
| **Bicyclist failure to yield – intersection** | 16.8 | 15.3 | 7.9 | 14.0 |
| **Bicyclist failure to yield – midblock** | 11.7 | 8.6 | 10.8 | 9.3 |
| **Motorist failure to yield – midblock (driveway/alley)** | 6.9 | 8.5 | 3.0 | 10.1 |
| **Turning errors – bicyclist and motorist** | 1.4 | 1.5 | 1.7 | 2.7 |
| **Bicyclist failure to clear intersection** | 1.4 | 1.3 | 0.2 | 0.0 |
| **Crossing Path Total** | **52.6** | **49.1** | **29.1** | **50.1** |
| **PARALLEL PATHS** | | | | |
| **Motorist turned/merged into path of bicyclist** | 12.1 | 13.2 | 6.9 | 8.1 |
| **Motorist overtaking bicyclist** | 8.6 | 8.9 | 29.3 | 8.1 |
| **Bicyclist turned/merged into path of motorist** | 7.3 | 6.8 | 16.9 | 5.4 |
| **Bicyclist overtaking motorist** | 2.7 | 1.6 | 0.7 | 0.6 |
| **Operator wrong side/head-on (motorist or bicyclist)** | 2.8 | 2.1 | 5.6 | 2.5 |
| **Motorist loss of control** | 0.6 | 0.3 | 0.5 | 0.3 |
| **Bicyclist loss of control** | 1.8 | 2.2 | 1.3 | 1.0 |
| **Parallel Path Total** | 35.9 | 35.1 | 61.2 | 26 |
| **Total for Common Crash Types Listed** | 88.5 | 84.2 | 90.3 | 76.1 |

Despite the differences in the types of crashes, there are some general trends that merit consideration by the RSA team. One of the most frequent group of crashes in the national, North Carolina urban, and Orlando metropolitan area studies involved motorist failure to yield at intersections (signalized, sign-controlled, or uncontrolled). These crashes include motorists pulling out or driving into intersections and into the path of bicyclists on initial crossing paths. Motorists and bicyclists may fail to stop for a red signal indication or a stop sign, or pull into the path of each other at a stop-controlled location after initially stopping, including to make right turns on red or to make right or left turns at stop signs (see Figure 8).

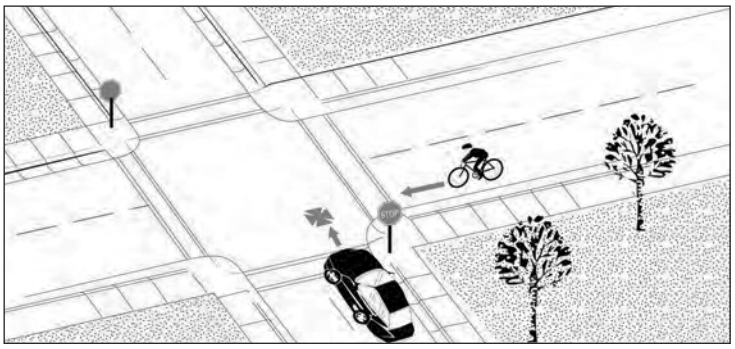



Figure 8. Crossing Path Crash - Motorist Failure to Yield at Stop-Controlled Intersection.[24]

Cyclists may contribute to these types of crashes by riding the wrong way (against traffic), on the sidewalk, or both. Nearly one-third (32 percent) of all cyclist collisions in the FHWA study involved cyclists riding against traffic; for intersection collisions, the proportion was 42 percent.[7] The Orlando metropolitan area study found that 43 percent of cyclists were riding against traffic. Both wrong-way and sidewalk riding place cyclists in positions where they are not expected by motorists at intersections and at driveways. Crashes at driveways are categorized as motorist failure to yield – midblock. The RSA team should examine conditions that may contribute to wrong-way or sidewalk riding, as well as conditions at intersections that might contribute to these types of crashes. Cyclists may be using sidewalks because they are uncomfortable with traffic or roadway conditions. Sidewalk and wrong-way riding may also be prevalent if shared use paths do not have adequate connections in both directions of a multilane or divided roadway.

The category of bicyclists failing to yield at intersections was also a frequent group of crashes in the national, North Carolina urban, and Orlando metropolitan area studies. Cyclist ride-throughs at stop signs or traffic signals are a frequent crash type in urban areas. Frequent stops along a corridor can be a significant burden to cyclists trying to conserve energy or avoid unclipping from foot pedals. A route that provides few stops for cyclists could improve safety and mobility for cyclists. These crashes also can occur when a cyclist is attempting to cross a multilane or high-volume roadway and has difficulty identifying a suitable gap in traffic. Side streets on high-volume, high-speed roads are often stop-controlled with no controls on the main road and may be a challenge for cyclists. Factors or conditions similar to those described at junctions may also affect access from commercial or private driveways (categorized as bicyclist failure to yield – midblock). Parking or other sight distance issues are among other factors that could also contribute to such crashes.

Traffic signals without automated detection for bicycles may contribute to cyclists riding through after slowing or stopping. Cyclists may also fail to clear an intersection before being

struck by motorists who may or may not have stop-control in their direction of travel (bicyclist failure to clear intersection). This crash type may also be difficult to identify from crash data, but signal timing can be used to verify adequate clearance intervals for both cold starts after a recent signal change and for riders proceeding at the end of the green indication.

Among parallel path crashes, the most frequent group of crashes in the national, North Carolina urban, and Orlando metropolitan area studies was motorist turned or merged into the path of a bicyclist. This crash type includes motorists turning left into the path of a through bicyclist, most often from the opposite direction but sometimes from the same initial direction as the bicyclist. Such crashes may occur when a motorist is looking for a gap to turn left and oncoming bicyclists are obscured from view by approaching motorists in front of the cyclist or in another lane. Figure 9 illustrates how such crashes may occur with cyclists.

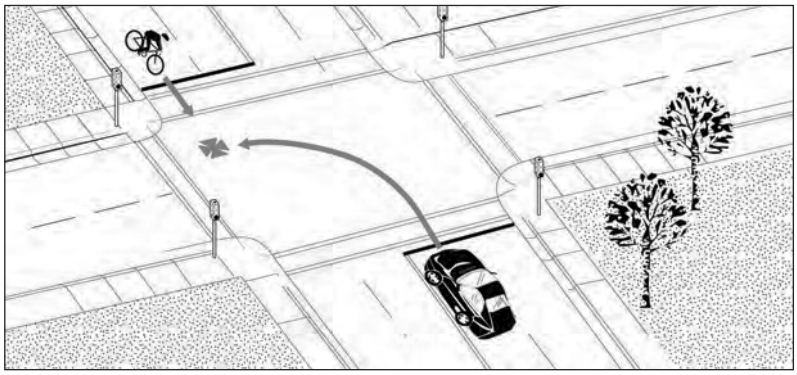


Figure 9. Parallel Path Crash—Left-Turning Motorist Failure to Yield at Signalized Intersection.[24]

This group also includes motor vehicles striking bicyclists when making right turns. The motorist may make a "right hook" maneuver because they misjudge the speed of the bicyclist traveling along the right side of the roadway or they mistakenly believe that the bicyclist should yield right-of-way (see Figure 10).

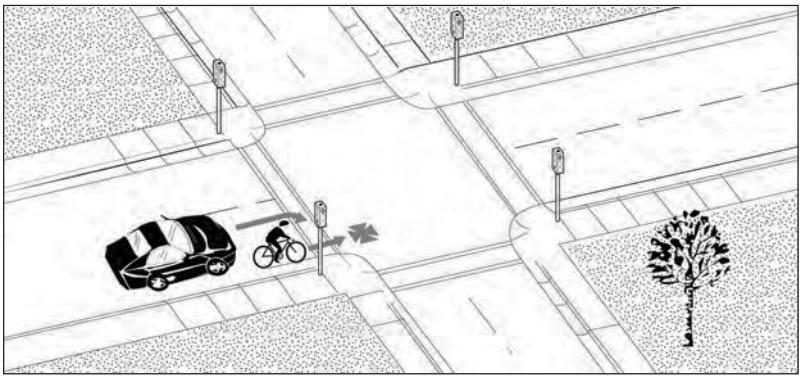


Figure 10. Parallel Path Crash—Right-Turning Motorist Failure to Yield at Signalized Intersection.[24]

Crashes involving right-turning vehicles can also occur just after a signal change when drivers planning to turn right do not see bicyclists approaching in their blind spot. Another cause includes drivers turning after waiting for pedestrians to clear from a crosswalk without observing a bicycle approaching from the rear.

The group of crashes involving motorists overtaking bicyclists may include situations where the motorist may fail to detect the bicyclist in time due to a curve or other sight distance issue (see Figure 11), the bicyclist may suddenly swerve left to avoid a pothole or other obstacle, or the overtaking motorist may detect the cyclist but fail to allow adequate time or space for safe passing. This type of crash represented between eight and nine percent of motor vehicle-bicycle crashes in the six State FHWA study, the North Carolina urban areas, and the Orlando metropolitan area. In rural North Carolina, this type of crash represented nearly 30 percent of motor vehicle-bicycle crashes, indicating that this may be a more significant issue in rural areas. Measures to improve sight distance, reduce vehicle speeds, enhance lighting, or provide delineated space for cyclists may be appropriate, depending on conditions present.

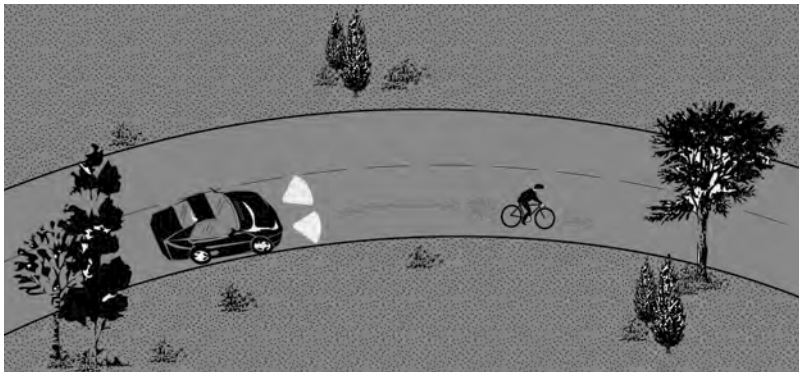


Figure 11. Parallel Path Crash - Motorist Failure to Detect Cyclist on a Curve at Night.[23]

Riding at night is also a frequent crash occurrence among cyclists as reported in the FHWA study[7] and in the Orlando metropolitan area study[23], with crashes involving cyclists during low-light conditions accounting for 21.3 percent and 22.1 percent of bicycle crashes, respectively. However, it is not clear how many of these crashes involved cyclists using active lighting—that is white headlamps or headlights facing the front and red taillights facing the back. Active lighting is important for motorists to be able to detect cyclists at night. Most States have active bicycle lighting laws that should be supported and enforced.

Although not a large percentage of crashes, turning errors involve either the motorist or bicyclist turning into the wrong lane at the end of their turn. Driveway and intersection design may facilitate slower turning speeds to help reduce the chances of this type of collision.

In addition to the bicycle crash type groups listed in Table 1, there may be other bicycle crash types to consider. For example, parked vehicles cannot only contribute to sight distance issues but can also be a factor for parallel path crashes involving bicyclists overtaking parked motor vehicles.[23] This crash type includes situations involving bicyclists striking parked motor vehicles or extended motor vehicle doors (dooring). Areas where there is a large amount of on-street parking may have a higher incidence of dooring crashes. For example, in Cambridge, Massachusetts, dooring accounted for 20 percent of all bicycle-motor vehicle crashes.[19]

The RSA team should consider these trends when conducting an RSA. However, a site-specific analysis of data and detailed field observations are essential when conducting an RSA. Chapter 3 provides details to consider beyond analyzing crash data.

3

# Chapter 3. Cyclists in the Road Safety Audit Process

This section provides detailed information pertaining to cyclists in the RSA process. General information about RSAs, such as RSA policies and procedures and generalized prompt lists, are included in the *FHWA Road Safety Audit Guidelines*.[10] The *Pedestrian Road Safety Audit Guidelines and Prompt Lists*[11] can also be used as a reference when conducting RSAs, particularly when considering how different modes of travel interact.

## 3.1 What is an RSA?

As noted in Chapter 1, an RSA is a formal safety examination of a future roadway plan or project or an in-service facility and is conducted by an independent, experienced, and multidisciplinary RSA team.

The primary focus of an RSA is safety while working within the context of mobility, access, surrounding land use, and/or aesthetics. RSAs enhance safety by identifying potential safety issues affecting all road users under all conditions and suggesting measures for consideration by the design team or responsible agency.

An RSA is not simply a standards check. Standards checks are part of the design process to ensure adherence to design standards and guidelines. Although the RSA team may identify safety issues by comparing items of concern to standards, the general intention of the RSA is to identify areas where applied standards may interact with road user behaviors to generate a potential safety issue.

The definition of an RSA contains four key terms:

- **Formal**—an eight-step procedure is followed.
- **Safety Examination**—the focus is to identify potential safety issues.
- **Independent**—RSA team members should be independent of facility ownership, design, and operation to ensure an unbiased review.
- **Multidisciplinary**—various backgrounds help ensure all aspects of safety performance can be adequately addressed.

## 3.2 What Should be Considered for an RSA?

In addition to using an RSA as a tool to improve safety performance of facilities in their jurisdiction, public agencies may wish to conduct RSAs oriented to address safety issues related to specific user groups, such as bicyclists. While all RSAs should include a review of pedestrian and cyclist safety, a bicycle-oriented RSA may be undertaken to improve identified cyclist safety issues that may have resulted from changes in land use and mode choice over time or inadequate consideration of cycling in previous planning and design processes. Specific areas to assess during an RSA, which are presented in the prompt list, include:

- Streets or Paths.
- Structures (Bridges or Tunnels).
- Intersections, Crossings, and Interchanges.
- Transitions.
- Transit.

## 3.3 Who Should Conduct RSAs?

An increasing number of State and local transportation agencies are using RSAs as a proactive tool for improving safety. Moreover, cyclist safety is a major concern for many local agencies and, as such, they may find a greater need for conducting a bicycle-oriented RSA. Since the independence of the audit team is a requirement of an RSA, local agencies are encouraged to contact the State Department of Transportation (DOT), the Local/Tribal Technical Assistance Program (LTAP/TTAP) center, the FHWA division office, or the FHWA resource center for assistance in finding team members. The local agency may also find it helpful to contact neighboring local agencies directly to assemble an independent team. Considerations for the RSA team responsibilities, skills, and size are discussed in Section 3.5.

## 3.4 When Should RSAs be Conducted?

RSAs can be conducted at any stage in a project's life:

- A pre-construction RSA (planning and design stages) examines a road before it is built, at the planning/feasibility stage or the design (preliminary or detailed design) stage. An RSA at this stage identifies potential safety issues before crashes occur. For example, an existing bicycle route may approach an intersection widening project. Cyclists must be safely accommodated through the new geometric layout. The earlier a pre-construction RSA is conducted, the greater is the potential for designers to efficiently and effectively remedy possible safety concerns.

- Construction RSAs (work zone, changes in design during construction, and pre-opening) examine temporary traffic management plans associated with construction, or other roadwork and changes in design during construction. For example, roadside construction barriers may eliminate a bicycle lane or available shoulder where cyclists ride, causing them to enter the mainline traffic stream. The RSA should assess the safety of cyclists under these conditions and examine measures to mitigate potential issues. RSAs can also be conducted when construction is completed but before the roadway is opened to traffic.
- A post-construction or operational RSA (i.e., of an existing road) examines a road that is operating and is usually conducted to address a demonstrated crash risk. Many older roadways, in particular, were not designed with adequate consideration of the needs of bicyclists. Conducting an RSA on existing facilities presents opportunities to retroactively improve bicyclist safety and to consider the needs of bicyclists where cycling activity has increased since construction.

## 3.5 How is an RSA Conducted?

The eight steps recommended by FHWA to conduct an RSA, along with suggestions for adequately considering cyclists in the process, are described in this section. Figure 12 illustrates the progression of these steps. The responsibilities of the project owner/design team and the RSA team may vary during the course of an RSA.




Figure 12. Eight-Step RSA Process.

### Step 1: Identify Project or Existing Road for RSA

The facility or project owner identifies the location(s) to be reviewed during the RSA. The owner should develop clear parameters for the RSA (the term "owner" in this document to refers to the person or agency that owns or is responsible for the project or facility). Evaluating the safety of cyclists may require the RSA team to investigate a parallel bicycle path or route, transition points for bicycle facilities both inside and outside of the RSA study area, or other conditions that may affect the safety of cyclists in the study area selected. Ultimately, parameters should be set that define the RSA scope, schedule, team requirements, tasks to be completed, report format and content, and response procedures.

### Step 2: Select Independent and Multidisciplinary RSA Team

The facility or project owner is responsible for selecting the RSA team or the RSA team leader. To ensure there is no conflict of interest and a fair and unbiased evaluation will be conducted, the RSA team must be independent of the operation and design of the location(s) being assessed and cannot include members of the party charged with the development of the original plans or the facility owner. The facility or project owner may select a set of qualified individuals from within its own organization, another transportation agency, or contract with an outside group. If a non-independent assessor wishes to evaluate the cyclist safety elements of a project, the process may still be valuable but should not be considered a formal RSA.

The facility or project owner should select an RSA team that possesses a combined set of skills that address the most critical aspects of the project. For RSAs with a significant cycling component (i.e. bicycle RSAs), the team members should be aware of constraints and issues that affect cyclists and have a background in (1) road safety, (2) traffic operations, (3) road design, (4) cycling safety, operations, or planning (or someone who understands the skills necessary for cycling on the road with traffic), (5) transit operations, (6) enforcement (e.g., bike patrol officer), and/or (7) emergency medical services.

The owner should consider including individuals from local cycling organizations or bicycle action committees, as they may provide valuable insights and detailed knowledge of the local area.

The size of the RSA team may vary. Small teams typically provide the greatest ability for team members to significantly contribute insights during the audit but may be limited in experience with the various areas of expertise. While three members may be adequate for some projects, that size may be insufficient for larger, more complex projects. The best practice is to have the smallest team that brings all the necessary knowledge and experience to the process.

Bicycles are almost always permitted to travel along the same roadways as motor vehicles. UVC§11-1202 is a statute that has been adopted in all 50 States and grants cyclists the same rights and duties as motorists. A member of the RSA team should be familiar with the laws applicable to cyclists and the interaction with other modes.

### Step 3: Conduct Start-up Meeting to Exchange Information

The purpose of the start-up meeting is to ensure the owner/design team and all RSA team members understand the purpose, schedule, and roles and responsibilities of all participants in the RSA. This meeting helps establish lines of communication between the RSA team leader and the owner/design team. At the end of the meeting, all parties should have a clear understanding of the scope of the RSA to be undertaken and each of their roles and responsibilities. Specific topics of discussion should include:

- RSA scope and objectives.
- Relevant data, information, drawings, aerials, photographs, etc.
- Design constraints, standards used, related bicycle plans, and findings of previous studies.
- Local laws/statutes describing rights and duties of all road users, some of which are described in Figure 13.

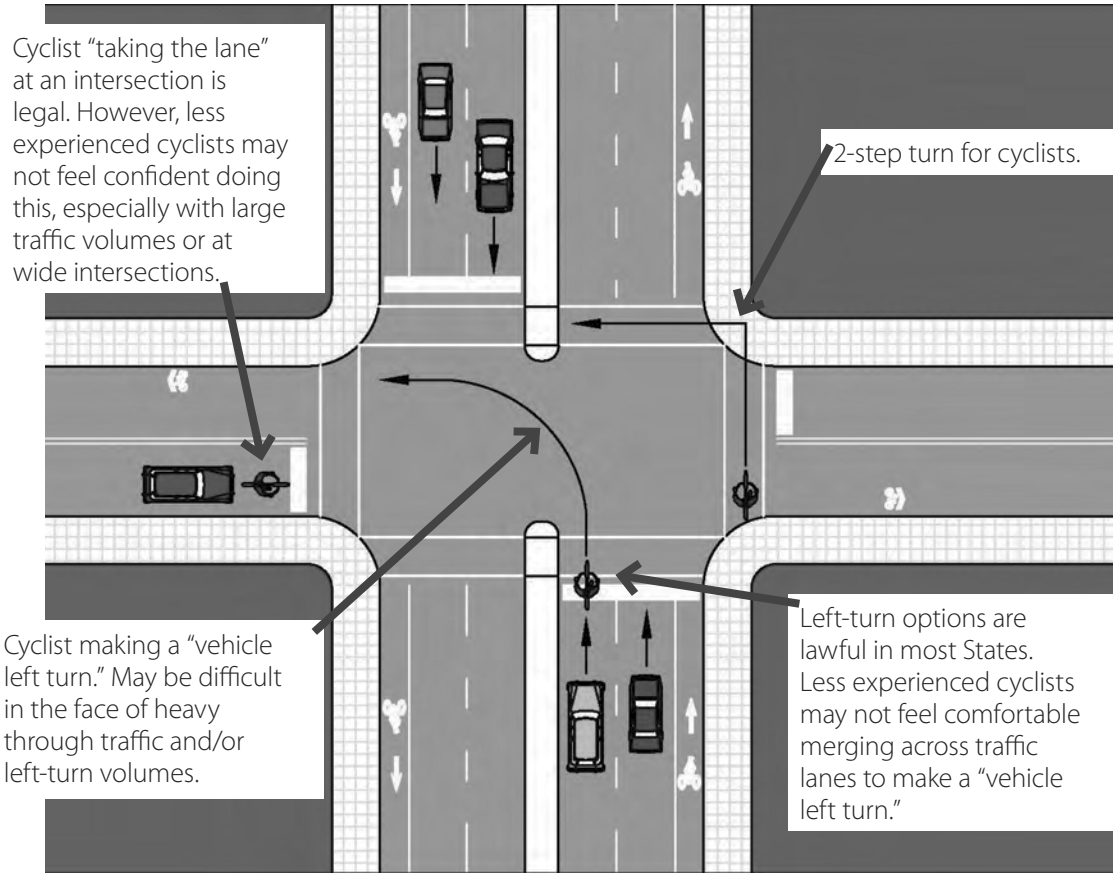



Figure 13. Legal Movements for Cyclists.

If possible, the owner and/or design team should provide data describing the overall cycling characteristics of the location(s) being assessed. This could include cyclist crash data, vehicular and cyclist traffic volumes, locations of key cyclist generators, and local stakeholder requests and complaints. A listing of the potential data used in an RSA is shown in Table 2. Preferably, any available data should be provided prior to the start-up meeting for review and analysis by the RSA team. This enables the team to familiarize itself with the location, understand potential safety issues, and ask more focused questions at the start-up meeting.

Table 2: Potential Data for Conducting RSAs.

| Requested Information |
|---|
| **Traffic Volume Data (minimum 1 year)** |
| Average vehicular daily traffic (ADT) |
| Truck and other heavy vehicle usage (usually expressed as percentage of traffic) |
| Intersection turning movement counts |
| Bicycle volumes (distribution of adult/child cyclists, direction of travel for cyclists, etc.)* |
| Pedestrian volumes |
| **Crash Data (minimum preceding 3 years)** |
| Individual police crash reports |
| Hospital crash/injury data |
| Reference/summary crash statistics |
| Crash pin maps |
| Collision diagrams (usually developed by the RSA team) |
| **Other Pertinent Information** |
| Aerial photographs of study area |
| Location of cyclist (and pedestrian) generators (such as schools, transit stops, recreational facilities) |
| Previous safety study reports (if applicable) |
| Inventory of existing cycling and pedestrian facilities (e.g., sidewalks, curb ramps, trails, greenways, etc.) |
| Locations of schools |
| Existing/future roadway, signing and marking, and signalization plans |
| Transit route information, including ridership (if available) |
| Vehicle speed data (speed limits and measured speeds) |
| School bus/walking route (safe routes to school) information |
| Agency and citizen correspondence pertinent to study area |
| Future development plans (including bicycle/greenway/trail/pedestrian master plans) |
| Complete streets policies |
| Roadway design standards |

*Bicycle volumes are beneficial, as they give the context for other data.



A team prepares for an RSA on a shared use path.

### Step 4: Perform Field Reviews under Various Conditions

The RSA team should review the entire site (as well as plans if conducting an RSA of a design), documenting potential safety issues and project constraints (e.g., available right-of-way, impact on adjacent land, etc.). Issues identified during the review of the supplied data should be verified in the field. Key elements to observe include:

- Site characteristics (road geometry, sight distance, clear zones, drainage, surface condition, signing and marking, lighting, barriers, etc.).
- Traffic characteristics (traffic/pedestrian/bicycle volumes, movements, speeds, interactions, etc.).
- Surrounding land uses (including bicycle, pedestrian, and vehicle generators).
- Human factors issues (such as road user expectancy, reactions, and other behaviors).

A thorough field review for an RSA with a significant cycling component should consider (at a minimum) the following:

- **Various conditions**—The RSA team should review the site during the daytime and nighttime to experience conditions from the perspective of all roadway users, especially cyclists. This is very important in identifying elements that may increase the risk of cyclists being involved in a collision. The RSA team should walk, bicycle, and drive (if on-road facilities) on or along the cycling facilities and note potential issues with the physical elements, as well as the behavior of cyclists and other road users. The team should ride bicycles that are consistent with equipment used by the cyclists on the facility at speeds that are typical of most riders.[24] The team should also ride in groups or individually based on prevalent conditions. Varying from typical conditions may hinder observation of potential safety issues as encountered by the cycling population.

  The field review should also include visits during both peak and non-peak traffic conditions. Cyclist safety, mobility, and access are heavily influenced by traffic conditions and issues may change depending on various traffic conditions.

  In general, RSAs should consider traffic flow periods, lighting conditions, and other time of day or potentially day of the week factors and plan site visits accordingly to observe conditions during periods of elevated crash potential.
- **Visibility of cyclists, especially at night**—Bicycles are vehicles and are almost always permitted to travel along the same roadways as motor vehicles. However, bicycles have a slender profile that reduces their conspicuity to motorists. Additionally, although required by law to have lighting, bicycles are generally not equipped with the same lighting features used by motor vehicles to see and be seen at night. During nighttime or low-lighting conditions, cyclists may not be conspicuous to motorized traffic due to bicycle factors but also to roadway lighting factors, such as maintenance of lighting, lighting output, and spacing of lighting. The effect of these factors on the safety of cyclists should be investigated by the RSA team.

- **Wide range of cyclist abilities**—A wide range of cycling skills, capabilities, and comfort levels must be considered. The RSA team should be aware of differentials in cognitive and mobility levels across several age groups, particularly when children use the facility. For example, skilled cyclists may have a better understanding of lane positioning techniques than less skilled cyclists (see Figure 14).

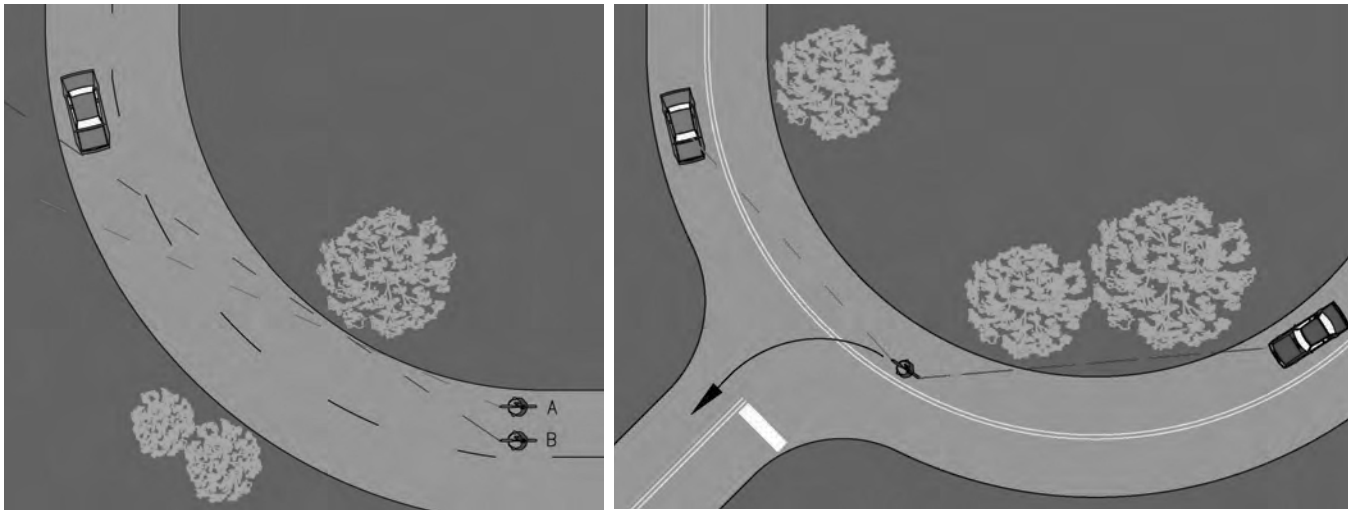



Figure 14. Techniques to Minimize Sight Distance Issues for Cyclists. Cyclists who ride near the edge of the roadway through curves (diagram left - rider A) will have less sight distance than those riding away from the pavement edge (diagram left - rider B).[25] This technique may be particularly critical for maintaining visibility at unsignalized intersections (diagram right).

- **Expectancy of cyclists by motorists**—Drivers who are focused solely on vehicular traffic and associated traffic controls may not give the appropriate attention to other road users, particularly cyclists and pedestrians. At intersections, drivers typically consider conflicting vehicular traffic and may not look for bicyclist traffic, especially when cyclists are approaching from different directions than motor vehicles. Cyclists may not ride in mainstream traffic but rather along the roadside or edge of a travel lane where a vehicle to the left of the cyclist may obstruct the view of other turning vehicles. Also, cyclists may be positioned in the blind spots of same-direction right-turning vehicles. Figure 15 depicts a range of typical issues for cyclists with respect to driver visibility and consideration of bicycle activity. The RSA team should examine the interaction of drivers and cyclists to determine if they are using effective scanning techniques and establishing visual communication with other modes.

The prompt lists are designed to be used during the field review to remind the RSA team of numerous aspects of cyclist safety. This includes a review of the prompt lists by the RSA team in the field for each type of cycling facility encountered, annotating any issues on paper and with photographs. A more detailed description of the organization of the Guidelines and prompt lists and how to use them is provided in Chapter 4.

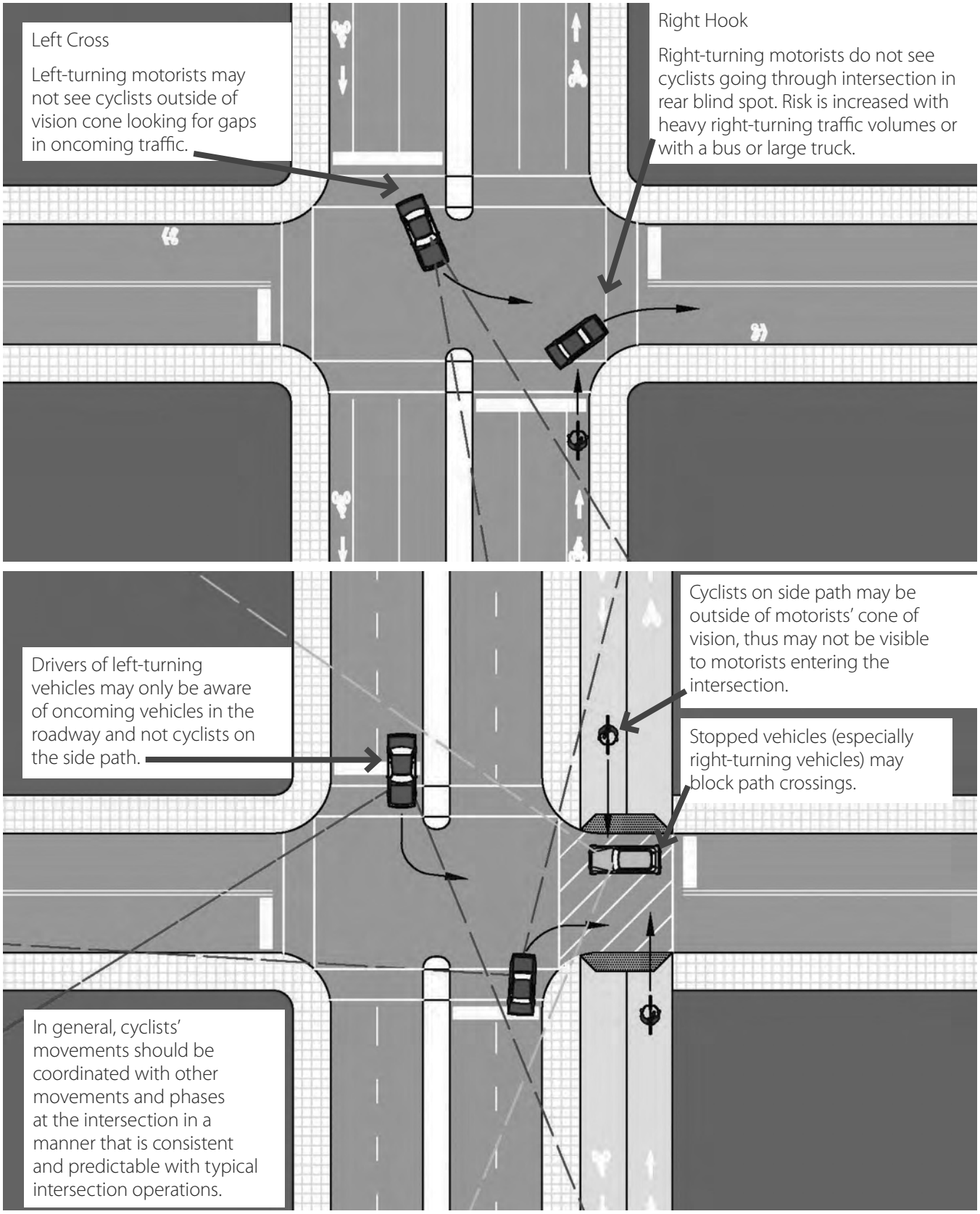



Figure 15. RSA Considerations with Respect to the Expectancy of Cyclists by Motorists.

**Step 5: Conduct RSA Analysis and Prepare Report of Findings**

The RSA team should conduct an analysis to identify safety issues based on data from the field visit and preliminary documents and prepare a report of the findings. Identification of safety issues should not be solely based on cyclists. Safety issues affecting all roadway users should be acknowledged and considered in this process.

The safety issues may be prioritized by the RSA team based on the documented (through crash data, exposure analyses, etc.) or perceived risk. Perceived risk may be based on the expected crash frequency and the expected severity of a crash. Expected crash frequency is qualitatively estimated on the basis of expected exposure (i.e., how many road users will likely be exposed to the identified safety issue) and probability (i.e., how likely is it that a collision will result from the identified issue). Expected crash severity is qualitatively estimated on the basis of such factors as anticipated speeds, expected collision types, and the likelihood that vulnerable road users will be exposed. These two risk elements (frequency and severity) may be combined to obtain a qualitative risk assessment on the basis of the matrix shown in Table 3.

Table 3: Prioritization Matrix

| Frequency of Crashes | Severity of Crashes | | | |
|---|---|---|---|---|
| | Possible/Minor Injury | Moderate Injury | Serious Injury | Fatal |
| Frequent | Moderately High | High | Highest | Highest |
| Occasional | Middle | Moderately High | High | Highest |
| Infrequent | Low | Middle | Moderately High | High |
| Rare | Lowest | Low | Middle | High |

For each identified safety issue, the RSA team generates a list of possible measures to mitigate the crash potential and/or severity of a potential crash. Measures should consider engineering, education, enforcement, and emergency medical services, or any other actions that may be beneficial to user safety on the facility.

The RSA team should prepare a report that includes a brief description of the project, a listing of the RSA team members or agencies participating in the RSA, a listing of the data and information used in conducting the RSA, and a summary of findings and proposed safety measures. The report should include pictures and diagrams that may be useful to further illustrate the issues and countermeasures.

### Step 6: Present RSA Findings to Owner/Design Team

The RSA findings and potential opportunities for improvement are presented to the owner/design team. The purpose of this meeting is to establish a basis for writing the RSA report and to ensure that the report will adequately address issues that are within the scope of the RSA process. This is another opportunity for discussion and clarification. The project owner/design team may ask questions to seek clarification on the RSA findings or suggest additional/alternative mitigation measures. At the conclusion of this step, the RSA report can be finalized by the RSA team.

### Step 7: Prepare Formal Response

Once the owner and/or design team have reviewed the RSA report, they should prepare a written response to its findings. The response should outline what actions the owner and/or design team will take with respect to each safety concern listed in the RSA report. The RSA findings may be presented in a public meeting or the report could be made available to the public to build support for the findings and the overall RSA process.

### Step 8: Incorporate Findings into the Project when Appropriate

After the response to the RSA report is prepared, the project owner and/or design team should work to implement the agreed-upon safety measures or create an implementation plan. Implementation of the suggested measures is at the discretion of these parties based on their project schedules and available funds.

## 3.6 Anticipated Challenges in Conducting Bicycle-Oriented RSAs

The following are some of the key challenges faced when conducting bicycle-related RSAs:

- Ensuring the needs of all roadway users are considered—Whereas the focus of these Guidelines and materials is on cyclists, it is paramount that the needs of all users are considered when conducting an RSA. This includes not only understanding design principles but also the laws that affect all users. Failure to consider all users appropriately may result in potential safety issues going unnoticed by the RSA team.
- Identifying effective measures for cyclists—RSAs not only are used to identify and define issues but to provide suggestions for addressing safety concerns. Mitigation measures and strategies may be categorized as near-term (e.g., signing, pavement markings, and maintenance activities), intermediate (e.g., projects involving construction but no additional right-of-way, such as intersection improvements), or long-term (e.g., right-of-way acquisitions for off-road paths). Significant reductions in cyclists' exposure or crash risk may require measures that are not feasible in the near or intermediate term, such as developing a larger network of bicycling facilities. For this reason, the RSA findings should recognize and promote ways to accomplish greater benefits through the long-range planning process to comprehensively address cyclist safety when future opportunities arise.

- **Overcoming opposition to cycling accommodations**—It is a goal of the USDOT to have fully integrated active transportation networks, including well-connected walking and bicycling networks.[26] Various sections of Title 23, Title 49, and Title 42 of the U.S. Code and the Code of Federal Regulations describe how bicyclists and pedestrians should be included in the planning process and should not be adversely affected by transportation projects. Implementing mitigation measures and strategies identified during the RSA process may be difficult, particularly when funding sources are limited. To address this challenge, the RSA team may need to identify the magnitude and severity of safety issues facing cyclists in the study area while demonstrating the benefits of potential mitigation measures and strategies.
- **Considering the relationship between agencies and the public in bicycle-oriented RSAs**—Bicycle-oriented RSAs should involve local cycling and/or community groups either as part of the RSA team or as a resource for the RSA team. Members of these groups may be most capable of providing the cyclist's perspective. An RSA may even be initiated at the request of such a group. It is important for the RSA team to consider the role these organizations can play in the improvement process when planning an RSA. Two effective methods of involving the public in the RSA process are:
  - Providing RSA training to community cyclists and/or residential participants. RSA training can be provided to community participants before the RSA. Some agencies have trained community members who "volunteer" to participate on RSA teams.
  - Holding a public meeting prior to the RSA to inform the public of the RSA and to receive input from community cyclists and/or residents. Comment cards and diagramming of known issues can be completed at the public meeting and then presented during the RSA kick-off meeting.

4

# Chapter 4. Using the Bicycle RSA Prompt Lists

## 4.1 Purpose of the Prompt Lists

The intent of the prompt lists are to assist RSA team members in identifying potential safety issues affecting cyclists and gain a more detailed understanding of conditions contributing to these issues. The RSA team should be familiar with the references and principles described in Chapter 2 before using the prompt lists. The prompt lists are a useful tool to help RSA teams identify the range of design, operational, behavioral, and policy elements that may affect cyclists' safety. RSA teams should not rely on the prompt lists as a simple yes/no checklist or assume the list covers all issues affecting the safety of cyclists. Rather, the list is intended to "prompt" the members' thoughts and judgment. It is the responsibility of the RSA team to address cyclist safety in a realistic and thoughtful manner, using the prompt lists as a guide to help address a potentially wide range of issues, including issues unique to a specific area.

## 4.2 Organization of the Prompt Lists

The following describe the organizational and hierarchical structure of the provided tools:

- Master Prompt List—presents the general considerations for cyclists in the RSA process and serves as an outline for the detailed prompt lists. The master prompt list is the least detailed, consisting of 12 major topic areas and 5 RSA zones.
- Detailed Prompt Lists (Sub-prompt)—presents a more detailed list of considerations for the RSA team. The detailed prompts are organized by zone, as follows.
  - Section A: Street or Path—describes potential issues on streets, trails, or paths that are used by cyclists.
  - Section B: Structures—describes potential issues regarding riding on bridges, in tunnels, or on other structures that may limit the dedicated width, limit the visibility of other users, or lower the expectancy of the presence of other users.

- **Section C: Intersections, Crossings, and Interchanges**—describes potential issues where cycling routes intersect with each other or a facility designated for other modes of travel. This may include intersections of streets or paths, railroad crossings, or crossings at interchanges.
- **Section D: Transitions**—describes areas where designated cycling facilities transition from one type to another, such as from an off-street path to an on-street facility. Some of the issues that may occur at transitions are also covered in Sections A and C; however, more detailed site-specific issues are discussed in this section.
- **Section E: Transit**—describes potential issues specific to transit locations (e.g., bus stops and light rail stops). Particular emphasis is placed on issues at bus stops, as this transit mode is most used and most frequently interacts with cyclists.

Figure 16 shows an example prompt list with an annotated key to introduce users to the structure and level of detail.

Master Prompt

Sub-Prompt, or detailed prompt and description, presents more detailed potential concerns

Some detailed prompts include photos showing potential issues or strategies used to address issues.

| A.2: Are design features present that adversely impact the use of the facility by cyclists? | |
|---|---|
| **Sub-Prompt** | **Description** |
| **A.2.4: Would bicycle lanes or separated facilities improve conditions for cyclists and if so, is there adequate separation between vehicular and bicycle traffic?**  | On-road accommodations: As shown in Figure 17, shared lanes are typically appropriate on low-speed, low-volume roads. Bike lanes or separated facilities may be more appropriate on high-speed, high-volume roads. Adequacy of the separation distance of these facilities is a function of vehicle speed, volume, and composition. Beyond meeting minimum standards, the width of on-road facilities should consider the wind impacts from passing heavy vehicles.<br><br>The high-speed roadway in the photo to the left has a wide bicycle lane designated by an 8 inch longitudinal marking and arrow/symbol pavement markings. |

Figure 16. Prompt List Key.

The detailed prompts, or sub-prompts, are accompanied by descriptions for the RSA team's consideration. These may be further categorized as on-road or off-road accommodations (see Glossary of Terms in Section 1.6); however, if these categories are not used, the prompt refers to all facilities.

## 4.3 When to Use the Prompt Lists

The prompt lists should not only be used during a Bicycle RSA but during any RSA with a cycling component. The RSA team can use the prompt lists during:

- Review of project information and design drawings.
- Field reviews and site visits.
- Review of RSA results and suggestion development.
- Report writing.

All items on the master prompt list should be reviewed for all RSA stages. Projects in the planning or preliminary design stages are less detailed, typically resulting in an RSA that addresses only general issues (such as whether separated facilities can or should be provided). As the design progresses, more detail is available in the design drawings; therefore, the RSA should consider more detailed elements (such as actual bikeway width). For RSAs of existing facilities, the RSA team must consider these same detailed elements, as well as review the condition of existing infrastructure (such as the condition of the biking surface) and behavioral patterns (such as cyclists riding in the correct direction on bicycle lanes).

## 4.4 How to Use the Prompt Lists

The prompt lists are designed to assist RSA team members, with varying degrees of experience, in identifying cyclist safety issues. Inexperienced RSA team members may find the detailed prompt lists more helpful than RSA team members with more experience. The experienced team members may focus more on the master prompt list. However, before conducting an RSA, all members should familiarize themselves with the prompt lists.

As described, the RSA master prompt list consists of 12 major topic areas and 5 RSA zones, each with an associated prompt. The prompts and the key elements that must be considered when conducting an RSA are:

- **Topic 1—Presence and Availability:** Are cyclists accommodated?
- **Topic 2—Design and Placement:** Are design features present that adversely impact the use of the facility by cyclists?
- **Topic 3—Operations:** Are there suitable provisions for cyclists given the characteristics of the roadway or path (speed, volume, traffic, and functional classification)? Do access management practices detract from cycling safety?
- **Topic 4—Quality and Conditions:** Is the riding surface maintained free of debris and/or hazards? Is drainage adequate on the riding surface? Are drainage grates designed for cyclists?
- **Topic 5—Obstructions:** Are there any horizontal or vertical obstructions (temporary or permanent) along the facility?
- **Topic 6—Roadside:** Is the clear zone for cyclist's operating space adequate?
- **Topic 7—Continuity and Connectivity:** Are accommodations for cyclists continuous? Do accommodations for cyclists provide adequate connectivity to major destinations?
- **Topic 8—Lighting:** Is the riding surface adequately lit?

- **Topic 9—Visibility:** Is visibility of the cyclists using the facility adequate from the perspective of all road users, and vice versa?
- **Topic 10—Signs and Pavement Markings:** Are signs and markings along the riding surface visible, well-maintained, easily understood, and adequate?
- **Topic 11—Signals:** If bicycle detection is present, is it properly positioned, functioning, and effective? Does the traffic signal design accommodate all users?
- **Topic 12—Human Factors/Behavior:** What are all roadway users (vehicles, bicyclists, pedestrians, transit, etc.) doing with regard to bicycle traffic, and what are cyclists doing with regard to all other roadway users? Do roadway user behaviors increase crash risk?

Topics 1 and 12 form the "bookends" of the prompt lists. They describe potential issues at their fundamental stage—infrastructure and behavior—and are described in detail in the following sections.

### 4.4.1 Presence and Availability

Cyclists should be provided a complete bicycle network that offers safe routes to destinations. However, not every roadway is designed to accommodate cyclists. Cyclists (and other non-motorized traffic) are typically not permitted on freeways, although they may have a separated, parallel route. On the other hand, facilities for cyclists may be provided that are not appropriate for the land use, roadway classification, traffic speed, composition, or volume context. As a result, safety may be compromised for cyclists who choose to use the facility and deprive other cyclists of direct and efficient bicycle routes to destinations. While it is beyond the ability of the RSA team to investigate cyclist safety at the network level, the team should be able to assess the appropriateness and safety of facilities for cyclists on the roadway that is the subject of the RSA. In addition to subject roadways, the team may need to assess the appropriateness and safety of facilities for cyclists on nearby and parallel routes or transition areas between cycling facilities outside of the defined study area.

Figure 17 indicates the suggested bicycle facility treatment for roadways as a function of the relationship between vehicle speed versus volume. As depicted in Figure 17, in general, separated facilities are appropriate for high-speed, high-volume roads (see darker area in diagram) while shared lanes are appropriate on low-speed, low-volume roads (see lighter area in diagram). Some roads may have characteristics that require a more detailed understanding of conditions to determine the appropriate accommodation for cyclists (see area in between). For example, on low-speed, high-volume roads bicycle lanes can encourage conflicts since cyclists may be traveling as fast or faster than motor vehicles placing cyclists into static or moving blind spots.

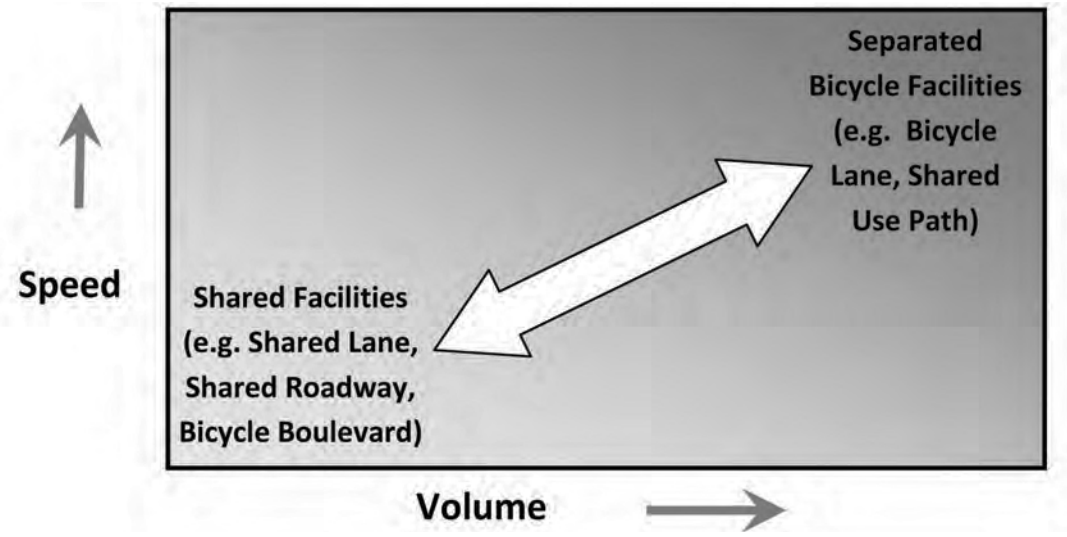



Figure 17. General Bicycle Facility Utilization Given the Context of Vehicular Traffic Volume and Speed.[27]

### 4.4.2 Human Factors and Behavior

Human factors and behaviors are a contributing factor in most crashes involving motor vehicles. Crashes involving cyclists are no different. The RSA team should observe the behaviors exhibited by motorists, pedestrians, and cyclists and investigate the reasons those behaviors are practiced. The RSA team should use the prompts in Table 4 to investigate and assess whether cyclist, pedestrian, or driver behavior increases the risk of a collision. If undesirable behaviors are present, there may be a need for additional enforcement, training, and education, as well as improvements in infrastructure where roadway design, operations, or traffic factors may be contributing to these behaviors.



Observing the behavior of cyclists is essential to understanding the conditions that affect the safety of cyclists. Some cyclists may feel more comfortable riding on the sidewalk due to roadway conditions.

Table 4: Prompts to Use when Assessing Cyclist and Other Road User Behavior.

| Do roadway users look/scan for other travel modes? | |
|---|---|
| Are roadway/path users courteous to each other? | Do motorists:<br>• Allow extra space or reduce speed as needed when overtaking or driving near bicyclists?<br>• Look for and yield to bicyclists before changing lanes, turning, parking or opening car doors?<br>• Avoid loud horn blasts when overtaking or driving near bicyclists?<br>• Watch for cyclists needing to merge and allow space for them to do so?<br>• Refrain from speeding?<br><br>Do cyclists:<br>• Give an alert call or signal (such as using a bell) when passing pedestrians or other bicyclists on shared use facilities?<br>• Ride at a safe speed and follow safe practices for the conditions?<br>• Slow down for pedestrians and wait for a safe passing opportunity?<br>• Stop at intersections when required to do so?<br><br>Do pedestrians:<br>• Stay to the right?<br>• Avoid abrupt changes in direction?<br>• Avoid stepping out in front of cyclists without looking?<br>• Keep dogs on leashes and out of the way of other path users?<br><br>Do all modes<br>• Use special lanes (e.g., bus/bicycle-only lanes, drop-off zones, etc.) appropriately and safely? |
| Do motorists follow traffic laws and rules of the road? | Do motorists:<br>• Obey posted speed limits and local ordinances?<br>• Avoid unsafe overtaking or passing cyclists too closely?<br>• Check for and yield to through cyclists before turning right, either from a stopped position or after overtaking a bicyclist traveling to the right?<br>• Avoid passing left-turning cyclists on the left?<br>• Use proper signals to indicate intentions?<br>• Obey traffic controls including signs, signals, and pavement markings?<br>• Look in both directions and yield to bicyclists and other traffic when turning and entering and exiting the roadway?<br>• Avoid parking in bicycle lanes or double-parking?<br>• Yield to opposing bicycle traffic when turning left under a green signal? |

| Do roadway users look/scan for other travel modes? | |
|---|---|
| Do bicyclists observe the rules of the road and other safe riding practices? | Do bicyclists:<br>• Travel with the flow of traffic?<br>• Position themselves properly in the lane/path? Consider the conditions present, such as narrow lane widths, on-street parking, turning conflicts, poor sight lines, and pavement conditions?<br>• Make left turns from the appropriate lane?<br>• Check for approaching traffic, including pedestrians on walkways, and yield before entering/crossing a roadway at any type of junction (intersection, driveway, or shared use path)?<br>• Understand and obey the posted traffic control devices and local ordinances?<br>• Check behind for traffic before changing lanes or merging with traffic on a different traveled way?<br>• Use proper hand signals to indicate turning or stopping intentions?<br>• If bicycle restrictions are present, do cyclists adhere to those restrictions and only use permitted areas or facilities?<br>• Avoid passing traffic on the right and occupying blind spots where they may face conflicts with right-turning motorists?<br>• Transport children using proper child seats and helmets? |
| Do bicyclists ride on the sidewalk? | • Does sidewalk riding contribute to conflicts with motor vehicles at intersections and driveways?<br>• Do cyclists dismount and avoid cycling on sidewalks in high-pedestrian traffic areas?<br>• Does sidewalk riding contribute to conflicts with pedestrians? |
| Are bicyclists practicing methods to increase their conspicuity at night? | • Are bicycles and bicyclists properly equipped with active, white headlamps and rear, red taillights?<br>• Do bicyclists supplement required lighting and reflectors with retroreflective gear and clothing at night? |

# Master Prompt List

| | RSA Zones | | | | |
|---|---|---|---|---|---|
| | A. Street or Path | B. Structures | C. Intersections, Crossings, and Interchanges | D. Transitions | E. Transit |
| **1. Presence & Availability** | | | | | |
| | Are cyclists accommodated? | | | | |
| **2. Design & Placement** | | | | | |
| | Are design features present that adversely impact the use of the facility by cyclists? | Are bridges/ tunnels designed with adequate bicycle accommodations on both sides?<br>Does the gradient of the cycling accommodations impact the use of the facility? | Are intersection/ interchange accommodations designed to reduce conflicting movements and communicate proper bicycle positioning through the crossing? | Are transition areas designed with logical termini or do they end abruptly, potentially contributing to sudden and difficult merges, midblock crossings, or behaviors such as wrong-way riding? | Are transit facilities designed and placed to minimize conflicts with other modes? |
| **3. Operations** | | | | | |
| | Are there suitable provisions for cyclists given the characteristics of the roadway or path (speed, volume, traffic, and functional classification)?<br>Do access management practices detract from cycling safety? | | Do traffic operations (especially during peak periods) create a safety concern for cyclists? | Do shared roadway geometrics change substantially or frequently? | Are transit facilities designed and placed to minimize conflicts with other modes? |
| **4. Quality & Conditions** | | | | | |
| | Is the riding surface smooth, stable, and free of debris and is drainage adequate?<br>Are drainage grates designed for cyclists? | Is the grating/ bridge surface designed for cyclists?<br>Is drainage adequate to accommodate bicyclists?<br>Are there longitudinal or transverse joints that may cause cyclists problems? | Are there any obstacles at crossings?<br>Are the manhole covers properly designed? | Is there an abrupt change in riding surface? | Are transit stops maintained during periods of inclement weather? |
| **5. Obstructions** | | | | | |
| | Are there any horizontal or vertical obstructions (temporary or permanent) along the facility? | Is there adequate horizontal and vertical clearance? | If bollards or other physical terminal devices are used, is the risk of occasional motorized vehicles greater than the risk of a fixed object within the travel way? | | Is the waiting area free of temporary/ permanent obstructions that constrict its width or block access to the bus stop? |

| | RSA Zones | | | | |
|---|---|---|---|---|---|
| | A. Street or Path | B. Structures | C. Intersections, Crossings, and Interchanges | D. Transitions | E. Transit |
| **6. Roadside** | | | | | |
| | Is the clear zone for cyclists' operating space adequate? | Are railings, guardrail, and/or parapets and other structures installed at an appropriate height and shy distance? | If bollards or other physical terminal devices are used, is the risk of occasional motorized vehicles greater than the risk of a fixed object within the travel way? | | Are bicycle accommodations connected and convenient for transit users? |
| **7. Continuity & Connectivity** | | | | | |
| | Are bicycle accommodations continuous?<br>Do bicycle accommodations provide adequate connectivity to major destinations? | Are bicycle accommodations continuous, or do they end abruptly at bridge/tunnel crossings? | Are bicycle accommodations continuous, or do they end abruptly at crossings/ intersections/ interchanges? | Is there a safe way for cyclists from both directions to access connections or continue to other destinations along the street network? | Are crossings convenient and free of potential hazards for cyclists? |
| **8. Lighting** | | | | | |
| | Is the riding surface adequately lit? | Are bridges and tunnels adequately lit? | Are the intersection/transition and paths leading to the transition adequately lit? | | Are transit access ways and facilities adequately lit? |
| **9. Visibility** | | | | | |
| | Is the visibility of cyclists using the facility adequate from the perspective of all road users? | Can cyclists see approaching vehicles/ pedestrians, and vice versa? | Can cyclists see approaching vehicles/ pedestrians at all legs of an intersection/ crossing, and vice versa? | Is the visibility of cyclists as they make the transition from one facility or roadway geometry to another adequate from the perspective of all road users? | Is the visibility of cyclists using the facility adequate from the perspective of all road users? |
| **10. Signs & Pavement Markings** | | | | | |
| | Are signs and markings along the riding surface visible, well-maintained, easily understood, and adequate? | Are adequate warning signs posted at entrances? | Do signs and markings along the cycling facility clearly indicate the cyclist path and right-of-way at intersections? | Are signs and markings at transition areas appropriate? | Are signs and markings at designated areas for cyclists using transit appropriate? |
| **11. Signals** | | | | | |
| | If bicycle traffic signalization and detection are present, are they properly positioned, functioning, and effective?<br>Does the traffic signal design accommodate all users? | | | | |
| **12. Human Factors / Behavior** | | | | | |
| | What are all roadway users (vehicles, bicyclists, pedestrians, transit, etc.) doing with regards to bicycle traffic, and vice versa? | | | | |

# Prompt List

## A. Street or Path

| A.2: Are design features present that adversely impact the use of the facility by cyclists? | |
|---|---|
| Sub-Prompt | Description |
| **A.2.1: Do accommodations for cyclists conform to the state of practice, guidelines, and relevant standards, or are there more advanced designs that would better support and enhance conditions for cycling?** | While an RSA is not a standards check, it is critical that some RSA team members have an understanding of design requirements for cycling facilities as well as an understanding of the relative safety benefits that various design features may provide.<br><br>Guidance documents include, but are not limited to:<br>• *AASHTO's A Policy on Geometric Design of Highways and Streets* ("Green Book").<br>• *Manual on Uniform Traffic Control Devices* (MUTCD).<br><br>Successful practices may be found in:<br>• *AASHTO's Guide for the Development of Bicycle Facilities*.<br>• *FHWA's Designing Sidewalks and Trails for Access, Parts 1 and 2.*[28] [29]<br>• *NACTO Urban Bikeways Design Guide*.<br><br>Knowledge of the information contained in these resources will help RSA team members check for conditions that may present a safety issue for cyclists, especially under challenging conditions (e.g., night, adverse weather, high vehicle speeds, multiple conflicts, etc.). Chapter 1 provides a more complete list of resources. |

| A.2: Are design features present that adversely impact the use of the facility by cyclists? | |
|---|---|
| Sub-Prompt | Description |
| **A.2.2: Are there adequate cycling provisions on both sides / directions of the roadway?**  | On-road accommodations: accommodations for cyclists are needed on both sides of a two-way roadway and certain one-way roadway pairs of streets to accommodate desire lines of cyclists. Aside from issues of continuity and connectivity (see A.7), conflicts arise when two-way accommodations for cyclists are not present (see photo, left).<br><br>The roadway in the photo has a shoulder on one side of the road only, which raises several potential issues associated with this cross-section:<br>• Cyclists are encouraged to ride against traffic.<br>• Cyclists and pedestrians traveling opposite directions are subject to conflicts on the shoulder.<br>• Some cyclists approach intersections and driveways from the right, creating an expectancy conflict with motor vehicle traffic.<br>• Connectivity to destinations on the opposite side of the road is not provided, potentially resulting in unpredictable maneuvers by cyclists. A.2.9 shows two-directional travel for bicycles maintained with a counterflow bicycle lane.<br><br>Off-road accommodations: facilities should allow for two-way travel that considers conflicts with other road users and desire lines of cyclists. Separated bicycle facilities may take the form of two, one-way paths or two-way paths. Priority should be carefully considered at side street crossings, especially for two-way paths. Continuity and connectivity (see A.7) with other types of facilities are also potential safety concerns. |
| **A.2.3: Does the design consider prevailing speeds of cyclists and comfort?** | On-road accommodations: steep downgrades and lack of superelevation may contribute to loss of control issues for even the most experienced bicyclists. This may be a particular issue on rural roads where cyclists may be accommodated by a shoulder.<br><br>Off-road accommodations: consideration should be given to the adequacy of horizontal curves, hill crests, and sag curves, especially curve and grade combinations that make the path difficult or uncomfortable to ride (i.e., a sharp horizontal curve at the bottom of a steep downgrade). |
| **A.2.4: Would bicycle lanes or separated facilities improve conditions for cyclists and if so, is there adequate separation between vehicular and bicycle traffic?**  | On-road accommodations: as shown in Figure 17, shared lanes are typically appropriate on low-speed, low-volume roads. Bike lanes or separated facilities may be more appropriate on high-speed, high-volume roads. Adequacy of the separation distance of these facilities is a function of vehicle speed, volume, and composition. Beyond meeting minimum standards, the width of on-road facilities should consider the wind impacts from passing heavy vehicles.<br><br>The high-speed roadway in the photo to the left has a wide bicycle lane designated by an 8-inch longitudinal marking and arrow/ symbol pavement markings. |

| A.2: Are design features present that adversely impact the use of the facility by cyclists? | |
|---|---|
| Sub-Prompt | Description |

**A.2.5: Is there adequate space and accommodation for bicycles?**






On-road accommodations: bicycle accommodations should consider the full operating width of cyclists, not just the physical width. The operating width for cyclists may increase because of speed, wind, bicyclist's handling skills or shy distance from curbs, gutter pans, drop-offs, guard rails, railing, car door swing, and other features.

The top photo to the left illustrates a bicycle lane with a striped buffer area between the bicycle lane and moving traffic (note that combined use of solid and dashed lines for a bicycle lane does not conform to the MUTCD). This bicycle lane is located on the left side of a one-way street to minimize door conflicts with parked vehicles and to avoid conflicts with buses.

Off-road accommodations: the full operating width of cyclists should be considered with regard to interactions with pedestrians and other path users. Operating space should be consistent and free of choke points or obstacles that limit space (see also B.6).

The photo on the bottom left shows a shared use path that narrows at a transition to a bridge, creating a choke point. This design may increase conflicts between path users. The type of users should also be considered (i.e., less experienced cyclists may need additional width for passing and other maneuvers than more experienced cyclists and areas with a high bicycle trailer usage may increase the need for additional width).

Figures 3 and 4 describe operating space and the lengths and widths of bicycles.

**A.2.6: Could the gradient impact cyclists?**



Cyclists on ascent up a steep grade may need additional operating width because of the greater speed differential from motor vehicle speed and because bicycles are less stable at low speeds. Cyclists on steep descents need greater stopping sight distances and separation from other users due to higher speeds.

The photo to the left shows a shared use path with a wide climbing lane to allow cyclists to pass slower cyclists, but does not provide additional space for cyclists on the downgrade. This is particularly critical given that there is a horizontal curve at the bottom of the hill.

Since cyclists can travel at high speeds on steep descents, curves and structures at the bottom of hills should accommodate higher design speeds. Pavement conditions (e.g., debris) or conflicts at the bottom of gradients can increase risk.

| A.2: Are design features present that adversely impact the use of the facility by cyclists? | |
|---|---|
| Sub-Prompt | Description |
| **A.2.7: Do traffic calming measures and traffic management practices allow for safe and efficient cycling operation?** | Typically, traffic calming measures (e.g., chicanes, curb extensions, and road diets) are utilized to encourage slower motorized vehicle speeds and create a more uniform speed profile. Cyclists can benefit from this reduction in vehicle speeds if the space for riding is adequately maintained by these measures.<br><br>Traffic management refers to measures that divert motorized traffic to other adjacent facilities (e.g., bicycle boulevard, partial diverters, etc.). These devices should enhance cycling safety by providing well-defined riding areas and path connections. |
| **A.2.8: Do rumble strips present a detrimental surface condition to bicycles?** | The application of rumble strips should consider the following (see also FHWA rumble strip advisories *T 5040.39 Shoulder and Edge Line Rumble Strips* and *T 5040.40 Center Line Rumble Strips*):<br>• Is the usable width of the shoulder reduced?<br>• Are regularly-spaced breaks in the rumble strips provided for a cyclist to traverse rumble strips?<br>• Are longer gaps provided on downgrades?<br>• Do rumble strips stop in advance of intersections and crossovers to allow lane changes in advance of turns?<br>• If centerline rumble strips are present, is the riding surface wide enough to allow vehicles to pass cyclists with adequate clearance and without crossing the centerline? |

| A.2: Are design features present that adversely impact the use of the facility by cyclists? | |
|---|---|
| Sub-Prompt | Description |
| **A.2.9: Does parking adversely affect cycling safety?**  | All parking affects a cyclist's position or maneuvers. On-street parking typically encourages slower vehicle speeds; however, the effects of on-street parking on the safety of cyclists should be understood. Consideration should be given to the following:<br>• On-street parking may effect a cyclist's position on the road as cyclists attempt to avoid "dooring."<br>• Pull-in/angle parking may lead to conflicts with cyclists when vehicles back up because awareness and visibility of approaching cyclists on the roadway may be restricted or obstructed by other parked vehicles.<br>• Back-in/head-out angle parking provides improved visibility of approaching cyclists on the roadway, as a driver has much better visibility when exiting.<br>• Encroachments, double parking, and illegal parking can contribute to cyclist conflicts with other users.<br>The photo to the left shows a counterflow bicycle lane through a neighborhood. The counterflow lane is within the door zone of parked vehicles. Consideration should be given to the ability of cyclists riding in bicycle lanes (with traffic and counterflow to traffic) to keep out of the door zone of parked vehicles without deviating from the lane. Also note that the counterflow bicycle lane and the vehicle travel lane provide two-direction access to cyclists (see A.2.2). |

| A.3: Are there suitable provisions for cyclists given the characteristics of the roadway or path (speed, volume, traffic, and functional classification)? Do access management practices consider cycling safety? | |
|---|---|
| Sub-Prompt | Description |
| **A.3.1: Is the type of cycling accommodation appropriate for the roadway context?** | Consideration should be given to the roadway functional classification, vehicle speeds, traffic volumes, vehicle classification, use and/or designation of the bicycle route, and access to cyclist destinations to determine if the type of accommodation is appropriate. A cyclist should have adequate space to operate based upon the prevailing conditions (see Figure 17). |
| **A.3.2: Is the type of cycling accommodation appropriate for the primary or intended users?** | Bicycle accommodations should match the needs of the intended users. Cyclists, particularly less-experienced cyclists, may prefer greater separation from vehicular traffic, especially as speeds and volumes increase. Particular attention should be given to routes that access schools, parks, and other public spaces that will be frequented by children and families. |

| A.3: Are there suitable provisions for cyclists given the characteristics of the roadway or path (speed, volume, traffic, and functional classification)? Do access management practices consider cycling safety? | |
|---|---|
| Sub-Prompt | Description |
| **A.3.3: Are driveways designed with cyclists in mind?** | Driveways and entrances should be well-defined and clear of obstructions so that driver and cyclist actions are consistent and predictable. Multiple driveway access points increase the number of conflict points for cyclists (see C.2.2 and C.2.3). Poor access management may encourage cyclists to use sidewalks instead of on-road facilities or take alternative routes that may also have safety issues. |

| A.4: Is the riding surface smooth, stable, and free of debris, and is drainage adequate? Are drainage grates or manholes located in the cyclists' path of travel? | |
|---|---|
| Sub-Prompt | Description |
| **A.4.1: Are cross-slopes adequate for prevailing speeds by cyclists?** | Cross-slopes can cause a cyclist to tip or veer off course. Acceptable cross-slopes are typically important in areas where one surface transitions to another and at the edge of the road where the surface can pitch unexpectedly. A one percent cross-slope is recommended, although cross-slopes should not exceed five percent.[12] |
| **A.4.2: Does debris accumulate in the area used (or intended for use) by cyclists?**  | Dirt, litter, glass, etc. may accumulate where cyclists travel. This debris may puncture tires or cause a loss of control, especially on a downgrade or curve. Consideration should also be given to the material adjacent to a facility used by cyclists, as these should be free of lose materials that can move onto a path.<br><br>The photo to the left shows a gravel driveway that has partially covered the bikeable shoulder. Loose gravel can cause a cyclist to lose stability and fall. Surface conditions that may present existing or future issues to cyclists should be considered. |
| **A.4.3: Is vegetation narrowing the rideable width or affecting the surface quality?** | Grass and fast-growing vegetation may narrow the travel way and interfere with cyclists, causing them to make avoidance maneuvers that may put them into conflict with other roadway or path users.<br><br>Off-road accommodations: Tree roots and other heavy growth may damage the riding surface, which can lead to a loss of control. |

| A.4: Is the riding surface smooth, stable, and free of debris, and is drainage adequate? Are drainage grates or manholes located in the cyclists' path of travel? | |
|---|---|
| Sub-Prompt | Description |
| **A.4.4: Are there potholes or other surface defects?**  | Facilities used by cyclists should be smoother than those deemed acceptable for motorized traffic. Potholes, cracks (especially longitudinal cracks), buckling from heavy vehicle use, and lips at surface transitions along the riding surface are surface defects that may cause cyclists to lose control or fall. A continuous presence of these surface defects may cause cyclists to ride outside of the intended path of travel.<br><br>The photo to the left shows a Shared Lane Marking (SLM) with a roughly patched pothole just beyond it. Cyclists may divert from the marked path to avoid surface irregularities such as these. |
| **A.4.5: Are drainage grates or manholes located in the cyclists' path of travel?**  | Recessed manholes, drainage grates, or utility covers may increase the potential for tire and wheel damage. Consideration should be given to the use of drainage grates that are "bicycle compatible" with transverse openings of an acceptable gap.<br><br>The grate pictured at the left has both longitudinal openings and is damaged, both of which could present a significant issue to a cyclist (see B.4.1). |
| **A.4.6: Are there longitudinal joints or cracks that could trap a wheel?**   | Deep longitudinal joints or cracks may "grab" a tire and potentially cause loss of control (see also B.4.3).<br><br>The photo to the left shows a longitudinal joint at the cold joint between pavement surfaces that may cause a cyclist to lose control and fall. |

| A.4: Is the riding surface smooth, stable, and free of debris, and is drainage adequate? Are drainage grates or manholes located in the cyclists' path of travel? | |
|---|---|
| Sub-Prompt | Description |
| **A.4.7: Does ponding of water occur in the cyclists' path of travel?**<br>  | Standing water can cause cyclists to make sudden changes in their path of travel and may conceal potholes or other defects. Debris may also collect in areas where there is poor drainage and cause cyclists to slip (see also B.4.2).<br><br>The photo to the left shows debris across the cycling facility that has been carried by storm water and deposited at the location due to poor drainage. |

| A.5: Are there horizontal or vertical obstructions (temporary or permanent) along the facility? | |
|---|---|
| Sub-Prompt | Description |
| **A.5.1: Are sign faces, including temporary construction or detour signs, mounted away from the operating space?**<br>  | Specifically, post-mounted signs shall be mounted at least 4 feet above and 2 feet beyond the edge of the bicycle facility (i.e., such that no portion of the sign or its support is within 2 feet of the edge of the bicycle facility). If the sign is overhead, the sign shall be mounted at least 8 feet above the facility, and there shall be at least 2 feet of horizontal clearance between the pole and the edge of the bicycle facility.<br><br>The stop sign shown in the photo to the left is not installed at the appropriate offset or height from the pavement edge, increasing the potential of a sign strike. Visibility of the sign is also obstructed by the fence and box. Placement of the fence adjacent to the path also restricts usable space (see A.2.5, A.6.1, and, for at-grade railroad crossings, C.2.6). |
| **A.5.2: Do vegetation or other obstructions encroach into the cycling operating space?** | Fast-growing vegetation, tree branches, bushes, or root damage to pavement may interfere with cyclists' operating space and cause riding into the vehicle travel lane, opposing pathway, or designated space for other users. |

| A.6: Is the clear zone for cyclists' operating space adequate? | |
|---|---|
| Sub-Prompt | Description |
| **A.6.1: Are clear zones along paths adequate?** | Clear zones should be maintained to provide an adequate level recovery area and unobstructed sight distance for prevalent bicycle speeds. The clear zone should be free of signs, fences, non-traversable landscaping, and loose materials that act as fixed objects or that can destabilize a cyclist. Clear zone guidance is provided by AASHTO (see also A.5.1). |
| **A.6.2: Do slopes in the clear zone pose a safety issue?**  | Graded shoulders provide a recovery area for cyclists. Steep slopes and drop-offs should be outside the clear zone. Clear zone guidance related to slopes is provided by AASHTO.<br>The photo to the left shows a shared use path with an unprotected, sharp drop-off that is non-traversable by cyclists. |

| A.7: Are bicycle accommodations continuous? Do bicycle accommodations provide adequate connectivity to major destinations? | |
|---|---|
| Sub-Prompt | Description |
| **A.7.1: Are cycling routes or facilities continuous?** | A network of bicycle-friendly roadways and paths is critical to provide cyclists with continuous and direct access to destinations. Gaps, lack of facilities, or facilities inappropriate for the context may result in indirect routes to destinations and possibly illegal or undesirable behaviors, such as riding against traffic and riding on sidewalks to reach destinations (see D.2). |
| **A.7.2: Are there frequent changes in the geometrics or accommodations provided for cyclists?** | Frequent or sudden changes in geometrics or accommodations can cause conflicts with other users, particularly in high volume, high-speed corridors (see D.2). Examples include drops of shoulders or bicycle lanes and reductions in path widths. Unexpected changes when traveling at higher operating speeds may lead to severe crashes. |
| **A.7.3: Is access provided to primary destinations?** | Consideration should be given to primary destinations for cyclists (e.g., work, school, church, parks, restaurants, etc.). Lack of appropriate access and accommodations for cyclists affects their safety within the roadway or pathway environment and may contribute to fewer riders due to safety concerns. |

## A.8: Is the riding surface adequately lit?

Inconsistent or dim lighting may create shadows, affecting the ability of cyclists to see and be seen. High-risk corridors may need additional lighting, particularly if surrounding land uses are active (e.g., college campus areas). Routes may need to be evaluated seasonally for commuter use in early evening hours and during seasons with heavy foliage or snow.

## A.9: Is the visibility of cyclists using the facility adequate from the perspective of all road users?

| Sub-Prompt | Description |
|---|---|
| **A.9.1: Is sight distance an issue?**  | Limited sight distance due to horizontal and vertical alignment, roadside objects, or surrounding infrastructure may pose safety issues, especially on horizontal curves. Cyclists may not see a potential conflict with other users, and vice versa. Consider the following features that may limit sight distance:<br>• Trees, shrubs, and landscaping.<br>• Sharp horizontal curves.<br>• Crests on steep hills.<br>• Fences and walls.<br>• Structures and buildings.<br>Also, note that increasing sight distance may result in increased travel speeds.<br>The photo to the left shows where horizontal curvature and a limited clear zone result in limited sight distance (see also Figure 14. Techniques to Minimize Sight Distance Issues for Cyclists). |
| **A.9.2: Are cyclists riding at the edge of the road or path obscured by vegetation along the roadway edge?**  | Facilities may be designed in such a way that cyclists ride close to the roadway or path edge. Vegetation and other features may reduce the usable width of the facility.<br>Additionally, vegetation and other roadside features may create conditions where cyclists:<br>• Blend into the surroundings (see also A.8).<br>• Make unpredictable maneuvers to avoid vegetation.<br>The photo to the left shows heavy vegetation growing close to the path. Cyclists may shy away from this vegetation, which can create conflicts with path users in both directions. This is especially critical given the narrow width of the facility and limited visibility. |

| A.10: Are signs and markings along the riding surface visible, well-maintained, easily understood, and adequate? | |
|---|---|
| Sub-Prompt | Description |
| **A.10.1: Are signage and pavement markings clear and consistent along the path or roadway?**   | Specific considerations include:<br>• Regulatory and Warning—Regulatory and warning signs should only be used when needed. Traffic control devices specific to bicycle travel should provide clear and consistent messages so that required actions of all road users are communicated effectively and understood.<br>• Wayfinding—When cyclists are fearful of motor traffic, they are more likely to behave in a less safe manner (e.g., riding on the sidewalk, hugging the edge of the road, etc.). Wayfinding can be used to help less confident cyclists avoid busier roads that they might find intimidating. Bicycle route maps may also be used to communicate route information to cyclists.<br>• On designated cycling routes, directional, destination, and wayfinding signage and pavement markings should be consistent, well-maintained, and should be readable and visible in all conditions, including at night. Signs that require stopping for reading should not be placed at intersections in or near traffic but rather in other locations where cyclists might stop, such as at tables, water fountains, etc.<br>• Trail Etiquette—Signs indicating trail etiquette may be used to communicate trail information to the cyclist. The signs should be concise and readable at bicycle travel speeds. The example in the photo to the left is confusing and is not readable at bicycle travel speeds. Furthermore, the no parking sign discourages cyclists from stopping. |
| **A.10.2: Is the spacing and location of signage and pavement markings adequate to communicate the intended use?**   | Too many signs in one location can lead to "information overload," which can confuse or distract cyclists and other road users. Also, signs intended for cyclists may be misinterpreted for use by other road users.<br>The intersection signage shown in the photo to the left presents road users with multiple messages, which may be confusing or distracting. |

A.11: Refer to B.11 and C.11 for traffic signal and detection position, function, and effectiveness considerations.

## B. Structures

**B.2: Are bridges/tunnels designed with adequate bicycle accommodations on both sides? Does the gradient of the cycling accommodations impact the use of the facility?**

| Sub-Prompt | Description |
|---|---|
| **B.2.1: Are two-way bicycle accommodations provided?**  | On-road accommodations: bridges and other structures, such as tunnels or culverts, may constrict or terminate designated space for cyclists placing them into conflict with motorists. This may lead to unpredictable maneuvers by cyclists. If accommodations are provided only on one side, is there a means of safe access and departure by bicyclists traveling in the other direction (see also B.5)?<br><br>Off-road accommodations: separated bicycle facilities may provide two-way travel for cyclists on one side of a structure; however, the continuity of the path should be maintained and conflicts avoided, such as having a two-way bikeway that is not separated from traffic, as well as other conditions described in B.5 (see also A.7).<br><br>The photo to the left shows a bridge that has been retrofitted with exclusive pedestrian and bicycle paths that provides good separation from vehicular traffic. |
| **B.2.2: Does the gradient of the cycling accommodations impact the use of the facility?** | Grade and the inability to escape due to the presence of walls, railings, and other barriers impact safety on bridges and in tunnels. Specific considerations may include:<br>• Is there space for vehicles to pass slow bikes on uphill segments?<br>• Is there separation between high-speed cyclists riding with or faster than vehicle traffic on downhill segments? |

**B.3: See prompts in A.3 for potential operational considerations affecting the safety of cyclists.**

| B.4: Does the grating/bridge surface pose a hazard to bicyclists? Is drainage adequate to accommodate bicyclists? Are there longitudinal or transverse joints that may cause cyclists problems? | |
|---|---|
| Sub-Prompt | Description |

**B.4.1: Is the riding surface smooth, and does it provide adequate skid resistance?**



All surfaces must be designed with cyclists in mind. The following conditions that affect safety should be considered:

- Can grates trap or channelize the front tire of bicycles (see also A.4.5 and A.4.6)?
- Is timber decking placed longitudinally so as to trap a tire?
- Are transitions in surface smooth and free from gaps? Note the jagged edge of the plate in the photo to the left resulting from snow plowing.
- Is skid resistance (i.e., traction) adequate under all weather conditions or are more advanced treatments required? Note also that metal plates can be slippery when damp or wet, especially near waterways. Additionally, movable spans like a drawbridge can bounce significantly under traffic loads, contributing to loss of control for cyclists on the bridge when traction is inadequate.

**B.4.2: Is drainage adequate, and is the surface free of debris?**



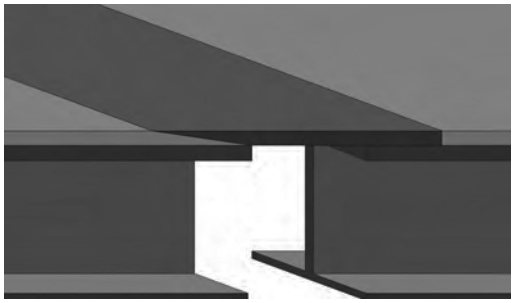
Ponding and draining water may pose the following safety issues to cyclists:

- Slippery surfaces.
- Masked surface defects (e.g., potholes, cracks, lips, etc.).
- Sediment, which can create a slippery surface.

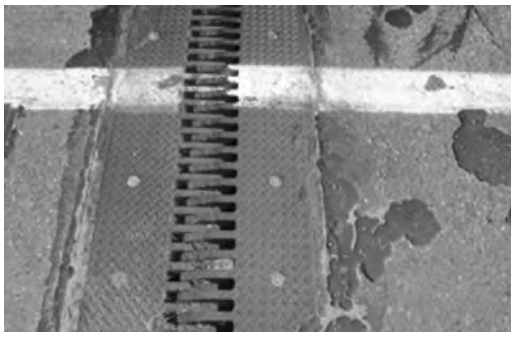
The presence of ponding and draining water may cause cyclists to perform avoidance maneuvers that may conflict with other road users or place the cyclist in an unexpected predicament. Evidence of drainage issues, particularly puddles or sediment from standing or flowing water should be reviewed (see also A.4.7).

The picture to the left shows sand and road debris cast onto the cycling path from sanding and plowing operations. Sand on the pavement can cause a loss of traction for cyclists.

| B.4: Does the grating/bridge surface pose a hazard to bicyclists? Is drainage adequate to accommodate bicyclists? Are there longitudinal or transverse joints that may cause cyclists problems? | |
|---|---|
| Sub-Prompt | Description |
| **B.4.3: Are there longitudinal or transverse joints that may cause cyclists problems?** | Longitudinal joints (i.e., parallel to the direction of travel) may trap a front bicycle tire and result in loss of control.<br><br>Transverse joints (i.e., perpendicular to the direction of travel) may have wide gaps that can trap bicycle wheels, causing loss of control and sudden falls.<br><br>Bridge expansion joints, including finger joints like the one pictured to the bottom right, can have wide gaps that snag a tire or cause pinch flats (tire punctures) and cause a fall. |



Bicycle Compatible Bridge Expansion Joint



Non-Bicycle Compatible Bridge Expansion Joint

## B.5: Is there adequate horizontal and vertical clearance?

In areas of low vertical clearance, items protruding into the clear zone (e.g., signs, light fixtures, structural supports, etc.) may not be noticed by a cyclist as they tend to focus on the travel surface. Furthermore, cyclists may change their position on the road or path to maintain comfortable operating space from bridge railings or tunnel walls. On roadways, large vehicles may also need to reposition themselves upon entering a tunnel due to vertical clearance, which can cause shifts in traffic in both directions that can affect cyclists.

Considerations with respect to horizontal clearance are discussed in A.2.5.

## B.6: Are railings, guardrail, and/or parapets and other structures installed at an appropriate height and shy distance? Are there features that can pose a risk to cyclists?



Recommended height and shy distance for railings are detailed in the *AASHTO Guide for the Development of Bicycle Facilities,* but many variations may occur, especially at locations where ornamental railings may be used. Further consideration should be given to vertical protrusions or bars that can catch or snag a passing cyclist or bicycle and whether the railing presents a greater safety issue than the hazard it is shielding. Blunt ends of railings and other barriers may increase risk to all road users.

The photo to the left shows a barrier that has guardrail on the side facing the path to prevent snagging. However, guardrail has a sharp edge that may pose an injury risk in the event of a fall.

## B.7: Are bicycle accommodations continuous, or do they end abruptly at bridge/tunnel crossings?

Inconsistencies in cycling accommodations may be introduced at bridges and tunnels. Conditions that may increase risk for cyclists include:

- Change in accommodation location both at the structure and on the structure.
- Changes in useable width (see also D.3, D.7, and D.9).

## B.8: Are bridges and tunnels adequately lit?



Lighting should adequately address the following:

- Cyclists can see the surface and determine useable space.
- All roadway users are aware of the presence of others.
- Transitions from daylight to tunnel or bridge, and vice versa, minimize changes in light so that cyclists and other users do not lose visual acuity (see also A.9).

Transitions may be especially critical at an interchange, where lighting conditions may change rapidly due to the presence of an underpass or overpass and complex traffic patterns may be present (see also C.9).

In the photograph to the left, cyclists can see daylight at the tunnel end and determine if there are others in the tunnel. Also, for security reasons, cyclists prefer to be able to see daylight at the tunnel end.

## B.9: Can cyclists see approaching vehicles/pedestrians, and vice versa?

Sight distance is often restricted by numerous features at or near bridges and tunnels to include:

- Railings.
- Abutments and retaining walls.
- Piers.

Sight distance with respect to the following conditions should be considered (see A.9):

- User habits, such as cyclists riding side-by-side on off-road paths.
- Operating speeds of all users.

User awareness should also be considered as described in Chapter 3, Figure 14.

## B.10: Are adequate warning signs posted at entrances?

Motorists and cyclists should be aware of each other. Warnings should be clearly visible for all lighting conditions and clearly understood, especially in areas where the useable space may be restricted (see also A.5.1).

## B.11: If bicycle traffic signalization and detection are present, are they properly positioned, functioning, and effective?




Transitions to and from bridges and tunnels may be controlled by traffic signals and other warning systems that are bicycle-activated. When used, these devices should consider the following:

- Is detection positioned where it can be easily "triggered" by cyclists without having to change their intended route?
- Are traffic signals and detection functioning properly?
- Are traffic signals understood by all road users and obeyed?
- Transitioning to and from bridges and tunnels may involve waiting through long traffic signal cycles. Is there sufficient storage space for cyclists that queue during these transitions?

The photo to the left shows a bicycle warning system that is used to alert motorists of the presence of cyclists on a bridge because the bikeable shoulders do not continue over the bridge (see also C.11).

## C. Intersections, Crossings, and Interchanges

C.2: Are intersection/interchange accommodations designed to reduce conflicting movements and communicate proper bicycle positioning through the crossing?

| Sub-Prompt | Description |
|---|---|
| **C.2.1: Are accommodations properly designed and placed on intersection approaches?** | On-road accommodations: on-road bicycle lanes must be properly designed and located to encourage proper lane positioning at intersections (i.e., the rightmost lane or portion of lane headed in the cyclist's direction of travel). Other considerations when locating a bicycle lane in relation to a turn lane include geometrics, traffic speed, and roadway gradient.<br><br>The top photo to the left shows a bicycle lane incorrectly located to the right of a dedicated turn lane, which may contribute to "right-hook" crashes. Bike lanes should be placed to the left of a right-turn lane to minimize the opportunity for right hook crashes and permit cyclists to ride through the intersection, as shown in the center photo.<br><br>The bottom photo to the left shows shared lane markings in the through and the far right right-turn only lane at an intersection on a multilane one way street.<br><br>On-road/off-road accommodations: at shared use path/road intersections, the following should be considered:<br>• Is the major movement assigned right-of-way?<br>• Are curb ramps present, and if so, do they extend the full width of the path, with adequate landing area, slope, and a flush surface?<br>• Do crossings provide adequate gaps and storage for crossing cyclists, particularly at higher-speed multilane crossings (see also C.2.7)? |



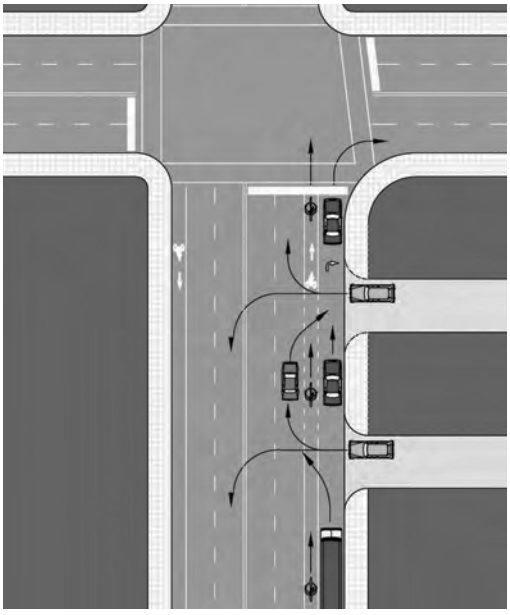





| C.2: Are intersection/interchange accommodations designed to reduce conflicting movements and communicate proper bicycle positioning through the crossing? | |
|---|---|
| Sub-Prompt | Description |

**C.2.2: Are there difficulties for cyclists caused by intersection geometry or lane use assignments?**





When peak traffic volumes and high speeds are present, intersection design features can make it difficult for cyclists to cross. The following conditions may be a safety concern for cyclists:

- Free flow/continuous right-turn lanes.
- Acceleration/deceleration lanes.
- Lane drops.
- Through lanes that become turn lanes.
- Shoulder drops to accommodate a turn lane.
- Roundabouts.
- Bus stops near intersections (see D.2).

The photo to the top left shows an acceleration lane with a bikeable shoulder beyond. Bicyclists have difficulty merging with higher-speed vehicle traffic at these locations because they are typically travelling at slower speeds and have a narrower profile, making them more difficult to be seen by accelerating and merging traffic.

The following conditions present at multilane intersections can also make left turns difficult for cyclists:

- Lane changes and U-turns to access crossovers.
- Wide curb radii encouraging high speed turns.
- Conflicts with continuous or channelized right-turn lanes and weaving traffic.
- Wide intersections.
- Unclear or long merge areas.

The diagram to the bottom left shows how placement of driveways and bus stops may affect the safety of cyclists.

As shown in the bottom graphic, drivers entering from side streets or driveways may not see cyclists behind vehicles, especially large vehicles, such as buses. The placement of a bus stop can increase cyclists' risk (see also E.9).

| C.2: Are intersection/interchange accommodations designed to reduce conflicting movements and communicate proper bicycle positioning through the crossing? | |
|---|---|
| Sub-Prompt | Description |
| **C.2.3: Are cyclists safely accommodated on each approach to an intersection?** | Accommodations (e.g., bicycle lanes, wide curb lanes, shared use paths, etc.) on intersection approaches can affect a cyclist's safety. Special consideration may be needed to permit a left-turning bicyclist to merge across heavy volumes of traffic or to accommodate two-stage left turns (see Figure 13). Right-of-way assignments and crossing treatments should be consistent along the evaluation corridor to ensure uniform expectations for all road users. Other elements to consider include:<br>• Storage length, particularly at path crossings.<br>• Adequacy of gaps in traffic at unsignalized crossings (see C.2.7 and D.7). |
| **C.2.4: Where pedestrian accommodations are present, are cyclists adversely affected?**<br>  | Traffic calming measures (e.g., refuge islands, curb bulb outs, etc.) help manage traffic speeds and can enhance the safety of a roadway for all users. The measures should be designed with cyclists in mind. For example, curb changes should not be abrupt or encroach into the bicycle facility (see D.2).<br>The photo to the left illustrates a curb bulb-out extending into a bicycle lane. |
| **C.2.5: Are there any unique intersection characteristics that may pose a problem for cyclists?** | Potential specific considerations include:<br>• A skewed intersection can direct a driver's focus away from approaching cyclists, present sight distance issues, and encourage higher speed movements through an intersection.<br>• Roundabout design should pay particular attention to properly accommodating cyclists and should consider interactions and transitions for all modes. Vehicle volumes and speeds should be considered when evaluating appropriate bicycle accommodations in roundabout design. It is important to consider whether the transition meets the safety needs of all users (see D.7). |

| C.2: Are intersection/interchange accommodations designed to reduce conflicting movements and communicate proper bicycle positioning through the crossing? | |
|---|---|
| Sub-Prompt | Description |
| **C.2.6: Do at-grade railroad crossings safely accommodate bicyclists?**  | Railroad crossings with skewed tracks can result in an increased crash risk for cyclists. Preferably, cycling facilities should cross railroad tracks as close to perpendicular as practical. Longitudinal tracks and very acute crossing angles over tracks can trap bicycle wheels. Additionally, crossing surfaces can be slippery in wet weather, especially when slip-resistant measures are not used (see B.4.1 and D.4).<br><br>Good pavement conditions, extra paved width to allow crossing closer to perpendicular, and flangeway fillers help minimize risk on low-speed, low-train-volume tracks.<br><br>The photo to the left illustrates a shared use path crossing of a railroad track. Trains in the area are infrequent and pass through the corridor at low speeds. |
| **C.2.7: Do facilities avoid or minimize the need for the cyclist to slow down or stop unnecessarily?**  | On-road accommodations: cyclists on the road are subject to the same rules that govern vehicles, and therefore, they must obey traffic control devices that require vehicles to stop or slow down.<br><br>Off-road accommodations: cyclists on off-road separated facilities (e.g., side paths and shared use paths) may be required to slow or stop at intersecting driveways or paths. Sight lines on the intersection approaches must be kept clear and priority should be considered for the heavier movement (e.g., cyclists across private driveways and minor, low-speed, low-volume streets) (see also C.10).<br><br>The photo to the left shows an example of a side path marked to illustrate the intent for cyclists to stop at driveways and cross streets (the markings do not conform to the MUTCD). However, if these stops are frequent or if conflicts with cross traffic are a rare occurrence, cyclists may disregard the traffic control. In some places, the stop or yield controls on the side paths directly conflict with or contradict other traffic control devices, which may create confusion in right-of-way that can result in crashes. |

## C.3: Do traffic operations (especially during peak periods) create a safety concern for cyclists?

| Sub-Prompt | Description |
|---|---|
| **C.3.1: Are there sufficient gaps in traffic or gaps created by geometry or traffic controls for bicycle crossings?**  | Depending on the peak traffic volumes and vehicular speeds, various measures (e.g., yield or stop signs, traffic signals, median refuge, grade separation, etc.) may be installed to create adequate gaps for cyclists to safely cross. The RSA team should assess whether the installed measures are effective. The lack of adequate gaps may discourage cyclists from using the intended crossings and routes. Note that it is within the ability of the RSA team to recommend a study, but it may not be within its ability to recommend installation of devices that must meet warrants.<br><br>The photo to the left depicts bicycle-only left-turn bays to facilitate left turns at an uncontrolled intersection. |
| **C.3.2: What traffic movements increase bicycle/other road user crash risk?** | Peak traffic volumes and high vehicular speeds present operational and safety issues to cyclists. These include heavy volumes to weave through, lack of bicycle detection, and poor visibility. Bicycle exposure while turning or waiting to turn creates the potential for "right hook" or "left cross" incidents, particularly at locations where intersection geometry increases this exposure (e.g., multiple turn lanes) (see Figure 13).<br><br>Other considerations include:<br>• Do high pedestrian and bicycle traffic volumes result in crossing cyclists conflicting with crossing pedestrians?<br>• Are there conflicts on the approaches to the intersection?<br>• Do pedestrians and cyclists share space, and are they properly using the facility? |

## C.4: Are there any obstacles at crossings? Are the manhole covers properly designed?

Manhole covers and drainage grates should be properly designed and installed. In addition to the orientation and spacing of grating bars, the structures should also be level with the pavement surface to avoid possible trapping or tipping issues. When practical, surface objects should be placed outside turning radii, where a cyclist is less balanced (see A.4.5).

C.5/C.6 and D.5/D.6: If bollards or other physical terminal devices are used, is the risk of occasional motorized vehicles greater than the risk of a fixed object within the travel way?

| Sub-Prompt | Description |
|---|---|



Use of bollards on shared use paths should be based on an assessment of the relative risk of motorized vehicles using the facility compared to safety issues associated with a permanent fixed object within the path travel way. If the risk of motorized traffic is greater, then consider the following with regards to bollard use:

- Proper installation.
- Visibility and retroreflectivity of device.
- Adequate width for all users (recumbent bicycles and bicycles with trailers are wider).
- Serving their intended purpose.
- Placement relative to the bicyclist's travel path.



Bollards that are not set back from the intersection can result in increased cyclist exposure to motor vehicles as they slow or stop to access the facility. Bicycles with long wheelbases such as trailers, "trail-a-bikes", and tandems require greater clearance before encountering bollards, especially if near horizontal curves or intersections. A common crash type with these obstructions occurs when one path user obstructs the advance view of the bollard and then moves sideways to avoid it, leaving the following rider without time to react or avoid the obstacle. This crash type is still an issue for reflectorized or conspicuous bollards.

The top photo to the left shows a moveable bollard retracted to just above the pavement surface. This may present visibility issues for cyclists using this facility as retraction reduces the bollards conspicuity.

The bottom photo to the left shows bollards that are placed in the bicyclist's travel path but do not effectively eliminate access for motor vehicles, which can enter on the right side of the bollard. Appropriate bollard positioning typically involves installing either one or three bollards positioned along the centerline and edge lines to minimize lane positioning issues for bicyclists that may lead to head-on bicycle crashes. For example, the use of two bollards may cause a situation where two head-on cyclists may choose to use the center gap at the same time and lead to a head-on collision.

## C.7: Are bicycle accommodations continuous, or do they end abruptly at crossings/intersections/interchanges?

It is desirable to provide continuous and connected bicycle facilities through intersections and interchanges to minimize confusion and conflicting maneuvers between all modes.

When bicycle lanes terminate near an intersection, some provision should be considered for a short distance after the intersection (e.g., a short section of bicycle lane or shared lane markings) to guide the bicyclist through the intersection. When bicycle lanes are dropped across an intersection, adequate advance warning of the changing conditions should be provided.

The desirable bicycle travel path may not be readily apparent through some intersection or interchange configurations with offset lanes or merge areas. These configurations may also restrict the amount of travel space available to a cyclist. Consideration may be given to defining lanes through the intersection (see D.2 and D.7).

## C.8/D.8: Are the intersection/transition and paths leading to the transition adequately lit?

Lighting illuminates the roadway surface and surroundings. Lighting also enhances the visibility of all road users in these low-light conditions:

- Night.
- Dusk or dawn.
- Locations where conditions may change rapidly, such as under bridges or in tunnels (see B.8).

Approach lighting provides time to assess conditions and helps a road user to properly adjust to those conditions (see A.8).

## C.9: Can cyclists see approaching vehicles/pedestrians at all legs of an intersection/crossing, and vice versa?



Intersections should have adequate sight and stopping distances from all approaches based on prevailing vehicle speeds. The placement of the stop (or yield) lines should allow drivers to see approaching cyclists, and vice versa. Sight distance should be adequate at crossings so that cyclists can see and be seen. Sight triangles may be obscured by roadside features such as:

- Signs.
- Fences.
- Trees/vegetation.
- Embankments.
- Stopped/parked vehicles.

Consideration should be given to both permanent and temporary features.

In the photo to the left, visibility between the parallel sidewalk and side path is obstructed by a row of tall vegetation. The vegetation also limits visibility of pedestrians using the crossing path. This planting inhibits the ability of pedestrians and cyclists to make visual contact with each other and establish intent (see A.9.1)

User awareness should also be considered as described in Figure 14.

## C.10: Do signs and markings along the cycling facility clearly indicate the cyclist path and right-of-way at intersections?






Traffic control devices that are relevant to bicycle travel should provide clear and consistent messages to all road users. Pavement markings and signs should be consistent with each other to correctly convey their intent (see A10.1 and B.10).

In the top photo to the left, pavement markings indicate proper placement for cyclists at the intersection.

In the bottom photo, the centerline on the shared use path is dashed. There is no signing or markings to indicate which approach has the right-of-way. Solid lines should be used where there are potentially conflicting movements, steep gradients, or where visibility is reduced.

## C.11: Does the traffic signal design accommodate all users?

| Sub-Prompt | Description |
|---|---|
| **C.11.1: Are signals, bicycle detection, and bicycle push buttons properly located and functioning? Do problems result from inconsistent bicycle detection types?** | Many actuated traffic signals are not configured to detect bicycles. Signal detection should be considered, particularly when concurrent vehicular traffic volumes are low, as the signal may require an automatic recall setting to service bicycles. All signal detection types should be maintained and checked to operate effectively for cyclists. Consider whether cyclists are able to determine the location to trigger detection and whether observed cyclist stopping locations don't match up well with detector locations. If used, push-buttons should be placed conveniently for the cyclists to reach. |

| C.11: Does the traffic signal design accommodate all users? | |
|---|---|
| Sub-Prompt | Description |
| **C.11.2: Are there conflicting traffic movements during bicycle crossing phases?**   | Signal phasing should consider the needs of crossing cyclists. If significant conflicts are present, then exclusive bicycle phases may be considered. Particular attention should be given to locations where a side path is present at a signalized intersection. At this type of location, the signal timing should provide adequate gaps and should minimize conflicts between path users and motor vehicles within the crosswalk and between pedestrians and cyclists on other connecting facilities, such as sidewalks.<br><br>The photo to the left shows a shared use path with a separate signal for pedestrian and bicycle traffic to cross the intersection. However, pedestrian traffic on the sidewalk may conflict with the path movement. Traffic signs and pavement markings are used to direct traffic through the intersection and alert cyclists of crossing pedestrians, but the combined use of stop and yield lines may be confusing to approaching path users (the combined use of stop and yield lines does not conform to the MUTCD). |
| **C.11.3: Do traffic signal clearance intervals safely accommodate cyclists?**  | Signal timing should allow for adequate clearance intervals for cyclists in a variety of situations, including standing starts and rolling approaches. Signal phasing, timing, and coordination may need to be adjusted if the end of the progression does not provide adequate time for a cyclist to clear an intersection prior to the release of an opposing traffic stream.<br><br>The photo to the left shows a cyclist waiting for a dedicated bicycle traffic signal phase. |

## D. Transitions

### D.2: Are transition areas designed appropriately with logical termini or do they end abruptly, potentially contributing to sudden and difficult merges, uncontrolled crossings, or behaviors such as wrong-way riding?





Transitions should be designed to meet the cyclist's expectations, provide adequate space for adjustments by the cyclist, and provide sufficient storage and turning space at a transition crossing, such as in the bicycle lane transitioning to a shared lane on a perpendicular street as seen in the photo on the top left. The crossing is signalized to assign the right-of-way between motorists and cyclists. Pedestrians and cyclists are also provided separated crossing paths. Transitions should not be abrupt or contribute to undesirable riding behaviors (e.g., riding the wrong way, crossing at an undesired location, etc.). Transitions that may be of particular concern include:

- Shoulder/lane drops.
- A through lane becomes a turn lane.
- Multiple turn lanes.
- Multiple merges.
- Continuous turn lanes.
- Path terminus.
- Termini where traffic volumes and speeds change.

The bottom photo to the left shows a wide, bikeable shoulder terminating at an intersection (see also A.2 and C.2).

### D.3: Do shared roadway geometrics change substantially or frequently?

Frequent or sudden drops of shoulders or bicycle lanes can discourage use and result in cyclists selecting alternate routes. Changes should be identified appropriately and conveyed to the cyclists in enough advance time and distance to enable them to react accordingly (see also A.3 and A.7). Considerations at bike facility transition areas may include:

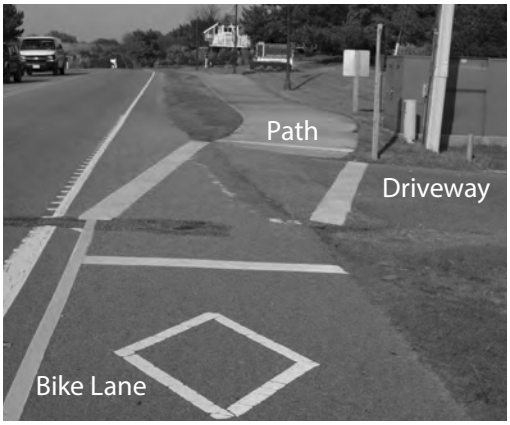
- Are appropriate warnings and transitions provided?
- Are there consistent levels of accommodation for bicyclists provided along a corridor where there are similar traffic volumes and speeds?

### D.4: Is there an abrupt change in riding surface?

Surface changes from paved to crushed stone or other riding surfaces can cause cyclists to lose control depending upon entry speed. Surface changes without warning, particularly at the end of a downgrade or in a curve, can be particularly detrimental (see also A.4.2 and A.4.7).

### D.5 and D.6: If physical terminal or transition devices are used, are they needed and is there sufficient width on either side (see C.5 and C.6)?

## D.7: Is there a safe way for cyclists from both directions to access connections or continue to other destinations along the street network?




Transitions from one facility to another (e.g., shared use path to roadway shoulder) should be designed so as to direct users to ride in the correct direction of travel. Roadway and path alignment along with the presence of marked crossings and wayfinding signs all influence how the facilities are used. These characteristics may contribute to inappropriate riding behavior such as wrong-way riding (see also A.7).

The photo to the left shows the transition between an off-road shared use path and a bicycle lane (note that diamond pavement markings for a bicycle lane do not conform to the MUTCD). The alignment, signing, and markings insert bicyclists into a driveway location from an unexpected direction and appear to encourage wrong-way riding in the bicycle lane.

Consideration should also be given to the location of popular origins and destinations along a road that are frequented by cyclists. Accommodations should be provided (as necessary) to cross cyclists from one side of the roadway to the other.

## D.8: Are the intersection/transition and paths leading to the transition adequately lit (see C.8)?

## D.9: Is the visibility of cyclists as they make the transition from one facility or roadway geometry to another adequate from the perspective of all road users?



The transition, whether along a roadway or at an intersection, should allow drivers to see cyclists and understand their path and intent, and vice versa. The following should be investigated:

- Obstructions caused by roadside features (e.g., fences and vegetation).
- Adequacy of warning signs.
- Location of the transition with respect to roadway geometry (e.g., shoulder drop and turn lanes) (see also A.9 and C.9).

The picture to the left depicts a bike lane that hooks right through a major intersection and transitions to a protected bikeway. Chevrons on the pavement help guide cyclists and show motorists the path provided for cyclists through the intersection (note that the chevron pavement markings do not conform to the MUTCD).

## D.10 and D.11: Are signs and markings at transition areas appropriate?

Transitions and termini should be appropriately signed and marked to warn cyclists of conditions ahead, particularly at locations at which cyclists do not expect transitions or termini. Likewise, motorized vehicles should have adequate warning when off-road bicycle facilities transition to on-road facilities. The intended paths of all road users should also be appropriately signed and marked at the point of transition. Additional attention may be given to locations with high volumes of unfamiliar users or tourists.

## E. Transit

| E.2 and E.3: Are transit facilities designed and placed to minimize conflicts with other modes? | |
|---|---|
| Sub-Prompt | Description |
| **E.2.1: Are transit stop locations appropriate for cyclists?** | Transit stops and shelters should be located near cyclist generators and along expected paths connected by safe crossings (see also A.2 and C.2). |
| **E.2.2: Do transit facilities provide adequate separation between cyclists and other modes of travel?**   | Transit facilities (e.g., shared bus/bike lanes) should consider operational and safety impacts of shared space with cyclists and other travel modes (see A.2 and A.3). Potential conflicts may occur between transit vehicles and cyclists at or near transit stops and in shared lanes for transit vehicles and bicycles. Specific considerations include:<br>• Merging maneuvers of cyclists in and out of travel lanes.<br>• Weaving maneuvers of cyclists and transit vehicles.<br>• Spacing of bus stops and frequency of conflicts/merging/weaving maneuvers.<br>The top photo to the left shows an area where high volumes of cyclists and regular bus service can create frequent conflicts between buses and cyclists. One cyclist is riding in the bus driver's blind spot. This condition requires vigilance from the bus operator and predictable behavior from the cyclist.<br>The operating widths of buses and bicycles should also be taken into consideration. The photo at the bottom left shows a shared lane marking set 11 feet from the curb at a bus stop. An RSA team should consider whether the pavement marking placement and visibility may cause a conflict between cyclists and a waiting bus (see A.10). |
| **E.2.3: Do waiting areas at transit stops provide sufficient space for cyclists?**  | Conflicts may occur between cyclists and bus passengers at transit stops. Considerations include:<br>• Space for boarding and alighting cyclists and other transit users during peak periods.<br>• Clear paths for cyclists and pedestrians (see C.2).<br>The photo to the left shows a designated bike waiting area at a bus stop. The designated area is at the loading area for cyclists outside of pedestrian paths on the sidewalk. In addition to reducing conflicts, designated waiting areas may also improve transit operational efficiency. |

## E.2 and E.3: Are transit facilities designed and placed to minimize conflicts with other modes?

| Sub-Prompt | Description |
|---|---|
| **E.2.4: Do paths accessing transit stops minimize conflicts between cyclists and other modes of travel?**  | Conflicts may occur between cyclists and pedestrians on designated paths accessing transit facilities (see E.7).<br><br>In the photo to the left, a cyclist is using an automated fare collector and is partially blocking access to the platform. Furthermore, the width of the access ramp to the platform is narrow and may not adequately accommodate peak demands, especially when pedestrians with mobility restrictions and cyclists are both present. |

## E.4: Are transit stops maintained during periods of inclement weather?

| Sub-Prompt | Description |
|---|---|
| **E.4.1: Is snow removed from waiting areas at transit stops? Is there sufficient storage area for removed snow?** | When heavy snow is common, snow removal and storage should maintain full access to facilities. |
| **E.4.2: Have the effects of weather been adequately considered?** | Weather can have a major impact on access to transit, particularly considering the placement of transit stops near intersections. Specific considerations may include:<br>• Drainage around a transit stop should not limit access for cyclists (see A.4).<br>• Shelter space allows for all weather use, particularly at high-activity stops. Designs for overhead structures should consider maximum heights for cyclists and whether cyclists are provided with riding and waiting spaces (see B.5). |

## E.5: Is the waiting area free of temporary / permanent obstructions that constrict its width or block access to the bus stop?



Obstructions in waiting areas, which can be temporary or permanent, may limit accessibility of passengers resulting in unanticipated behaviors and travel patterns by all transit users. Obstructions may include:

- Newspaper stands.
- Street furniture.
- Vegetation.
- Bicycle parking.

The photo to the left shows a location where the sidewalk was widened and bike racks were installed in the street furniture zone to maintain adequate access to a busy subway station.

## E.6: Are bicycle accommodations connected and convenient for transit users?




Continuity and connectivity should be considered on all facilities for cyclists accessing transit, including:

- Paths accessing transit.
- Waiting areas at transit stops.
- Bicycle parking at or near transit.

The photo to the left shows covered bicycle parking conveniently located behind a bus stop, with wide paths leading to the stop. Bicycle parking should be located as close to the activity as possible without impeding or conflicting with other users (see D.7 and E.2).

## E.7: Are crossings convenient and connected to continuous facilities for cyclists?

Transit routes are often located along arterials with relatively high traffic volumes traveling at high speeds. Typical considerations regarding cyclists crossing to transit are described in detail in Section C: Intersections, Crossings, and Interchanges and can be summarized by the following:

- Adequacy of gaps created for cyclists to cross to transit stops.
- Level of traffic control.
- Directness of route.

## E.8: Are transit access ways and facilities adequately lit?

Transit stops, particularity those with high activity at night, should be adequately lit to identify conflict points between transit users. Areas of concern may include:

- Approaches to a stop.
- Area around a stop.
- Paths to bicycle parking (see A.8, C.8, and D.8).

## E.9: Is the visibility of cyclists using the facility adequate from the perspective of all road users?

Open sight lines should be maintained between approaching buses and passenger waiting/loading areas, shelters, bike racks, etc. Consideration should be given to the speed at which a cyclist may approach transit stops or pedestrian-oriented spaces and where cyclists will load on the bus. Cyclists may wait at a location close to the front of the bus, which sometimes places them on the far side of a shelter where they cannot be seen. Visibility and sight distance issues that may cause conflicts between users include:

- Transit vehicles.
- Vegetation.
- Shelters and other structures.
- Transit users (pedestrians and cyclists).

User awareness should also be considered as described in Chapter 3, Figure 14 (see also A.9, B.9 and C.2).

## E.10: Are signs and markings at designated areas for cyclists using transit appropriate?




Pavement markings and signage should clearly indicate assigned space on the roadway, especially in areas where there is a high potential for conflict (see A.10). Additionally, cyclists waiting to board or depart transit vehicles should not conflict with pedestrians (see E.2.3).

In the photo to the left, the bike lane pavement markings have faded. Pavement markings typically have a shorter life where there is heavy traffic crossing the markings, such as at this heavily-used bus stop.

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# Exhibit C

# Chapter 1

## *Introduction to Bicycle Facilities*

## 1. Goals and Visions for Bicycle Use

The Intermodal Surface Transportation Efficiency Act (ISTEA) set a new direction for surface transportation in America that is enunciated in its statement of policy:

> ***"to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy efficient manner."***

Provisions for bicycling, with its potential for providing economically efficient transportation, became an important policy goal of ISTEA. The Secretary of Transportation was directed to conduct a national study that developed a plan for the increased use and enhanced safety of bicycling and walking. The National Bicycling and Walking Study - Transportation Choices for a Changing America presents a plan of action for activities at the Federal, State and local levels for meeting the following goals:

- To double the current percentage (from 7.9 percent to 15.8 percent) of total trips made by bicycling and walking; and
- To simultaneously reduce by 10 percent the number of bicyclists and pedestrians killed or injured in traffic crashes.

The potential for increasing the number of bicycle trips is evident in the National Personal Transportation Survey, which shows that more than a quarter of all trips are 1.6 kilometers (one mile) or less, and 40 percent are 3.2 kilometers (two miles) or less. Almost half are 4.8 kilometers (three miles) or less and two-thirds are 8.0 kilometers (five miles) or less. Approximately 53 percent of all people live less than 3.2 kilometers (two miles) from the nearest public transportation route.

New Jersey residents have become aware of the energy, efficiency, health and economic benefits of bicycling for transportation and recreational purposes. In 1995, New Jersey Department of Transportation completed a statewide plan that established policies, goals and programmatic steps to promote safe and efficient bicycling for transportation and recreation in New Jersey. Through an extensive outreach effort, residents established a statewide vision for the future of bicycling and walking for all communities in New Jersey:

> ***"New Jersey is a place where people choose to bicycle and walk. Residents and visitors are able to conveniently walk and bicycle with confidence and a sense of security in every community. Both activities are a routine part of transportation and recreation systems."***

In order to achieve this vision for New Jersey, and to enable people in every community of the state to bicycle with confidence and a sense of security, it is necessary to plan and provide appropriate facilities that will accommodate, encourage and promote bicycling. This manual provides direction regarding how appropriate facilities for bicycling should be provided.

Since these guidelines are a companion document to NJDOT's Pedestrian Compatible Planning and Design Guidelines, it is appropriate to discuss the relationship between pedestrian and bicycle domains in general terms. While both functions need to be carefully planned for, the movement characteristics and needs of pedestrians and bicycles differ in obvious ways. The



greater speed and size of the bicycle and rider means that, in general, bicycles are best accommodated as part of the roadway and not on sidewalks. Additional outside lane dimensions or widened shoulders perform this function most typically. For recreational pathways and other unique circumstances (e.g., certain bridges), pedestrian and bicycle movement is sometimes combined if adequate width can be provided and usage is not intense.

## 2. Types of Bicyclists

Bicyclists in New Jersey form a highly diverse population with varying needs and interests. These bicyclists range from advanced, highly experienced riders who ride frequently, often have special training, are confident in all traffic conditions and can negotiate with less operating space, to basic riders who are more casual in their riding practices and less comfortable riding in traffic, to young children who have not developed adequate judgement or received special training, enabling them to ride in the street unless under the strict control of a parent or other mature person.

Although advanced bicyclists represent only 20 percent of all bicyclists, they account for an estimated 80 percent of all bicycle trips. They are comfortable travelling long distances, are accustomed to using their bicycle (or bicycles) in a variety of environments, and will be the most likely to choose to bicycle for utilitarian purposes such as commuting or shopping.

Basic bicyclists are more casual riders, are less comfortable in traffic and have limited experience and skills. They form the largest group of bicyclists, but since they only occasionally cycle, basic bicyclists account for a smaller percentage of total bicycle trips. However, many casual riders may progress into becoming more confident and active riders as they gain experience.

Basic bicyclists will be more comfortable riding on lightly travelled neighborhood streets, on park or campus roads not used extensively by cars, on roadway shoulders along lightly travelled rural highways or on separate bicycle paths. Basic cyclists travel at slower speeds and for shorter distances compared to advanced cyclists, and frequently will wish to travel with other family members or friends. According to a Harris Poll reported in the National Bicycling and Walking Study, nearly half of all adults in the nation have bicycled at least once during the past year. Because of the urban character of New Jersey, it is reasonable to assume that an even higher percentage of adults would have bicycled at least once in the past year in New Jersey.

Young children form a separate group of bicycle riders. Children have minimal riding skills, little experience and limited physical capabilities. Their bicycles often may be of limited quality, limiting bicycling range. Children unfortunately also often have an inappropriately high level of confidence, or at least fearlessness, in their riding skill, and lack judgement regarding safe bicycling practices. Sidewalks in residential neighborhoods, school grounds and parks provide safe environments for young children to gain the bicycling skills they will need as they grow older. Because of their limited judgement capacity, children under the age of nine should not be allowed to ride on public streets unless actively supervised by a parent or other mature adult.

## 3. Types of Bicycle Facilities

Because of the great difference in skill levels among bicycle riders, different types of bicycle facilities are needed to serve riders in New Jersey. Advanced bicyclists are best served by bicycle compatible streets and highways which have been designed to accommodate shared use by bicycles and motor vehicles. Basic bicycle riders will be especially interested in riding on bikeways which are designated facilities that encourage bicycle use.



The difference between a compatible roadway and a designated roadway can be summarized as follows:

**Compatible Roadways:** Roads which have design features which allow a competent bicyclist to safely share the roadway with motor vehicles. Compatible roadway design guidelines differ based on traffic volumes, speeds and environmental setting. Because advanced bicyclists can be anticipated to use most of the roadways in the state, it is important that all roadways be designed to be compatible with bicycle use. See Figure 1.

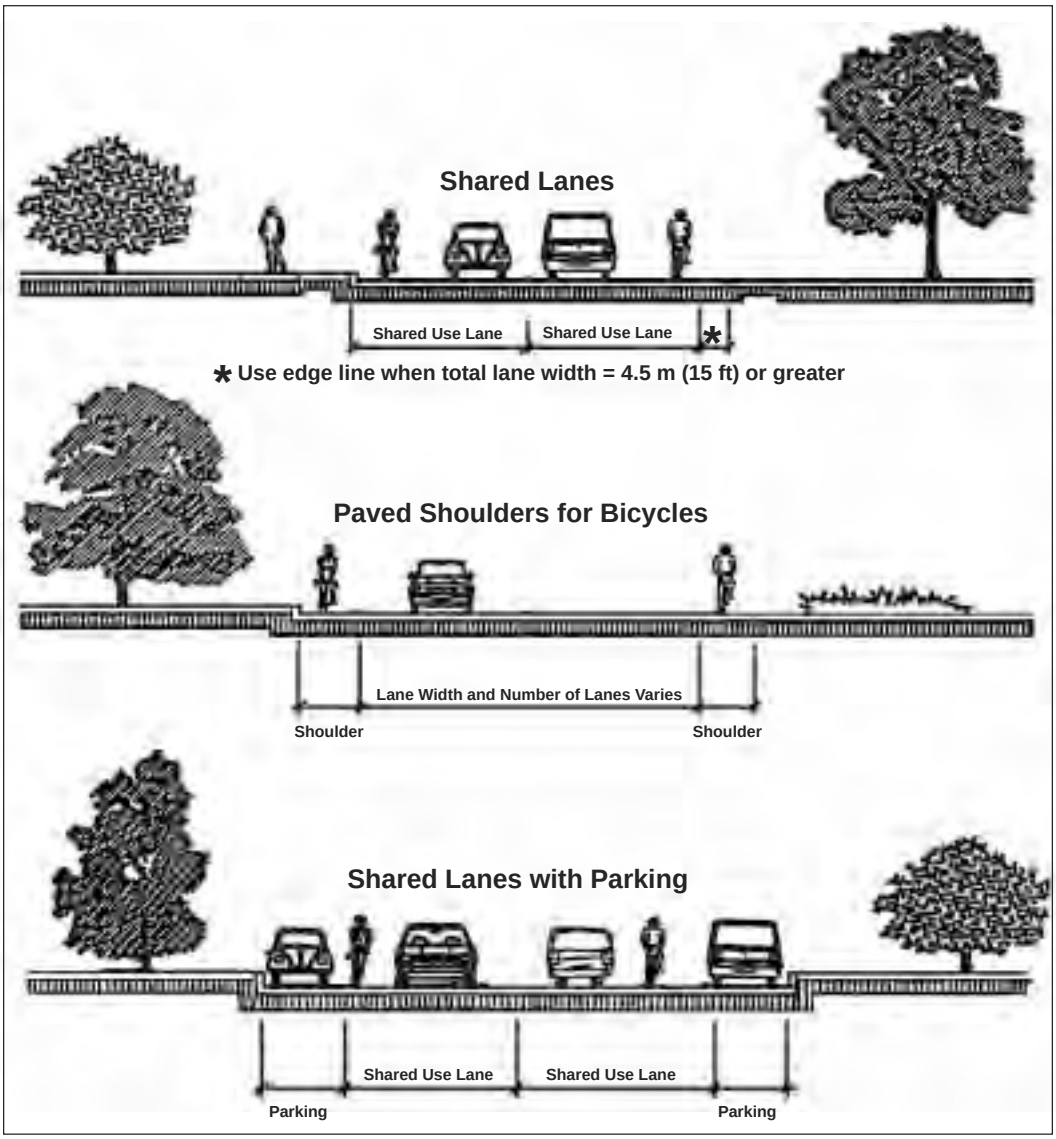



**Figure 1**
Types of Bicycle Compatible Roadways

Source: Greenways Incorporated

**Designated Roadway:** Roads on which bicycle use is anticipated and invited through the use of lane markings, signage, maps or tour guides.

Designated bicycle facilities provide greater safety for less experienced or less confident riders. Designated roadways are located where encouragement of bicycle use is desired, based on consideration of traffic conditions, pavement width and geometrics, and appropriateness and directness of the particular route. They are also often located in areas which offer especially pleasing rides such as in parks or through quiet subdivisions. Because basic riders will be more apt to be riding for pleasure, bikeways are often located in resort areas or in regional parks.

As indicated by these definitions, the designation of a roadway as a bikeway represents a proactive policy designed to encourage bicycling. Three categories of bikeways exist:

**Bicycle Routes** — Roadways designated for bicycle use through the installation of directional and informational signage.

**Bicycle Lanes** — A lane designated for exclusive or preferential use by bicycles through the application of pavement striping or markings and signage.

**Bicycle Paths** — A bicycle facility separated from motorized vehicular traffic. A bicycle path may be located within a highway right-of-way or on an independent right-of-way. A bicycle path is not a sidewalk but may be designed to permit shared use with pedestrians.

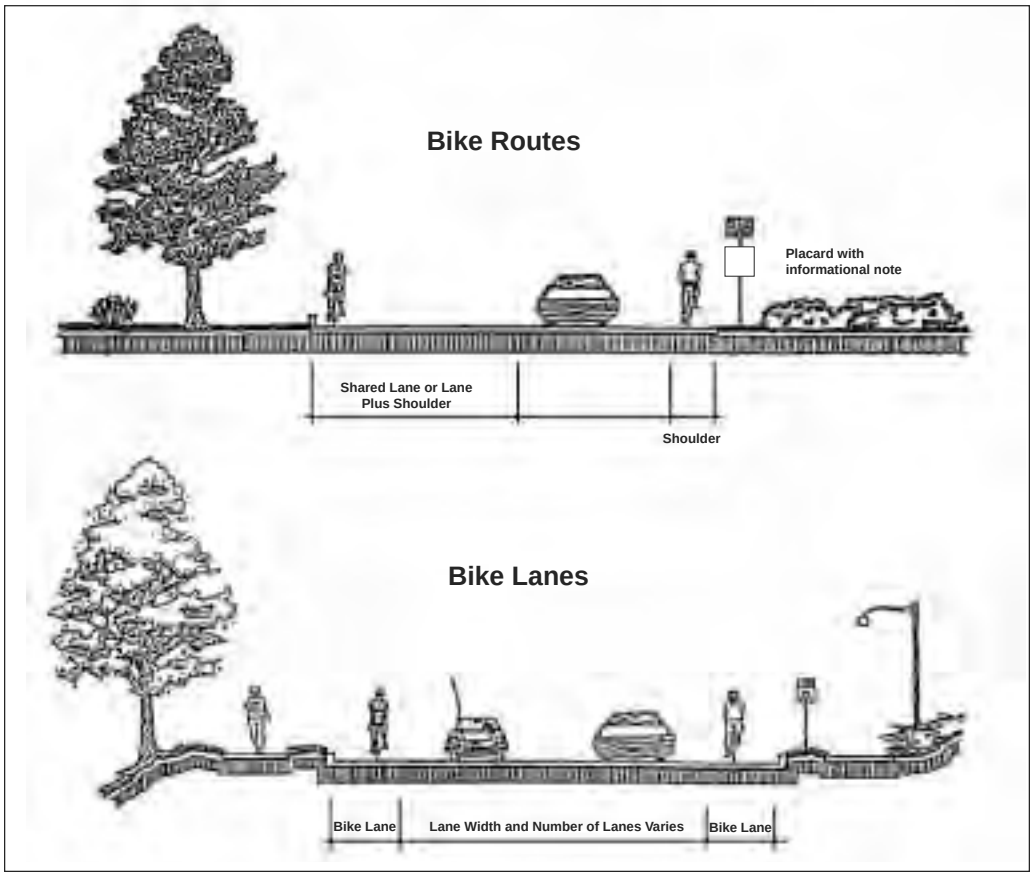
Figure 2 illustrates the difference between a bicycle route and a bicycle lane.

Chapter Two of this manual provides design guidance regarding how streets and highways should be designed to be made compatible with bicycle use. Chapter Three provides planning and design guidance regarding the designation of roadways as bikeways. Chapter Four provides similar guidance regarding the planning and design of bicycle paths.

Chapter Five describes other types of facilities which are needed to make bicycling a viable travel mode for a larger portion of New Jersey's residents. Issues addressed in Chapter Five include bicycle parking and storage, integrating bicycle use with public transportation, and ancillary facilities to aid bicyclists such as shelters, rest areas and comfort stations.

Chapter Six discusses roadway operations and maintenance activities required to support bicycling.

**Figure 2**
Types of Bikeways on Highways




Source: Greenways Incorporated

# Chapter 2

## *Bicycle Compatible Roadway/Design Treatments*

Planning and designing highways to permit the shared use of roadways by bicyclists and motorists usually does not require excessive changes, effort or cost. In most cases, existing roadway widths, space, and surface conditions may be sufficient to allow safe bicycling. Bicycle compatible roadways offer additional benefits to highway users such as:

- Greater offset to fixed objects
- Additional space for disabled vehicles
- Greater recovery zone for errant motorists
- Additional space for bus pull-overs at transit stops
- Better stability of roadway pavement structure
- Additional gutter drainage capacity during rainstorms
- Space for pedestrian travel, especially during snowstorms
- Greater area for temporary snow storage
- Reduction or elimination of drop-off at edge of pavement

Because bicycle compatible roadway improvements are intended for the shared use of all highway users and are not specifically designated for bicycle use, no additional exposure to liability is incurred by the highway agency. A well designed bicycle compatible roadway should reduce accidents and exposure to liability by allowing a safer environment for all highway users.

On the other hand, failure to take reasonable measures to assure that a highway is compatible with bicycle use, even though adequate measures could have been installed, increases an agency's potential exposure to liability in the event of a subsequent accident. The guidelines presented in this chapter thus represent a minimum level of improvement which should be applied during the construction or reconstruction of all roadways in the state.

Bicycle compatible facilities provide access to the transportation system for bicycle traffic and enhance bicycle safety. Most bicycle accidents do not involve crashes with motor vehicles. Bicyclists instead lose control of their vehicles and crash. Roadways not designed or properly maintained to address the needs of bicycle traffic can contribute to these accidents. Properly designed and maintained roadways mitigate bicycle safety problems and lessen the chance of these accidents.

The more common bicycle accidents which do involve motor vehicles, such as vehicles turning or merging into the path of the bicyclist, motorist failure to yield to bicycle traffic, or bicyclist failure to yield, can also be reduced through proper roadway design which accommodates bicycle use.



# 1. Pavement Width

At a minimum, all highway projects shall provide sufficient width of smoothly paved surface to permit the shared use of the roadway by bicycles and motor vehicles.

Table 1 is based on the FHWA manual, Selecting Roadway Design Treatments to Accommodate Bicycles, as well as previous experience in New Jersey and other states. Pavement widths represent minimum design treatments for accommodating bicycle traffic. These widths are based on providing sufficient pavement for shared use by bicycle and motor vehicle traffic and should be used on highway projects as minimum guidelines for bicycle compatible roadways.

Considerations in the selection of pavement width include traffic volume, speed, sight distance, number of trucks and larger vehicles, and grade. The dimensions given in Table 1 for shared lanes are exclusive of the added width for parking, which is assumed to be 2.4 meters (8 feet). On shared lanes with parking, the lane width can be reduced if parking occurs only intermittently. On travel lanes where curbs are present, an additional 0.3 meters (1 foot) of width is necessary.

On very low volume roadways, having an AADT of less than 1200 vehicles per day, even relatively fast highways pose little risk for bicyclists since there will be high probability that an overtaking car will be able to widely pass a bicyclist. When an overtaking car is unable to immediately pass a bicyclist, a small delay for the motorist will be acceptable. These types of roadways are enjoyed by both bicyclists and motorists, and widening of these roads is not usually recommended. Cost of providing widening of these roads can seldom be justified based on either capacity or safety.

Similarly, moderately low volume roadways having an AADT between 1,200 and 2,000 generally are compatible for bicycle use and will have little need for widening. However, since there is a higher risk of two opposing cars meeting at the same time, and as motorists must pass a bicyclist, providing some room at the outside of the roadway is desirable on faster speed roadways. On low speed roadways, motorists should be willing to accept some minimal delay.

With AADT greater than 2,000, the probability becomes substantially greater that a vehicle overtaking a bicycle may also meet another on-coming vehicle. As a result, on these roads, some room at the edge of the roadway should be provided for bicyclists. At low speeds, little separation is needed for both a bicyclist and a motorist to feel comfortable during a passing event. With higher speeds, more room is needed.

At volumes greater than 10,000 AADT, vehicle traffic in the curb lane becomes almost continuous, especially during peak periods. As a result bicyclists on these roads require separate space to comfortably ride. In addition, improvements to the roadside border and the shoulder area will be especially valuable for motorists as well.

NJDOT guidelines for highways recommend that a full 2.4 meter (8 foot) paved shoulder be provided for all state highways. On highways having an AADT greater than 20,000 vehicles per day, or on which more than 5 percent of the traffic volume consists of trucks, every effort should be made to provide such a shoulder, both for the benefit of bicyclists and to enhance the safety of motor vehicle movement.



**Table 1**
Bicycle Compatible Roadway Pavement Widths

## *Condition I*
## *AADT 1200* -2000*

| | URBAN W/PARKING | URBAN W/O PARKING | RURAL |
|---|---|---|---|
| <50 km/h (30 mph) | SL 3.6m (12 ft.) | SL 3.3m (11 ft.) | SL 3.0m (10 ft.) |
| 50 km/h-65 km/h (31-40 mph) | SL 4.2m (14 ft.) | SL 4.2m (14 ft.) | SL 3.6m (12 ft.) |
| 65 km/h-80 km/h (41-50 mph) | SL 4.5m (15 ft.) | SL 4.5m (15 ft.) | SH 0.9m (3 ft.) |
| >80 km/h (50 mph) | NA | SH 1.2m (4 ft.) | SH 1.2m (4 ft.) |

* For volumes less than 1200 a shared lane is acceptable.

KEY: SH=shoulder SL=shared lane

## *Condition II*
## *AADT 2000-10,000*

| | URBAN W/PARKING | URBAN W/O PARKING | RURAL |
|---|---|---|---|
| <50 km/h (30 mph) | SL 4.2m (14 ft.) | SL 3.6m (12 ft.) | SL 3.6m (12 ft.) |
| 50 km/h-65 km/h (31-40 mph) | SL 4.2m (14 ft.) | SL 4.2m (14 ft.) | SH 0.9m (3 ft.) |
| 65 km/h-80 km/h (41-50 mph) | SL 4.5m (15 ft.) | SL 4.5m (15 ft.) | SH 1.2m (4 ft.) |
| >80 km/h 50 mph | NA | SH 1.8m (6 ft.) | SH 1.8m (6 ft.) |

## *Condition III*
## *AADT over 10,000 or Trucks over 5%*

| | URBAN W/PARKING | URBAN W/O PARKING | RURAL |
|---|---|---|---|
| <50 km/h (30 mph) | SL 4.2m (14 ft.) | SL 4.2m (14 ft.) | SL 4.2m (14 ft.) |
| 50 km/h-65 km/h (31-40 mph) | SL 4.2m (14 ft.) | SH 1.2m (4 ft.) | SH 1.2m (4 ft.) |
| 65 km/h-80 km/h (41-50 mph) | SL 4.5m (15 ft.) | SH 1.8m (6 ft.) | SH 1.8m (6 ft.) |
| >80 km/h (50 mph) | NA | SH 1.8m (6 ft.) | SH 1.8m (6 ft.) |

**NOTE:** NJDOT minimum shoulder width of 2.4 meters (8 feet) should be provided wherever possible on roadways having an AADT greater than 10,000 vehicles.



## a. Conditions Where Additional Space is Warranted

- **Sight Distance** Roadways with adequate decision sight distance will allow a motorist to see, recognize, decide on the proper maneuver, and initiate actions to avoid a bicyclist. Adequate decision sight distance is most important on high speed highways and narrow roadways where a motorist would have to maneuver out of the travel lane to pass a bicyclist.

  The pavement widths given in Table 1 are based on the assumption that adequate sight distance is available. In situations where there is not adequate sight distance, additional widths may be necessary.

- **Truck Traffic** Roadways with high volumes of trucks and large vehicles, such as recreational vehicles, need additional space to minimize bicycle/motorist conflicts on roadways. Additional width will allow overtaking of bicycles by trucks with less maneuvering. Additionally, overtaking by a truck will exert less lateral force from truck drafts, and provide greater sight distance for following vehicles.

  Although there is no established threshold, additional space should be considered when truck volumes exceed 5 percent of the traffic mix, or on roadways that service campgrounds or tourist travel. Where truck volumes exceed 15 percent of the total traffic mix, widths shown in the table should be increased by a minimum of 0.3 meters (1 foot).

- **Steep Grades** Steep grades influence overtaking of bicyclists by motorists. A bicyclist climbing a steep grade is often unsteady and should be afforded additional width. Also, the difference in speed of a slow, climbing bicyclist and motorist results in less time for a vehicle to maneuver around a bicyclist. The slowing of a motor vehicle on a steep grade to pass a bicyclist can result in diminished highway level of service.

  A bicyclist descending a steep grade may also need more width. A high speed bicyclist will tend to move into the travel lane to avoid roadside hazards. Where descending grades exceed 6 percent, and bicycle traffic is anticipated, signing should be placed along the descending lane to advise bicyclists and alert motorists of bicyclists in the travel lane (see Section 5 - Traffic Control Devices).

  Additional space should be considered on the ascending lane when the grade exceeds 3 percent. Where the grade exceeds 5 percent, a minimum of a 1.5 meter (5 foot) wide shoulder or 4.8 meter (16 foot) wide curb lane in urban conditions is desirable to afford safe shared use with minimal impact on level of service.

## b. Treatment for Unavoidable Obstacles

Short sections of roadways with unavoidable obstacles that result in inadequate width are acceptable on bicycle compatible roadways if mitigated with signing or striping. Typical examples include bridges with narrow widths and sections of roadway that cannot be widened without removing significant street trees. These conditions preferably should not exist for a distance greater than 0.4 kilometers (one quarter mile) or on high speed highways. Zebra warning striping should be installed to shift traffic away from the obstacle. See Figure 3. Figure 4, Bicycle Compatible Hazard Marking, is another option when an obstacle cannot be removed. In this case pavement markings alert the bicyclist that the travel lane width will narrow. In both situations, where bicycle traffic is anticipated, a share the road sign should be used to supplement any striping. See Figure 5 - Share the Road Sign. On longer sections of roadway, edge striping should be added to narrow the travel lane and apportion pavement space for a partial shoulder.



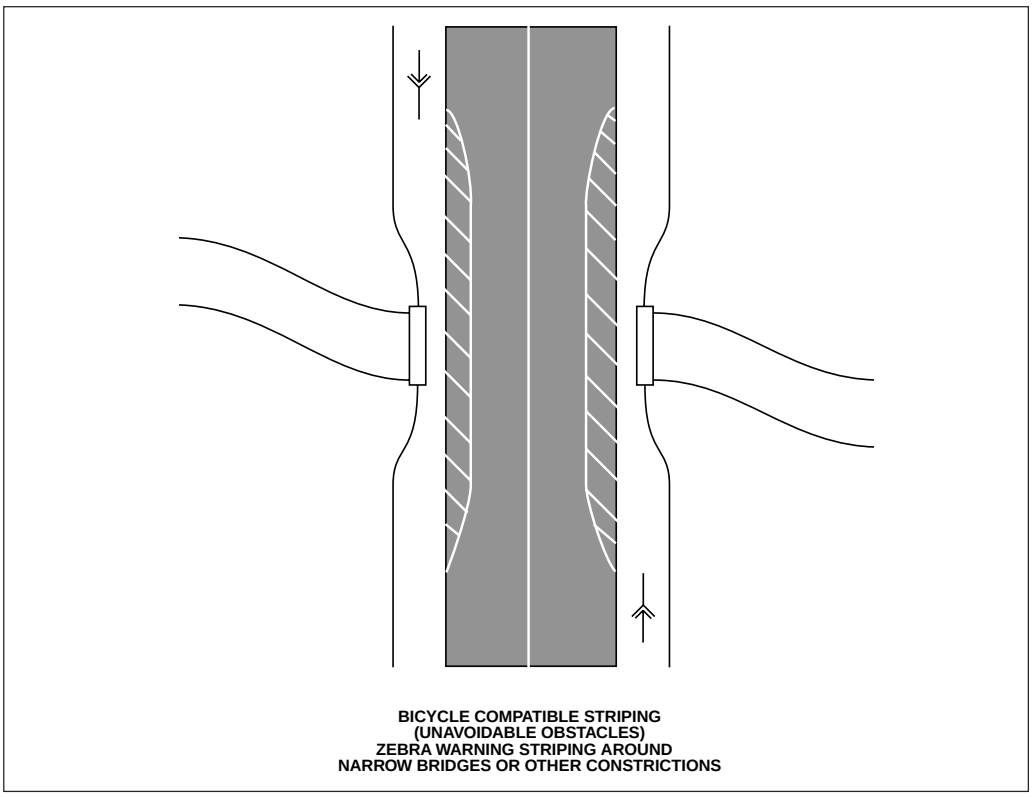



**Figure 3**
Zebra Warning Striping

Source: Adapted from NJDOT Bicycle Compatible Roadways, NJDOT, 1982

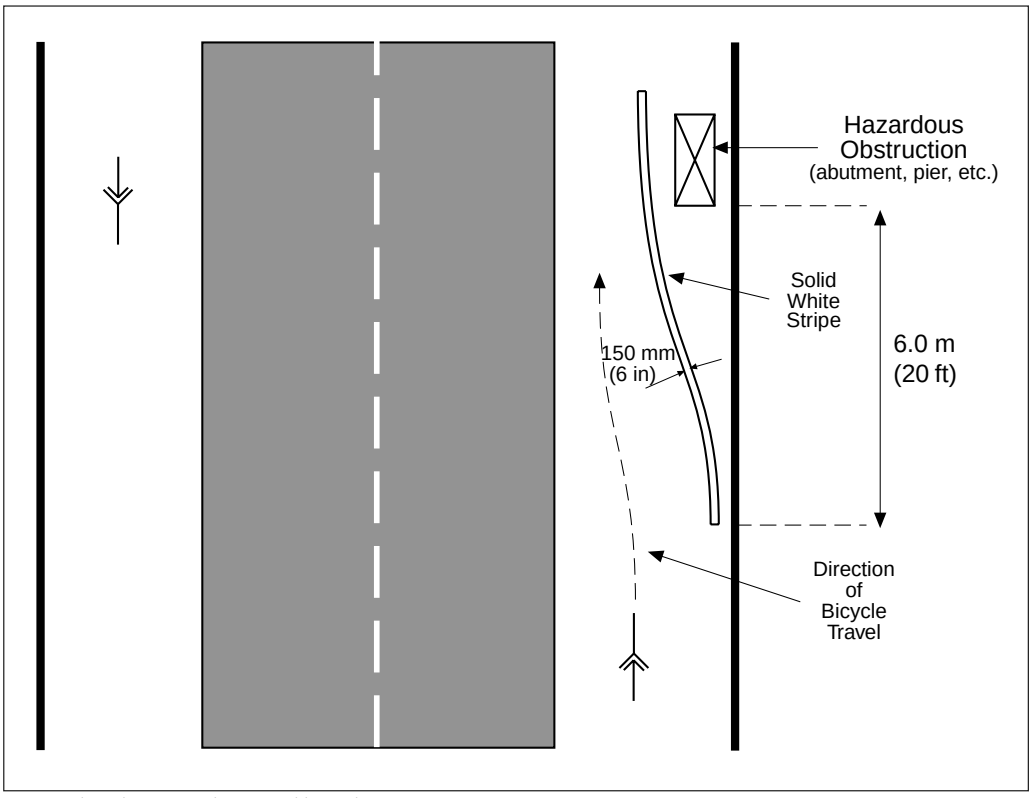
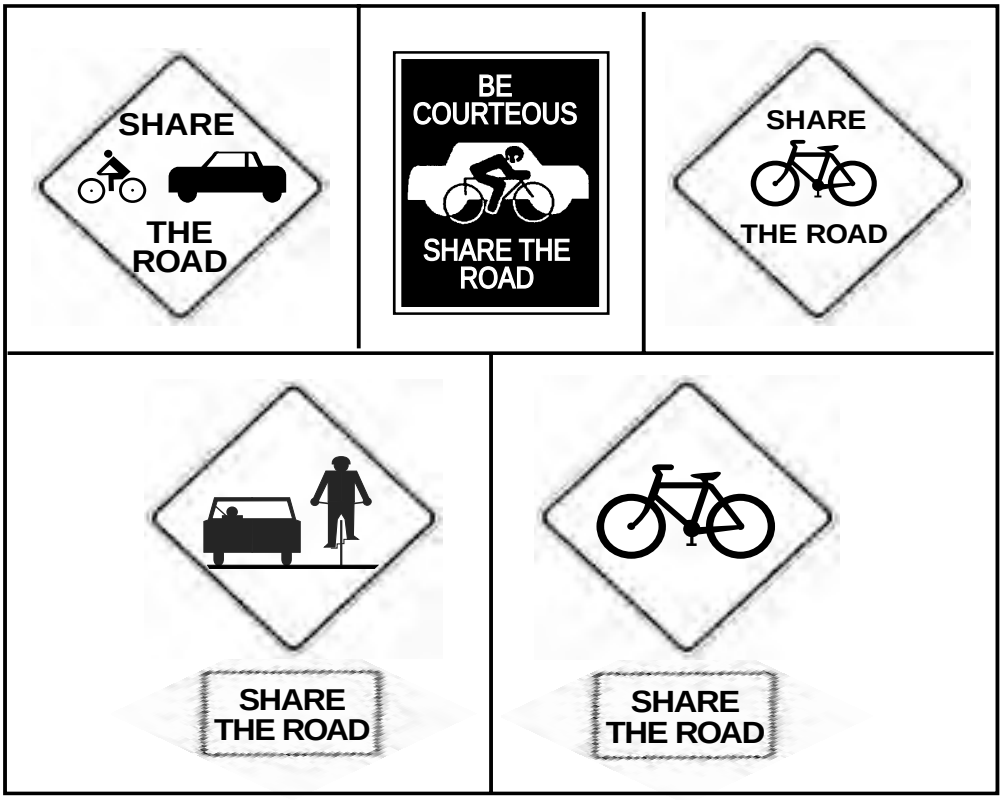



**Figure 4**
Bicycle Compatible
Hazard Marking

Source: Adapted from Bicycle Compatible Roadways, NJDOT, 1982

**Figure 5**
Share the Road Sign




Source: Bicycle Federation of America

**NOTE:** These represent examples of signs used by others. NJDOT is in the process of adopting an approved sign.

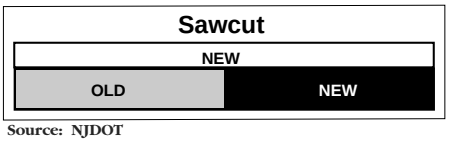
# 2. Pavement Design

With their narrow, high pressure tires, and lack of suspension, bicycles require a smooth riding surface without obstructions or pavement irregularities. On roadways with rough surfaces and hazards, a bicyclist will ride as close to the smooth wheel track in the travel lane as possible. These conditions will affect the level of service of the roadway.

## a. Pavement Surface

Where shoulders are employed to provide the pavement width necessary to accommodate bicycle traffic, pavement surface should be as smooth as the adjacent travel lane. Bituminous concrete is preferred over concrete where shoulders are employed. The outside pavement area (where bicycle traffic normally operates) should be finished free of longitudinal seams. On portland cement concrete, pavement transverse expansion joints (if necessary) should be sawcut to ensure a smooth ride.

**Figure 6**
Pavement Joints




Source: NJDOT

In areas where bituminous shoulders are added to existing pavement, or pavement is widened, pavement should be sawcut to produce a tight longitudinal joint. The pavement section at the sawcut should match the existing section to minimize wear and opening of the joint. See Figure 6.

## b. Rumble Strips



Rumble strips provide positive guidance for motorists on freeways. However, they present a difficult obstruction and potential hazard to bicyclists. Use of rumble strips should be avoided on all land service roadways.

### c. Raised Roadway Reflectors

Raised roadway reflectors provide substantial benefits in areas of poor visibility. However, when used on the edge line they are a surface irregularity which can be hazardous to bicycle traffic. Therefore, raised reflectors should only be used along interior lane lines or center lines, not edge lines.

### d. Utilities

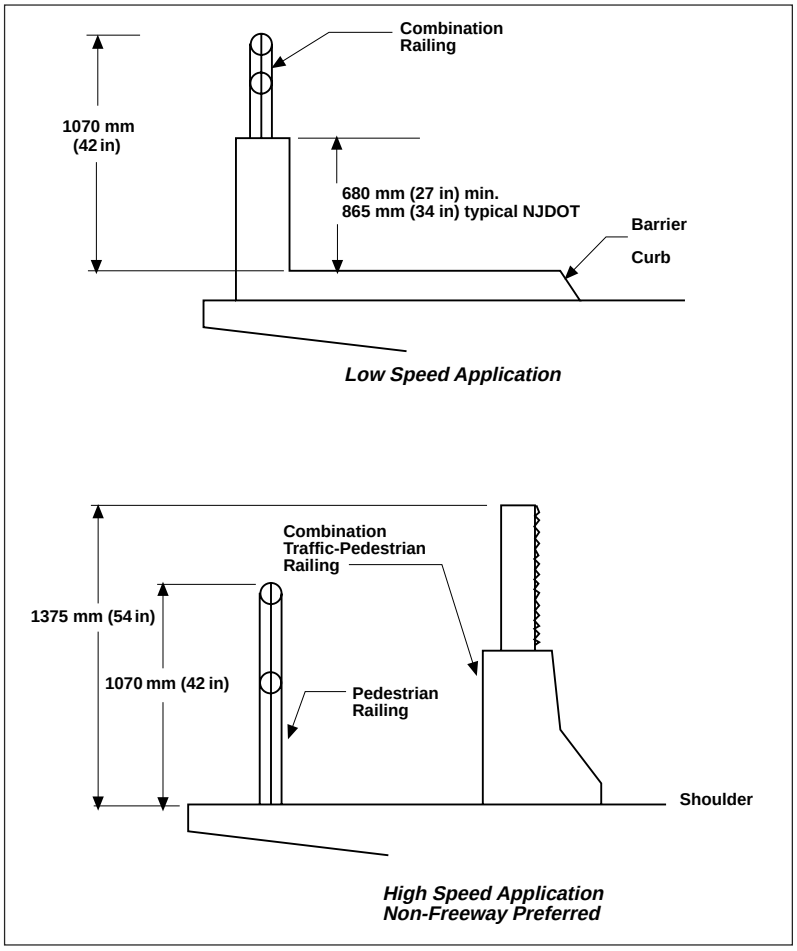
Bicycle traffic is more sensitive to pavement irregularities than is motor vehicle traffic. During construction, appurtenances should not be left projecting above the pavement surface. Repeated resurfacings without adjusting the utility cover neck flange or drainage grate frames results in the covers being sunken below the pavement surface, a hazardous condition to bicycle traffic which bicyclists refer to as "black holes." Therefore, utility covers and drainage grates should be adjusted to fit flush with the roadway surface in all new construction, reconstruction and resurfacing projects.

## 3. Bridges

Bridges serve an important function by providing bicycle access across barriers. However, some features found in bridges can be unsuitable where bicyclists are to be accommodated. The most common of these are curb-to-curb widths that are narrower than the approach roadways (especially where combined with relatively steep grades), open grated metal deck (found on many movable spans), low railings or parapets and certain types of expansion joints that can cause steering difficulties.

Sidewalks are generally not acceptable for bicycling. However, in a few limited situations, such as on long or narrow bridges, designation of the sidewalk as an alternate facility can be beneficial provided that curb cuts and appropriate signing are provided.

Bridge railing or barrier curb parapets should have railings at least 1.4 meters (4.5 feet) high as shown in Figure 7.




Source: NJDOT

**Figure 7**

Bicycle Accommodations on Bridges (Bridge Railing or Barrier Curb Parapet Treatments)

# 4. Drainage Facilities

Stormwater drainage facilities and structures are usually located along the edge of roadway where they often present conflicts with bicyclists. Careful consideration should be given to the location and design of drainage facilities on bicycle compatible roadways.

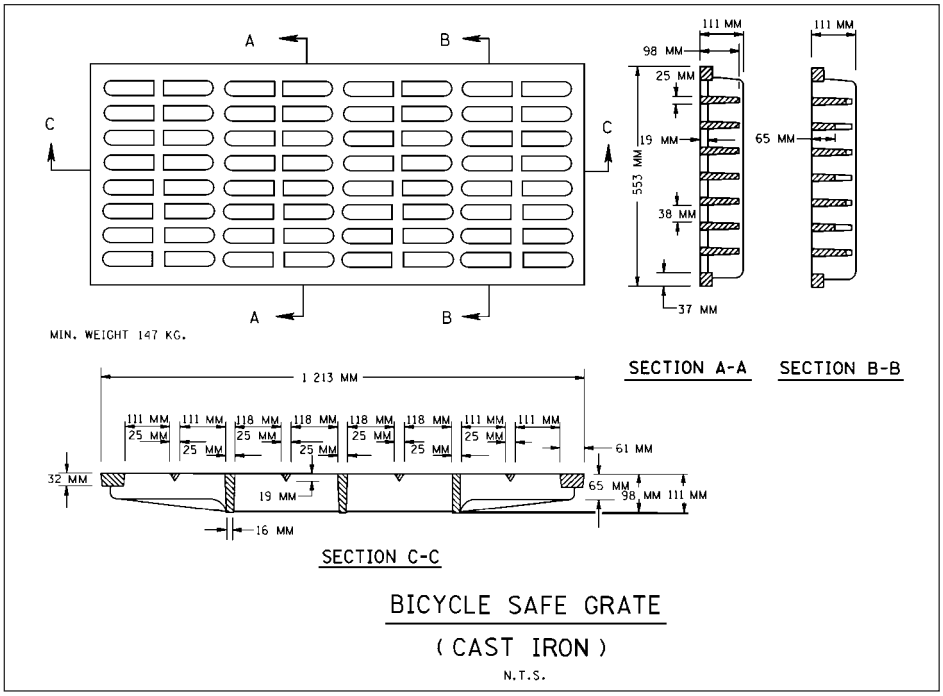
## a. Drainage Inlets and Grates

All drainage grate inlets pose some hazard to bicycle traffic. The greatest hazard comes from stream flow drainage grates which can trap the front wheel of a bicycle and cause the cyclist to lose steering control or have the narrow bicycle wheels drop into the grate. A lesser hazard is caused by bicyclists swerving into the lane of traffic to avoid any type of grate or cover.

A "bicycle safe" drainage grate with acceptable hydraulic characteristics has been developed by NJDOT's drainage section (Figure 8). This inlet grate should be used in all normal applications and should be installed flush with the final pavement. Where additional drainage inlet capacity is required because of excessive gutter flow or grade (greater than 2 percent), double inlets should be considered. Depressed grates and stream flow grates should not be used except in unique or unusual situations which require its use and only outside the lane sharing area. Where necessary, depressed grates should only be installed in accordance with the NJDOT Roadway Design Manual on shoulders 1.8 meters (6 feet) wide or greater. Where projects offer the possibility for replacement of stream flow grates located in the lane sharing area, these grates should be replaced with the "bicycle safe" grate.

When roads or intersections are widened, new bicycle safe drainage grates should be installed at a proper location at the outside of the roadway, and existing grates and inlet boxes should be properly retired and removed, and the roadway reconstructed. Drainage grate extensions, the installation of steel or iron cover plates or other "quick fix" methods which allow for the retention of the subsurface drain inlet are unacceptable measures since they will create a safety hazard in the portion of the roadway where bicyclists operate.

**Figure 8**
NJDOT "Bicycle Safe" Drainage Grate




Source: Standard Roadway Construction Details, NJDOT

### b. Manholes and Covers

Manholes and covers should be located outside of the lane sharing area wherever possible. Utility fixtures located within the lane sharing area or any travel lane used by bicycle traffic should be eliminated or relocated. Where these fixtures cannot be avoided the pavement surface should be made flush with the particular facility.

### c. Combination Curb and Gutter

These types of curbs greatly reduce space available for bicyclists. They should only be used on low volume streets or where grades dictate special drainage conditions. The width of the gutter pan should not be used when calculating the width of pavement necessary for shared use by bicyclists. On steep grades, the gutter should be set back an additional 0.3 meters (one foot) to allow space to avoid high speed crashes caused by the longitudinal joint between the gutter pan and pavement. In general, the combination curb and gutter is not recommended. Where it is used, pavement width should be calculated by adding 0.3 meters (one foot) from the curbed gutter.

## 5. Traffic Control Devices

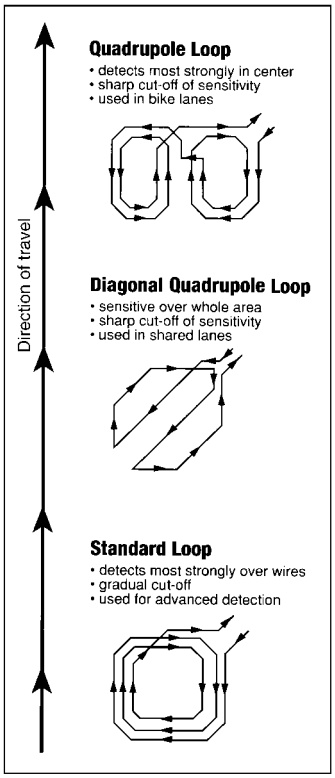
As legitimate users of New Jersey's roadways, bicyclists are subject to essentially the same rights and responsibilities as motorists. In order for bicyclists to properly obey traffic control devices, those devices must be selected and installed to take into account their needs. All traffic control devices should be placed so they can be observed by bicyclists who are properly positioned on the road. This includes programmed visibility signal heads.

### a. Traffic Signals and Detectors

Traffic-actuated signals should accommodate bicycle traffic. Detectors for traffic-activated signals should be sensitive to bicycles and should be located in the bicyclist's expected path. Examples of successful installation of bicycle sensitive signal detectors, are shown in Figure 9.

Stenciling should direct cyclists to the point where their bicycle will set-off detectors.

For the sake of riders who have vehicles with insufficient amounts of iron to be detected, and to add redundancy in the event of failure of the bicycle sensitive loop detectors, pedestrian push buttons should be provided at all signalized intersections and mounted in a location which permits their activation by a bicyclist without dismounting. Where left turn lanes are provided and only protected left turns are allowed, bicycle sensitive loop detectors should be installed in the left turn lane or a pedestrian style push button should be provided accessible to a bicyclist in the turn lane to permit activation of the left turn phase.




Source: City of San Diego Traffic Signal BicycleDetection Study, 1985

**Figure 9**
Recommended Loop Types for Bicycle Detection

Where moderate or heavy volumes of bicycle traffic exist or are anticipated, bicycles should be considered in the timing of the traffic signal cycle as well as in the selection and placement of the traffic detector device. In such cases short clearance intervals should not be used where bicyclists must cross multi-lane streets. According to the 1991 AASHTO Guide for the Development of Bicycle Facilities, a bicycle speed of 16 km/h (10 mph) and a perception/ reaction time of 2.5 seconds can be used to check the clearance interval. Where necessary, an all-red clearance interval can be used.

### b. Signing

Bicycle compatible roadways usually do not require regulatory, guide or informational signing in excess of that necessary for motorists, i.e., exclusively for bicyclists. In certain situations, however, additional signing may be needed to advise both motorists and bicyclists of the shared use of the roadway, including travel lane.

**Share the Road:** This sign (see Figure 5) is intended for use on roadways under the following conditions:

- Shared lanes (especially if lane widths do not comply with Table 1) with relatively high posted travel speeds of 65 km/h (40 mph) or greater.
- Shared lanes (conforming with Table 1) in areas of limited sight distance.
- Situations where bicycle compatible shared lanes or demarcated shoulders or marked bike lanes are dropped or end, and bicycle and motor vehicle traffic must begin to share the travel lane.
- Other situations where it is determined advisable to alert motorists of the likely presence of bicycle traffic, and to alert all traffic of the need to share available roadway space.

**Allowed use of Full Lane:** This sign (Figure 10) is intended to advise motorists and bicyclists that bicycle traffic may be expected to move to the center of the travel lane in order to increase its visibility or avoid roadway obstacles in certain situations. These conditions include:

**Figure 10**
"Allowed Use of Full Lane" Sign




Source: Bicycle Blueprint, 1993

- Steep descending grades where bicycle traffic may be operating at higher speeds and requires additional maneuvering room to shy away from pavement edge conditions.
- Steep ascending grades, especially where there is no paved shoulder or the shared lane is not adequately wide; bicycle traffic may require additional maneuvering room to maintain balance at slow operating speeds.
- High volume urban conditions especially those with travel lanes less than the recommended width for lane sharing.

**Note:** Though not formally adopted by NJDOT, this sign has been used to advise motorists that under certain conditions bicycle traffic can be expected to operate in the center of the travel lane, and is included here to highlight this concept of bicyclists "taking the lane."

# 6. Intersections and Driveways

Sand, gravel and other debris in the bicyclist's path present a potential hazard. In order to minimize the possibility of debris from being drawn onto the pavement surface from unpaved intersecting streets and driveways, during new construction, reconstruction and resurfacings, all unimproved intersecting streets and driveways should be paved back to the right-of-way line or a distance of 3.0 meters (10 feet) (Figure 11). Similarly, where curb cuts permit access to roadways from abutting unpaved parking lots, a paved apron should be paved back to the right-of-way line or 3.0 meters (10 feet) from the curb line. These practices will lessen the need for maintenance debris removal. The placement of the paved back area or apron should be the responsibility of those requesting permits for access via curb cuts from driveways and parking lots onto the highway system.

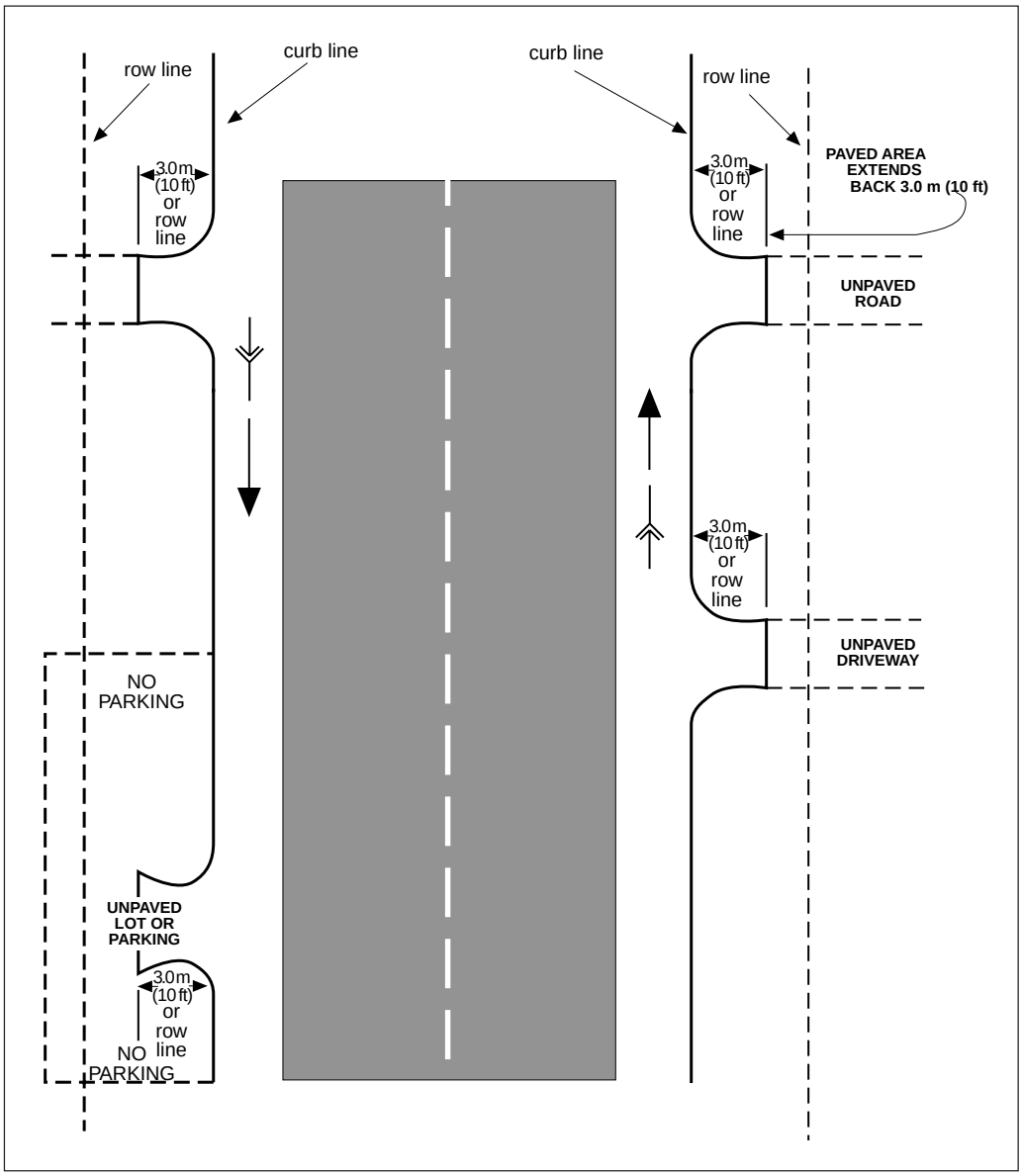



**Figure 11**

Bicycle Compatible Intersection with Unpaved Streets and Driveways

Source: Adapted from Bicycle Compatible Roadways, NJDOT, 1982

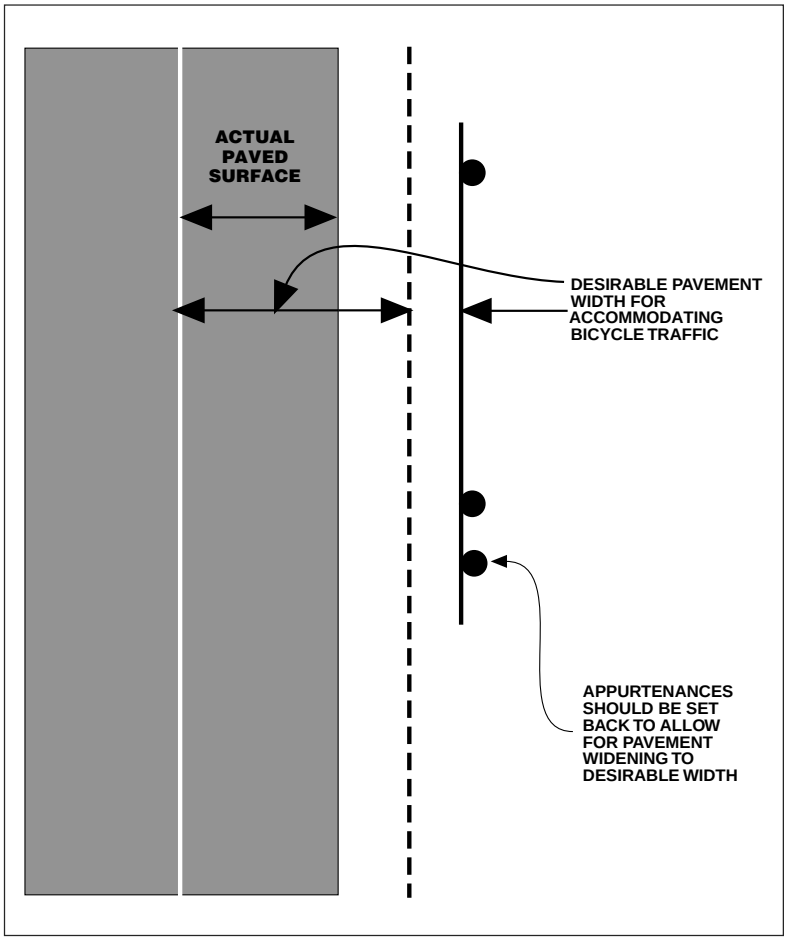
High speed, wide radius intersection designs may enhance safety for motor vehicles by minimizing speed differentials between entering and exiting vehicles and through vehicles. However, these designs exacerbate speed differential problems faced by bicyclists travelling along the right side of a highway and encourage drivers to fail to yield the right-of-way to bicyclists. As a result, where wide radius curb returns are being considered, specific measures should be employed to ensure that the movement of bicyclists along the highway will be visible to motorists and to provide bicyclists with a safe area to operate. One method to accomplish this would be to stripe (dash) a bicycle lane through the intersection area. In this event, share the road signs should be posted in advance of the intersection to alert existing traffic, and yield to bicyclist signs should be posted on the approach to the intersection. In general, however, curb radii should be limited to distances which communicate to the motorist that he or she must yield the right-of-way to bicyclists traveling along the roadway or to pedestrians walking along the sidewalk or roadway margin.

## 7. Roadside Obstacles

In order to make certain that as much of the paved surface as possible is usable by bicycle traffic, sign posts, light standards, utility poles, and other similar appurtenances should be set back 0.3 meters (1 foot) minimum "shy distance" from the curbing or pavement edge with exceptions for guide rail placement in certain instances. Additional separation distance to lateral obstructions is desirable. Where there is currently insufficient width of paved surface to accommodate bicycle traffic, any placement of these appurtenances, should, where feasible, be set back far enough to allow room for future projects (widenings, resurfacings) to bring pavement width into conformance with these guidelines (Figure 12).

Vertical clearance to obstructions should be a minimum of 2.6 meters (8 feet, 6 inches).

**Figure 12**
Bicycle Compatible Placement of Appurtenances for Future Projects




Source: Adapted from Bicycle Compatible Roadways, NJDOT, 1982

# 8. Railroad Crossings

As with other surface irregularities, railroad grade crossings are a potential hazard to bicycle traffic. To minimize this hazard, railroad grade crossings should, ideally, be at a right angle to the rails. This minimizes the possibility of a bicyclist's wheels being trapped in the rail flangeway, causing loss of control. Where this is not feasible, the shoulder (or wide outside lane) should be widened, or "blistered out" to permit bicyclists to cross at right angles (Figure 13).

It is also important that the railroad grade crossing be as smooth as possible. Pavement surface adjacent to the rail should be at the same elevation as the rail. Pavement should be maintained so that ridge build-up does not occur next to the rails.

Other options to provide a smooth grade crossing include: removal of abandoned tracks; use of compressible flangeway fillers, timber plank crossings, or rubber grade crossing systems.

These improvements should be included in any project which offers the opportunity to do so.

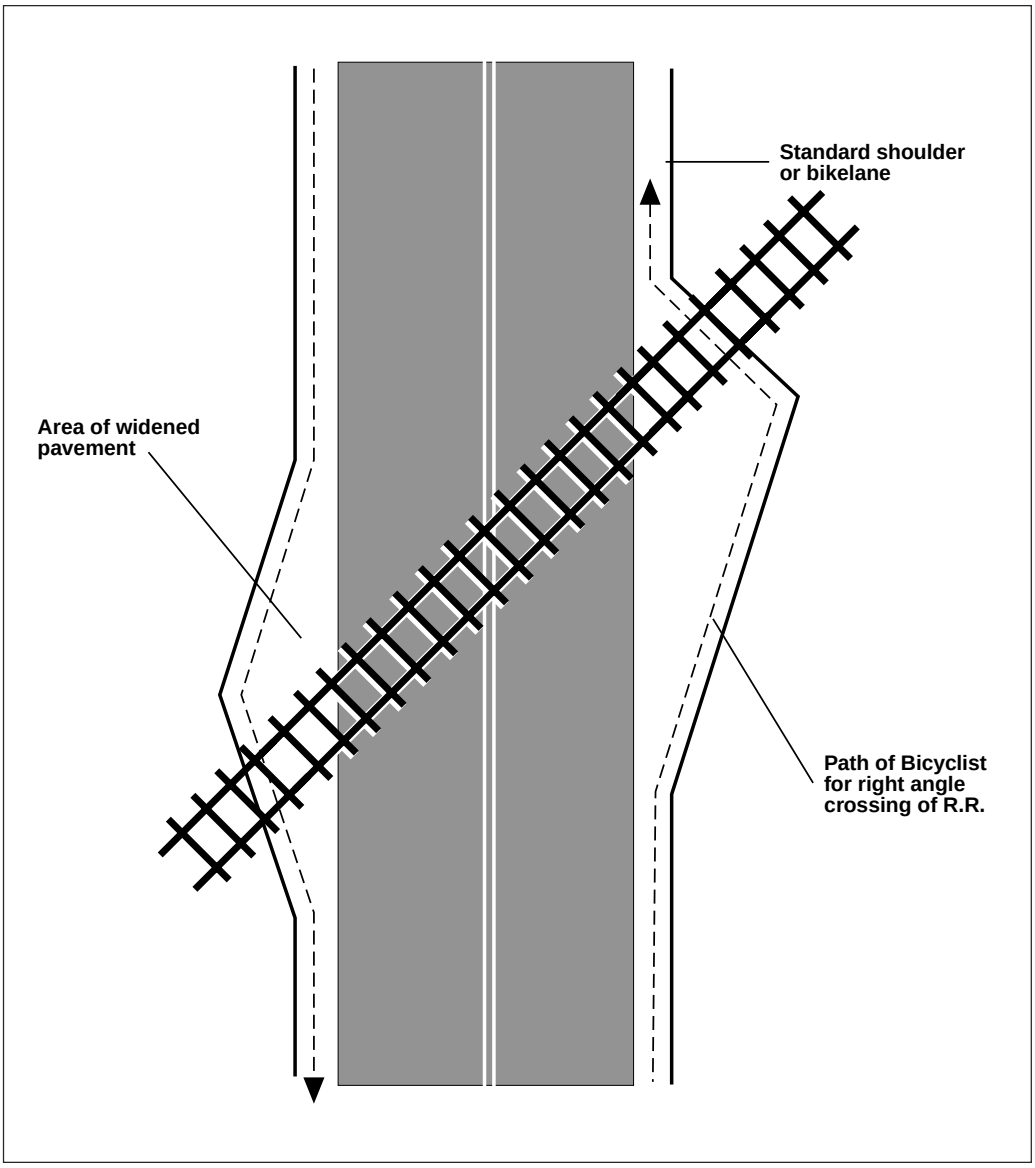



**Figure 13**

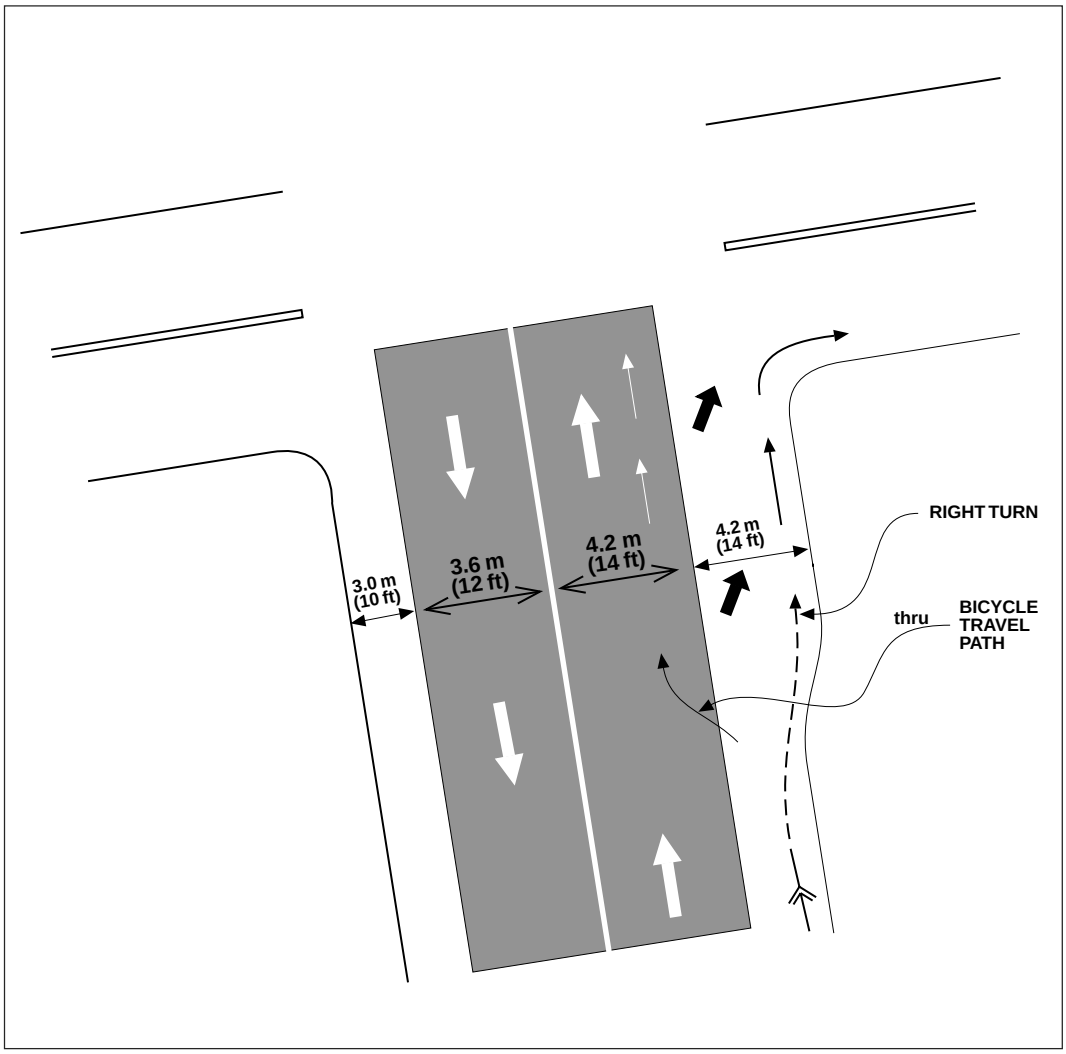
Surface Widening for Bicycles at Non-Perpendicular Railroad Crossings

Source: Adapted from Bicycle Compatible Roadways, NJDOT, 1982

# 9. TSM Type Improvements

Transportation Systems Management (TSM) improvements are minor roadway improvements which enhance motor vehicle flow and capacity. They include intersection improvements, channelization, the addition of auxiliary lanes, turning lanes and climbing lanes. TSM improvements must consider the needs of bicycle traffic in their design or they may seriously degrade the ability of the roadway to safely accommodate bicyclists. Designs should provide for bicycle compatible lanes or paved shoulders. Generally, this requires that the outside most through lane and (if provided) turning lane be 4.2 meters (14 feet) wide (Figure 14). Auxiliary or climbing lanes should conform with Table 1 by either providing an adjacent paved shoulder or a width of at least 4.5 meters (15 feet) (Figure 15). Where shared lanes and shoulders are not provided, it must be assumed that bicycle traffic will take the lane.

**Figure 14**
Bicycle Compatible TSM Shoulder Converted to Turning Lane




Source: Adapted from Bicycle Compatible Roadways, NJDOT, 1982

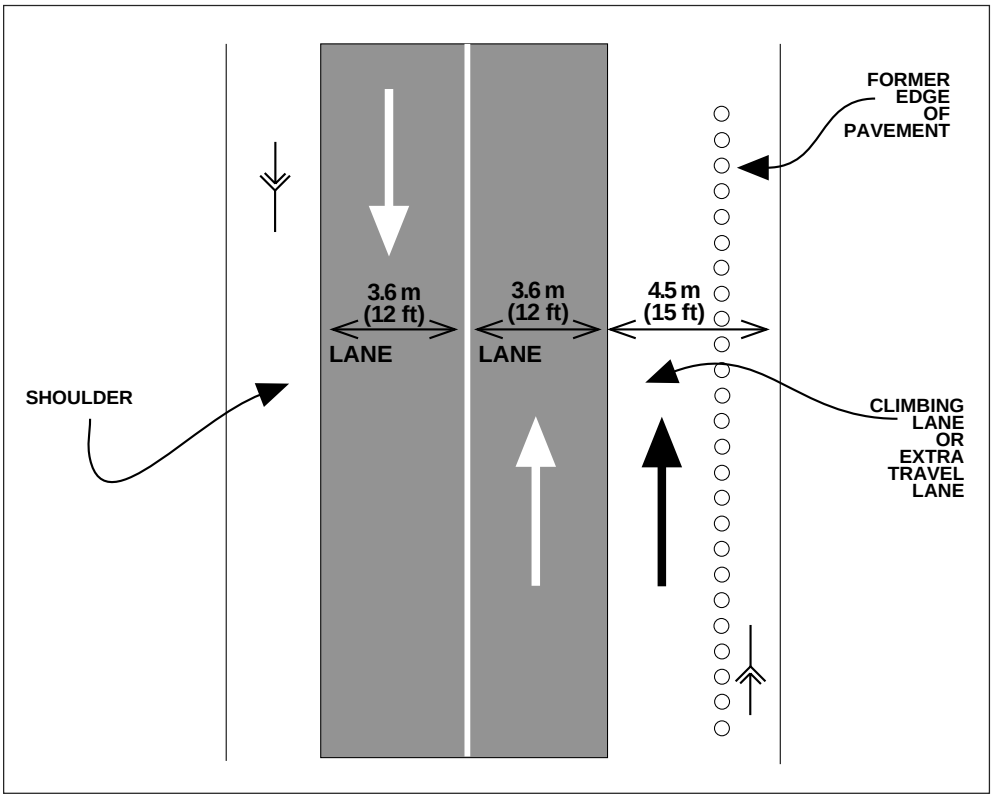



**Figure 15**

Bicycle Compatible TSM Shoulder Converted to Climbing Lane or Extra Travel Lane

Source: Adapted from Bicycle Compatible Roadways, NJDOT, 1982

## 10. Marginal Improvements/Retrofitting Existing Highways

There may be instances or locations where it is not feasible to fully implement guidelines pertaining to the provision of adequate pavement space for shared use due to environmental constraints or unavoidable obstacles. In such cases, warning signs and/or pavement striping must be employed to alert bicyclists and motorists of the obstruction, alert motorists and bicyclists of the need to share available pavement space, identify alternate routes (if they exist), or otherwise mitigate the obstruction.

On stretches of roadway where it is not possible to provide recommended shoulder or lane widths to accommodate shared use, conditions for bicycle traffic can be improved by:

- striping wider outside lanes and narrower interior lanes (Figure 16);
- providing a limited paved shoulder area by striping a narrow travel lane. This tends to slow motor vehicle operating speeds and establish a space (with attendant psychological benefits) for bicycle operation.

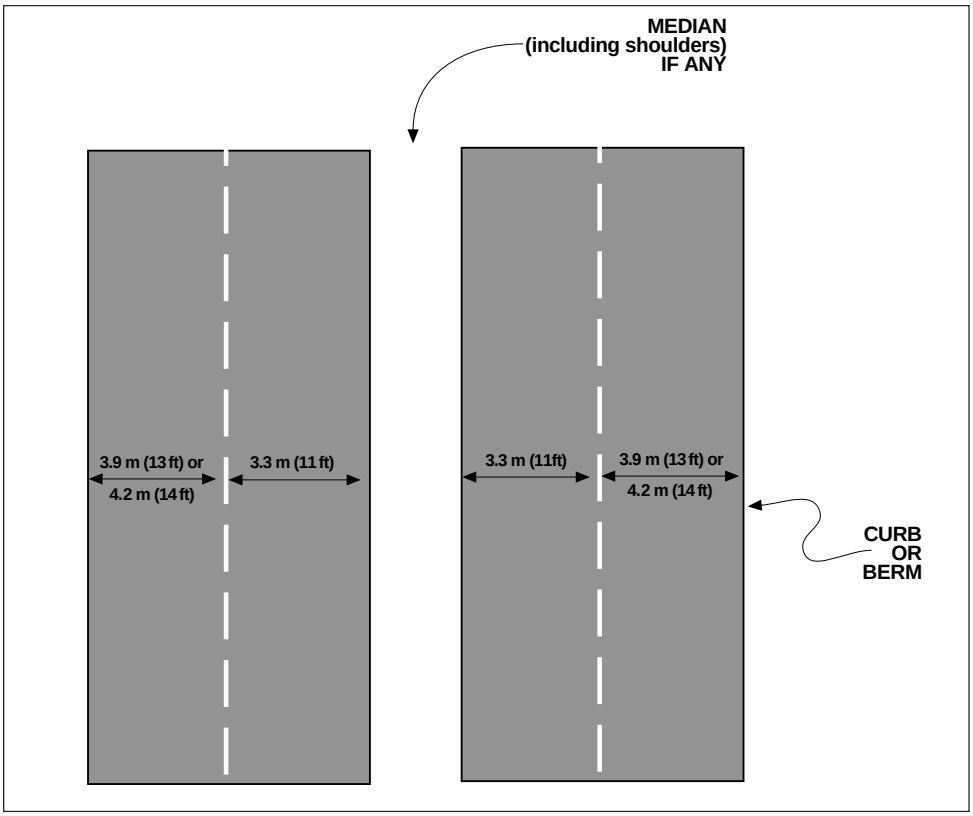
Where narrow bridges create a constriction, "move over" zebra striping should be used to shift traffic away from the parapet and provide space for bicycle traffic (Figure 3).

Other possible strategies, to be employed as appropriate, are shown in Figure 17. These include:

- elimination of parking or restricting it to one side of the roadway.
- reduction of travel lanes from two in each direction to one in each direction plus center turn lane and shoulders.
- reduction of the number of travel lanes in each direction, and the inclusion or re-establishment of paved shoulders.

**Figure 16**

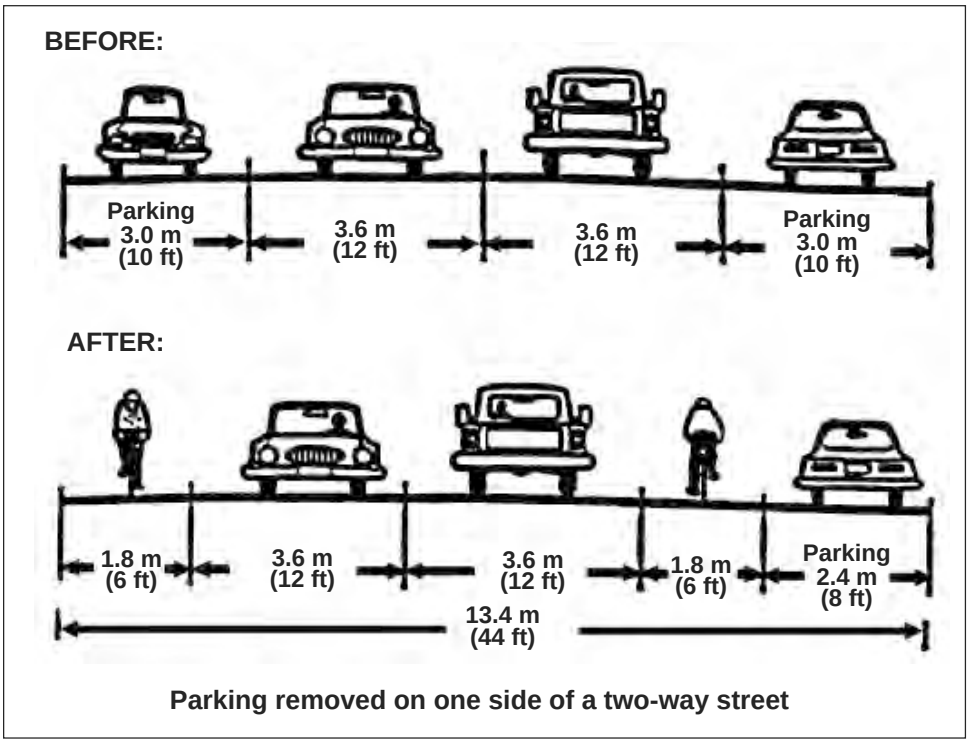
Bicycle Compatible Restriping (Multi-Lane Curbed Section Roadway) (No Shoulder)




Source: Adapted from Bicycle Compatible Roadways, NJDOT, 1982

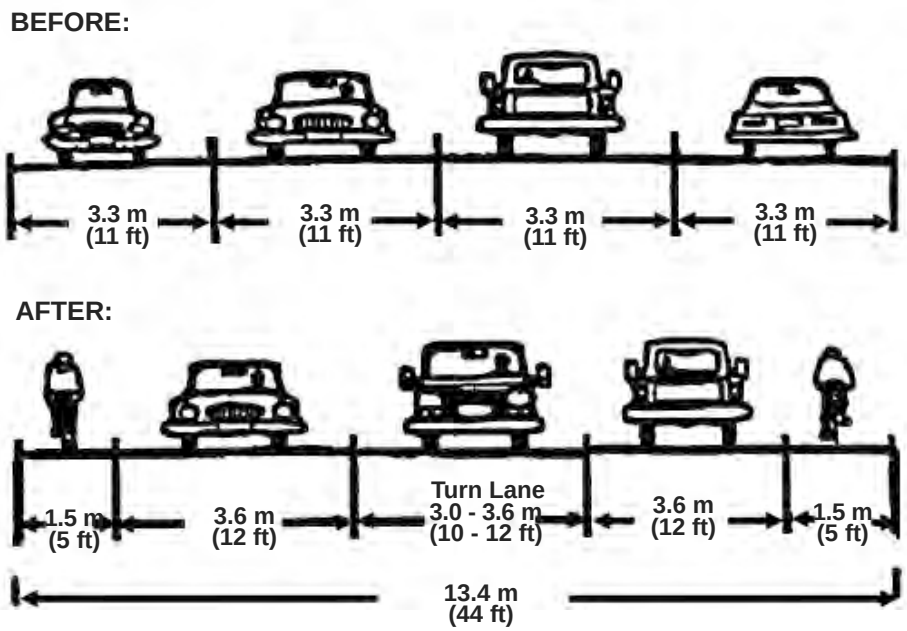
**Figure 17**

Retrofitting Roadways to Include Bicycle Lanes




Parking removed on one side of a two-way street

**Figure 17**
Continued




**Four lanes reduced to 2 standard lanes, turning lane @ intersections, and shoulders**

Source: Adapted from Oregon Bicycle Plan, 1990

# 11. Permits and Access Control

## a. Driveway and street intersections

Frequent access driveways, especially commercial access driveways, tend to convert the right lane of a land service highway and the shoulder area into an extended auxiliary lane for acceleration and deceleration. Frequent turning movements, merging movements and vehicle occupancy of the shoulder can severely limit the ability of bicyclists to utilize the roadway. As a result, access control measures should be employed to minimize the number of entrances and exits onto highways. For driveways having a wide curb radius, consideration should be given to marking a bicycle lane through the driveway intersection areas. As with other types of street intersections, driveways should be designed with sufficiently tight curb radii to clearly communicate to motorists that they must yield the right-of-way to bicyclists and pedestrians on the roadway.

## b. On-site circulation and facilities

Entrance and exit driveways should be sufficiently wide to accommodate bicycles. Lane widths for shared lanes presented in Table 1 should be incorporated into the design of all driveways. In general, shared lane use of driveways will be more appropriate than use of a shoulder because of the low speed of traffic on a driveway, the relatively low traffic volumes and the frequency of intersections with parking aisles.

Review of developments for transportation impacts should address how on-site bicycle facilities are planned. Bicycle storage racks should be provided at commercial facilities at locations convenient to building entrances and covered from the elements. This is especially important at retail and service establishments. At employment sites, secure bicycle racks and/or lockers should be provided. For a further discussion regarding bicycle storage facilities, see Chapter 5 - Supplemental Facilities.

### c. Reconstruction responsibilities

Construction activities controlled through the issuance of permits, especially driveway, drainage, utility or street opening permits, can have an important effect on the quality of a roadway's surface in the portion of the roadway where bicyclists operate. Permit conditions should ensure that pavement foundations and surface treatments are restored to their preconstruction condition, that no vertical irregularities will result, and that no longitudinal cracks will develop. Strict inspection and control of construction activities is required, and a five year bond should be held to assure correction of any deterioration which might occur as a result of faulty reconstruction of the roadway surface. Spot widenings associated with new access driveways frequently result in the relocation of drainage grates. Any such relocation should be designed to close permanently the old drainage structure and restore the roadway surface. New drainage structures should be selected and located to comply with drainage provisions established in these guidelines.

## 12. Traffic Calming

### a. What is "traffic calming?"

Traffic calming is a relatively new and very different approach to managing the roadway environment. Traffic calming seeks to reduce the dominance and speed of motor vehicles. It employs a variety of techniques to reduce vehicle speeds. Measures can include physical alterations to the horizontal and vertical alignment of the road and changes in priority. In some cases it may be possible to introduce a 30 km/h (20 mph) zone as part of a package of measures. First developed and applied in several European countries, the principles and techniques of traffic calming are arousing considerable interest in the US today. Traffic calming has been used in the US, to retrofit existing residential neighborhoods suffering from excessive through-traffic and in the design of new planned developments. Some techniques employed to calm traffic are familiar to US traffic engineers, others less so. What is different about traffic calming is its use as an overall integrating concept in designing for pedestrians and bicyclists over large areas. Traffic calming is rapidly being seized upon by many local communities and interest groups as an integrated alternative to conventional road planning and design. Its implementation is bound to be controversial because traffic calming reverses and challenges many currently accepted approaches to roadway design.

Aside from accident and casualty reduction, the benefits claimed for traffic calming are manifold. Slower vehicle speeds can create better driver discipline; less acceleration and braking reduces fuel consumption, vehicle emissions and noise intrusion. Furthermore, the smoother flow of vehicles may actually improve travel times. Traffic calming also provides an opportunity for environmental improvements. Aside from a reduction in noise and air pollution from motor vehicles, aesthetic improvements such as plantings can easily be incorporated into a program of physical alterations to the road space.

In residential areas, traffic calming is frequently applied to foster the concept that roads are "living areas" and should therefore be made safe and attractive. Here particularly, changes to the street scene are applicable, and, where possible, traffic calming should provide community areas, including play spaces and places where people can sit and chat.

Traffic calming need not, however, be confined only to minor roads. In urban and suburban areas, arterial streets and highways carrying fast, heavy traffic generally pose the greatest danger to vulnerable user groups. Measures that reduce the speed and dominance of motor vehicles and facilitate safe passage for bicyclists and pedestrians are thus even more necessary on such main roads. However, the techniques seen as applicable to main



urban thoroughfares generally differ from those employed to calm traffic on minor residential roads. A greater variety of features have been developed for minor roads where stricter speed control is unlikely to adversely affect roadway capacity or levels of service.

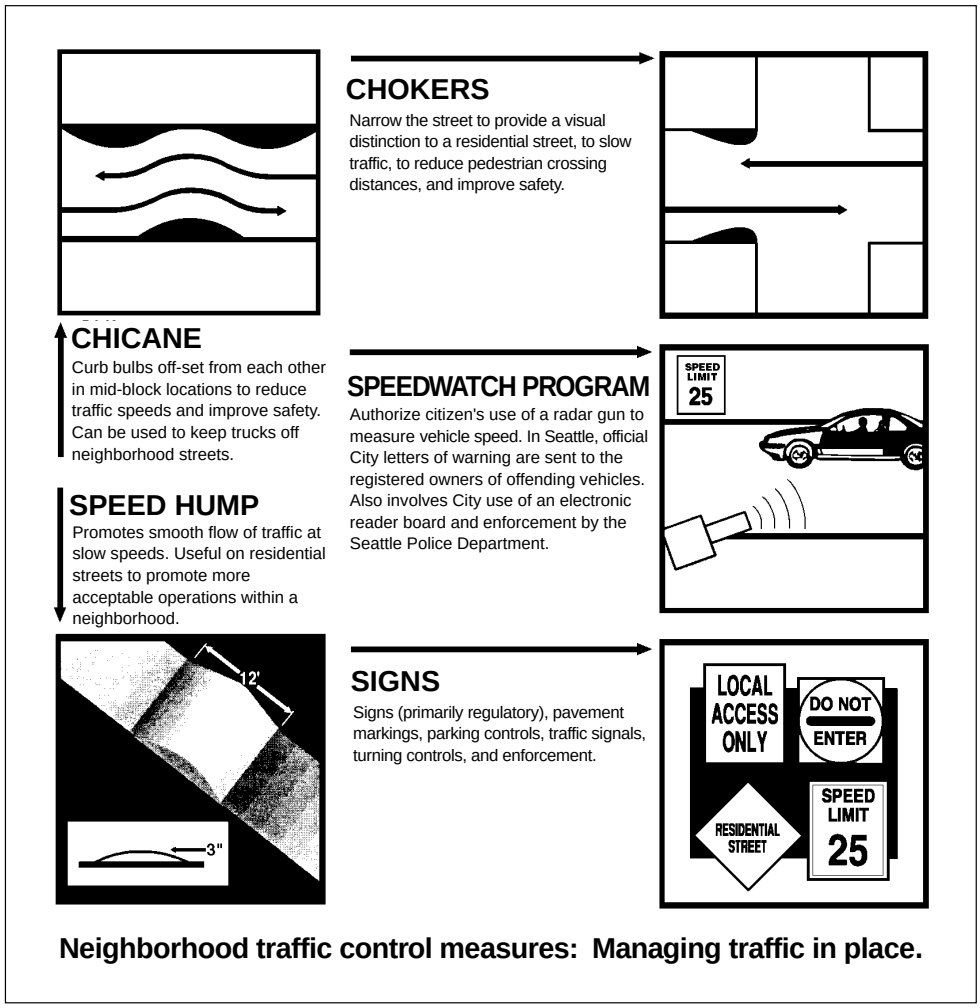



**Figure 18**
Traffic Calming Techniques

Source: Design and Safety of Pedestrian Facilities, ITE, 1994

Normally, traffic calming should be applied as an area-wide technique. To apply it only to a particular street can easily shift accidents, pollution and traffic into neighboring areas.

In order that traffic calming may realize its full potential in terms of creating a safer and more attractive urban environment, it must be part of a wider and longer-term strategy to reduce dependence on private motor vehicles in towns and cities, and promote a modal shift in favor of walking, cycling and public transit.

The growing popularity of traffic calming is attributable to four perceived benefits:

- A significant reduction in road accidents and their severity.
- A greater feeling of security, particularly among vulnerable road users.
- Reclamation of roadway space for non-traffic activity such as play and social interaction.
- Improved visual and aesthetic environments created by landscaping and a reduction in the intrusive presence of motor vehicles.

## b. Traffic Calming and Bicyclists

In areas subject to traffic restraint or low speed limits, special facilities for bicycles are not usually needed or provided since traffic calming offers many inherent benefits for bicyclists. Mixing with slower traffic, bicyclists can move around in comparative safety. Traffic calming also offers a more bicycle-friendly alternative to wholly pedestrianized streets. Some traffic calming measures may also be particularly appropriate on older and narrower streets, which are too narrow to allow for the provision of special bicycling facilities.

Nevertheless, poorly-designed traffic-calming facilities can inconvenience or even endanger bicyclists. Bicyclists are particularly susceptible to changes in surface height and texture, and may be put at risk by poorly-considered road narrowing. Speed-reducing measures should not be so "harsh" as to discourage bicyclists from using traffic-calmed areas.

## c. Design Guidelines to Accommodate Bicyclists

To avoid losing the inherent benefits of traffic calming for bicyclists by pushing them onto busier routes, the following general design guidelines should be followed in the implementation of traffic-calming schemes.

**Figure 19**
Bicycle Slip-thru Speed Hump



Source: Cyclists and Traffic Calming, 1982

- Where possible, provide bicyclists with alternatives to by-pass physical obstacles such as *chicanes* or ramps; the recommended minimum width for a bicycle pass is 690 millimeters (27 inches).
- Where a reduction in roadway width is employed as a speed control measure, careful consideration should be given to how motorists and bicyclists can safely share the remaining space.
- Surface materials, particularly on ramps, should have a good skid resistance, while textured surfaces should not be so rough that they endanger the stability of bicyclists or cause severe grazing if the bicyclist should fall.
- A smooth transition on entry and exit ramps should be provided. Inclines should be clearly indicated and have a gradient of not more than 1:6 (16%).
- If the traffic-calming feature (or, indeed, any other traffic-management feature) is to be installed on a road with a gradient, it must be noted that bicyclists are likely to approach it at quite different speeds uphill and downhill. This should be taken into consideration in designing the feature.

Three general observations should be noted from successful traffic-calming schemes that have been implemented:

- Where consistently low speeds less than 30 km/h (20 mph) are required, such as in residential areas, physical traffic-calming features should be positioned sufficiently close together to deter unnecessary acceleration and braking.
- The use of appropriate signing is important to remind drivers that they are entering a traffic restraint area; public awareness campaigns facilitate the acceptance of lower speeds.
- Sympathetic speed limits, such as 30 km/h (20 mph) in residential areas, are used to reinforce the physical speed control measures.

## d. Traffic Calming Techniques

Examples of traffic calming techniques are listed and illustrated in Figures 18 through 23. More detailed illustrations and descriptions can be found in the companion document to these guidelines, NJDOT Pedestrian Compatible Planning and Design Guidelines. These techniques are a selection of some current measures employed. Similarly, the descriptions of the various features are for illustrative purposes and should not be interpreted as rigid design criteria. It is recognized that the appropriate application of different traffic-calming techniques is dependent on the physical setting. As a result, the selection of appropriate techniques requires application of professional judgement and creativity.

### Road Humps and Speed Tables

***Description*:** Raising the surface of the road over a short distance, generally to the height of the adjacent curb. Humps are longer than speed bumps and can be round or flat topped; the latter are known as "speed tables" and can extend over 3.0 to 9.1 meters (10 to 30 feet). Humps may extend curb-to-curb, or may be cut back at the curb by 200 millimeters (8 inches) with tapered sides to facilitate drainage and permit a bicycle bypass.



**Figure 20**
Speed Table

Source: Traffic Calming, CART, 1989, STOP, 1993

While generally employed on residential roads, humps are permitted on main roads subject to a speed limit of 50 km/h (30 mph) or less. On higher speed roads, these concepts may still be appropriate to call attention to important pedestrian crossings or areas of congestion. However, care must be taken in design to provide appropriate vertical transitions.

Speed tables frequently are coincident with a pedestrian crossing.

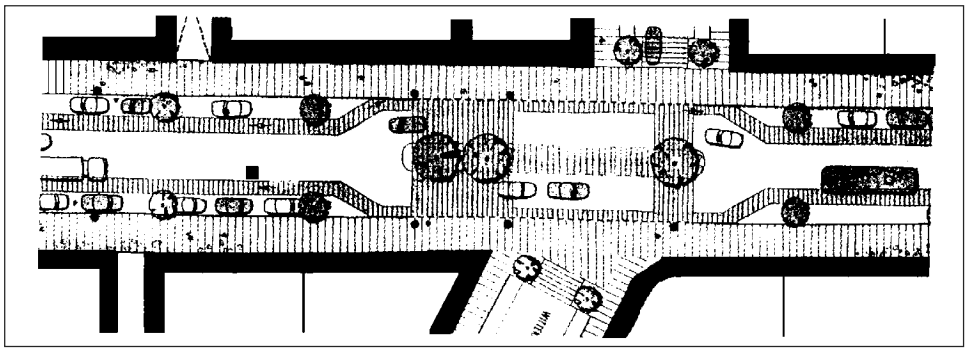
***Design Considerations:*** To ensure the effectiveness of road humps while enabling bicyclists to negotiate them with a reasonable degree of comfort:

- gradients on the approach and exit slopes should not exceed 1:6 (16%);
- ramp faces should be clearly indicated;
- all materials employed should be skid resistant;
- the leading edge of ramps should be flush with the road surface;
- humps should be situated sufficiently far from an intersection to allow turning bicyclists to regain an upright position before they encounter the obstruction.

Where flat top humps (speed tables) are coincident with a pedestrian crossing they should extend from curb-to-curb.

Speed humps in the vicinity of bus stops should be designed to permit buses to either completely clear the raised roadway or to straddle the hump. (Bus passengers are particularly vulnerable to the adverse effects of humps.)

**Figure 21**
Mix of Traffic Calming Elements



Source: Traffic Calming, CART, 1989, STOP, 1993

## Chicanes

***Description*:** Physical obstacles or parking bays staggered on alternate sides of the roadway so that the route for through vehicles is tortuous.

***Design Considerations:*** In the implementation of chicanes, consideration should be given to the safe passage of bicyclists. This could be achieved by permitting them to by-pass chicanes; alternatively, signs to indicate directional priority may help. Similarly, chicanes must be designed to allow vehicles with large turning radii to negotiate the roadway. To permit street cleaning equipment to operate effectively, the curb radius should always be at least 0.9 meters (3 feet).

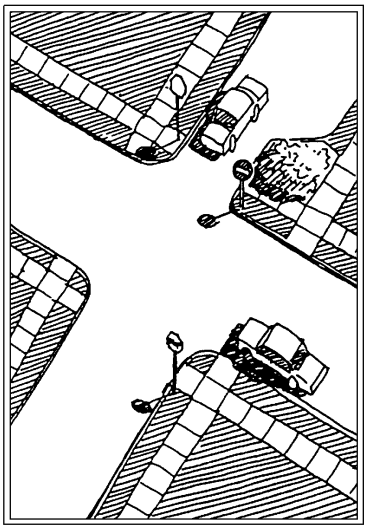
A reduction in sight distance should not be used in isolation to reduce speeds, as alone this could be potentially dangerous. A reduction in sight distance may be appropriate to avoid excessive land or ROW takings or as a reinforcing measure only where other physical features are employed which will effectively reduce operating speed.

Chicanes offer a good opportunity to make environmental improvements through planting or landscaping. However, preference should be given to low-lying or slow-growing shrubs to minimize maintenance and ensure a reasonable degree of visibility.

Measures should be employed to ensure that chicanes are clearly visible in the dark.

## Traffic Throttles/Chokers or Neck-downs

**Figure 22**
Choker/Neckdown



Chokers/Narrowing/"Neckdowns"

***Description*:** The narrowing of a two-way road over a short distance to a single lane. Sometimes these are used in conjunction with a speed table and coincident with a pedestrian crossing.

***Design Considerations*:** Throttles are generally only appropriate where traffic flows are less than 4-5,000 vehicles/day. Above this level considerable delays will occur in peak periods.

To reduce the risk of bicyclists being squeezed, throttles should generally be used in conjunction with other speed control measures, such as a speed table at the narrowing. Slower-moving drivers will be more inclined to allow bicyclists through before trying to pass. Where bicycle flows are high, consideration should be given to a separate right-of-way for bicyclists at the pinch point, possibly by means of a not-quite-central refuge.

Clear signing should indicate traffic flow priorities.

A textured surface such as blockwork may be used to emphasize pedestrian crossing movement. Substituting this for the normal roadway surface material may also help to impress upon motorists that lower speeds are intended.

Nevertheless, such measures should not confuse pedestrians with respect to the boundary of the roadway area over which due care should still be taken, especially where a road is raised to the level of the adjacent walkway. As with all crosswalks, appropriate care must be taken to alert the blind and others with limited vision of the presence of a crossing. A tactile material should be provided at the approach which can be detected with long cane techniques. Similarly a contrasting color and texture should be provided for the benefit of the visually impaired.

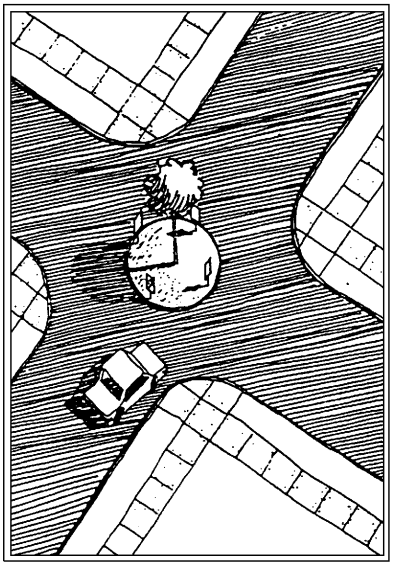
## Roundabouts or Traffic Circles

***Description*:** Small radius traffic circles located at street intersections or mid-block locations. Some have raised centers, others are little more than painted circles on the road.

***Design Considerations:*** Roundabouts should preferably have sufficiently raised and highly visible centers to ensure that motorists use them correctly rather than over-running. Frequently, roundabouts with an interior area greater than 7 square meters (75 square feet) are planted. Small roundabouts may be only painted islands with a flexible barrier.

Complementary speed reduction measures, such as road humps on the approach to roundabouts can improve safety. Clear signing is essential.

The design of roundabouts must ensure that large radius vehicles will be able to negotiate the roadway, in particular, garbage trucks, fire engines, moving vans and school buses, all of which can be anticipated in residential areas. However, on low speed streets with AADT less than 2000, it is appropriate to assume that these large vehicles can encroach into the opposite lane when entering or exiting a roundabout.



Traffic Circles

**Figure 23**
Traffic Circle

## Raised Intersections

***Description*:** The roadway is raised at a street intersection with a visible roadway ramp on each approach. The platform created in the intersection is elevated to curb level and should have a distinctive surfacing.

Physical obstructions such as bollards or planters can be used to restrict the area to which vehicles have access.

***Design Considerations*:** Roadway ramps should not exceed a maximum gradient of 1:6 (16%).

Distinctive surfacing materials should be skid resistant, particularly on inclines. Ramps should be clearly marked to enable bicyclists to identify and anticipate them, particularly in conditions of poor visibility.

As with all crosswalks, care must be taken that visually impaired people have adequate cues to advise them of the roadway area. Tactile strips may be appropriate and color variation will aid those who are partially sighted.

## Plug "No-Entry" (with Bicycle Slip)

***Description:*** A cul-de-sac created by blocking access in one direction at one point in the street to motor vehicles. Unlike a traditional cul-de-sac, a "plugged" street remains open for use by bicyclists and pedestrians.

***Design Considerations:*** Bicycle exemption should be provided as a general rule, and designed to minimize the likelihood of obstruction by parked vehicles.

Signing should acknowledge the continued existence of the route as a through one for bicyclists.

## Irregular or Textured Surfaces

***Description:*** The use of non-asphalt roadway surfaces such as brick, paving blocks or blockwork, cobblestones to reinforce the concept of a "traffic restricted" area.

***Design Considerations:*** Care must be taken in the choice of materials to ensure that they do not pose a danger or deterrent to bicyclists and pedestrians. Cobblestones present special difficulties and are particularly discouraging for bicyclists on steep slopes because they make it harder to maintain momentum when riding uphill. Similarly, paving stones with chamfered edges impair a bicyclist's stability and should be avoided.

Cobblestones or other rough surface should not be used along pedestrian routes since they represent both an obstacle and a danger for persons in wheelchairs, walkers or other devices.

In residential areas consideration must be given to the noise that might be generated from textured surface materials.

## Tortuous Roads

***Description:*** Roads designed to meander, occasionally turning sharply, reducing the image or perception of a straight and open road, thereby encouraging low vehicular speeds.

This technique is often used in new housing developments, incorporating courtyards or cul-de-sacs and thus removing through traffic.

***Design Considerations:*** Tortuous roads are generally planned during the design of a new road rather than superimposed on an existing one. The siting of buildings may be used to accent the meanders.

Designers should be aware of the need to assure accessibility to residential properties, both in terms of emergency vehicles and service vehicles. Tortuous roads will not be viable if they severely restrict accessibility.

## "Woonerf" or Shared Surfaces

***Description:*** The traditional distinction between pedestrian space and vehicular space is removed and a "living courtyard" or common area is shared by both pedestrians and vehicles.

This technique is common in European communities and is created by narrowing the street entry on either end, typically on short, isolated residential streets, and installing obstacles such as planters, parking, etc., at irregular intervals to slow traffic.



***Design Considerations:*** Woonerfs are generally acceptable for short distances only and should be used in conjunction with other physical speed control features such as textured pavement or posted 10 to 15 km/h (8 to 10 mph) speed limit signs.

# Chapter 3

## *Designating Bikeways on Highways*

## 1. Bicycle Routes on Highways

A bicycle route is a suggested way to get somewhere. In a community, a bicycle route may consist of a set of signs designating a preferred way to get from a residential area to a park or to a shopping area. A network of such routes may show bicyclists how to get to many destinations throughout the community. In some cases, looped systems of scenic routes have been created to provide users with a series of recreational experiences.

In rural areas, signed and numbered touring routes can help long-distance bicyclists ride across the state on a network of carefully-chosen, quiet country roads. Often, such bicycle routes are keyed to a user map.

Overall, the decision to select one road over another for a bicycle route should be based on the advisability of encouraging bicycle use on that particular road. While the roads chosen for bike routes may not be completely free of problems, they should offer the best balance of safety and convenience of the available alternatives. In general, the most important considerations are pavement width and geometrics, traffic conditions, and appropriateness for the intended purpose.

Attributes which describe how appropriate a particular road is for a bicycle route include directness, scenery and available services. Directness is important for bicyclists traveling for a purpose. For recreational riders, this factor is not as important. For recreational bicyclists, on the other hand, varied and attractive scenery is one of the most important factors. Recreational riders, particularly those riding more than a few kilometers (miles), will be interested in services (food, water, restrooms). A route without such services will be less desirable than one with occasional stopping places.

### a. Designating Bike Routes

When designating a bicycle route, the placement and spacing of signs should be based on Part IX of the MUTCD. For Bike Route signs to be functional, supplemental plates may be placed beneath them when located along routes leading to high demand destinations (e.g.,"To Downtown,""To State College," etc., see Figure 24 for typical signing).

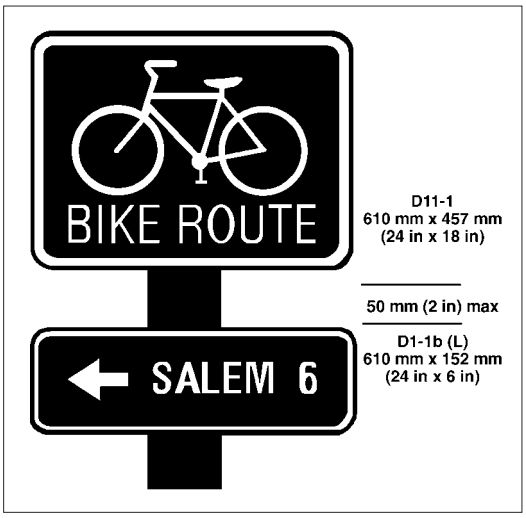
Since bicycle route continuity is important, directional changes should be signed with appropriate arrow subplaques. Also, signing should not end at a barrier. Information directing the bicyclist around the barrier should be provided.

According to the MUTCD (Part 2A-6),"Care should be taken not to install too many signs. A conservative use of regulatory and warning signs is recommended as these signs, if used to excess, tend to lose their effectiveness. On the other hand, a frequent display of route markers and directional signs to keep the driver informed of his location and his course will not lessen their value."



**Bike route:** The Bike Route sign (see Figure 24) is intended for use where no unique designation of routes is desired. However, when used alone, this sign conveys very little information. It should be used in conjunction with supplemental plaques giving destinations and distances. See Part 9B-22 of the MUTCD for specific information on subplate options.

**Figure 24**
Functional Signing

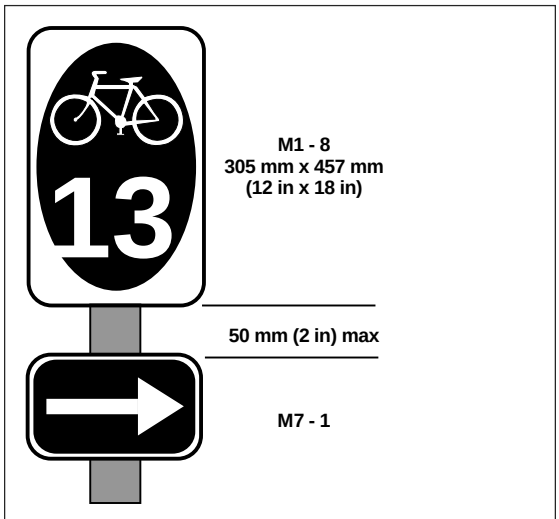



Source: Manual on Uniform Traffic Control Devices, FHWA, 1988

**Numbered bike route:** The numbered bike route sign (see Figure 25) is used to establish a unique identification for a state or local bicycle route. The sign may be combined with directional arrow subplates OM7-1 through M7-7.

One use of this type of sign is for long touring bicycle routes. The number may, for example, correspond to a parallel highway, indicating the route is a preferred alternate route for bicyclists. This sign also is used in communities with multiple bicycle routes.

**Figure 25**
Numbered Bicycle Route Sign




*Signs used to designate numbered bicycle route.*

Source: Manual on Uniform Traffic Control Devices, FHWA, 1988

Such signs are often used in conjunction with user maps, which tell the bicyclist where each route goes.

Numbering of bicycle routes, at the state and county level, should be coordinated with the NJDOT Bicycle/Pedestrian Advocate to assure continuity.

# 2. Bicycle Lanes on Highways

*Bicycle lanes can be considered when it is desirable to delineate available road space for preferential use by bicyclists and motorists,and to provide for more predictable movements by each. Bicycle lane markings, as exemplified in Figure 26, can increase a bicyclist's confidence in motorists not straying into his/her path of travel. Likewise, passing motorists are less likely to swerve to the left out of their lane to avoid bicyclists on their right.*

*Bicycle lanes should always be one-way facilities and carry traffic in the same direction as adjacent motor vehicle traffic. Two-way bicycle lanes on one side of the roadway are unacceptable because they promote riding against the flow of motor vehicle traffic. Wrong-way riding is a major cause of bicycle accidents and violates the Rules of the Road stated in the Uniform Vehicle code. Bicycle lanes on one-way streets should be on the right side of the street, except in areas where a bicycle lane on the left will decrease the number of conflicts (e.g., those caused by heavy bus traffic). In unique situations, it may be appropriate to provide a contra-flow bicycle lane on the left side of a one-way street. Where this occurs, the lane should be marked with a solid, double yellow line and the width of the lane should be increased by 1 foot.*



**Figure 26**
Bicycle Lane Markings

Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991

## a. Lane Widths

*Under ideal conditions, the minimum bicycle lane width is 5 feet (1.5 m). However, certain edge conditions dictate additional desirable bicycle lane width. To examine the width requirements for bicycle lanes, Figures 27, 28 and 29 show three usual locations for such facilities in relation to the roadway. Figure 27 depicts bicycle lanes on an urban curbed street where a parking lane is provided. The minimum bicycle lane width for this location is 5 feet (1.5 m). If parking volume is substantial or turnover is high, an additional 1 or 2 feet (0.3 or 0.6 m) of width is desirable for safe bicycle operation. Bicycle lanes should always be placed between the parking lane and the motor vehicle lanes. Bicycle lanes between the curb and the parking lane can create obstacles for bicyclists and eliminate a bicyclist's ability to avoid a car door as it is opened, therefore, this placement should not be considered.*

**Figure 27**
Bicycle Lanes on an Urban Curbed Street

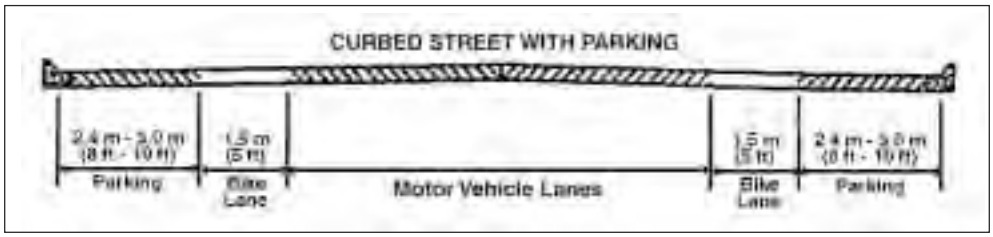



*Figure 28 depicts bicycle lanes along the outer portions of an urban curbed street where parking is prohibited.*

*Bicyclists do not generally ride near a curb because of the possibility of debris, of hitting a pedal on the curb, of an uneven longitudinal joint, or of a steeper cross slope. Bicycle lanes in this location should have a minimum width of 5 feet (1.5 m) from the curb face. If the longitudinal joint between the gutter pan and the roadway surface is uneven and falls within 5 feet (1.5 m) of the curb face, a minimum of 4 feet (1.2 m) should be provided between the joint and the motor vehicle lanes.*

**Figure 28**
Bicycle Lanes along the Outer Portions of an Urban Curbed Street

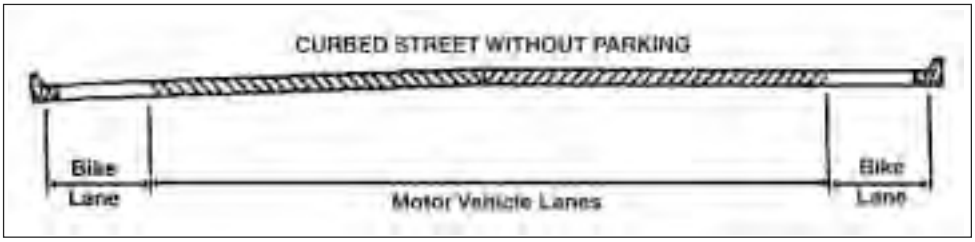
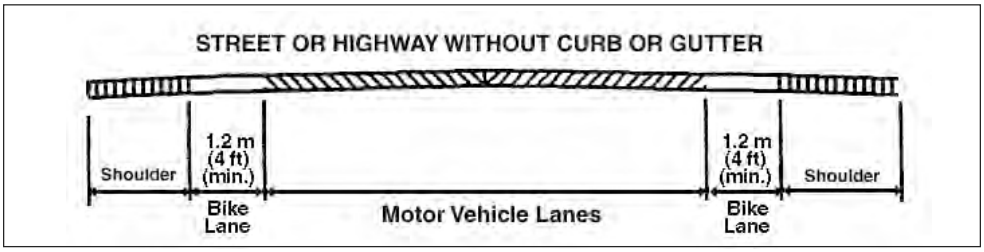



*Figure 29 depicts bicycle lanes on a highway not adjacent to the curb. Bicycle lanes should be located between the motor vehicle lanes and the roadway shoulders. In this situation bicycle lanes may have a minimum width of 4 feet (1.2 m), since the shoulder can provide additional maneuvering width. A width of 5 feet (1.5 m) or greater is preferable; additional widths are desirable where substantial truck traffic is present, or where vehicle speeds exceed 40 mph. In certain situations it may be appropriate to designate the full shoulder as the bike lane.*

**Figure 29**
Bicycle Lanes on Highway Without a Curb or Gutter




Source: Adapted from Guide for the Development of Bicycle Facilities, AASHTO, 1991

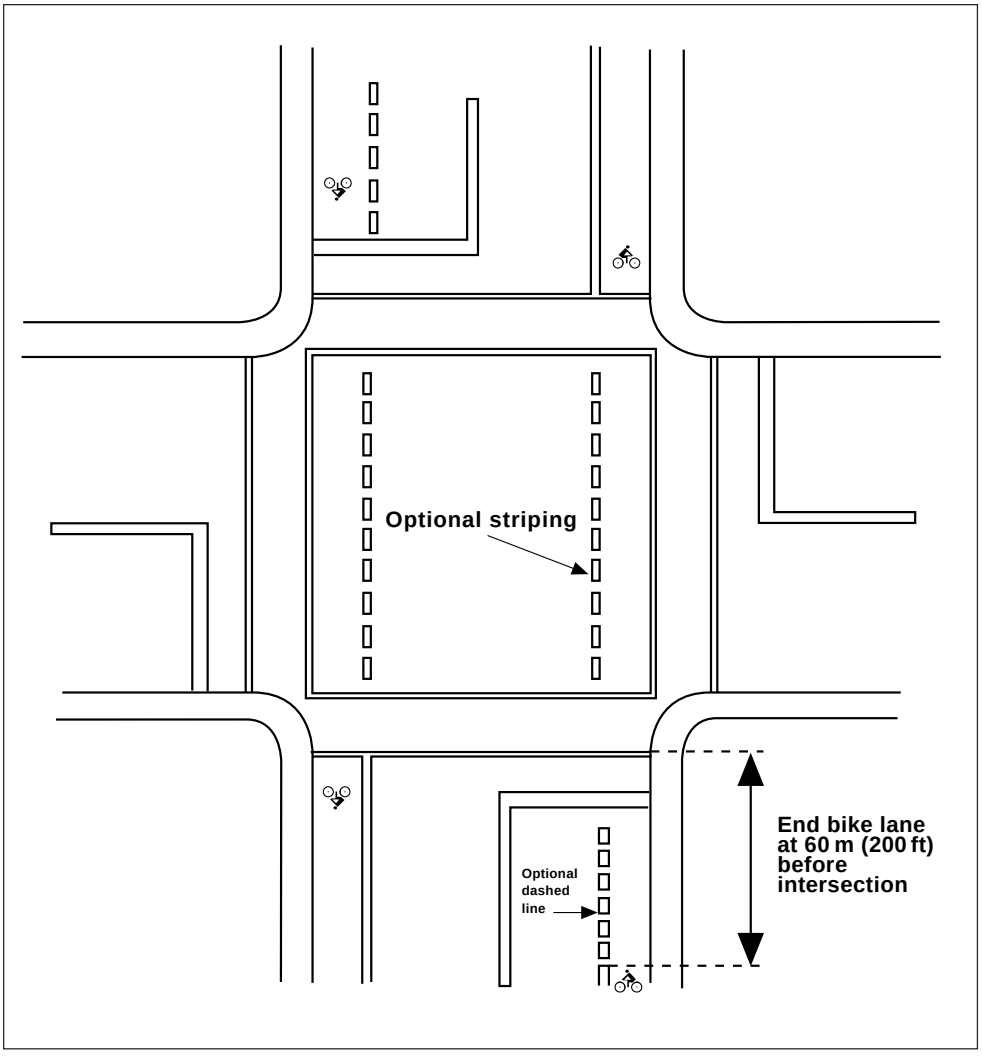
## b. Intersections

*Bicycle lanes tend to complicate both bicycle and motor vehicle turning movements at intersections. Because they encourage bicyclists to keep to the right and motorists to keep to the left, both operators are somewhat discouraged from merging in advance of turns. Thus, some bicyclists will begin left turns from the right side bicycle lane and some motorists will begin right turns from the left side of the bicycle lane. Both maneuvers are contrary to established Rules of the Road and result in conflicts.*

*Design treatment for bicycle lanes at simple intersections is shown in Figure 30. On a two lane highway, the edge line along the bike lane should end approximately 60 meters (200 feet) from the intersection to allow left turning bicyclists and right turning motorists to "weave."*

**Figure 30**

Bicycle Lanes on 2 Lane Roadways Without Turn Lanes




Source: Adapted from Technical Handbook of Bikeway Design, Velo, Quebec, 1992

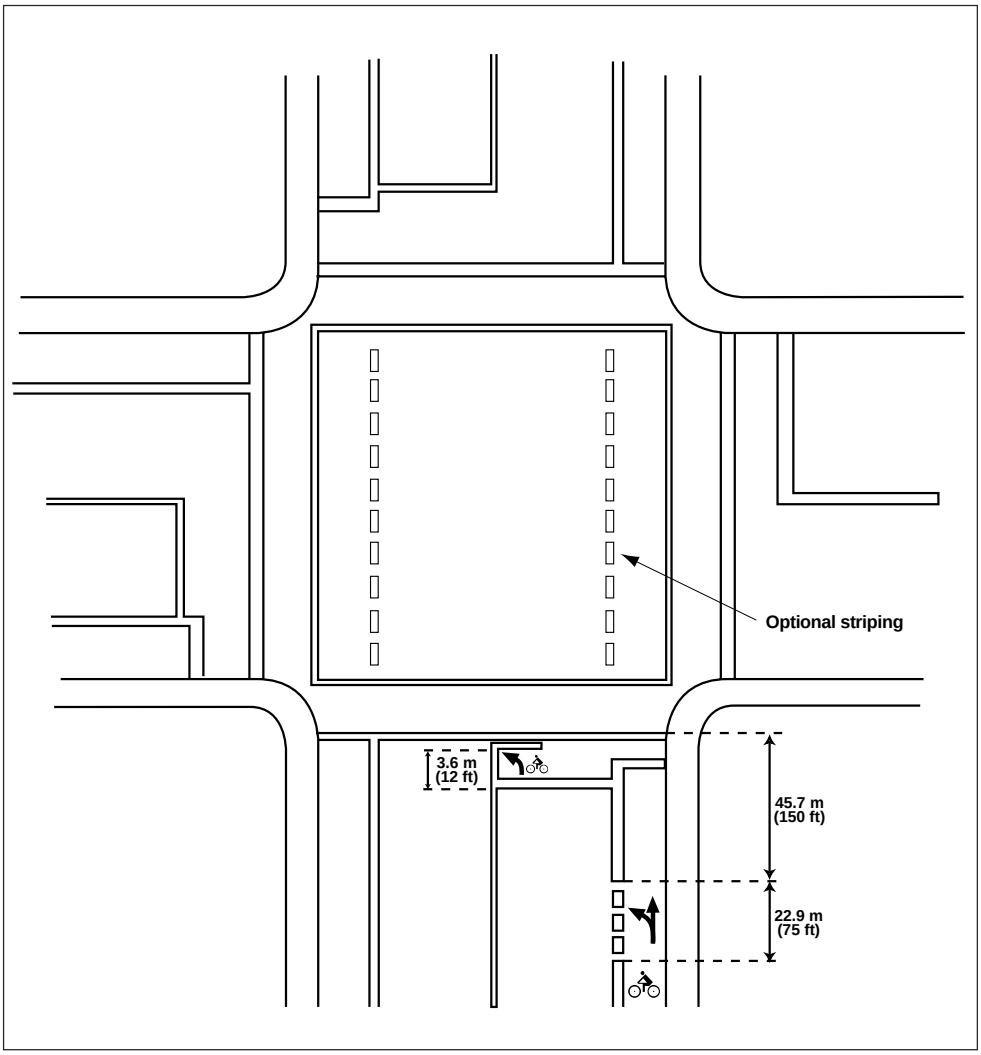
*Where high volumes of bicycle traffic exist and primacy is given to bicyclists, a bicycle queuing area should be considered at the intersection as shown in Figure 31. At these intersections, the stop line for vehicles is set back to allow bicyclists to move to the front of a lane of vehicular traffic to make a left turn or proceed through the intersection.*

Design treatment at multi-lane intersections is more complex. *Figure 32 presents examples of details on pavement markings for bicycle lanes approaching motorist right-turn-only lanes. Where there are numerous left turning bicyclists, a separate turning lane, as indicated in the MUTCD should be considered. The design of bicycle lanes should also include appropriate signing at intersections to reduce the number of conflicts. General guidance for pavement marking of bicycle lanes is contained in the MUTCD.*

*Adequate pavement surface, bicycle-safe grate inlets, safe railroad crossings, and traffic signals responsive to bicycles should always be provided on roadways where bicycle lanes are being designated. Raised pavement markings and raised barriers can cause steering difficulties for bicyclists and should not be used to delineate bicycle lanes.*

**Figure 31**

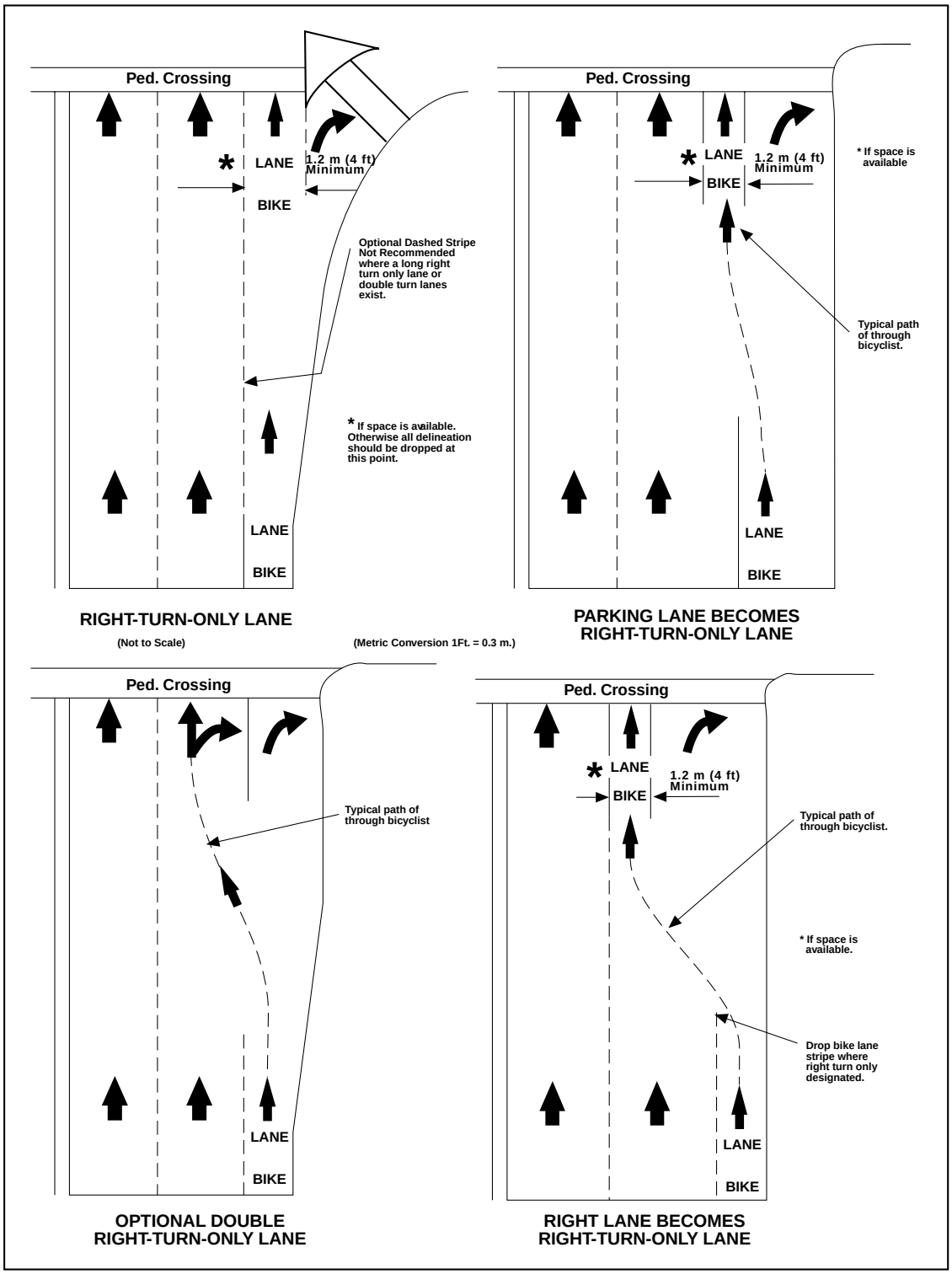
Optional Bicycle Queuing Area at Intersection with High Volumes




Source: Adapted from Technical Handbook of Bikeway Design, Velo, Quebec, 1992

**Figure 32**

Bicycle Lanes Approaching Motorist Right-Turn-Only Lanes




Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991



Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991

## c. Signing and Striping Requirements

Signing should be in accordance with MUTCD and is shown in Figure 33. Bicycle lanes should be well-marked and signed to ensure clear understanding of the presence and purpose of the facility by both bicyclists and motorists. The MUTCD specifies standard signing for bicycle lanes. According to MUTCD, "the R3-16 sign should be used in advance of the beginning of a marked designated bicycle lane to call attention to the lane and to the possible presence of bicyclists. The R3-16 and R3-17 signs should be used only in conjunction with the Preferential Lane symbol pavement marking and erected at periodic intervals along the designated bicycle lane and in the vicinity of locations where the preferential lane symbol is used."

**Figure 33**
MUTCD Bicycle Lane Signs




Source: Manual on Uniform Traffic Control Devices, FHWA, 1988

According to MUTCD, where it is necessary to restrict parking, standing, or stopping in a designated bicycle lane, appropriate signs as described in MUTCD may be used, or signs R7-9 or R7-9a shall be used.

Bicycle lane stripes should be solid, 150mm to 200mm (6 to 8 inches) wide white lines. Care should be taken to use pavement striping that is skid resistant. Thermoplastic tape and painted markings can become slippery and cause the cyclist to fall. Impregnated grit, non-skid, preformed tape is an acceptable striping material.

It is very important to re-apply bicycle lane markings when they begin to fade, since faded bicycle lane markings can lead to confusion by motorists and bicyclists. If necessary, re-application of bicycle lane stripes should be placed on a more frequent schedule than regular roadway re-striping projects. Old markings should be removed prior to re-striping if new layers of marking materials would otherwise create raised areas that would be hazardous to bicyclists.

Preferential bicycle lane symbols should be installed on the pavement in bicycle lanes. Symbols should be installed at regular intervals (no more than 107 meters (350 feet) between symbols), immediately after intersections, and at areas where bicycle lanes begin. Pavement letters that spell "ONLY BIKE," and arrows are optional.

# 3. Suitability Factors for Locating Bikeways on Highways

The suitability of a highway facility for bicycling is influenced by a number of factors. These factors can generally be classified in the following categories:

- Land Use and Location Factors
- Physical Constraint Factors
- Traffic Operations Factors

a. **Land use and location factors** represent the most significant category affecting suitability. Since bicycle trips are generally shorter than trips made by other modes, there must be a manageable distance between origins and destinations such as between residential areas and places of employment. There are certain key land uses which are especially likely to generate bicycle traffic if good bicycle facilities are available. These consist of, but are not limited to transit centers, schools, employment centers with nearby residential areas, recreation areas and mixed use cities, towns and villages.

b. **Physical constraint factors** consist of highway geometric or physical obstacles to bicycling which are difficult or costly to remedy. For example, a roadway may be suitable because of location factors but not suitable because of the existence of physical constraints to bicycling such as a narrow bridge, insufficient ROW or intersections with restricted lane widths, as a result of lane channelization. The feasibility of ameliorating these physical constraints must be weighed in deciding the designation of bikeways.

c. **Traffic operations factors** include traffic volume, speed, the number of curb cuts or conflict points along the highway, sight distance, and bicycle and pedestrian sensitive traffic control devices. Experienced bicyclists will use highways despite limiting traffic operational factors. However, less confident bicyclists will perceive such highways as unsafe and intimidating. These highway facilities should be designed or improved to accommodate bicyclists through the shared use of roadways. However, they are inappropriate for designation as bikeways.

Other safety issues such as maintenance and pavement repair are also important considerations in the designation of bikeways but do not affect the planning aspects of suitable facilities.

# 4. Design Guidelines for Bikeways on Highways

Bicycle lanes are usually more suitable in urban settings on roads with high traffic volumes and speeds. Bicycle routes are often used in urban settings to guide bicyclists along alternate or parallel routes that avoid major obstacles or which have more desirable traffic operational factors.

In rural settings, bicycle lanes are not usually necessary to designate preferential use. On higher volume roadways, wide shoulders offer bicyclists a safe and comfortable riding area. On low volume roadways, bicyclists prefer the appearance of a narrow, low speed country road.

Table 2 recommends the type of bikeway and pavement width for various traffic conditions.

For locations where pavement widths do not meet the following criteria, the NJDOT Bicycle/Pedestrian Advocate should be notified, and can assist in the decision making process.

Where physical obstructions exist that can be removed in the future, the highway facility should be designed to meet bikeway space allocation requirements, and upgraded and designated when the physical constraint is remedied (i.e., bridge is replaced and improved to allow designated facility.)

The final design should be coordinated with the NJDOT Bicycle/Pedestrian Advocate for review and approval prior to construction.



**Table 2**
Bikeway Types and Pavement Width

## *Condition I*
## *AADT 1200* - 2000*

| | URBAN W/PARKING | URBAN W/O PARKING | RURAL |
|---|---|---|---|
| <50 km/h (30 mph) | BR (SL) 4.2m (14 ft.) | BR (SL) 4.2m (14 ft.) | BR (SL) 3.0m (10 ft.) |
| 50 km/h-65 km/h (31-40 mph) | BL 1.5m (5 ft.) | BL 1.5m (5 ft.) | BR (SH) 1.2m (4 ft.) |
| 65 km/h-80 km/h (41-50 mph) | BL 1.8m (6 ft.) | BL 1.5m (5 ft.) | BR (SH) 1.8m (6 ft.) |
| >80 km/h (50 mph) | N/A | BL 1.8m (6 ft.) | BR (SH) 1.8m (6 ft.) |

KEY: BR (SL) = shared lane, BR (SH) = shoulder, BL = bike lane

* For volumes less than 1200 AADT a shared lane is acceptable where adequate sight distance exists.

## *Condition II*
## *AADT 2000 - 10,000*

| | URBAN W/PARKING | URBAN W/O PARKING | RURAL |
|---|---|---|---|
| <50 km/h (30 mph) | BR (SL) 4.2m (14 ft.) | BR (SL) 4.2m (14 ft.) | BR (SH) 1.2m (4 ft.) |
| 50 km/h-65 km/h (31-40 mph) | BL 1.5m (5 ft.) | BL 1.5m (5 ft.) | BR (SH) 1.2m (4 ft.) |
| 65 km/h-80 km/h (41-50 mph) | BL 1.8m (6 ft.) | BL 1.8m (6 ft.) | BR (SH) 1.8m (6 ft.) |
| >80 km/h (50 mph) | N/A | BL 1.8m (6 ft.) | BR (SH) 2.4m (8 ft.) |

KEY: BR (SH) = shoulder, BR (SL) = shared lane, BL = bike lane

## *Condition III*
## *AADT Over 10,000*

| | URBAN W/PARKING | URBAN W/O PARKING | RURAL |
|---|---|---|---|
| <50 km/h (30 mph) | BR (SL) 1.5m (5 ft.) | BR (SL) 1.5m (5 ft.) | BR (SH) 1.2m (4 ft.) |
| 50 km/h-65 km/h (31-40 mph) | BL 1.8m (6 ft.) | BL 1.5m (5 ft.) | BR (SH) 1.8m (6 ft.) |
| 65 km/h-80 km/h (41-50 mph) | BL 1.8m (6 ft.) | BL 1.8m (6 ft.) | BR (SH) 1.8m (6 ft.) |
| >80 km/h (50 mph) | N/A | BL 1.8m (6 ft.) | BR (SH) 2.4m (8 ft.) |

KEY: BR (SH)=shoulder BL=bike lane



# 5. Integrating Bikeways Into The Highway Planning Process

Planning for bicycle facilities on highways should begin at the very earliest stage of project development on all sizes and types of highway projects. Even the smallest highway reconstruction project could result in a missed opportunity if bicyclists are not taken into consideration at the initiation of the project.

At the municipal level, planners should address these highway planning issues in the comprehensive context of the circulation element in the municipal master plan, as provided for in the New Jersey Municipal Land Use Law, N.J.S.A. 40:55D-28.b.(4).

The following procedure offers the planner and designer guidance in determining the need for bikeways during the usual phases of project development.

## a. Needs Assessment

The first step in the planning process for any transportation project is the assessment of needs. Existing and planned land use, current and projected traffic levels, and the special needs of the area population are examined. There are circumstances in which a portion of the transportation need might be served by non-motorized means, as well as locations where existing bicycle demand would be better served by improved facilities. A series of questions with respect to land use and location factors are presented to assist in recognizing the potential for non-motorized travel and evaluating the needs of bicyclists at the State level.

- Does the highway serve an activity center which could generate bicycle trips?
- Is the highway facility included on a county or municipal bicycle master plan?
- Will the highway facility provide continuity with or between existing bicycle facilities?
- Is the highway facility located on a roadway which is part of a mapped bike route or utilized regularly by local bicycle clubs?
- Does the highway facility pass within 3.2 kilometers (two miles) of a transit station?
- Does the highway facility pass within 3.2 kilometers (two miles) of a high school or college?
- Does the highway facility pass within 0.8 kilometers (1/2 mile) of an elementary school or middle school?
- Does the highway facility pass through an employment center? If so, is there a significant residential area within a 4.8 kilometer (3 mile) radius?
- Does the highway facility provide access to a recreation area or otherwise serve a recreation purpose?

If any one of these criteria produces a significantly positive response, the highway facility has the potential of attracting less experienced bicycle riders and/or large numbers of advanced riders. As a result, it should be considered as potentially suitable for designation as a bikeway. If none of the above criteria is met, the project should be designed to meet minimum bicycle compatible roadway criteria.

The planner should include a description of the potential significance of the highway facility as a bicycle facility in the project initiation or scoping document that will be forwarded to the project designer. If the planner determines that the project is potentially suitable for



designation as a bikeway, the nature of potential bicycle use should be addressed, including factors affecting roadway design such as highway truck volumes or intersections.

### b. Preliminary Engineering

Highway facilities which have been determined through the needs assessment process to be potentially suitable for bikeways should be analyzed to determine physical constraints which may limit the type of facility which could be provided.

The following factors should be considered:

- Does sufficient ROW exist or can additional ROW be acquired to allocate the required space for a bikeway?
- If physical impediments or restrictions exist, can they be avoided or removed to allow the required pavement to provide a bikeway?
- Do bridges allow for bicycle access in accordance with bikeway standards?
- Can travel or parking lanes be reduced in width or eliminated to allow space for bikeways?

If the answer to these questions is positive, a bikeway should be recommended at the completion of the preliminary engineering phase for the following situations:

- Transportation facilities or segments that connect bicycle traffic generators within 8.0 kilometers (5 miles) of each other.
- Segments of transportation facilities that provide continuity with existing bicycle facilities.

If physical constraint factors that preclude allocation of space and designation of bikeways exist, and cannot be avoided or remedied, these factors should be reported to the project manager in the final design phase.

### c. Final Design and Facility Selection

When the needs assessment and preliminary design indicate the need for bikeways, the designer should consider traffic operations factors in determining the actual design treatment for the bikeway. The following should be considered in the design of the highway and bicycle facility:

- What are the existing and projected traffic volumes and speeds?
- Does parking exist? Can parking be restricted or removed to allow better sight distances?
- Are intersections/conflict points excessive? Can intersections/conflict points be reduced along roadways in accordance with the New Jersey Highway Access Management Code?
- Can turn lanes at intersections be designed to allow space for bicyclists?
- Can sections with insufficient sight distance or highway geometrics be changed?
- Can traffic operations be changed or "calmed" to allow space for bikeways?



# Chapter 4

## *Bicycle Paths*

Bicycle paths consist of multiple use paths or trails, separated from motorized vehicular traffic, on which bicycle travel is anticipated and permitted. Bicycle paths may be located within a highway right-of-way or on an independent right-of-way. Because of their expense, bicycle paths seldom are constructed for the exclusive use of bicyclists, but instead must be shared with other users.

Bicycle paths can serve a variety of purposes. They can provide a commuting bicyclist with a shortcut through a residential neighborhood (e.g., a connection between two cul-de-sac streets). Located in a park, they can provide an enjoyable recreational opportunity. Bicycle paths can be located along abandoned railroad rights of way, the banks of rivers, and other similar areas. Bicycle paths can also provide bicycle access to areas that are otherwise served only by limited access highways closed to bicycles. Appropriate locations can be identified during the planning process. Examples of bicycle paths are shown in Figure 34 and Figure 35.

All bicyclists can find bicycle paths inviting places to ride. In addition, since paths augment the roadway system, they can extend circulation options for bicyclists, making trips feasible which might not be feasible if bicyclists had to depend exclusively on roadways. Basic bicyclists and children, however, especially appreciate the freedom from conflicts with motor vehicles which off-road paths promise.

Provision of a bicycle path should not be used as a rationale for prohibiting use of parallel roadways by bicyclists nor as an excuse for not designing such roadways to be compatible with bicycle use. Because of conflicts created by intense usage, differing speed and riding skills of bicyclists and conflicts between users, multiple use recreational paths may often be inappropriate facilities for experienced bicycle riders. In fact, many conflicts on popular multiple use paths can be avoided by encouraging more experienced bicyclists to use parallel roadways.



**Figure 34**
Example of Bicycle Path

Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991

## 1. Planning Issues in Designating Bicycle Paths

### a. Shared Use of Multiple Use Paths

As indicated, off-road paths are rarely constructed for the exclusive use of bicyclists, but instead must be shared with other non-motorized users (or, in some instances, with specialized motorized uses such as snowmobiles, off-road motorcycles and similar vehicles).

Just as conflicts can occur between bicycles and pedestrians on sidewalks, or between motor vehicles and bicycles on highways not constructed to compatible standards, heavy use of trails and other multiple use paths can create conflicts between different user groups. Among bicyclists, basic riders and young children who travel at speeds below 15 km/h (9 mph) will conflict with more advanced riders travelling at speeds greater than 20

km/h (12 mph). Pedestrians, in-line skaters and bicyclists, both basic and advanced, will wish to travel at substantially different speeds. So long as the volume of users is low, the conflicts between different groups can be kept manageable. However, even moderate volumes may result in substantial deterioration in level of service and can expose users to substantial safety risks. Conflicts between users are especially likely to occur on regionally significant recreational trails which attract a broad diversity of users.

**Figure 35**
Example of Bicycle Path



Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991

## b. Regulation of Multiple Use Paths

The types of conflicts on multiple use paths have increased substantially in recent years with the increased popularity of mountain bikes and in-line skating. Methods of addressing these conflicts include providing alternative facilities for different groups, prohibiting certain modes, restricting different modes to specific hours of operation, providing wider facilities or marking wide paths to regulate the flow of traffic. Examples of all of these types of actions can be witnessed along boardwalks in New Jersey where conflicts between different user groups can be especially severe.

## c. Incompatible Multiple Use of Paths or Trails

Joint use of paths or trails by bicycles and horses or mountain bikes and hikers pose special problems which in general should be avoided. Horses startle easily and may kick out suddenly if a bicyclist is perceived to be a danger. Furthermore, the surface requirements of a bicycle path are incompatible with the requirements of a bridle path: bicycles function best on hard surfaces, horses best on soft surfaces. A compromise surface to accommodate both would result in a less than adequate surface for both. As a result, where either horseback activity or bicycle activity is anticipated to be high, separate trails are required. Mountain bikes and horses may safely share the use of gravel or dirt trails provided that adequate passing widths are available, the volume of traffic by both modes is low and sight distances permit horses and bicyclists to anticipate and prepare for possible conflicts.

The popularity of mountain bikes has created an increasing problem on hiking trails which have minimal surface improvement and are narrow in width. The speed differential between a mountain bike and a hiker can be substantial. Narrow trails in woods can substantially limit sight distance for mountain bikes and cause riders to either crash into hikers or have near misses. Mountain bike use of hiking trials also results in substantial erosion problems. As a result, use of mountain bikes should be restricted to wider dirt roads and lanes which have adequate sight distance as well as drainage improvements sufficient to protect against trail erosion.

## d. Linkage Paths

Conflicts between different users of multiple use paths occur primarily on heavily used recreational trails or in the immediate vicinity of a major pedestrian trip generator. Neigh-

borhood paths and community trails which are used much less intensively will seldom result in conflicts and can be safely shared by a variety of users. Construction of linkages between adjoining residential developments, between schools and neighborhoods or between shopping areas and surrounding streets can substantially expand the circulation opportunities for both pedestrians and bicyclists.

Because such linkage paths are usually short and lightly used, they can almost always be safely shared by different users even if the path's width is minimal. A designer of such a linkage path needs to anticipate the probability of conflicts when designing such a facility. A short path, less than 120 meters (400 feet) in length, in a suburban neighborhood, can usually be constructed to a width of only 1.5 meters (5 feet) provided that adequate sight distance is available to allow a bicyclist to stop when encountering a pedestrian or an opposing bicyclist. This assumes that the probability of encountering a conflicting pedestrian or bicyclist is too small to justify providing the added width needed to pass.

Linkage paths should be required to be constructed when developments are being planned or have been constructed in such a fashion that reasonable pedestrian or bicycle travel is frustrated as a result of a constrained roadway network. Policy for linkages can be defined in the land use element of municipal master plans, in the circulation element of municipal master plans, and on the official map as provided in the Municipal Land Use Law. NJDOT's companion manual, Pedestrian Compatible Planning and Design Guidelines provides additional planning and design guidance regarding the construction of linkage paths.

## e. Bicycle Use of Sidewalks

Identifying a sidewalk as a bicycle path is undesirable for a variety of reasons. *Sidewalks are typically designed for pedestrian speed and maneuverability and are not safe for higher speed bicycle use. Conflicts are common between pedestrians traveling at low speeds (or exiting stores, parked cars, etc.) and bicycles, as are conflicts with fixed objects (e.g., parking meters, utility poles, sign posts, bus benches, trees, fire hydrants, mail boxes, etc.). Walkers, joggers, skateboarders, and roller skaters can, and often do, change their speed and direction almost instantaneously, leaving bicycles insufficient time to react to avoid collisions.*

*Similarly, pedestrians often have difficulty predicting the direction an oncoming bicyclist will take. At intersections, motorists are often not looking for bicyclists (who are traveling at higher speeds than pedestrians) entering the crosswalk area, particularly when motorists are making a turn. Sight distance is often impaired by buildings, walls, property fences, and shrubs along sidewalks, especially at driveways.*

In residential areas, young children can be anticipated to ride bicycles, tricycles, scooters and other riding toys on sidewalks. This type of use is an acceptable exception to the general finding that use of sidewalks by bicyclists is undesirable. Sidewalks in residential areas generally have low pedestrian volumes and are accepted as extended play areas for children. Pedestrians anticipate and usually enjoy encounters with young children who are playing in the sidewalk. This type of bicycle use of the sidewalk is generally acceptable, and provides young children who do not have the judgement or skill to ride in the street an opportunity to develop their riding skills.

## f. Bicycle Paths Adjacent to Roadways

Two-way bicycle paths located immediately adjacent to a roadway are not generally recommended for the following reasons:



(1) They require one direction of bicycle traffic to ride against motor vehicle traffic, contrary to normal Rules of the Road.

*(2) When the bicycle path ends, bicyclists going against traffic will tend to continue to travel on the wrong side of the street. Likewise, bicyclists approaching a bicycle path often travel on the wrong side of the street in getting to the path. Wrong-way travel by bicyclists is a major cause of bicycle/automobile accidents and should be discouraged at every opportunity.*

*(3) At intersections, motorists entering or crossing the roadway often will not notice bicyclists coming from their right, as they are not expecting contra-flow vehicles. Even bicyclists coming from the left often go unnoticed, especially when sight distances are poor.*

*(4) When constructed in narrow roadway right of way, the shoulder is often sacrificed, thereby decreasing safety for motorists and bicyclists using the roadway.*

(5) *Many bicyclists will use the roadway instead of the bicycle path because they have found the roadway to be safer, more convenient, or better maintained. Bicyclists using the roadway are often subjected to harassment by motorists who feel that in all cases bicyclists should be on the path instead.*

(6) *Bicyclists using the bicycle path generally are required to stop or yield at all cross streets and driveways, while bicyclists using the roadway usually have priority over cross traffic, because they have the same right of way as motorists.*

(7) *Stopped cross street motor vehicle traffic or vehicles exiting side streets or driveways may block the path crossing.*

(8) *Because of the closeness of motor vehicles to opposing bicycle traffic, barriers are often necessary to keep motor vehicles out of bicycle paths and bicyclists out of traffic lanes. These barriers can represent an obstruction to bicycles and motorists, can complicate maintenance of the facility, and can cause other problems as well.*

*For the above reasons, bicycle lanes, or shared roadways should generally be used to accommodate bicycle traffic along highway corridors rather than providing a bicycle path immediately adjacent to the highway.*

An exception to this general rule consists of situations where an off-road path intended for bicycle use must be located adjacent to a roadway for a relatively short distance. In order to maintain continuity of the trail section, it may be preferable in this situation to locate the path adjacent to the roadway. An example of this situation would consist of the joint use of a roadway's bridge by a trail. In such situations, physical separation of the path from the roadway must be provided as discussed later in this chapter.

# 2. Design of Paths for Bicycle Use

## a. Width and Clearance

*The paved width and the operating width required for a bicycle path are primary design considerations. Figure 36 depicts a bicycle path. Under most conditions, recommended paved width for a two-directional bicycle path is 10 feet (3 m). In some instances, however, a minimum of 8 feet (2.4 m) can be adequate. This minimum should be used only where the following conditions prevail: (1) bicycle traffic is expected to be low, even on peak days or during peak hours; (2) pedestrian use of the facility is not expected to be more than occasional; (3) there will be good horizontal and vertical alignment providing safe and frequent passing opportunities; (4) the path will not be subjected to maintenance vehicle loading conditions that would cause pavement edge damage. Under certain conditions it may be necessary or desirable to increase the width of a bicycle path to 12 feet (3.7 m) or more; for example, because of substantial bicycle volume, probable shared use with joggers and other pedestri-*

*ans, use by large maintenance vehicles, steep grades, where bicycles will be likely to ride two abreast.*

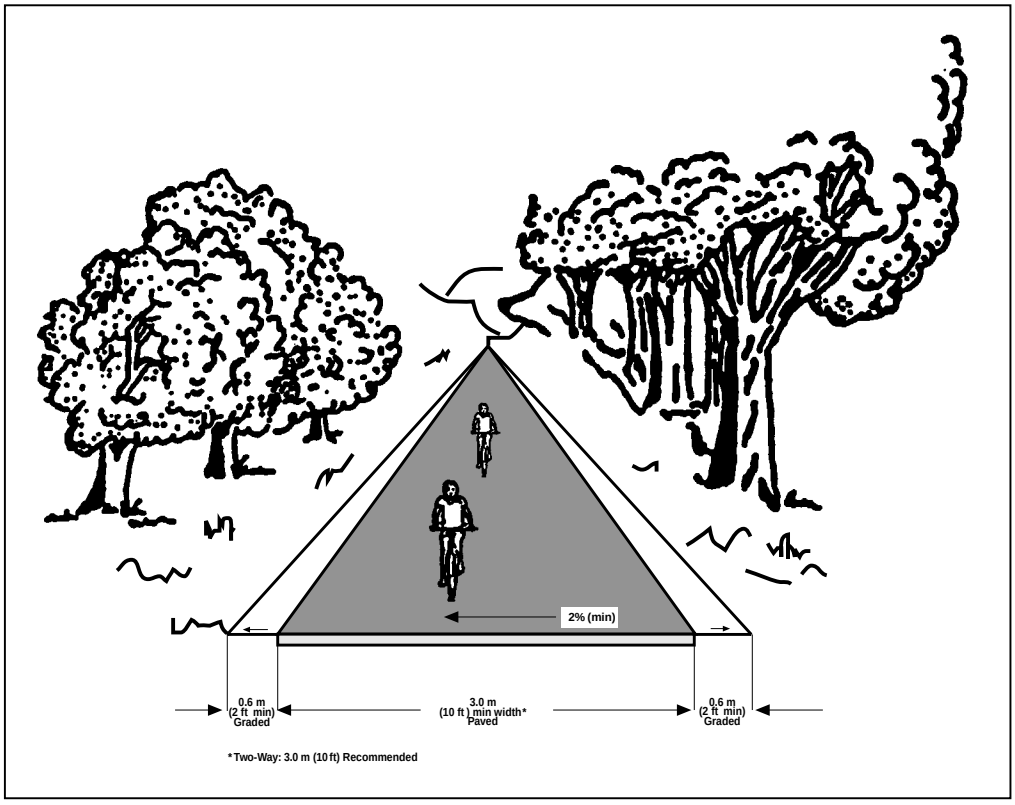
Reduced widths are acceptable on linkage paths. Because of their short length, they seldom allow bicyclists to operate at full speed, and because of low traffic volumes they seldom result in conflicts. However, whenever possible, linkage paths should comply with the minimum width standards presented here.

One directional bike paths are not recommended since they will usually be used as two-way facilities and should be designed accordingly.

*A minimum of 2 feet (0.6 m) width graded area should be maintained adjacent to both*

**Figure 36**

Bicycle Path on Separated Right-of-Way




Source: Adapted from Guide for the Development of Bicycle Facilities, AASHTO, 1991

*sides of the pavement, however, 3 feet (0.9 m) or more is desirable to provide clearance from trees, poles, walls, fences, guardrail, or other lateral obstructions. A wider graded area on either side of the bicycle path can serve as a separate jogging path.*

*The vertical clearance to obstructions should be a minimum of 8 feet (2.4 m). However, vertical clearance may need to be greater to permit passage of maintenance vehicles and, in undercrossings and tunnels, a clearance of 10 feet (3 m) is desirable for adequate vertical shy distance.*

## b. Horizontal Separation from Roadways

Ordinarily, bicycle paths are located where separate right-of-way is available. However, where a bike path is being considered within a roadway right-of-way, *a wide separation between a bicycle path and adjacent highway is desirable to confirm both the bicyclist and the motorist that the bicycle path functions as an independent highway for bicycle traffic. In addition to physical separation, landscaping or other visual buffer is desirable. When this is not possible and the distance between the edge of the roadway and the bicycle path is less than 5 feet (1.5 m), a suitable physical divider may be considered. Such dividers serve both to prevent bicyclists from making unwanted move-*

*ments between the path and the highway shoulder and to reinforce the concept that the bicycle path is an independent facility. Where used, the divider should be a minimum of 4.5 feet (1.4 m) high, to prevent bicyclists from toppling over it, and it should be designed so that it does not become an obstruction or traffic hazard in itself.*

### c. Design Speed

*The speed that a bicyclist travels is dependent on several factors, including the type and condition of the bicycle, the purpose of the trip, the condition and location of the bicycle path, the speed and direction of the wind, and the physical condition of the bicyclist. Bicycle paths should be designed for a selected speed that is at least as high as the preferred speed of the faster bicyclists. In general, a minimum design speed of 20 mph (32 km/h) should be used; however, when the grade exceeds 4 percent, a design speed of 30 mph (48 km/h) is advisable.*

*On unpaved paths, where bicyclists tend to ride slower, a lower design speed of 15 mph (24 km/h) can be used. Similarly, where the grades dictate, a higher design speed of 25 mph (40 km/h) can be used. Since bicycles have a higher tendency to skid on unpaved surfaces, horizontal curvature design should take into account lower coefficients of friction.*

### d. Horizontal Alignment and Superelevation

*The minimum radius of curvature negotiable by a bicycle is a function of the superelevation rate of the bicycle path surface, the coefficient of friction between the bicycle tires and the bicycle path surface, and the speed of the bicycle. The minimum design radius of curvature can be derived from the following formula:*

$$R = \frac{V^2}{15\,(e+f)}$$

*where:* $R$ = Minimum radius of curvature (ft)
$V$ = Design Speed (mph)
$e$ = Rate of superelevation
$f$ = Coefficient of friction

*For most bicycle path applications the superelevation rate will vary from a minimum 2 percent (the minimum necessary to encourage adequate drainage) to a maximum of approximately 5 percent (beyond which maneuvering difficulties by slow bicycles and adult tricyclist might be expected). The minimum superelevation rate of 2 percent will be adequate for most conditions and will simplify construction.*

*The coefficient of friction depends upon speed; surface type, roughness, and condition; tire type and condition; whether the surface is wet or dry. Friction factors used for design should be selected based upon the point at which centrifugal force causes the bicyclist to recognize a feeling of discomfort and instinctively act to avoid higher speed. Extrapolating from values used in highway design, design factors for paved bicycle paths can be assumed to vary from 0.30 at 15 mph (24 km/h) to 0.22 at 30 mph (48 km/h). Although there are not data available for unpaved surfaces,it is suggested that friction factors be reduced by 50 percent to allow a sufficient margin of safety.*

*Based upon a superelevation rate (e) of 2 percent, minimum radii of curvature can be selected from the following table.*

*When substandard radius curves must be used on bicycle paths because of right of way, topographical or other considerations, standard curve warning signs and supplemental pavement markings should be installed in accordance with the MUTCD. The negative effects of substandard curves can also be partially offset by widening the pavement through the curves.*



| Table 3 Minimum Radii for Paved Bicycle Paths (e = 2 Percent) | | |
|---|---|---|
| Design Speed-V (mph) (1 mph=1.6 km/hr) | Friction Factor - f | Minimum Radius - R (Feet) (1'=0.3 m) |
| 20 | 0.27 | 95 |
| 25 | 0.25 | 155 |
| 30 | 0.22 | 250 |
| 35 | 0.19 | 390 |
| 40 | 0.17 | 565 |

Table 3

## e. Grade

*Grades on bicycle paths should be kept to a minimum, especially on long inclines. Grades greater than 5 percent are undesirable because the ascents are difficult for many bicyclists to climb and the descents cause some bicyclists to exceed the speeds at which they are competent. Where terrain dictates, grades over 5 percent and less than 500 feet (150 m) long are acceptable when a higher design speed is used and additional width is provided. Grades steeper than 3 percent may not be practical for bicycle paths with crushed stone surfaces.*

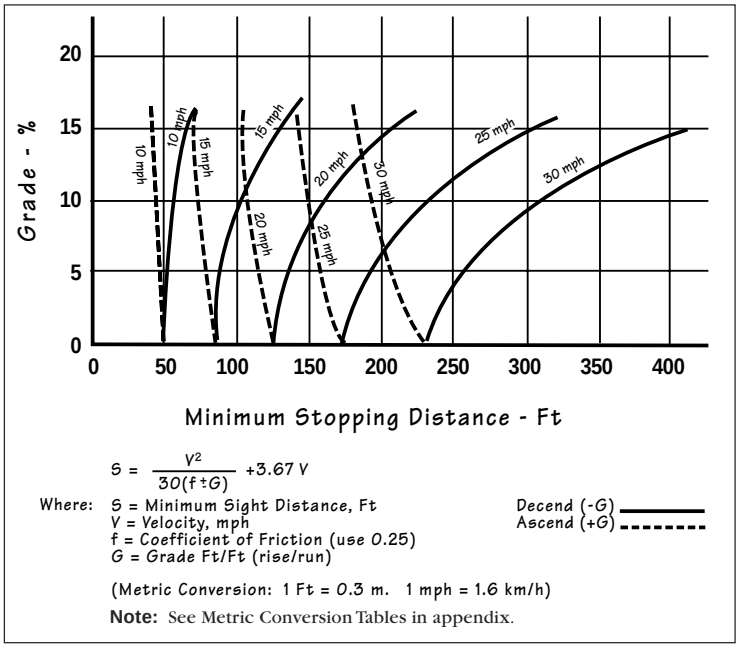
## f. Switchbacks

In areas of extremely steep terrain, a series of "switchbacks" may be the only solution to traversing changes in elevation. At these locations, a grade of 8 percent is acceptable for a distance of no longer than 30 meters (100 feet). Grades steeper than 8 percent will not meet *Americans with Disabilities Act* standards. Pavement width should be a minimum of 3.6 meters (12 feet) wide to allow ascending bicyclists to walk. The "switchbacks," or turns should be completely visible from the uphill turn. Runouts at the end of each turn should be considered for bicyclists not able to stop. Railing should be installed to discourage shortcuts, and appropriate signing should be placed at the top of the descent.

## g. Sight Distance

*To provide bicyclists with an opportunity to see and react to the unexpected, a bicycle path should be designed with adequate stopping sight distance. The distance required to bring a bicycle to a full controlled stop is a function of the bicyclist's perception and brake reaction time, the initial speed of the bicycle, the coefficient of friction between the tires and the pavement, and the braking ability of the bicycle.*

*Figure 37 indicates the minimum stopping sight distance for various design speeds and grades based on a to-*




Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991

**Figure 37**
Minimum Stopping Sight Distance

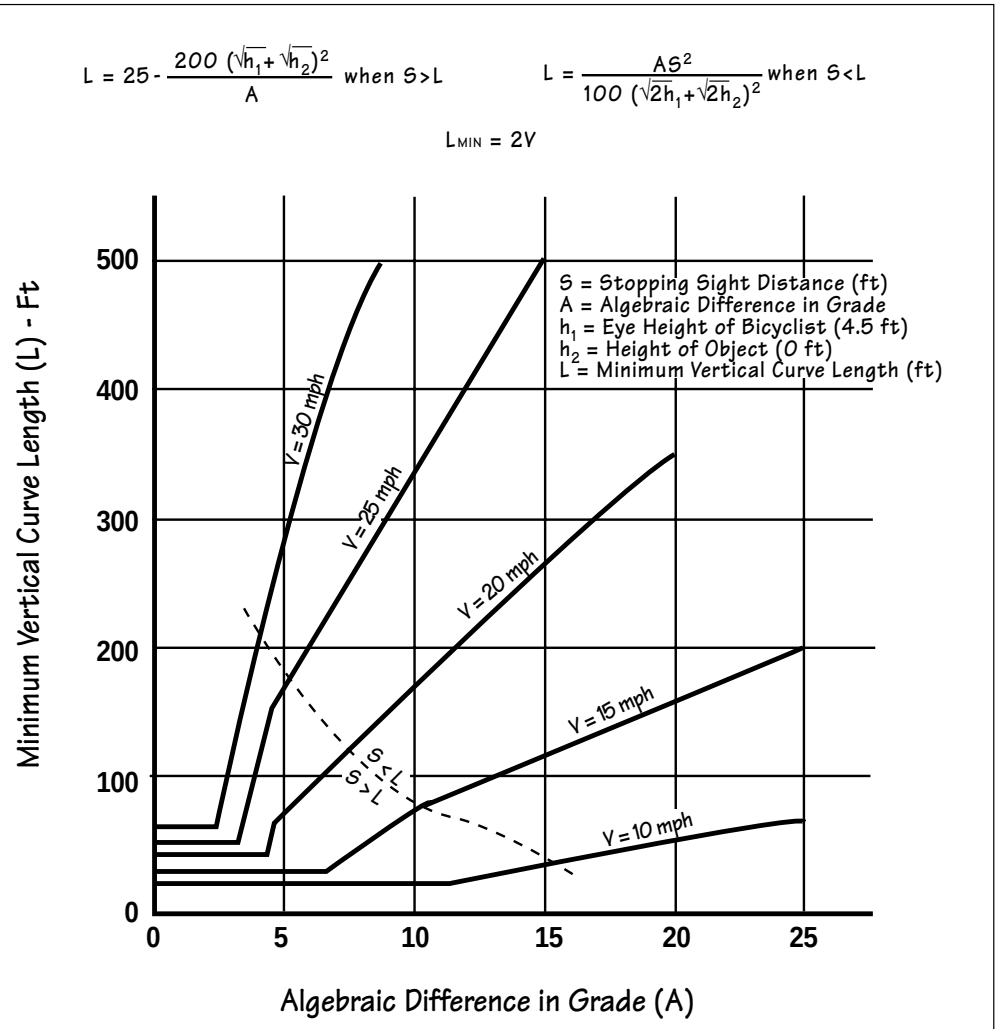
*tal perception and brake reaction time of 2.5 seconds and a coefficient of friction of 0.25 to account for the poor wet weather braking characteristics of many bicycles. For two-way bicycle paths, the sight distance in descending direction,that is, where "G" is negative,will control the design.*

*Figure 38 is used to select the minimum length of vertical curve necessary to provide minimum stopping distance at various speeds on crest vertical curves. The eye height of the bicyclist is assumed to be 4.5' (1.4 m) and the object height is assumed to be zero to recognize that impediments to bicycle travel exist at pavement level.*

*Figure 39 indicates the minimum clearance that should be used to line of sight obstructions for horizontal curves. The lateral clearance is obtained by entering Figure 39 with the stopping sight distance from Figure 37 and the proposed horizontal radius of curvature.*

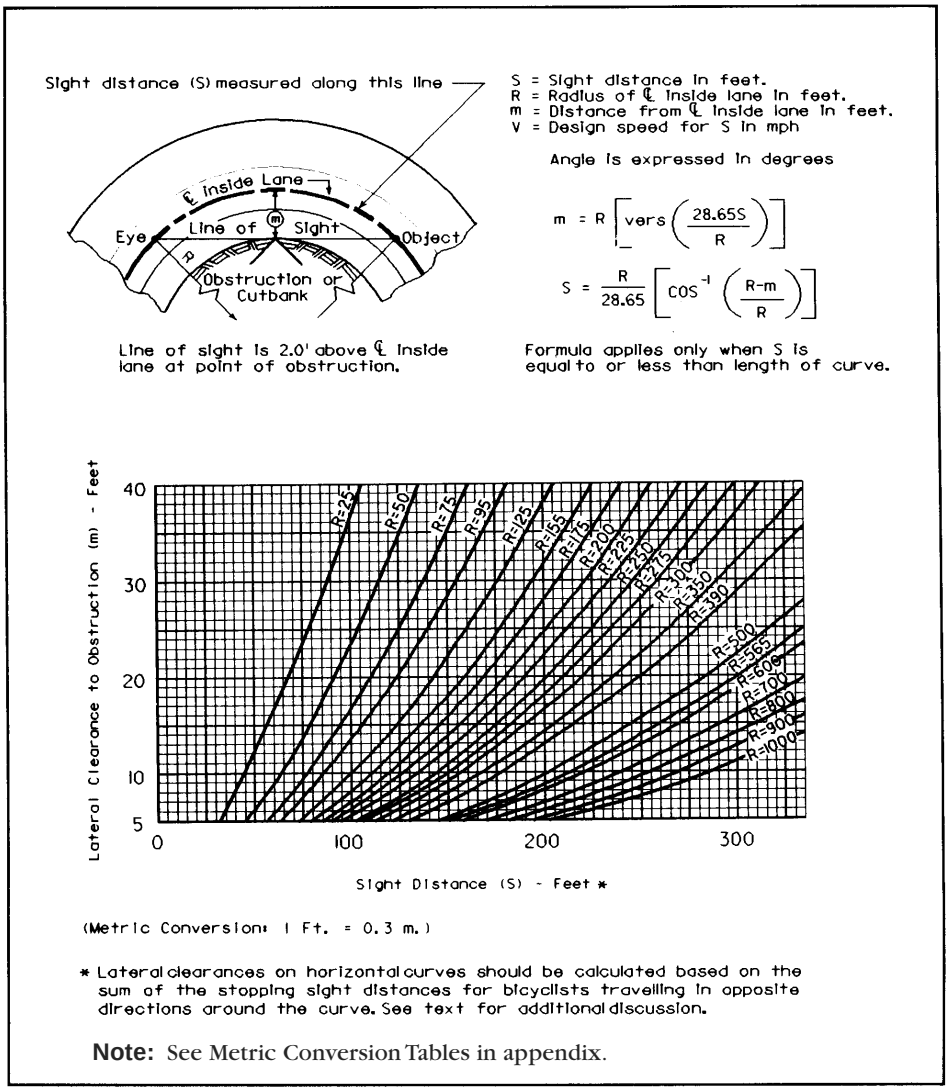
*Bicyclists frequently ride abreast of each other on bicycle paths and, on narrow bicycle paths, bicyclists have a tendency to ride near the middle of the path. For these reasons, and because of the serious consequences of a head on bicycle accident, lateral clearances on horizontal curves should be calculated based on the sum of the stopping sight distance for bicyclists traveling in opposite directions around the curve. Where this is not possible or feasible, consideration should be given to widening the path through the curve, installing a yellow center stripe, installing a curve ahead warning sign in accordance with the MUTCD, or some combination of these alternatives.*

**Figure 38**
Minimum Length of Vertical Curves




**Note:** See Metric Conversion Tables in appendix.

Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991




**Note:** See Metric Conversion Tables in appendix.

**Source:** Guide for the Development of Bicycle Facilities, AASHTO, 1991

**Figure 39**
Minimum Lateral Clearances on Horizontal Curves

## h. Intersections

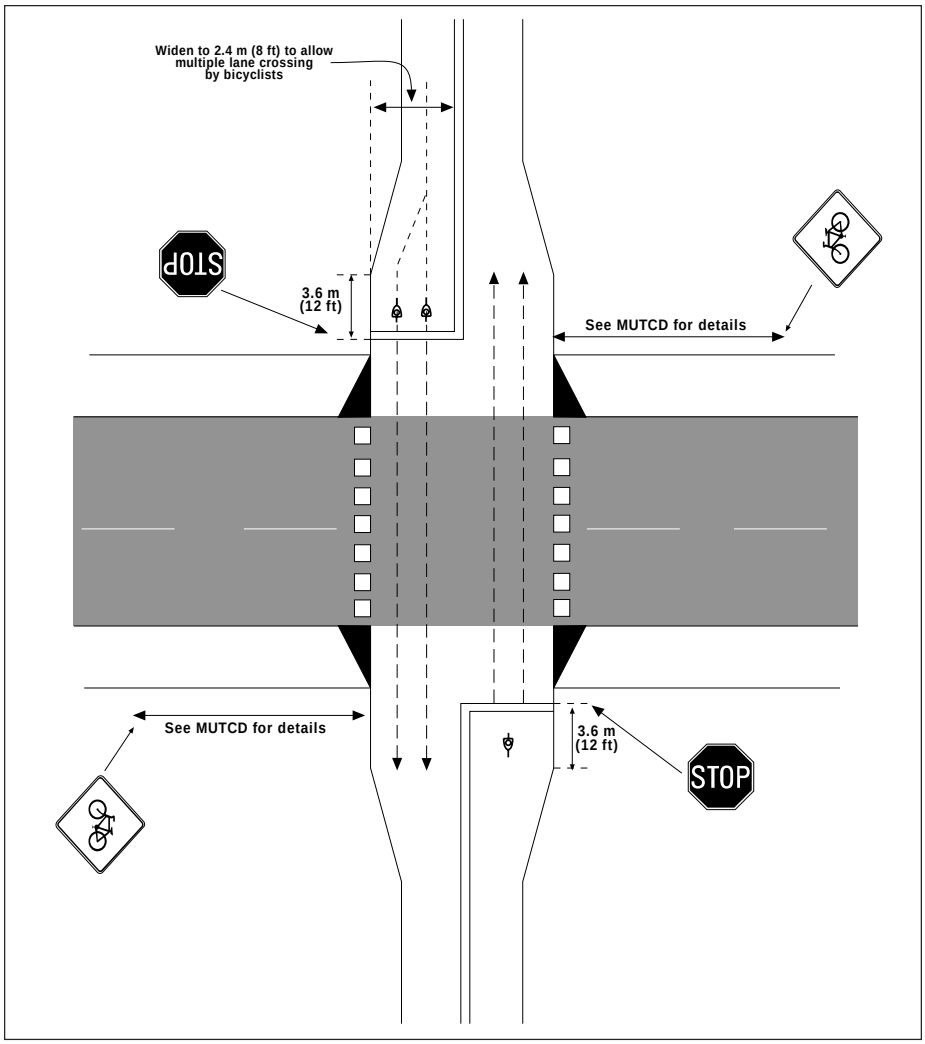
*Intersections with roadways are important considerations in bicycle path design. If alternate locations for a bicycle path are available, the one with the most favorable intersection conditions should be selected. For crossings of freeways and other high-speed, high-volume arterials, a grade separation structure may be the only possible or practical treatment. Unless bicycles are prohibited from the crossing highway, providing for turning movements must be considered.*

*When intersections occur at grade, a major consideration is the establishment of right of way. The type of traffic control to be used (signal, stop sign, yield sign, etc.), and location, should be provided in accordance with the MUTCD (see Figure 40).*

*Sign type, size and location should also be in accordance with the MUTCD. Care should be taken to ensure that bicycle path signs are located so that motorists are not confused by them and that roadway signs are placed so that bicyclists are not confused by them.*

Other means of alerting bicyclists of a highway crossing include grade changes or changing surfaces at the approach (see Figure 41). Devices installed to prohibit motorists from entering the bike path can also assist with alerting bicyclists to crossings.

**Figure 40**
Intersection of Bicycle Path and 2 Lane Roadway




Source: Adapted from Technical Handbook of Bikeway Design, Velo, Quebec, 1992

*It is preferable that the crossing of a bicycle path and a highway be at a location away from the influence of intersections with other highways. Controlling vehicle movements at such intersections is more easily and safely accomplished through the application of standard traffic control devices and normal Rules of the Road. Where physical constraints prohibit such independent intersections, the crossings may be at or adjacent to the pedestrian crossing. Right of way should be assigned and sight distance should be provided so as to minimize the potential for conflict resulting from unconventional turning movements. At crossings of high volume multi-lane arterial highways where signals are not warranted, consideration should be given to providing a median refuge area for bicyclists.*

*When bicycle paths terminate at existing roads, it is important to integrate the path into the existing system of roadways. Care should be taken to properly design the terminals to transition the traffic into a safe merging or diverging situation. Appropriate signing is necessary to warn and direct both bicyclists and motorists regarding these transition areas.*

*Bicycle path intersections and approaches should be on relatively flat grades. Stopping sight distances at intersections should be checked and ad-*

*equate warning should be given to permit bicyclists to stop before reaching the intersection, especially on downgrades.*

*Ramps for curb cuts at intersections should be the same width as the bicycle paths. Curb cuts and ramps should provide a smooth transition between the bicycle paths and the roadway.*

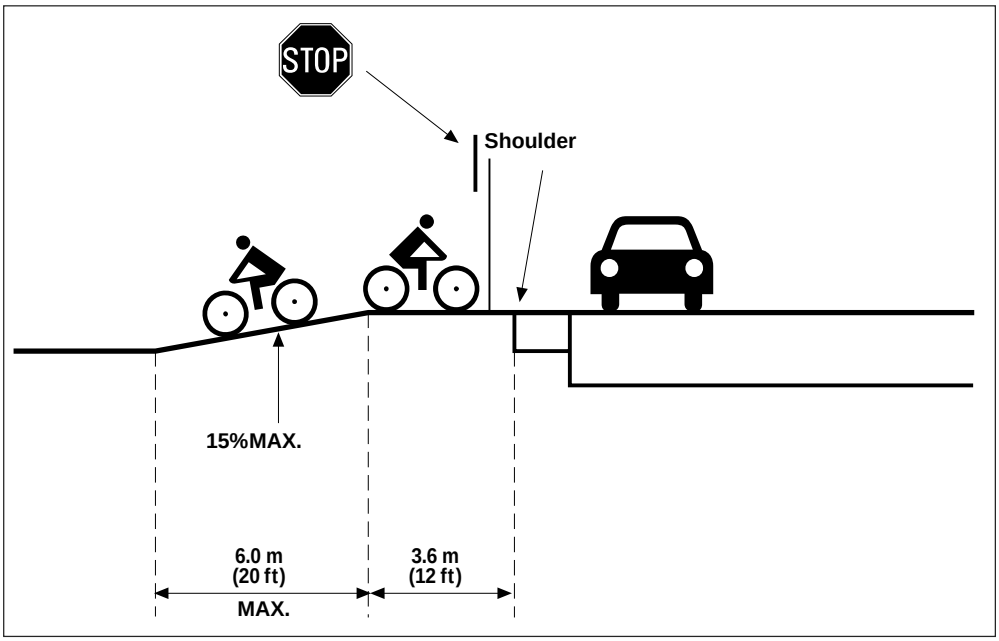



**Figure 41**
Highway Crossing Marked by Grade Change

Source: Adapted from Technical Handbook of Bikeway Design, Velo, Quebec, 1992

## i. Signing and Marking

*Adequate signing and marking are essential on bicycle paths, especially to alert bicyclists to potential conflicts and to convey regulatory messages to both bicyclists and motorists at highway intersections. In addition, guide signing, such as to indicate directions, destinations, distances, route numbers and names of crossing streets, should be used in the same manner as they are used on highways. In general, uniform application of traffic control devices, as described in the MUTCD, will tend to encourage proper bicyclist behavior.*

*A designer should consider a 4 inch (10 cm) wide yellow centerline stripe to separate opposite directions of travel. This is particularly beneficial in the following circumstances: (1) for heavy volumes of bicycles; (2) on curves with restricted sight distances; and (3) on unlighted paths where nighttime riding is expected. Edge lines can also be very beneficial where nighttime bicycle traffic is expected.*

*General guidance on signing and marking is provided in the MUTCD. Care should be exercised in the choice of pavement marking materials. Some marking materials are slippery when wet and should be avoided in favor of more skid resistant materials.*

## j. Pavement Structure

Under most circumstances, a 50 millimeter (2 inch) thick asphaltic concrete top course placed on a 150 millimeter (6 inch) thick select granular subbase is suitable for a bikeway pavement structure as shown in Figure 42. Where unsatisfactory soils

Table 4

| Trail Surface Synopsis | | |
|---|---|---|
| **SURFACE MATERIAL** | **ADVANTAGES** | **DISADVANTAGES** |
| Soil cement | Uses natural materials, more durable than native soils, smoother surface, low cost. | Surface wears unevenly, not a stable all-weather surface, erodes, difficult to achieve correct mix. |
| Granular stone | Soft but firm surface, natural material, moderate cost, smooth surface, accommodates multiple use. | Surface can rut or erode with heavy rainfall, regular maintenance to keep consistent surface, replenishing stones may be a long-term expense, not for steep slopes. |
| Asphalt | Hard surface, supports most types of use, all weather, does not erode, accommodates most users simultaneously, low maintenance. | High installation cost, costly to repair, not a natural surface, freeze/thaw can crack surface, heavy construction vehicles need access. |
| Concrete | Hardest surface, easy to form to site conditions, supports multiple use, lowest maintenance, resists freeze/thaw, best cold weather surface. | High installation cost, costly to repair, not a natural looking surface, construction vehicles will need access to the trail corridor. |
| Native soil | Natural material, lowest cost, low maintenance, can be altered for future improvements, easiest for volunteers to build and maintain. | Dusty, ruts when wet, not an all-weather surface, can be uneven and bumpy, limited use, not accessible. |
| Wood chips | Soft, spongy surface - good for walking, moderate cost, natural material. | Decomposes under high temperature and moisture, requires constant replenishment, not typically accessible, limited availability. |
| Recycled materials | Good use of recyclable materials, surface can vary depending on materials. | High purchase and installation cost, life expectancy unknown. |



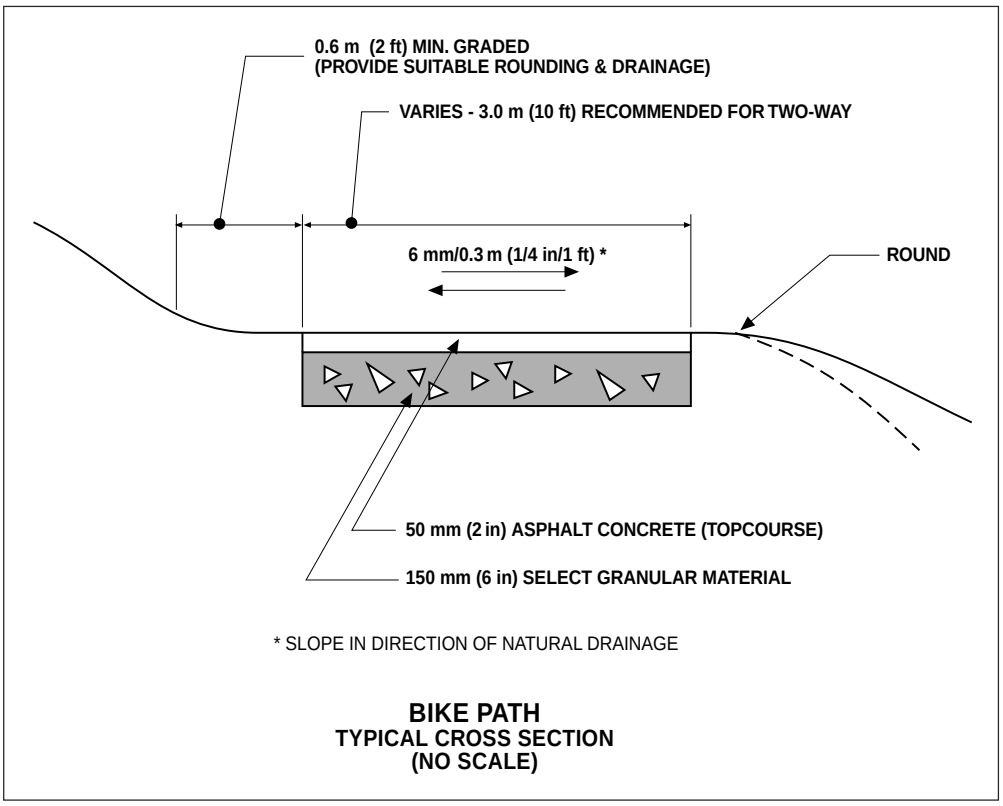



**Figure 42**
Bikeway Pavement Structure

Source: Adapted from Highway Design Manual, New York State Department of Transportation

can be anticipated, a soil investigation should be conducted to determine the load carrying capabilities of the native soil and the need for any special provisions.

*In addition, there are several principles that should be followed to recognize some basic differences between the operating characteristics of bicycles and those of motor vehicles. While loads on bicycle paths will be substantially less than highway loads, paths should be designed to sustain without damage wheel loads of occasional emergency, patrol, maintenance, and other motor vehicles that are expected to use or cross the path.*

Conditions where additional pavement structure may be necessary are flood plains, and locations where shallow root systems will upheave a thin pavement section.

*Special consideration should be given to the location of motor vehicle wheel loads on the path. When motor vehicles are driven on bicycle paths, their wheels will usually be at or very near the edges of the path. Since this can cause edge damage that, in turn, will result in the lowering of the effective operating width of the path, adequate edge support should be provided. Edge support can be either in the form of stabilized shoulders or in constructing additional pavement width. Constructing a typical pavement width of 12 feet, where right of way and other conditions permit, eliminates the edge raveling problem and offers two other additional advantages over shoulder construction. First, it allows additional maneuvering space for bicyclists and second, the additional construction cost can be less than for constructing shoulders because the separate construction operation is eliminated.*

*It is important to construct and maintain a smooth riding surface on bicycle paths.* Bicycle path pavements should be machine laid; root barriers should be used where necessary to prevent vegetation from erupting through the pavement; *and, on portland cement concrete pavements, transverse joints, necessary to control cracking, should be sawcut to provide a smooth ride. On the other hand, skid resistance*

*qualities should not be sacrificed for the sake of smoothness. Broom finish or burlap drag concrete surfaces are preferred over trowel finishes, for example.*

*In areas where climates are extreme, the effects of freeze-thaw cycles should be anticipated in the design phase. At unpaved highway or driveway crossings of bicycle paths, the highway or driveway should be paved a minimum of 10 feet on each side of the crossing to reduce the amount of gravel being scattered along the path by motor vehicles. The pavement structure at the crossing should be adequate to sustain the expected loading at that location.*

When a bike path is part of a multi-use trail facility, alternative pavement structure may be appropriate. Particularly because of today's wide profile tires found on hybrid and all-terrain bikes, more bicycles are able to use this surface.

## k. Structures

*An overpass, underpass, small bridge, drainage facility or facility on a highway bridge may be necessary to provide continuity to a bicycle path. An example of a small bridge structure used to provide bicycle continuity is shown in Figure 43. A bicycle facility on a highway structure is shown in Figure 44.*

**Figure 43**

Bridge Structure to Provide Bicycle Path Continuity



Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991

*On new structures, the minimum clear width should be the same as the approach paved bicycle path; and the desirable clear width should include the minimum 2 foot (0.6 m) wide clear areas. Carrying the clear areas across the structures has two advantages. First, it provides a minimum horizontal shy distance from the railing or barrier, and second, it provides needed maneuvering space to avoid conflicts with pedestrians and other bicyclists who are stopped on the bridge. Access by emergency, patrol, and maintenance vehicles should be considered in establishing the design clearances of structures on bicycle paths. Similarly, vertical clearance may be dictated by occasional motor vehicles using the path. Where practical, a vertical clearance of 10' (3 m) is desirable for adequate vertical shy distance.*

*Railings, fences, or barriers on both sides of a bicycle path structure should be a minimum of 4.5' (1.4 m) high. Smooth rub rails should be attached to the barriers at handlebar height of 3.5' (1.1 m).*

*Bridges designed exclusively for bicycle traffic may be designed for pedestrian live loadings. On all bridge decks, special care should be taken to ensure that bicycle safe expansion joints are used.*

*Where it is necessary to retrofit a bicycle path onto an existing highway bridge, several alternatives should be considered in light of what the geometrics of the bridge will allow.*

*One option is to carry the bicycle path across the bridge on one side. This should be done where (1) the bridge facility will connect to a bicycle path at both ends; (2) sufficient width exists on that side of the bridge or can be obtained by widening or restriping lanes; and (3) provisions are made to physically separate bicycle traffic from motor vehicle traffic as discussed above.*

*A second option is to provide either wide curb lanes or bicycle lanes over the bridge. This may be advisable where (1) the bicycle path transitions into bicycle lanes at one end of the bridge; and (2) sufficient width exists or can be obtained by widening or restriping.*

*A third option is to use existing sidewalks as one-way or two-way facilities. This may be advisable where (1) conflicts between bicyclists and pedestrians will not exceed tolerable limits; and (2) the existing sidewalks are adequately wide. Under certain conditions, the bicyclist may be required to dismount and cross the structure as a pedestrian.*

*Because of the large number of variables involved in retrofitting bicycle facilities onto existing bridges, compromises in desirable design criteria are often inevitable. Therefore, the width to be provided is best determined by the designer, on a case-by-case basis, after thoroughly considering all the variables.*



**Figure 44**
Bicycle Facility on a Highway Structure

Source: Guide for the Development of Bicycle Facilities, AASHTO, 1991

## I. Drainage

*The recommended minimum pavement cross slope of 2 percent adequately provides for drainage. Sloping in one direction instead of crowning is preferred and usually simplifies the drainage and surface construction. A smooth surface is essential to prevent water ponding and ice formation.*

*Where a bicycle path is constructed on the side of a hill, a ditch of suitable dimensions should be placed on the uphill side to intercept the hillside drainage. Such ditches should be designed in such a way that no undue obstacles are presented to bicyclists. Where necessary, catch basins with drains should be provided to carry the intercepted water under the path. Drainage grates and manhole covers should be located outside of the travel path of bicyclists. To assist in draining the area adjacent to the bicycle path, the design should include considerations for preserving the natural ground cover. Seeding, mulching, and sodding of adjacent slopes, swales, and other erodible areas should be included in the design plans.*

## m. Lighting

*Fixed-source lighting reduces conflicts along the paths and at intersections. In addition, lighting allows the bicyclist to see the bicycle path direction, surface conditions, and obstacles. Lighting for bicycle paths is important and should be considered where riding at night is expected, such as bicycle paths serving college students or commuters, and at highway intersections. Lighting should also be considered through underpasses or tunnels, and when nighttime security could be a problem. Depending on the location, average maintained horizontal illumination levels of 0.5 foot candle (5 lux) to 2 foot-candles (22 lux) should be considered. Light standards (poles) should meet the recommended horizontal and vertical clearances. Luminaries and standards should be at a scale appropriate for a pedestrian or bicycle path.*

## n. Barriers to Motor Vehicle Traffic

*Bicycle paths often need some type of physical barrier at highway intersections and pedestrian-load bridges to prevent unauthorized motor vehicles from using the facilities. Provisions can be made for a lockable, removable post to permit entrance by authorized vehicles. The post should be permanently reflectorized for nighttime visibility and painted a bright color for improved daytime visibility. When more than one post is used, a 5-foot (1.5 m) spacing is desirable. Wider spacing can allow entry to motor vehicles, while narrower spacing might prevent entry by adult tricycles and bicycles with trailers.*

*An alternate method of restricting entry of motor vehicles is to split the entry way into two 5 feet (1.5 m) sections separated by low landscaping. Emergency vehicles can still enter if necessary by straddling the landscape. The higher maintenance costs associates with landscaping should be acknowledged, however, before this alternative method is selected.*



# Chapter 5

## *Supplemental Facilities*

Supplemental and ancillary support facilities for bicycles are important improvements for promoting increased bicycling transportation. Improvements such as bicycle parking at trip origins and destinations and rest areas along bicycle paths increase access and convenience to various locations.

Supplemental facilities can be developed in conjunction with bicycle compatible roadway improvements at key destinations such as transit centers, park and ride lots, shopping centers, downtown commercial areas, employment centers, schools and other public places. The 1991 AASHTO Guide for the Development of Bicycle Facilities recommends:

- promotion of bicycle parking facilities,
- provisions for interfacing bicycle travel with transit (bike-on-bus/rail),
- provisions for rest areas along bicycle paths, and
- development of bicycle maps.

## 1. Bicycle Parking and Storage Facilities

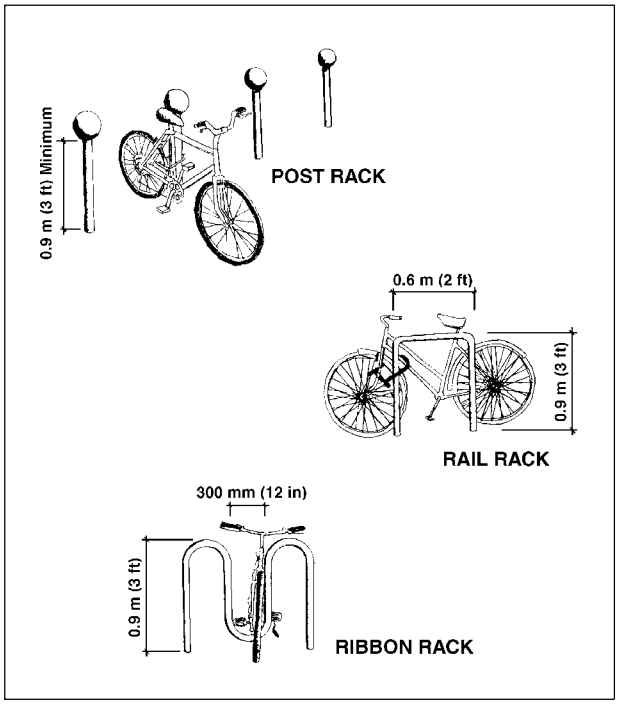
Use of a bicycle for personal transportation requires that the rider be able to park his or her bike. All facilities which provide parking to the public should provide parking for bicycles at the rate of one bicycle parking space per 10 automobile parking spaces for the first 100 parking stalls and one bicycle space for every 20 beyond that.

Guidelines for selecting and siting bicycle parking facilities may vary based on consideration of equipment types, location, and facility program administration and maintenance. Factors to be considered in all instances include the facility's compatibility with the type of site, security, ease of use, durability (weather and vandalism), accessibility and attractiveness.

### a. Equipment Types

Bicycle racks and bicycle lockers are the basic equipment types. Different designs and manufacturers are readily available. Bicycle racks generally meet short-term parking needs. They are convenient for brief stops at shopping centers, libraries, post offices and other locations and are simple to use. Typical rack types are shown in Figure 45.

Bicycle lockers are suited for locations that must accommodate long-term bicycle storage needs such as at transit centers, park and ride lots, schools, employment centers and multifamily residential developments.



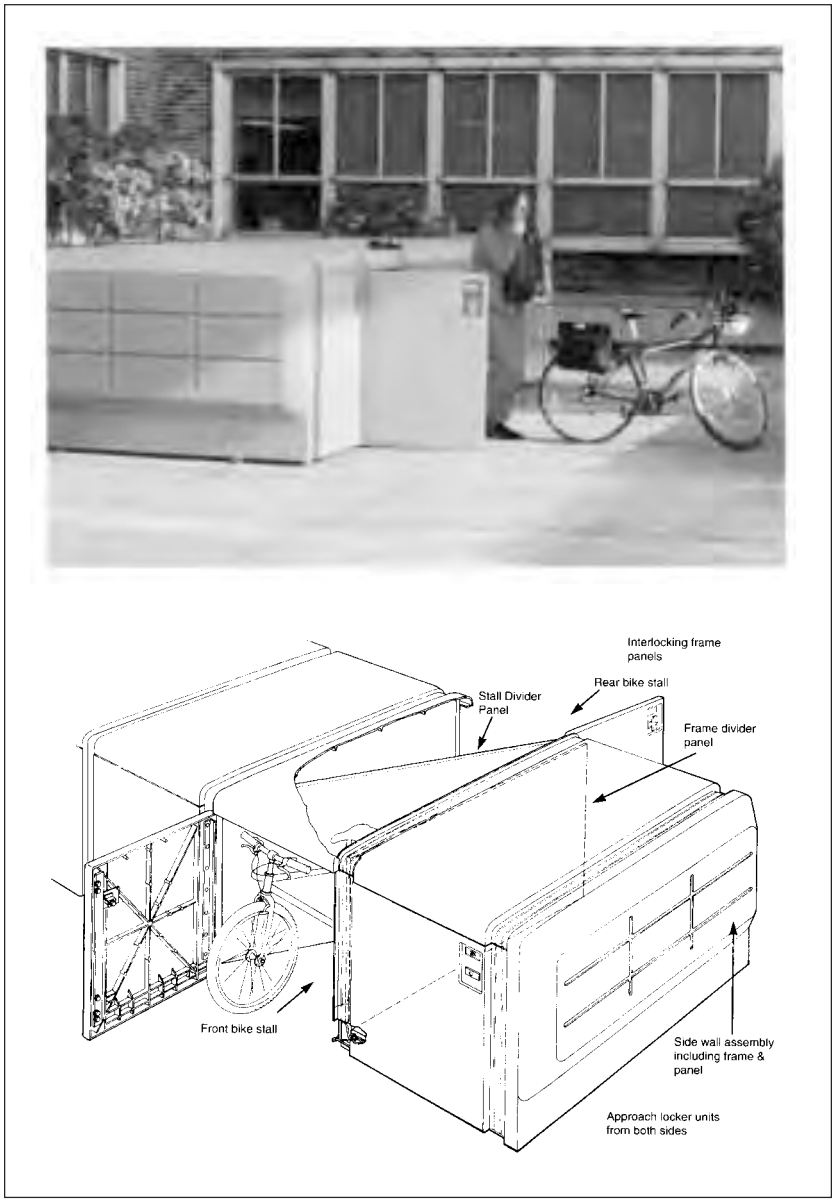

Source: Trails for the Twenty-First Century, 1993

**Figure 45**
Bicycle Rack Types

They are typically used by commuters and offer secure storage space and protection for accessories. Lockers usually require a rental or lease program and/or key distribution system and must be monitored and maintained. Locker designs include options for double-sided access with interior partitions and can be purchased in different type groupings and numbers of units (see Figure 46).

In some cases, a combination of both lockers for long-term storage and racks for quick, easy access should be provided at the same location to meet the needs of different types of users.

**Figure 46**
Bicycle Lockers




Source: Cycle Safe, Inc.

## b. Location and Siting of Facilities

Short-term parking facilities, generally bicycle racks, should be highly visible and easily accessible and should be provided at entrances to destinations like libraries, downtown commercial areas, post offices, parks and other public spaces. Wherever possible, bicycle racks should be located under a shelter.

Long-term facilities such as bicycle lockers should be located in secure, easily monitored locations. At transit centers lockers should be placed near boarding locations and be separated from motor vehicle parking areas. Lockers at employment centers should be located near building entrances. In all cases, access to bicycle lockers should be convenient but must not interfere with pedestrian flow or traffic.

Siting of parking facilities should be coordinated with bicycle compatible routes or bikeways that lead to the location. Retrofit of existing motor vehicle parking lots or garages may also offer opportunities to create safe and convenient locations for bicycle storage facilities. Other design elements to consider are the installation of signs that instruct users how to use and operate the parking facility. Appropriate signage directing bicyclists to parking areas, curb ramps, lighting and overhead canopies should be considered in the design of the bicycle parking facility.

### c. Facility Operation and Maintenance

Programs for operation and maintenance of bicycle parking facilities vary, depending on equipment types and locations. Bicycle racks generally require minimal maintenance and are easily operated by users. No advance rental or lease system is required. Bicycle lockers are usually leased or rented for longer time periods. A management program for leasing and key distribution must be established. For example, often transit agencies contract out to local jurisdictions or businesses at the station area to administer the locker operations. The transit agency generally provides, installs and services or maintains the units. There are also other variations in administrative programs which offer different degrees of involvement by either the transit agency or local jurisdictions.

Bicycle parking facility programs should also consider provisions for showers and lockers at employment destinations to encourage more commuters.

## 2. Bicycle-on-Transit

Provisions for bicycles on buses or rail can include racks on buses or on-board areas on either buses or trains.

Guidelines for considering such programs and facilities depend on service area characteristics and equipment types. In urban areas, high transit ridership and limited space on trains often limits the carrying capacity for bicycles. However, there are locations with service area characteristics that are favorable for such programs. These include transit systems with off-peak, reverse commuters where adequate space for bicycles is available; destinations and routes associated with recreation areas, shore areas, hotels and tourism where demand is higher; colleges and university settings; and air quality attainment areas which often can qualify for funding for such projects.

## 3. Shelters/Rest Areas/Comfort Stations

Support facilities on bicycle paths or multi-purpose trails are improvements that promote bicycle use. On long, uninterrupted bicycle paths amenities should include minor and major comfort stops. Minor facilities may include shade shelters or informational maps. Major facilities should provide restrooms, water or other conveniences.

Shelters at minor facilities can include roofed structures with protected seats. They should be set back from bicycle path traffic, located away from obstructions that can obscure visibility and

**Figure 47**
Typical Shelter

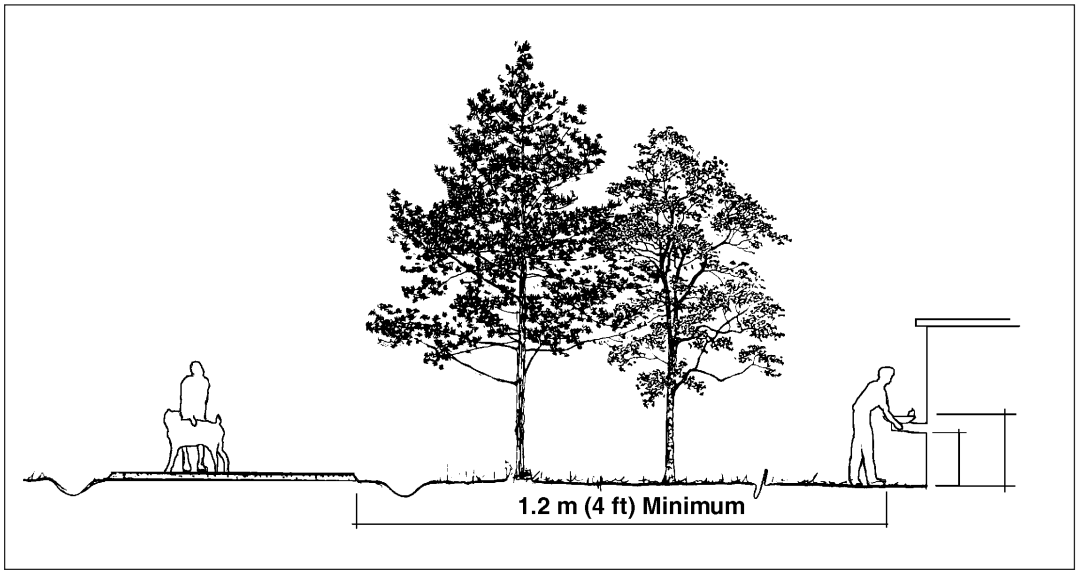


Source: Trails for the Twenty-First Century, 1993

cause safety concerns, and positioned to ensure protection from prevailing winds (see Figure 47).

Facilities can be located at access points of the bicycle path that help link the path to communities and surrounding land uses and destinations such as transit centers, parks, and parking areas. Full-service shelters and rest areas should meet local design and ADA standards relating to water and sewage utility connections and restroom accessibility. Water services can include drinking fountains designed with spigots to fill water bottles (see Figure 48).

**Figure 48**
Rest Area Facilities




Source: Trails for the Twenty-First Century, 1993

# Chapter 6

## *Operations and Maintenance*

## 1. Operations and Maintenance

The condition of the roadway surface is an important element in both bicycle safety and level of service. In general, due to their high pressure, narrow profile tires, lack of suspension, and need to maintain balance, bicycles require a higher standard of road maintenance than motor vehicles. Potholes, bumps, seams, and debris — which can be of minor annoyance or no consequence whatever to motor vehicles —are potential hazards to bicycle traffic as these obstacles can cause loss of control of the bicycle, or cause the bicyclist to risk conflict with motor vehicle traffic by swerving to avoid the obstacle.

For the above-mentioned reason, the roadway surface on which bicycles normally operate should be maintained free of potholes, bumps, corrugations, seams, unravelled pavement edges, gravel, glass fragments, and any other debris or obstacles that mar a smooth riding surface. The area involved includes the right portion of the outside travel lane plus any additional space. Typically, this portion of the roadway gets less attention as maintenance efforts are concentrated on the portion of the roadway used by motor vehicles.

Maintenance repairs in this area should be carried out with the needs of the bicycle in mind; i.e., they should be done in a workmanlike fashion with particular attention to providing a smooth pavement surface.

The following actions are recommended by the 1991 AASHTO Guide for the Development of Bicycle Facilities as requirements in the operation and maintenance of bicycle facilities.

- Create a smooth surface free of potholes and debris.
- Eliminate dropoffs from pavement edges.
- Inspect pavement conditions - do not allow unravelled pavement edges.
- Inspect signs - making certain that signs do not intrude into bicycle travel space.
- Control growth of trees, shrubs, and vegetation.
- Supply trash and recycling receptacles and be sure they are regularly emptied.
- Mow areas in the vicinity of bike paths.
- Plow snow - do not use deicing agents.
- Enforce and prevent unauthorized motor vehicles from using the path.
- Maintain bicycle and shoulder lane stripings and markings.
- Establish an agency responsible for the control, maintenance, and policing of bicycle facilities.

Maintenance of roadways to accommodate bicycle traffic does not usually require changes in the types of maintenance activities that are carried out; rather it requires changes in the focus of maintenance practices. Where possible, maintenance, repair and litter removal activities should be shifted to include, not to ignore, roadway margins and shoulders.



The use of a shared lane will limit the amount of grit and debris that collects in the bicycle operating (lane sharing) area, as motor vehicle traffic will "sweep" this area clean. When shoulders are assumed to be the appropriate area for bicycle operation, it is essential to regularly sweep the shoulder area. All shoulders should be swept at least monthly. On highways where gravel or other debris can be anticipated to accumulate, more frequent sweeping will be required. This will be especially important on highways carrying a large number of gravel, construction or trash hauling vehicles.



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# Excerpt From the NJDOT Guide to Metrication

## CONVERSION FACTORS

| GENERAL | | | | |
|---|---|---|---|---|
| **Quantity** | **From English Units** | **To Metric Units** | **Metric Symbol** | **Multiply By** |
| Length | inch | millimeter | mm | 25.4 |
| | foot | millimeter | mm | 304.8 |
| | foot | meter | m | 0.304 8 |
| | foot (U.S. Survey) * | meter | m | 0.304 800 6 |
| | yard | meter | m | 0.914 4 |
| | mile | kilometer | km | 1.609 344 |
| Area | square inch | square millimeter | $mm^2$ | 645.16 |
| | square foot | square meter | $m^2$ | 0.092 903 |
| | square yard | square meter | $m^2$ | 0.836 127 4 |
| | acre | square meter | $m^2$ | 4 046.856 |
| | acre | hectare | ha | 0.404 685 6 |
| | square mile | square kilometer | $km^2$ | 2.590 000 |
| Volume | fluid ounce | milliliter | ml | 29.573 53 |
| | quart | liter | L | 0.946 352 9 |
| | gallon | liter | L | 3.785 412 |
| | gallon | cubic meter | $m^3$ | 0.003 785 412 |
| | cubic inch | cubic millimeter | $mm^3$ | 16 387.064 |
| | cubic foot | cubic meter | $m^3$ | 0.028 316 85 |
| | cubic yard | cubic meter | $m^3$ | 0.764 555 |
| | acre-foot | cubic meter | $m^3$ | 1 233.482 |
| Temperature | degree Fahrenheit | degree Celcius | °C | 5/9 (°F-32) |
| Velocity | feet per second | meters per second | m/s | 0.304 8 |
| | miles per hour | kilometers per hour | km/h | 1.609 344 |
| Rate of application | gallon per square foot | liter per square meter | $L/m^2$ | 41.132 19 |
| | gallon per square yard | liter per square meter | $L/m^2$ | 4.527 317 |
| | gallon per acre | liter per hectare | L/ha | 9.353 925 |
| | gallon per acre | cubic meter per hectare | $m^3/ha$ | 0.009 353 925 |
| | 1 000 gallons per acre | cubic meter per hectare | $m^3/ha$ | 9.353 925 |
| Slope | foot per foot | meter per meter | m/m | 1.0 |
| | foot per mile | meter per meter | m/m | 0.000 189 4 |
| Discharge | cubic foot per second | cubic meter per second | $m^3/s$ | 0.028 316 85 |

- Underlined factors in the table denote exact numbers.
- Use the number of digits needed for the required accuracy.
- When converting from metric units to English divide by the factor shown (multiply by the inverse).
- Conversion values based on 1 inch = 25.4 millimeters unless otherwise shown.
- * U.S. Survey Foot: In 1893, the U.S. foot was legally defined as 1200/3937 meters. In 1959, a refinement was made to bring the foot into agreement with the definition used in other countries, i.e., 0.304 8 meters. At the same time, it was decided that any data in feet derived from and published as a result of geodetic surveys within the U.S. would remain with the old standard, which is named the U.S. Survey foot. The new length is shorter by exactly two parts in a million.



## CONVERSION FACTORS

| CIVIL AND STRUCTURAL ENGINEERING | | | | |
|---|---|---|---|---|
| **Quantity** | **From English Units** | **To Metric Units** | **Metric Symbol** | **Multiply By** |
| Mass | ounce<br>pound<br>ton (2,000 lb) | kilogram<br>kilogram<br>megagram | kg<br>kg<br>Mg | 0.028 349 52<br>0.453 592<br>0.907 184 |
| Mass per unit length | pound per inch<br>pound per foot | kilogram per meter<br>kilogram per meter | kg/m<br>kg/m | 17.857 97<br>1.488 16 |
| Mass per unit area | pound per square foot<br>ton (2,000 lb) per square foot | kilogram per square meter<br>megagram per square meter | $kg/m^2$<br>$Mg/m^2$ | 4.882 43<br>9.764 856 |
| Mass density | pound per cubic foot<br>pound per cubic yard<br>ton (2,000 lb) per cubic yard | kilogram per cubic meter<br>kilogram per cubic meter<br>megragram per cubic meter | $kg/m^3$<br>$kg/m^3$<br>$Mg/m^3$ | 16.018 46<br>0.593 276<br>1.186 554 |
| Force | pound<br>kip<br>ton (2,000 lb) | newton<br>kilonewton<br>kilonewton | N<br>kN<br>kN | 4.448 222<br>4.448 222<br>8.896 444 |
| Force per unit length | pound per inch<br>pound per foot<br>kip per foot<br>ton (2,000 lb) per foot | newton per meter<br>newton per meter<br>kilonewton per meter<br>kilonewton per meter | N/m<br>N/m<br>kN/m<br>kN/m | 175.126 8<br>14.593 90<br>14.593 90<br>28.187 80 |
| Force per unit area, pressure, stress, modulus of elasticity | pound per square inch<br>kip per square inch<br>kips per square inch<br>pound per square foot<br>kip per square foot | kilopascal<br>megapascal<br>gigapascal<br>kilopascal<br>megapascal | kPa<br>MPa<br>GPa<br>kPa<br>MPa | 6.894 757<br>6.894 757<br>0.006 894 757<br>0.047 880 26<br>0.047 880 26 |
| Bending moment, torque, moment of force | pound inch<br>pound foot | newton meter<br>newton meter | N · m<br>N · m | 0.112 984 8<br>1.355 818 |
| Moment of mass | pound foot | kilogram meter | kg · m | 0.138 255 |
| Moment of inertia | inch to the fourth power | millimeter to the fourth power | $mm^4$ | 416 231. |
| Section modulus | inch cubed | millimeter cubed | $mm^3$ | 16 387.064 |

- Underlined factors in the table denote exact numbers.
- Use the number of digits needed for the required accuracy.
- When converting from metric units to English divide by the factor shown (multiply by the inverse).
- Conversion values based on 1 inch = 25.4 millimeters unless otherwise shown.



## CONVERSION FACTORS

| ELECTRICAL ENGINEERING | | | |
|---|---|---|---|
| **From English Units** | **To Metric Units** | **Metric Symbol** | **Multiply By** |
| abampere | ampere | A | 10. |
| abcoulomb | coulomb | C | 10. |
| abfarad | farad | F | $10^{9}$ |
| abhenry | henry | H | $10^{-9}$ |
| abmho | siemens | S | $10^{9}$ |
| abohm | ohm | Ω | $10^{-9}$ |
| abvolt | volt | V | $10^{-8}$ |
| ampere hour | coulomb | C | 3 600. |
| EMU of capacitance | farad | F | $10^{9}$ |
| EMU of current | ampere | A | 10. |
| EMU of electric potential | volt | V | $10^{-8}$ |
| EMU of inductance | henry | H | $10^{-9}$ |
| EMU of resistance | ohm | Ω | $10^{-9}$ |
| ESU of capacitance | farad | F | $1.112\ 650 \times 10^{-12}$ |
| ESU of current | ampere | A | $3.335\ 6 \times 10^{-10}$ |
| ESU of electric potential | volt | V | 299.79 |
| ESU of inductance | henry | H | $8.987\ 554 \times 10^{11}$ |
| ESU of resistance | ohm | Ω | $8.987\ 554 \times 10^{11}$ |
| faraday (based on carbon-12) | coulomb | C | 96 487.0 |
| faraday (chemical) | coulomb | C | 96 495.7 |
| faraday (physical) | coulomb | C | 96 521.9 |
| footcandle | lux | lx | 10.763 91 |
| footlambert | candela per square meter | $cd/m^2$ | 3.426 259 |
| gamma | tesla | T | $10^{-9}$ |
| gauss | tesla | T | $10^{-4}$ |
| gilbert | ampere | A | 0.795 774 7 |
| horsepower (electric) | watt | W | 746.0 |
| kilowatt hour | joule | J | 3 600 000. |
| lumen per square foot | lumen per square meter | $lm/m^2$ | 10.763 91 |
| maxwell | weber | Wb | $10^{-8}$ |
| mho | siemens | S | 1 |
| oersted | ampere per meter | A/m | 79.577 47 |
| ohm centimeter | ohm meter | Ω · m | 0.01 |
| ohm circular-mil per foot | ohm meter | Ω · m | $1.662\ 426 \times 10^{-9}$ |
| statampere | ampere | A | $3.335\ 640 \times 10^{-10}$ |
| statcoulomb | coulomb | C | $3.335\ 640 \times 10^{-10}$ |
| statfarad | farad | F | $1.112\ 650 \times 10^{-12}$ |
| stathenry | henry | H | $8.987\ 554 \times 10^{11}$ |
| statmho | siemens | S | $1.112\ 650 \times 10^{-12}$ |
| statohm | ohm | Ω | $8.987\ 554 \times 10^{11}$ |
| statvolt | volt | V | 299.792 5 |
| unit pole | weber | Wb | $1.256\ 637 \times 10^{-7}$ |

Underlined factors in the table denote exact numbers.
Use the number of digits needed for the required accuracy.
When converting from metric units to English divide by the factor shown (multiply by the inverse).
Conversion values based on 1 inch = 25.4 millimeters unless otherwise shown.



# Exhibit D

Using the models listed on plugincars, we've created an infographic that compares the range of 14 battery electric vehicles available this year in the US.

# BEV Range Comparison

## 2018 US Models

fleetcarma



### Smart Electrive Drive

**58 mi. / 93 km**

Electric Vehicle Coupe

$23,800



### FIAT 500e

**84 mi. / 135 km**

Electric Vehicle Coupe

$32,600



### Mercedes B-Class Electric Drive

**87 mi. / 140 km**

Electric Vehicle Sedan

$42,400



### Honda Clarity Electric

**89 mi. / 143 km**

Electric Vehicle Sedan

$36,620



### Kia Soul EV

**111 mi. / 179 km**

Electric Vehicle Coupe

$34,500

## BMW i3

**114 mi. / 184 km**

Electric Vehicle Sedan

$43,400



## Ford Focus Electric

**115 mi. / 185 km**

Electric Vehicle Sedan

$29,200



## Hyundai Ioniq Electric

**124 mi. / 200 km**

Electric Vehicle Sedan

$29,500



## Volkswagen e-Golf

**125 mi. / 201 km**

Electric Vehicle Sedan

$30,500



## Nissan LEAF

**151 mi. / 243 km**

Electric Vehicle Sedan

$29,900



## Tesla Model 3

**220 mi. / 354 km**

Electric Vehicle Sedan

$35,000



## Tesla Model X

**237 mi. / 381 km**

Electric Vehicle SUV

$85,000



## Chevrolet Bolt

**238 mi. / 383 km**

Electric Vehicle Sedan

$37,500

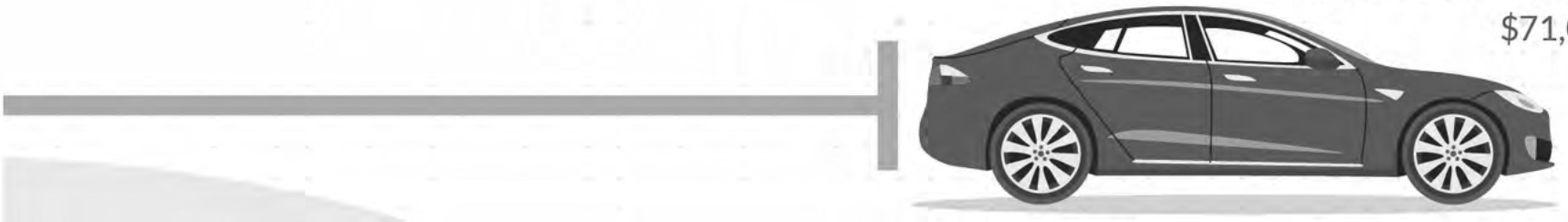


## Tesla Model S

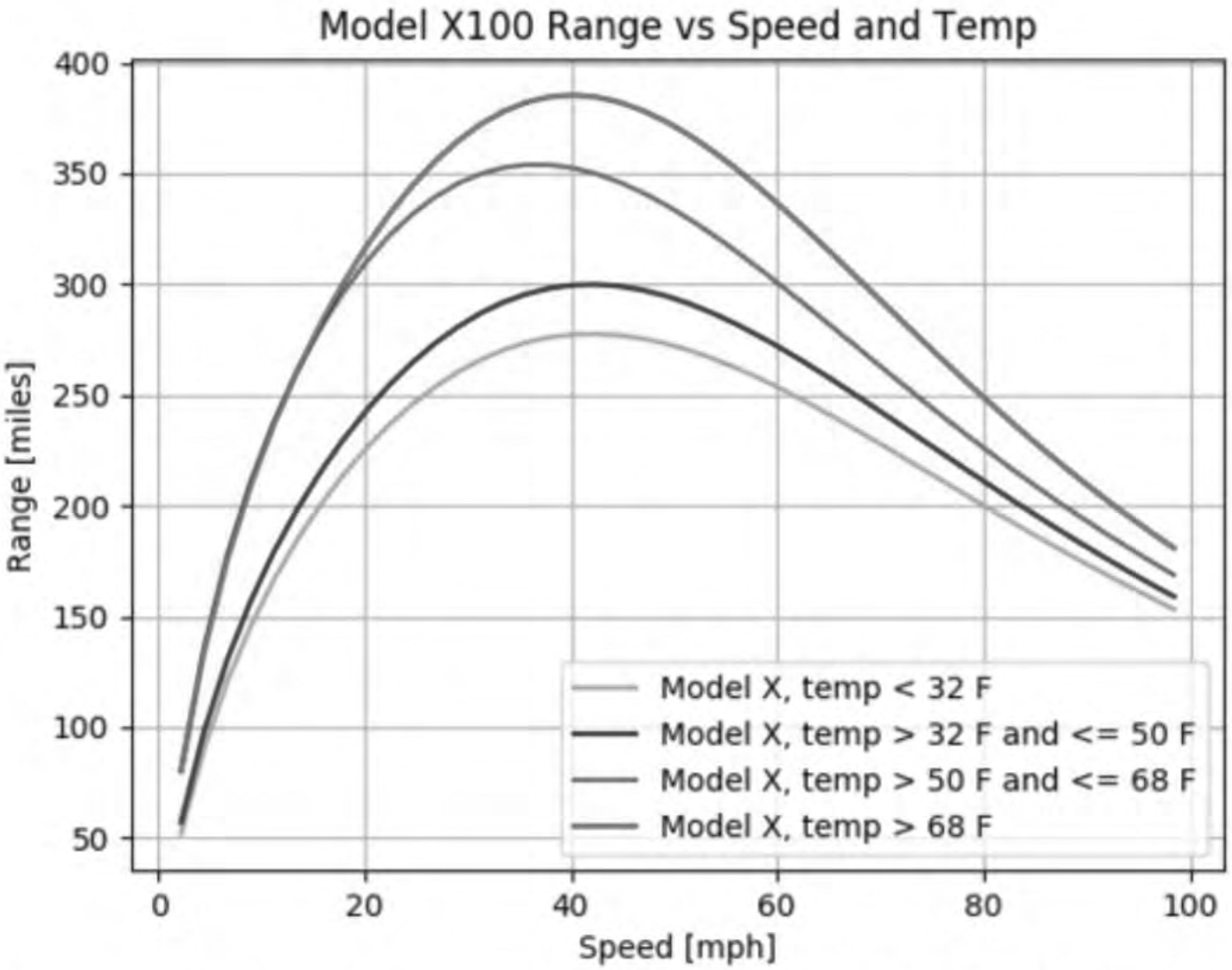
**315 mi. / 507 km**

Electric Vehicle Sedan

$71,000



# Exhibit E




*Consumed Power, Range, Speed, and Temperature data from 805 Teslas (Source: A **Better Routeplanner**)*

## 41: RESPONSE TO STUART FLASHMAN – LAW OFFICES OF STUART M. FLASHMAN

**41A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic.

**41B:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**41C:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**41D:** The comment questions the transportation study's use of 4:00 to 6:00 PM as the PM peak travel time. This comment appears to be based on using the popular app Waze to estimate the time of a hypothetical trip from Union Square in San Francisco to the vicinity of the proposed project. The actual methodology used in the traffic study is more quantitative.

The standard peak periods used in the industry for local roadways are 7:00 to 9:00 AM, 2:00 to 4:00 PM, and 4:00 to 6:00 PM. Those periods can and sometimes are changed based on surrounding land uses or unique conditions in the area being studied. Within each of those two-hour blocks, actual traffic counts are conducted, allowing the traffic engineer to determine the actual peak hour within the larger block. It is that "peak of the peak" that is actually used in the study, consistent with the goal of using the most conservative data.

**41E:** Comment 41E asserts that the RDEIR assumed, without explanation, that because each single-family home would have an electric vehicle charger, 50 percent of project vehicle miles travelled would be by electric vehicle. The comment further asserts that this assumption must be supported by evidence of current electric vehicle usage from current housing developments in the East Bay.

Comment 41E misstates the RDEIR's projection regarding electric vehicle use. The RDEIR does not assume "that 50% of vehicle miles driven will be via electric car." As stated in Table 4.1-7, footnote 4 of the RDEIR, "With the installation of electric vehicle charging stations in all single-family homes, *50% of single family homes are assumed to have an electric vehicle*. 50% of the annual miles driven *by these households* are assumed to be displaced with miles driven by electric vehicles." (Emphasis added.) Thus, the RDEIR projects that 25%, not 50%, of vehicle miles traveled would be by electric vehicle. Comment 41E overstates the RDEIR's assumptions regarding electric vehicle use by 100%.

In addition, the RDEIR's assumption regarding electric vehicle use is not unexplained. As stated on page 8 of Appendix C of the RDEIR:

"Percent of residential miles driven in electric vehicles assumes that 50% of all single family households with a charging station will have an electric vehicle and those households will use that vehicle for 50% of the annual miles they drive. A variety of factors will contribute to high rates of electric vehicle use for the project. First, there are already dozens of electric vehicle models available for purchase in California, and the costs of batteries continue to decrease. Second, there are numerous statewide and regional

initiatives to help fund electric vehicle and infrastructure purchases, and many policy goals aim to increase the number of EVs because vehicle electrification is critical to achieving California's long-term greenhouse gas reduction goals. Third, reliable access to EV chargers is an important factor contributing to buying electric vehicles. Therefore, the project's mitigation measure requiring that EV charging infrastructure be included in each single family home will encourage EV ownership and use. Given the market trends, policy goals, and infrastructure growth and incentives, this analysis estimates that half the residential units facilitated by the Project will have an EV by 2023. Further, even though many households with EVs also own a conventional gasoline or diesel car, they use the EV for a large percent of work commute, personal errands, and shopping, while the conventional vehicle is the primary vehicle for vacation travel. Therefore, the evidence indicates that households with an EV will have a very high usage rate for residential trips, even if the households also own a conventional vehicle."

The RDEIR's consultant for Air Quality, Greenhouse Gas and Health Risk Assessment, Ramboll, has provided a supplemental letter further explaining and documenting that penetration of electric vehicles continues to accelerate, particularly where home EV charging is provided, and that California EV adoption is accelerating at a faster rate than experts predicted as recently as five years ago (compare EMFAC 2014 to EMFAC 2017). A copy of this letter is included in Attachment D to the FREIR.

Finally, Comment 41E asserts that the RDEIR is required to "provide data on recent East Bay housing developments that have included electric car chargers as standard and show what percentage of cars in such development and what percentage of miles driven are by electric car. In choosing comparable developments, the location should be similar to Danville's in terms of proximity to major job centers." Substantial evidence supports the RDEIR's projection of 25% electric vehicle miles traveled and the methodology suggested by the comment is neither necessary nor feasible. The Town has no housing developments in which electric vehicle charging has been provided to all homes; the applicant's offer to provide these chargers is unique. Neither the Town nor Ramboll is aware of any existing East Bay housing development that currently provides 100% EV charging, and even if such developments exist, there is no mechanism for a municipality to monitor and report the driving habits of each household.

**David Crompton**

**From:** Allen Flickinger <flickmail@gmail.com>
**Sent:** Monday, October 15, 2018 12:36 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Preserve Project

Mr. Crompton:

As homeowners whose property adjoins the existing Magee ranch, we have the following concerns about the proposed Magee Preserve project:

1. The Town of Danville zoning map shows that there are only two remaining blocks of property zoned A-4. The Magee Preserve would eliminate the largest of these, leaving only one A-4 Agricultural Preserve District. We fear that this will markedly and adversely change the character of the town. Does the current council want to be known and remembered as the group that gave away the Town's crown jewel? A

2. It is not clear to us and to others how the undeveloped land in the Magee Preserve proposal would be precluded from future development. We would appreciate clarification from the Town on this matter.

We would be pleased to discuss either of these issues further.

Regards,

Allen and Kate Flickinger

2304 Tree Creek Place

## 42: RESPONSE TO ALLEN & KATE FLICKINGER

**42A:** Please refer to the Master Responses in Section 2.4.3 regarding Measure S and Open Space. Approximately 199 acres of the 410 acre site is currently zoned A-4; Agricultural Preserve District. The A-4 zoning is zoning given to lands that are a Williamson Act Contract. Under the Williamson Act, properties receive preferential property tax treatment and, in exchange, voluntarily agree to use their properties only for agricultural purposes while the property is under contract. The Williamson Act allows the property owner to opt out of the contract by providing a notice of non-renewal. A notice of non-renewal was submitted in 2000, and the property came out of Williamson Act Contract in 2010.

Once a property is no longer under Williamson Act Contract, the A-4; Agricultural Preserve District is no longer necessary or appropriate. While the zoning does not automatically revert to the A-2; General Agricultural District, the property owner has the right to pursue other zoning categories described as consistent within the General Plan.

The proposed P-1; Planning Unit Development District rezoning would allow for the clustering of all of the property's development potential to approximately 29 acres of the 410-acre site. As a result, the site's 381-acre balance would have no remaining development rights. This is the same development approach the Town has employed for similar projects since incorporation, and has resulted in the retention of permanent open space along hillsides and ridgelines such as through the Sycamore Valley area.

The approximately 381-acre portion of the project site that would not be developed would also be required to be further encumbered by a scenic easement, prohibiting the development of structures or significant grading, that would be dedicated to the Town of Danville. The open space area would be maintained by a GHAD that would be required to be formed as part of the project. In addition, conservation easements would be dedicated within the 381 acres for preservation of habitat, as would two miles of trails for the East Bay Regional Park District.

**David Crompton**

**From:** marshmugs@aol.com
**Sent:** Monday, October 15, 2018 3:50 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

October 15, 2018
Dear Mr Compton:
Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. The traffic is already almost impossible during key school and commute hours, and adding more to it without addressing an attempts to mitigate the problem for cardrivers and bike riders is unforgivable. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government. That is what Measure S promised. By circumventing Measure S, you are totally disregarding the clearly expressed wishes of your constituents, and you must know that. A
Your efforts to push this project forward without addressing the safety of bike riders and without any mitigation of the existing and additional car traffic problems is a clear dereliction of your duty. Please reconsider this project and schedule a vote of the public before you rezone this precious property.
Very sincerely,
Margaret Freeman36 Campo PelotaDiablo, California 94528925-837-4563

## 43: RESPONSE TO MARGARET FREEMAN

**43A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic, 2.4.2 regarding bicycle safety, and Section 2.4.3 regarding Measure S.

**David Crompton**

**From:** Todd Gary <tgary@thegarylawfirm.com>
**Sent:** Wednesday, September 26, 2018 12:09 PM
**To:** Randy Haberl; Robert Combs; Mark Graham; Archie Bowles; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik
**Cc:** David Crompton; Maryann Cella
**Subject:** Todd Gary's public comments on the Bicyclist Safety Analysis in the Magee Ranches draft revised EIR

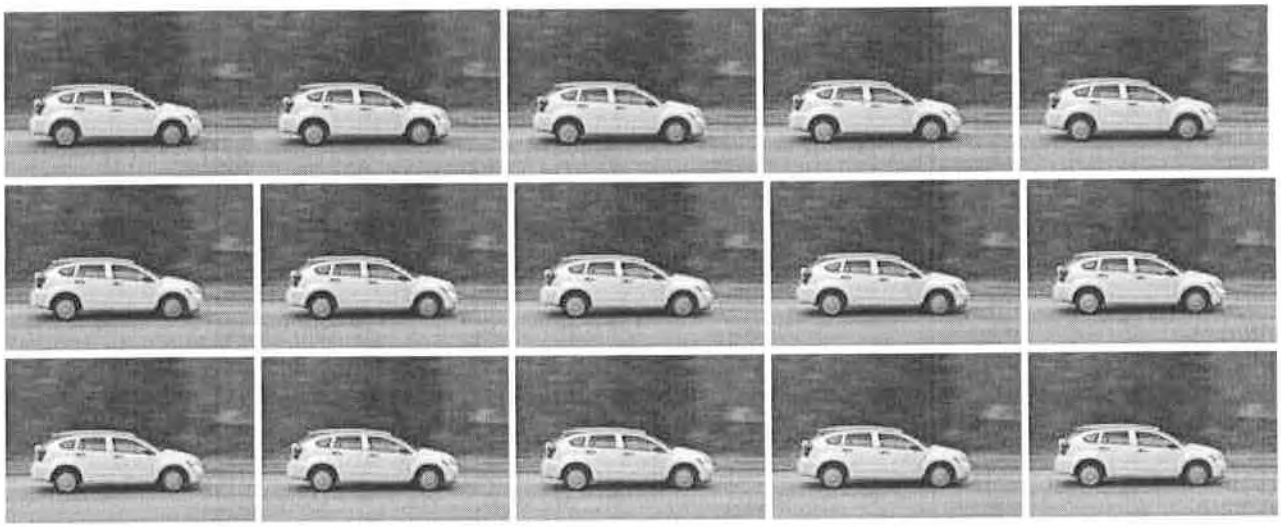
Dear Danville Planning Commission Chairperson Haberl and Commissioners,

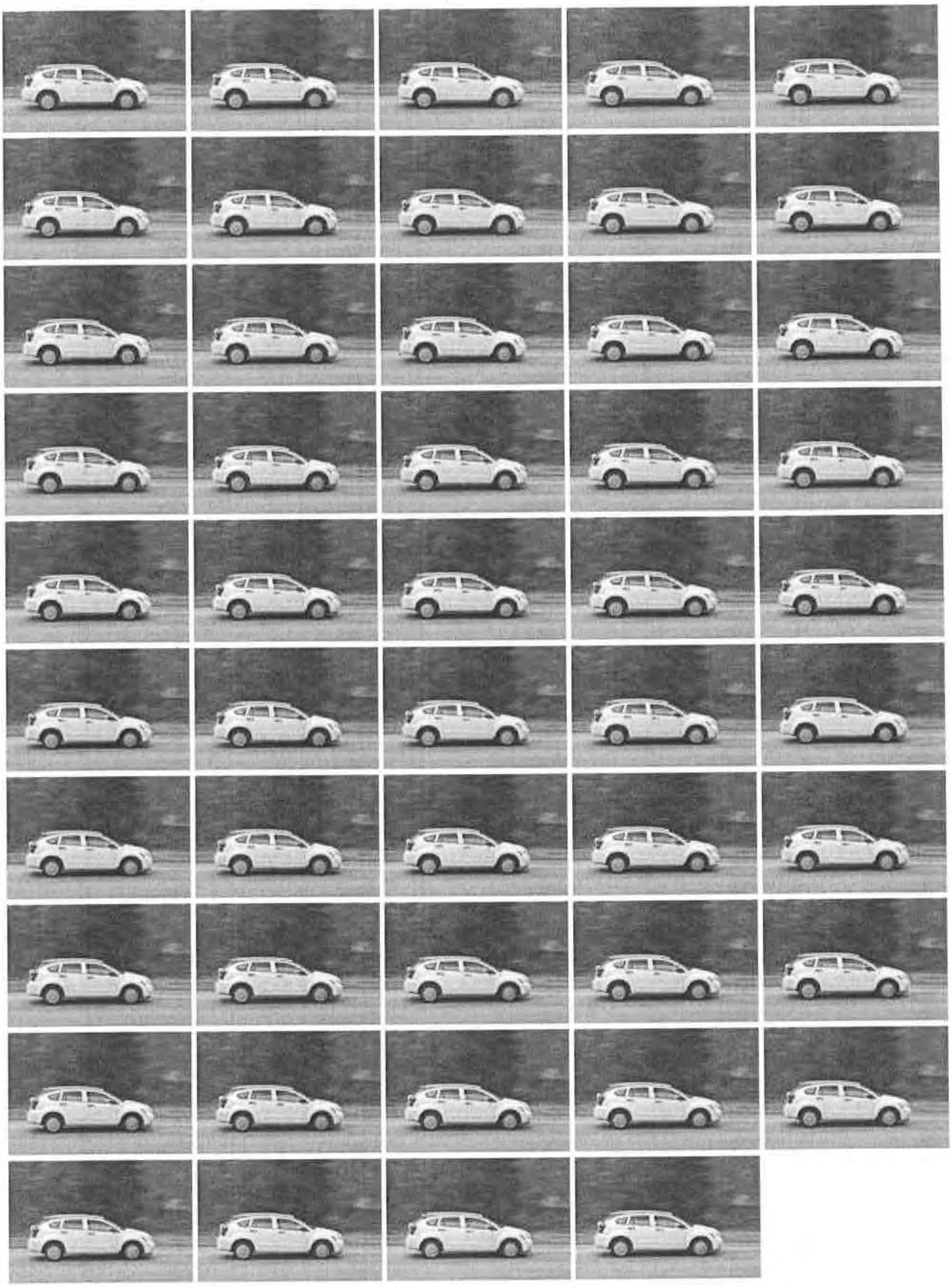
(Mr. Crompton, please include this email in as part of the public record in support of my comments on the RDEIR.)

In my public comments last evening regarding the bike safety impacts of the RDEIR, I used the term "nearly 1,000 car trips daily." Chairperson Haberl requested that I email you with the source of that figure. I had intended to use the Town staff's projections for purposes of my comments, although I believe (based on data I will submit separately) that this figure should be higher. Regardless, the Town' staff's projections are 841 additional car trip every day. (RDEIR, page 4.3-18). To the extent that 841 additional car trips on this road each and every day might not be considered "nearly 1,000" trips, I apologize. (I had misremembered the figure as over 900.) Instead of $28,000 car trips monthly, that is $25,200 additional car trips on that dangerous road every month.

To highlight the daily figure, the RDEIR indicates that this 841 additional daily car trip figure includes 98 additional AM peak hour trips from the Project. (RDEIR, page 4.3-18 and Table 4.3-8). Of these AM trips, the Town's analysis assumes that 65% of these trips would be directed westbound on Diablo. (RDEIR, Figure 4.3-5a). I question that assumption, as all of the four schools serviced by this Project and most major employment centers are westbound. Be that as it may, the Town's analysis represents 64 additional car trips (98x.65=64) on Diablo Road over the dangerous segment I spoke of, each and every weekday morning during the two hour commute period alone. A

Last evening I said this is not a game of numbers or methodologies, but one of flesh and blood. In that spirit, here are how many *additional* cars (generated by *this* Project, according to Town figures) will be traveling over the western portion of Diablo Road each and every week day morning during the two-hour morning peak. Please envision the road you saw last night, and each of these vehicles passing cyclists at 40 mph along substandard lanes with no shoulders, or returning along the route opposing cars crossing the double yellow:





The Town staff's RDEIR concludes this is not a significant impact on bicycle safety. I disagree, quite vehemently.

Thank you for your service.

Todd Gary
(925) 518-9896

## 44: RESPONSE TO TODD GARY (1)

**44A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety. This comment correctly indicates that the project would generate approximately 841 daily vehicle trips, as set forth on page 4.3-18 of the RDEIR.

**David Crompton**

**From:** Todd Gary <tgary@thegarylawfirm.com>
**Sent:** Monday, October 15, 2018 4:59 PM
**To:** David Crompton
**Cc:** Maryann Cella
**Subject:** RE: A Response tp Revised Draft EIR for Magee Preserve

Dear Mr. Crompton.

Please receive, document and address these as my personal comments on the RDEIR for the Magee Preserve (formerly Magee Ranches ) project, in addition to those comments made at the recent hearing.

Page 4.3-8: For unsignalized intersections, HCM 2010 applies "average delay for all intersection movements" for All Way Stop Control (AWSC). That means the AWSC at Blackhawk/Diablo Rd. and Mt. Diablo Scenic is averaging the delays experienced by east/west bound traffic with those delays exiting Mt. Diablo Scenic, which is pretty much zero. The vast majority of traffic is east/west, and results in the huge delays during peak times. Please provide and address data on real-time delay in rush hour. A

Page 4.3-8: Bike safety is analyzed using Highway Capacity Manual methodology. "The methodology yields estimated performance measures for bicycle travel speed and LOS scores for the link and segment…" (4.3-8.) "The HCM BLOS methodology was selected to determine levels of bicycle operations as it considers many aspects associated with rider comfort and safety." (4.3-8) "Operations," "comfort," "capacity and "performance" for cyclists is not the issue: safety is. You were directed by the Court to address bicycle safety, not make conclusions about comfort or performance. B

Page 4.3-8: The HCM model utilized is for urban streets. (4.3-8.) This is a rural street, and is therefore inapplicable. C

Page 4.3-8: The following six factors are incorporated into urban BLOS score, four of which are utterly irrelevant to bicycle safety (4.3-8):

- Bicycle Running Speed (irrelevant)
- Bicycle Delay at Intersection (irrelevant)
- Bicycle Travel Speed: segment length and segment running time (irrelevant)
- Bicycle LOS Score for Intersection (irrelevant)
- Bicycle LOS Score for Link: Roadway cross-section; motorized vehicle volumes; motorized vehicle speeds; heavy vehicle (truck) percentage; pavement condition; number of through lanes (relevant)
- Bicycle LOS Score for Segment: number of access points on right side in the subject direction of travel (relevant) D

Not included in the analysis are the following factors which are crucial to bicycle safety:

- Lane width (actual, not average)
- Shoulder width (actual, not average)
- Sight lines
- Steepness
- Hazards (brush, drains, poles in or immediately adjacent to lane)

Page 4.3-8: "From various spot measurements along the corridor, average lane and shoulder widths were determined for each BLOS study segment. The averages along each segment provide a conservative but appropriate approach to understand bicycle level of comfort on the study corridor." Unfortunately, averages don't impact bike safety – actual lane and shoulder widths do. In fact, widely varying widths and shoulders decrease bike safety as they require more weaving and movement. "Comfort" is not the requisite analysis; safety is, so actual widths should be considered. D

Page 4.3-14: The EIR assumes a parallel path as remedy for deficient conditions, but fails to analyze any aspect of that path's impact – including efficacy (use) or aggravation of existing traffic/bike safety conditions. "As presented in Table 4.3-5, the results for existing conditions show acceptable levels of [bike] operation [not safety] on most segments during all peak hours, except between Avenida Nueva and Diablo Creek Place in both directions during all peak hours. The deficient segment is highly impacted by the number of right-turn vehicular access points created by numerous residential driveways. A parallel path is a proposed project element that would cover this segment and be available to the public for walking and bicycling." (4.3-14) It is capricious to assume a path will improve conditions without actually analyzing the path's feasibility and its impact. E

Page 4.3-14: The weekend BLOS uses trip generation data assuming 69 DU's, although the project has 69 DU plus a minimum of 7 ADU's. The RDEIR uses data from housing projects that contain no ADU's, so is not adequate. (4.3-14 and table 4.3-6).

Page 4.3-15: The analysis of bike/auto collisions fails to account for many significant collisions. It concludes with zero analysis that the rate of collisions is not substantial. No threshold is selected as to what constitutes "substantial." This is capricious and wrong. F

Page 4.3-16: Thresholds of Significance for bike "level of service" is determined to be

1) dropping below BLOS D or
2) Below D, and increase score of 5%

These are relevant to "performance" or "operation" or "capacity" – not safety. G

Page 4.3-17-18: Trip generation rates. EIR uses "Danville rates" not ITE calculations, assuming "Danville rates" are more conservative. (4.3-17).

"Trip generation for project was determined using the "Danville Rate (with Second Dwelling Unit (DU)" based on the results of a traffic count survey of residential projects in Danville with second dwelling units (Victoria Place and Valerosa) conducted in 2012." (4.3-17)

Victoria Place, per the RDEIR, has 24 homes and 5 casitas per the RDEIR. (I believe it has only 20 homes plus the Casistas.) This number of homes is statistically inadequate. However, to the extent the data is relevant, this project is within walking distance of three major shopping centers, each at the intersection of Crow Canyon and Camino Tassajara (Blackhawk Plaza, Tassajara Crossing, and the Chevron shopping center), with two major markets, two Starbucks, three pizza houses, dozens of restaurants, drycleaners, movie theaters, banks, barbers, postal annexes, pharmacies, hardware stores, clothing shops, bars, UPS Stores, florists, dentists, hair salons, fitness centers, etc. It is patently unreasonable to think that this neighborhood would generate the equivalent number of daily trips as the Magee Preserve Project, which is within walking distance of absolutely nothing whatsoever. H

Valerosa (Fieldstone Dr, Fairwood Dr.) has 20 homes with 4 casitas per the DEIR. (I believe it has only 16 homes plus the Casitas. This project is across the street from an elementary school, and within walking distance of a post office and other amenities. It is patently unreasonable to think that this neighborhood would generate the equivalent number of daily trips as the Magee Preserve Project, which is within walking distance of absolutely nothing whatsoever.

Figure figure 4.3-5a: Distribution is assumed at only 65% of daily trips going west in AM and school PM peaks, with 35% going east. (figure 4.3-5a). This is extremely unlikely. Where does this assumption come from? All schools and most major employment centers are west.

Of the 841 anticipated additional daily trips generated, 98 are during the a.m. peak hours (4.3-18). At 65% westbound, this means 63 additional car trips on Diablo Road during the a.m. peak hours alone. This is highly significant , and a significant deterioration of bike safety. I

Page 4.3-23: The following analysis is flawed and lacks study or methodology:

> "The above mitigation would reduce the traffic impact to a less-than-significant level. However, this intersection is within the responsibility and jurisdiction of Contra Costa County and not the Town. If the County does not implement this measure, the traffic impact will be significant and unavoidable." (4.3-23)
>
> *Existing Plus Project Conditions - Bicycle LOS*
> Table 4.3-11 summarizes the weekday BLOS analysis results under Existing plus Project Conditions. With the project, the Diablo Road/Blackhawk Road corridor is expected to continue operating at an acceptable BLOS D or better on all segments during all weekday peak hours, except between Avenida Nueva and Diablo Creek Place in both directions during all weekday peak hours.
>
> Table 4.3-12 shows the weekend (Saturday) BLOS analysis results under Existing plus Project Conditions. With the project, the Diablo Road/Blackhawk Road corridor is expected to operate at acceptable BLOS D or better on all segments during the peak hours, except between Avenida Nueva and Diablo Creek Place in both directions during weekend (Saturday) conditions. J
>
> As noted under Existing Conditions, the deficient segment between Avenida Nueva and Diablo Creek Place is mainly impacted by the right-turn access-point traffic generated by existing residential driveways, which is a critical variable in BLOS calculation using the HCM 2010 methodology. ***Consistent with enhancing bicyclist comfort and safety in the vicinity, the project includes a trail system parallel to the deficient segment available to the bicyclist community that could improve bicyclist comfort and safety through the worst segment of the study corridor.***

**Above conclusion is flawed- and more importantly, not studied!!!! It is just assumed, with no analysis or study of impact of grade-level crossing of Diablo down by St. Timothy's church.**

Any mitigation or alternatives to the Projects impacts contemplated by a parallel trail, or the path contemplated to bypass the windiest section of Mt. Diablo Road, require an analysis of those proposed trails. The major "path" requires an at-grade crossing of Diablo Road, which will actually increase risks to both cyclists and cars in this corridor.

Page 4.3-44: Emergency Vehicle Access (4.3-44)

"Emergency vehicles are somewhat affected by traffic congestion, but typically use lights and sirens to clear a path." K

This is ridiculous. How do you clear a path on a two-lane lane road with no shoulders, when it is congested? This analysis is seriously flawed, as emergency vehicular access is greatly impacted by an additional 841 daily trips.

K
Cont'd

## 45: RESPONSE TO TODD GARY (2)

**45A:** Please refer to Master Responses in Section 2.4.1 regarding traffic, and specifically the Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard intersection. As reported in the RDEIR, application of HCM 2010 shows that the existing vehicle levels of service at this intersection are LOS E in the AM peak, LOS F in the School PM peak, and LOS C in the PM peak. These results reflect severe delay in the AM and School PM peaks, not delays of "pretty much zero." Additional information regarding delays at this intersection is provided in Attachment A to this FREIR.

**45B:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**45C:** Please refer to the Master Responses in Section 2.4.2, which explain why the Diablo Road/Blackhawk Road corridor is categorized as urban.

**45D:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**45E:** The parallel path described in the comment is an element of the proposed project. Its construction is feasible and the impacts of its construction are studied in the RDEIR as part of the construction of the proposed project as a whole. The comment does not explain how the creation of a new option for bicyclists and pedestrians wishing to avoid a deficient segment of the roadway would aggravate existing conditions. Refer to the trail exhibit in the Master Responses in Section 2.4.2.

Regarding Table 4.3-4 of the RDEIR, the weekend vehicle trip calculation uses the "Danville rates," which are higher than the ITE rates, and account for accessory dwelling units.

**45F:** The comment does not explain its conclusion that many significant bicycle/auto collisions are not accounted for in the RDEIR. Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety for further discussion on bicycle collisions.

**45G:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**45H:** The comment questions the "Danville rates" used for traffic generation from the project. These rates are higher and, therefore, more conservative than traditional ITE rates. The Town has consistently applied Danville rates.

**45I:** The distribution of vehicle trips from the project (65% westbound, 35% eastbound) is based on the traffic consultant's knowledge of the study area, traffic forecast model outputs, and input from the Town's traffic engineering staff. The traffic study notes that "[i]t was observed that the AM and PM peak periods have similar traffic distributions. For the purposes of the analyses in this report, the AM and School PM peak periods are assumed to have the same distribution, and the PM peak period has a distribution considering no trips to/from school locations." The study also contains a detailed listing of destinations

where trips are allocated to in the analysis. (See Appendix E to the RDEIR, p. 30-31, Figures 6a and 6b).

**45J:** Please refer to the Master Responses in Section 2.4.1 regarding traffic and 2.4.2 regarding bicycle safety. In addition, this comment confuses the trail proposed by the project to the east (paralleling the Avenida Nueva/Diablo Creek Place roadway segment) with the Town's potential connecting trail farther to the west, for which the proposed project would provide an easement. The Town's potential trail within the easement, not the trail proposed by the project, would include a crossing of Diablo Road.

**45K:** Please refer to Master Responses is Section 2.4.7 regarding emergency vehicle access, including the new access that would be provided by the project.

October 1, 2018

David Crompton
Town of Danville
510 La Gonda Way
Danville, CA 94526
dcrompton@danville.ca.gov

RE: Magee Ranch Preserve – Residential Development Draft EIR

Dear David,

We do not feel the EIR adequately addresses the impacts of the proposed development on the creek riparian corridor. The EIR characterizes the creek as moderate quality riparian habitat. We feel, because of urbanization of the area, the role of the creek as a wildlife corridor is extremely important habitat area. In the twenty years we have lived by the creek, we have watched the intensification of wildlife (coyotes, deer, raccoons, turkeys, frogs, birds) as the Green Valley Creek has become a last refuge. A

The proposed plans fail to accurately identify the modifications to the creek corridor required to construct the development. Cross-sections depict a creek at 3:1 slopes and no significant trees. In reality, the creek is deeply incised with numerous vertical banks and a dense canopy of mature trees lining the slopes. To construct the project (EVA Road and 4' storm inlet), will require the removal of a number of large oak trees, the construction of major retaining walls in the creek channel and thus, significant modification to creek hydrology.

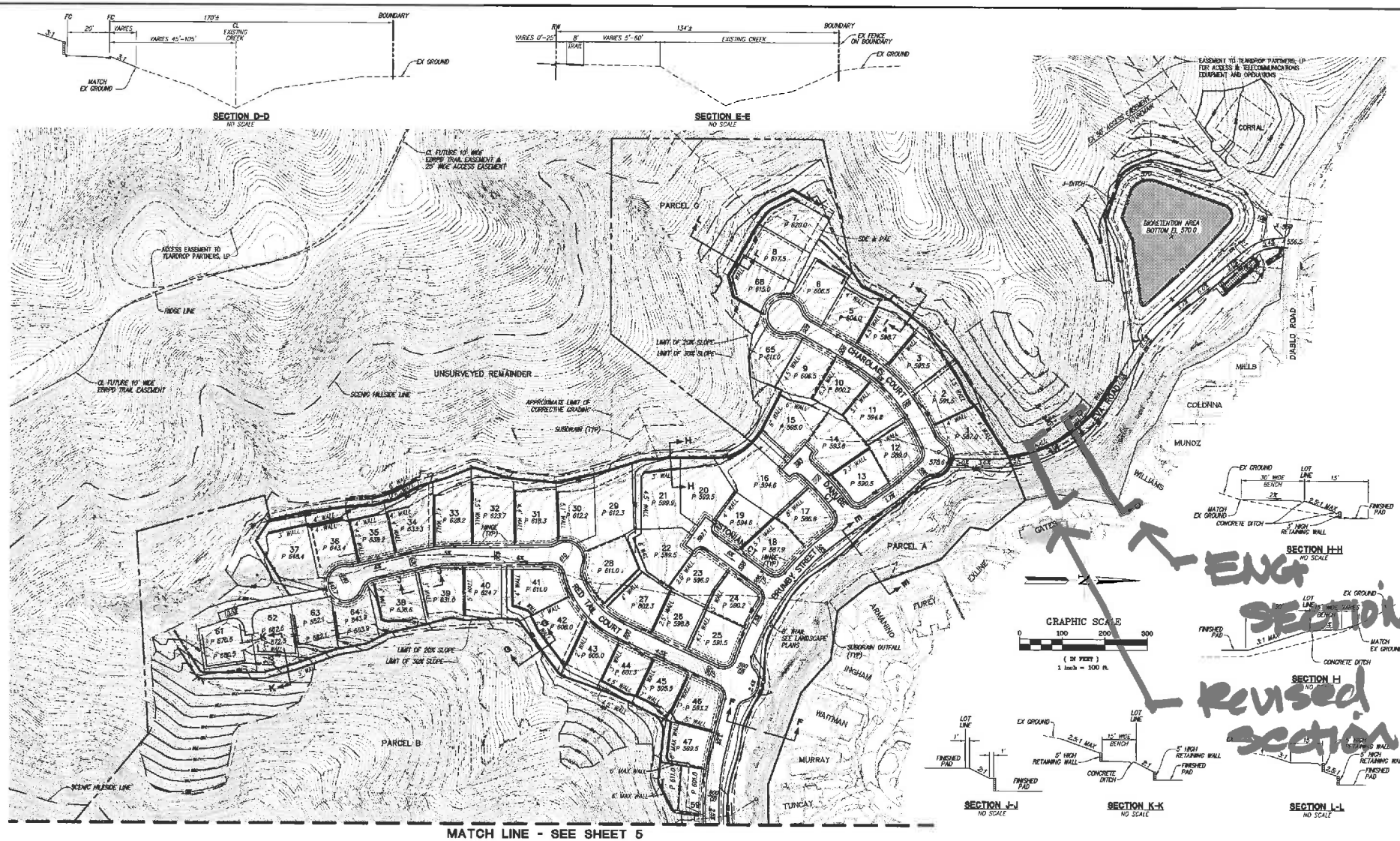
The EIR generically addresses these impacts with requirements to replace the loss of 100+ year-old oak trees at a 1:1 ratio. This hardly seems like an adequate mitigation to wild life habitat to achieve a level of "less than significant" impact. The EIR also suggest a mitigation of replacement of riparian habitat at 1:1 ratio at an undetermined location. This is a far lower ratio than is typically required to offset riparian/wetlands impacts. B

The EIR details the mitigation measures for the loss of .3 acre creek habitat associated with bridge, but does not mention or quantify the loss of habitat to construct 4' storm drain inlet of EVA or utility lines under EVA. The key value of creek for habitat is as a continuous corridor. Finally, the EIR does not address the risk to the adjacent homes along the creek from the hydrological modifications to the creek. The 4' storm drain and walls required for EVA will accelerate creek flow velocity and magnify further erosion of unstable slopes. C

While these inputs may have been overlooked due to the vague information provided in the development plans, they are significant impacts and must be addressed. I have attached some graphics to help illustrate my concerns. The EIR team needs to visit the properties and evaluate the impacts based upon reality of the creek; consider information not provided in the plans and identify, specifically, how these impact can be mitigated to a "less than significant" level. D

Sincerely,

David and Linda Gates




MATCH LINE - SEE SHEET 5

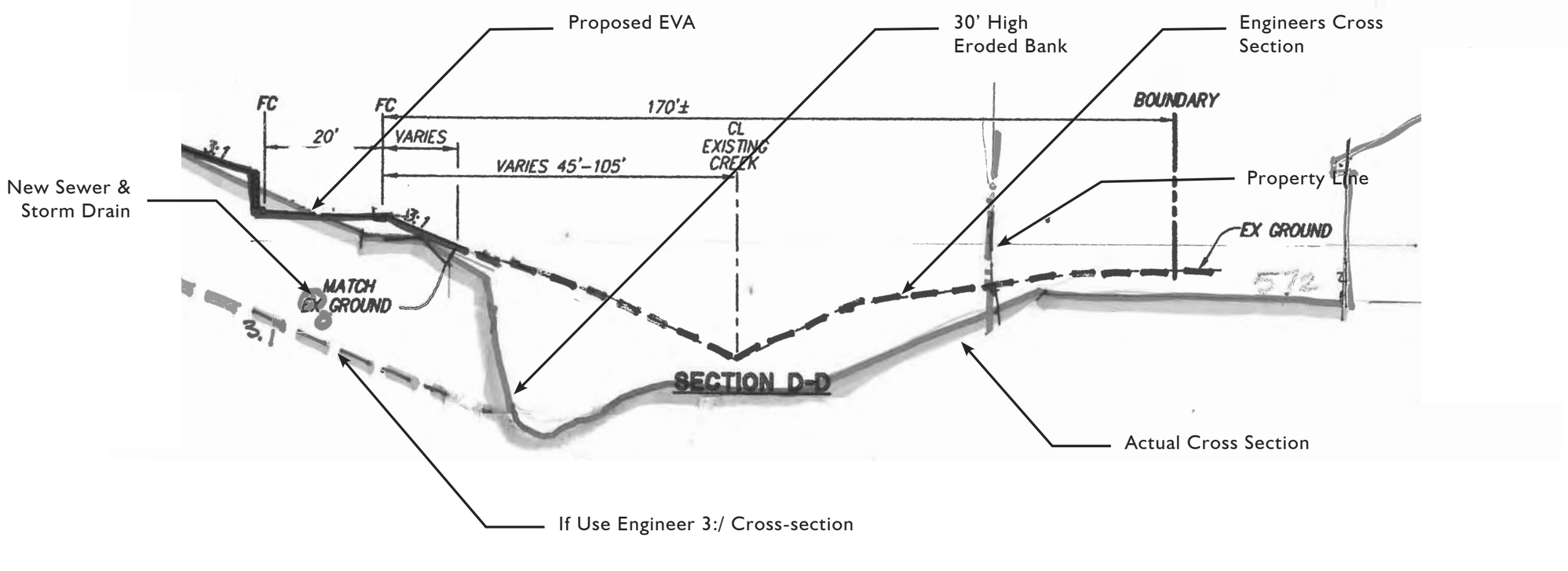
# GRADING PLAN

## SUBDIVISION 9291 - MAGEE RANCHES

TOWN OF DANVILLE, CONTRA COSTA COUNTY, CALIFORNIA

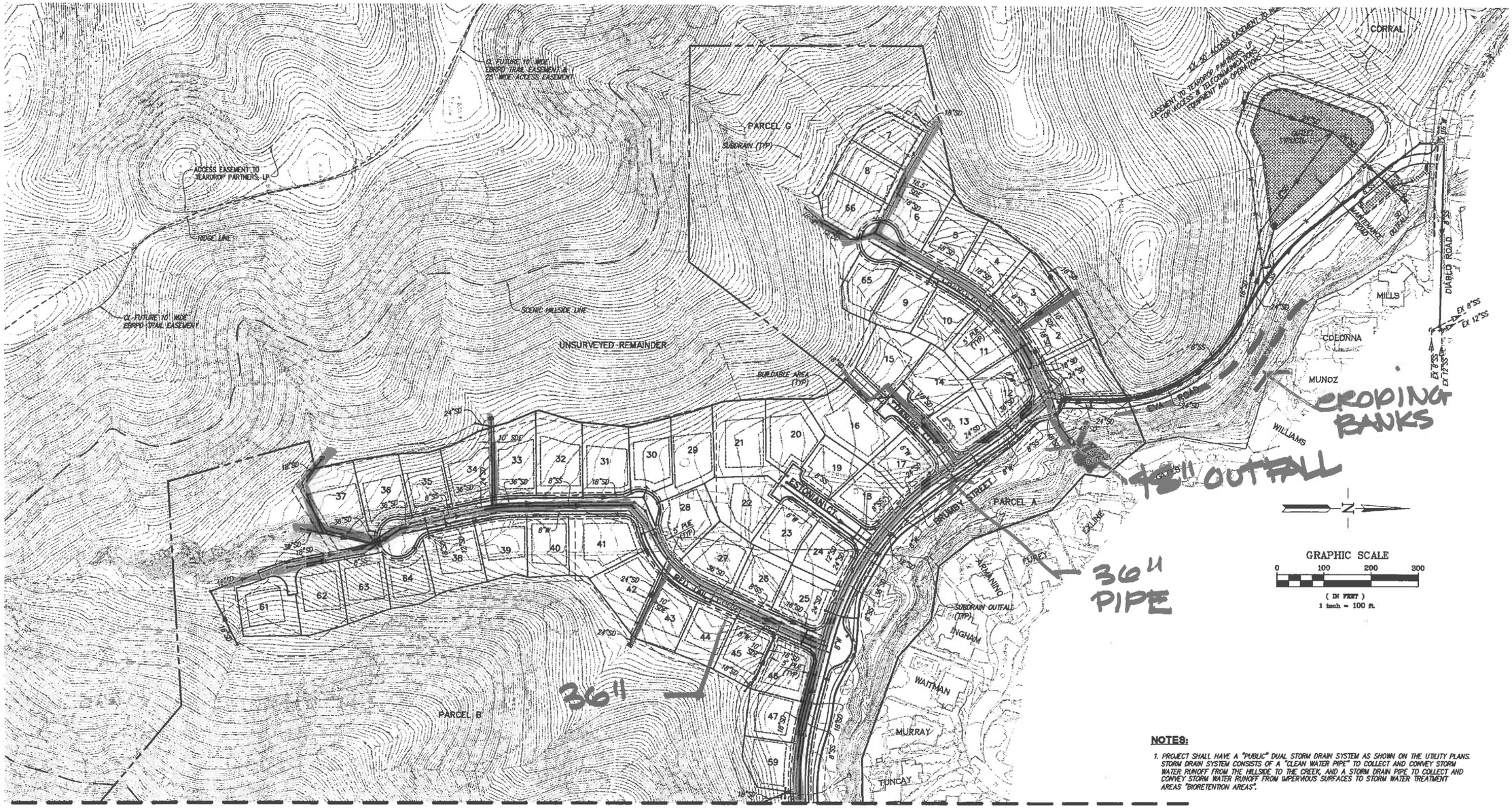
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

DATE: JUNE 30, 2017 JOB NO. 091015 SHEET 6 OF 13 SHEETS


Proposed EVA
30' High
Eroded Bank
Engineers Cross
Section
FC
FC
170'±
BOUNDARY
20'
VARIES
CL
EXISTING
CREEK
VARIES 45'–105'
Property Line
New Sewer &
Storm Drain
EX GROUND
MATCH
EX GROUND
3:1
SECTION D-D
Actual Cross Section
If Use Engineer 3:/ Cross-section








**NOTES:**

1. PROJECT SHALL HAVE A "PUBLIC" DUAL STORM DRAIN SYSTEM AS SHOWN ON THE UTILITY PLANS. STORM DRAIN SYSTEM CONSISTS OF A "CLEAN WATER PIPE" TO COLLECT AND CONVEY STORM WATER RUNOFF FROM THE HILLSIDE TO THE CREEK, AND A STORM DRAIN PIPE TO COLLECT AND CONVEY STORM WATER RUNOFF FROM IMPERVIOUS SURFACES TO STORM WATER TREATMENT AREAS "BIORETENTION AREAS".

# UTILITY PLAN

## SUBDIVISION 9291 - MAGEE RANCHES

TOWN OF DANVILLE, CONTRA COSTA COUNTY, CALIFORNIA


RJA
RUGGERI-JENSEN-AZA
ENGINEERS • PLANNERS • SURVEYOR
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94
PHONE: (925) 227-9100 FAX: (925) 227-9300


DATE: JUNE 30, 2017 JOB NO. 091015 SHEET 9

G:\JOB2009\091015\TENT MAP\2017 VTM REVISION\R-091015-TM09-U.DWG 6/29/2017 2:26:56 PM ALAN MULLEN

## 46: RESPONSE TO DAVID & LINDA GATES

**46A:** Please refer to the Master Responses in Section 2.4.8 regarding biological resources. The biological technical report prepared by Live Oak Associates (2012) provides a detailed description of the East Branch of Green Valley Creek riparian corridor, and the formal tree survey completed by HortScience (2017) shows the location of all trees occurring along the creek corridor. These reports and the RDEIR identify tree impacts along the creek corridor resulting from the proposed project.

This comment states that the topographic contours shown on the grading plans do not fully depict incised creek conditions in the area north of the proposed EVA road. The incised creek conditions were recognized during project planning and documented by performing ground surveys in the creek channel in 2013 and 2018 to obtain accurate representations of the creek bank morphology. Please refer to the ENGEO letter contained in Attachment C. The design of corrective grading for the EVA road recognizes the eroded creek bank condition and provides mitigation measures. The proposed EVA road will be constructed in cut and will be located more than 30 feet from the top of the steep creek bank. The EVA road construction will not require retaining walls for support. The ENGEO geotechnical reports for the project identify stabilization measures including excavation of a 10-foot-deep, 25-foot-wide keyway, and replacement of geogrid-reinforced backfill. All of the proposed corrective grading would be constructed within the approximate limit of disturbance without the need for tree removal.

**46B:** The commenter argues that replacement for the loss of 100+ year-old oak trees at a 1:1 ratio is not adequate. As detailed in the RDEIR, all trees to be removed would be mitigated for according to the Town's tree ordinance. All ordinance-size trees to be removed would be replaced with approved species "of a cumulative number and diameter necessary to equal the diameter of the tree(s) which are approved for removal" in accordance with the Town's ordinance. Additionally, non-ordinance-size trees (i.e., trees less than 10 inches in diameter for single-trunk trees or less than 20 inches in diameter for multi-trunk trees) that are removed would be replaced at a replacement-to-removal ratio of 1:1. In addition, the draft "Magee Ranch Waters of the U.S. and Riparian Mitigation and Monitoring Plan and Conservation Management Plan" (MMP/CMP) calls for the replacement of all riparian trees (i.e., trees occurring within riparian woodland habitat) at a 5:1 replacement-to-removal ratio. As part of the regulatory permitting process, the regulatory agencies may impose additional tree replacement requirements for removed riparian trees.

**46C:** The commenter argues that riparian habitat replacement at a 1:1 ratio at an undetermined location is not adequate. The mitigation goal is to create and enhance riparian or aquatic habitats with habitat functions and values greater than or equal to those existing in the impact zone. The draft Magee Preserve MMP/CMP has been prepared for the project and identifies areas for mitigation that exceed a 1:1 replacement-to-loss ratio by creating or enhancing habitat having a greater value than the habitat impacted. This, along with measures to preserve approximately 381 acres of the site, including jurisdictional waters and riparian habitats, would sufficiently compensate for the aquatic and riparian habitats impacted.

The biological technical report prepared by Live Oak Associates notes that in addition to the approximately 0.3 acre of permanent and temporary impacts to riparian habitat along the East Branch of Green Valley Creek resulting from the proposed bridge, construction of the outfalls would result in additional small permanent impacts to the banks of the East Branch of Green Valley Creek at each location. The total area of impact at each outfall location would not appreciably change the estimate of 0.3 acre of impacts to riparian habitat. The final mitigation amounts will be based on actual impacts to be determined during the design phase.

Please refer to the Master Responses in Section 2.4.5 regarding hydrology. The project proposes to relocate the storm drain outfall to a point downstream from the eroded portions of the creek channel. Therefore, there would be no increase in hydrological flows in the eroded area. Hydrologic flows from the project would be re-routed to avoid discharging into this reach of creek, which would slightly reduce overall peak discharges and velocities in the creek in this area. The storm drain lines would be located under the EVA road and entirely within the disturbance envelope. No retaining walls are proposed on the creek banks or in the creek channel.

**46D:** See above.

**David Crompton**

**From:** donya.george <donya.george@gmail.com>
**Sent:** Monday, October 15, 2018 4:23 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Dear Mr. Crompton,

I live on Jillian Way and am directly impacted by this project. Please do what is right for our precious community and consider an alternative for this land. If you truly care about what is best for our town and citizens, you will not approve this development.

Please accept these comments on the DREIR for the Magee Ranches project.
I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles.

The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review
The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The project will be a very negative change to our community.
Respectfully,
Donya George5 Jillian WayDanville, California

22h ago · 47

A

## 47: RESPONSE TO DONYA GEORGE

**47A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Ellie Gould <elliesgould@gmail.com>
**Sent:** Monday, October 15, 2018 1:34 AM
**To:** David Crompton
**Subject:** Magee Preserve

Hi David,

While my husband and I commend the effort to preserve open space in Danville, we believe the proposed Magee Preserve will have a deleterious effect on the quality of life of the families already living in or near Magee Ranch, as well as all others who must traverse Blackhawk Road above Green Valley Road and particularly above Mt Diablo Scenic Blvd.

Traffic along Blackhawk Road is already hellish in the mornings, turning the 8-9 minute drive time from my home in Magee Ranch to the El Cerro on-ramp of 680 into 20-25 minutes or more. Traffic sometimes backs up from the stop sign at Mt Diablo Scenic Blvd and Blackhawk Road all the way back to Magee Ranch Road. More and more often lately I find myself having to drive an extra 8 miles or so to my job in Walnut Creek because it actually takes less time to go up Blackhawk Road and turn down Camino Tassajara to Sycamore Valley Road and drive a couple extra miles on 680 than to go down Blackhawk Road. When my son, a 2012 graduate, attended Monte Vista, he had to leave our home no later than 7:50 to make the 8:30 bell. Ridiculous! A

Adding a development of 80 or more new dwellings (69 + >10% casitas) to enter and exit onto Blackhawk Road near Jillian is sheer irresponsibility. And where will existing traffic be routed during construction of the trail, home development, and "improvements"to the Green Valley Road intersection?

The video renderings euphemistically show a serene drive along Blackhawk Road and say that the development won't be visible. Yet the video shows a straight road, nothing like the existing narrow curved road which is already a hazard with cars, cyclists, and animals all trying to occupy the space. And I'm not optimistic that our views in Magee Ranch won't be affected. B

I vote NO on the existing Magee Preserve plan.

Eleanor Gould
104 Leafield Road
Danville, CA 94506
825-743-1352

Sent from my iPhone

## 48: RESPONSE TO ELANOR GOULD

**48A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic and management of construction traffic. Please also see Response 35A.

**48B:** Video renderings of with-project conditions along Blackhawk Road are not part of the RDEIR. Regarding views from individual homes, these are not an issue for the RDEIR because CEQA addresses views from public rather than private viewpoints.

**David Crompton**

**From:** Hahackman <hahackman@aol.com>
**Sent:** Monday, October 15, 2018 2:00 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project.

I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles.

The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government, which is what Measure S promised. Of the community members who are aware of this not widely-publicized re-zoning from agricultural/open space to planned unit developments, most are opposed to it.

This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The consequences of THEIR actions are OURS to live with. The project will be a very negative change to our community.

Respectfully,
Heather Hackman
102 Club Terrace
Danville, CA 94526

## 49: RESPONSE TO HEATHER HACKMAN

**49A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Dan Harrelson <dan@harrelson.me>
**Sent:** Sunday, October 14, 2018 8:02 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead is designed to benefit only special interests---the developers and landowners. The project will be a very negative change to our community.

Respectfully,

Dan Harrelson
364 Borica Dr, Danville

## 50: RESPONSE TO DAN HARRELSON

**50A:** Please refer to the responses to Letter 6.

**David Crompton**

**From:** Liz Harvey <msdakota51@gmail.com>
**Sent:** Monday, October 15, 2018 4:41 AM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Dear Mr. Crompton,

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government. **That is what Measure S promised.** Of the community members who are aware of this planned development, most are opposed to it.

Respectfully,

Elizabeth Harvey

279 Verde Mesa Drive, Danville.

## 51: RESPONSE TO ELIZABETH HARVEY

**51A:** Please refer to the responses to Letter 6.

David,

Two minor items:

1. Table 3-1 (Page 3-10) of the RDEIR contains an error that you have probably already caught. Lot #2 should be 13,522 s.f., not 31, 522. There was also a confusing paragraph that bothered me the first time through the document, but I can no longer find it. If I run across it in the near future I will let you know. A
2. Attached is a two-page information sheet related to cell phone towers that might be of interest to the Planning Commission. I would have made copies for the Commission myself and distributed them but am not sure this wouldn't create a Brown Act problem. B

V/R
Dave Havlik

## 52: RESPONSE TO DAVE HAVLIK

**52A:** Revisions have been incorporated into the Final REIR to correct the error noted in Section 3.0, Table 3-1 of the RDEIR.

**52B:** The comment does not relate to the proposed project or the RDEIR.

**David Crompton**

**From:** Jutta Herrick <juttabrigi@aol.com>
**Sent:** Monday, October 15, 2018 7:16 AM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk roads. Those roads will endure (according to the DREIR) about 850 more car trips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road, presenting an increased risk to cyclists, plus causing horrendous backup traffic during commute hours. A

I am extremely disappointed that the Town Council is deciding on major development of this agricultural space for residential use, instead of having this matter voted on by the community.

Respectfully submitted,

Jutta E. Herrick

## 53: RESPONSE TO JUTTA HERRICK

**53A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Melessa Hirschhorn <melessah@gmail.com>
**Sent:** Sunday, September 16, 2018 7:36 PM
**To:** David Crompton
**Subject:** Magee Ranch

Please don't allow the open space in Magee Ranch be re-zoned. We need to maintain this area as open space. | A
Thank you,
Melessa Hirschhorn
626 Mia Ct
Sent from my iPhone

## 54: RESPONSE TO MELESSA HIRSCHHORN

**54A:** Please see the Master Responses in Section 2.4.3 regarding open space.

**David Crompton**

**From:** Angie Ho <angiewho@me.com>
**Sent:** Thursday, September 27, 2018 9:37 AM
**To:** David Crompton
**Subject:** Magee ranch development

Hi, my husband and I are very concerned about the amount of traffic, congestion and wildlife with the continual building of additional homes in our area off of Diablo Road. This town was not build to have the amount of traffic that it currently has. If homes are continually added, our small town of Danville will not have the charm and quiet that makes it what it is, which is the reason we chose this city vs San Ramon, Dublin or Walnut Creek.
I would strongly ask that the board consider this in relation to the additional development. Thank you. A

Warm Regards,
Angie Ho

Sent from my iPhone

## 55: RESPONSE TO ANGIE HO

**55A:** Please see the Master Responses in Section 2.4.1 regarding traffic, Section 2.4.3 regarding open space, and Section 2.4.8 regarding biology.

## David Crompton

**From:** Jackie Howe <jackie_howe@sbcglobal.net>
**Sent:** Tuesday, October 16, 2018 10:12 AM
**To:** David Crompton
**Subject:** From Magee Ranch HOA regarding Magee
**Attachments:** Magee Preserve Town of Danville 2018.docx

Attached please find a letter from Magee Ranch HOA regarding the Magee Preserve. Please submit the letter to everyone designated in the letter, as this information is urgent.

Jackie Howe

Town of Danville
Mayor & Council
Planning Commission

Re: Environmental Impact Report – Magee Preserve

We are strongly opposed to the Magee Preserve development as proposed. We strongly believe that the proposed high-density development will significantly adversely impact traffic on Diablo Road which is already very bad, and it will significantly increase the possibility of bicycle/automobile accidents. Additional traffic from the proposed development would make matters much worse.

The Magee Ranch Homeower's Association consists of the owners of 258 homes located within the Town limits immediately south of Blackhawk Road/Diablo Road and immediately adjacent to the proposed Magee Preserve development. We have approximately 1,000 Danville residents in our development. To our north and west are approximately 158 additional homes, not part of our association, which are also within the Town limits. There are approximately 600 additional Danville residents in these homes.

A

The Diablo Road/Blackhawk Road corridor has a number of other communities, not located within the limits of the Town of Danville, including Diablo, Blackhawk Hidden Oaks, Blackhawk Saddleback, Blackhawk Oakridge, and the main Blackhawk area. All of these communities must use Blackhawk Road/Diablo Road for vehicle travel. In addition the same corridor must be used by many other Danville and County residents to travel to and from schools, businesses and churches.

Our greatest concern is about bicycle and vehicle traffic that our residents must contend with on a daily basis. We believe that the EIR is grossly inadequate in many respects when addressing these issues. Our specific comments are:

*Bicycles:*

The EIR completely ignores any discussion of the presence of recreational bicycles on Diablo/Blackhawk Road. It uses a statistical analysis that is grossly inadequate and in no way reflects reality. For many years, Diablo/Blackhawk Road has been used by a large number of recreational bicyclists. These include many people with varying degrees of skill and abilities from basic amateurs to near-professionals with top of the line equipment and racing clothing. Many use the road as a through route and many use it as an access to the summit of Mt. Diablo. The use of road for these purposes is seasonal and weather dependent with the greatest use during the longer days in the spring and summer.

B

This use has grown significantly since the use of the Mt. Diablo road as a segment of the Tour of California several years ago. Bob ("Bobke") Roll, a native of the Bay Area and a former professional bike racer and current broadcaster for the Tour de France and the Tour of California, mentioned during a broadcast of the race up Mt Diablo that he enjoyed, but worked hard, on his numerous trips up Mt. Diablo. Serious bicyclists like to use the better routes picked for the Tour. The vast majority of recreational users are not from the immediate area but come from all over the Bay Area.

The recreational use is totally ignored in the EIR. The analysis process was stated on page 4.3-14: "To determine project impacts, a weekend vehicle trip generation rate was determined based on the existing housing development located south of Blackhawk Road at Magee Ranch Road." In other words, no attempt was made to count recreational bicycle use and no attempt was made to account for use by those residents in the County rather than in the Town of Danville.

As a result of this an analysis, Table 4.3-6 gives "Saturday Bicycle Peak Hour" rate at 33. This is blatantly inaccurate. On two westbound trips on Diablo Road (one on October 13 and one on October 14), one of our residents counted bicycles between Mt. Diablo Scenic and McCauley Road. During the approximately three minute drive in the early afternoon, he counted 8 bicyclists on Saturday (3 of those were on the narrow part of Diablo Road between Avenida Nueva and Alameda Diablo) and 18 on Sunday (12 of those were one organized group traveling together). The rate of 33 stated in the EIR is ludicrous.

We also seriously question the accuracy of the stated number of accidents. We know of one of our residents who was involved in an accident while he was bicycling on Diablo Road. Fortunately, his injuries were not serious and he was not transported to a hospital. He believes that his accident is not reflected in the data since there was no direct involvement of the Danville PD, the CHP, or the SRVFD. We suspect there are other incidents just like this and a significant number of near misses that are not reflected in the data.

Any properly done EIR needs to accurately address the recreational use of bicycles, especially during the peak periods on weekends and during the spring and summer months biking season.

B Cont'd

*Vehicle Traffic:*

The original EIR for this project had major problems such as the failure to list and account for two private schools in the area that generate traffic along Diablo/Blackhawk Road (The Athenian School and St. Isidore School). That error is not in this current EIR, but we have no reason to believe that the accuracy of this report is greater than the last one. Rather, we suspect that the current EIR has been carefully crafted to obfuscate the traffic issue and we, therefore, have little confidence in it.

An example of this can be seen from a count of parked vehicles at Athenian School (about 107), not to mention about 45 homes accessed from Mt. Diablo Scenic. These figures don't include

C

school drop-offs and pick-ups. The numbers in the traffic volume charts don't seem to match with reasonable expectations,

Having said this, we strongly agree with the impact statement on page 4.3-23 which states:

> "Impact: The project trips added to the intersection of Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard under Existing plus Project Conditions will increase the V/C ratio by more than 5 percent during the AM and School PM peak hours, which constitutes a significant impact based on the established thresholds of significance. This represents a significant, potentially unavoidable impact."

C Cont'd

This is precisely what our residents are saying. However, the EIR gives as a mitigation the installation of a stop light at Diablo Road and Mt. Diablo Scenic. This would be a disaster. Almost daily during morning commute and school times, the current stop sign creates a major backup for westbound traffic just east of the current stop sign. This backup often extends to Jillian Way and beyond. A stop light would create an even longer backup, and since the egress from the project would be at this same place, the backup will cause a major problem for anyone exiting the project and trying to turn left (west), We see this as a major safety issue that would likely cause accidents involving turning vehicles.

*General Comment:*

We see the Non-Clustered Alternative, 6.6 on page 6.11 and in Figure 6.2a, as nothing short of a thinly veiled threat. We point out that Measure S, which was approved by 75% of Danville voters in the past and is not discussed, is too serious an issue to ignore. Measure S is something that needs to be seriously considered by the Planning Commission and the Town Council and should have been included in the EIR.

D

## 56: RESPONSE TO JACKIE HOWE

**56A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic and Section 2.4.2 regarding bicycle safety.

**56B:** The RDEIR addresses the use of Diablo Road/Blackhawk Road by recreational bicyclists; this is the reason that the RDEIR analyzes weekend peak as well as weekday peak impacts to bicycle safety. See RDEIR pages 4.3-14 through 4.3-15 and 4.3-26 through 4.3-28.

This comment misunderstands the statements in the RDEIR regarding the bicycle safety analysis. The RDEIR does not attempt to count total recreational bicyclists on Diablo Road/Blackhawk Road because those numbers vary widely depending on the time of year and other factors. In addition, as noted in the Master Responses in Section 2.4.2, BLOS calculation does not include the number of bicycles using a roadway at a given time; rather, it addresses the most important safety conditions a bicyclist using the roadway would experience based on nationwide bicyclist surveys.

The number in RDEIR Table 4.3.6 do not represent existing bicycle trips on Diablo Road during the Saturday Bicycle Peak Hour. Instead they represent the number of *vehicle* trips the project would be expected to add to the roadway during the Saturday bicycle peak hour.

**56C:** Please refer to the Master Responses in Section 2.4.1 regarding signalization of the Diablo Road/Blackhawk Road/Mt. Diablo Scenic Boulevard intersection.

**56D:** Please refer to the Master Responses in Section 2.4.3 regarding Measure S and Section 2.4.6 regarding alternatives.

**David Crompton**

**From:** Juley Hull <juleyh@yahoo.com>
**Sent:** Monday, October 15, 2018 4:26 PM
**To:** David Crompton; Archie Bowles; Robert Combs; Mark Graham; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; Rob Ewing; Newell Arnerich; Karen Stepper; Robert Storer; Lisa Blackwell; Renee Morgan
**Cc:** Rama Murty
**Subject:** Magee Ranch Project

Town of Danville Council and Planning Commissioners,

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. A

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review.

In addition, **I strenuously object to the 3 proposed homes off McCauley Rd., which would cause additional congestion to the ONLY ROAD OUT OF HIDDEN VALLEY! It is bad enough that we share the one road with traffic in and out of the fire station, Sunrise Nursing Home, and especially Green Valley Elementary School. The back up at the light is ridiculous as it is, especially whenever there is a school function or the parents are dropping off or picking up their kids. The light only allows for 4-5 cars to exit at one time, so it can take as many as 5-6 lights before one can exit McCauley! That is at least 5 minutes and often close to 10 minutes delay. I try to arrange my schedule to avoid those times, but it is not always possible. Imagine if there were a fire or other emergency and all 211 Hidden Valley Homes were forced to evacuate at once! Many homes have several cars, which they might foolishly try to salvage to the detriment to the rest of us trying to escape!** B

**The proposed entry to McCauley will cause confusion and delays beyond the lengthy delays we already have, and all so the Builder can add only 3 more homes! I suggest you phase in small areas at a time, excluding the McCauley side of the property, which could remain as open space. People are more likely to vote Yes under Measure S to release smaller parcels of property at any given time. Ideally, you should widen Blackhawk Rd to 4 lanes of traffic, which would alleviate the traffic issue tremendously.**

**The McCauley retaining wall as designed in your past project 3-4 years ago was not sound, as well as unsightly. Your insistence upon building along this side of the property is a huge bone of contention to those of us in Hidden Valley. We did not appreciate your passing a motion at 2 am in your Council Meeting, after we had succumbed to fatigue and gone home, to add back those 3 McCauley-side homes which had been omitted at a previous meeting. It was**

**a very sneaky and under-handed thing to do, and you lost my respect completely with that behavior.**

B Cont'd

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead is designed to benefit only special interests---the developers and landowners. The project will bring very negative changes to our community.

C

Sincerely,

*Juley E Hull*

## 57: RESPONSE TO JULEY HULL

**57A:** Please refer to responses to Letter 6.

**57B:** Please refer to Master Responses in Section 2.4.2 regarding traffic. The commenter's opposition to the three lots on McCauley is acknowledged.

**57C:** Please refer to Master Responses in Section 2.4.3 regarding Measure S.

## David Crompton

**From:** Don A Hunter <idbackpackads@sbcglobal.net>
**Sent:** Monday, September 17, 2018 10:09 AM
**To:** David Crompton
**Subject:** Magee Ranch

My wife and I feel that any attempt to rezone Magee Ranch should go before a public vote as outlined in Measure S passed 20 years ago. A

Don Hunter
349 Bolero Drive
Danville Ca

## 58: RESPONSE TO DON HUNTER

**58A:** Please refer to Master Responses in Section 2.4.3 regarding Measure S.

**David Crompton**

**From:** Greg Isom <greg@isomadvisors.com>
**Sent:** Monday, October 15, 2018 10:37 AM
**To:** Archie Bowles; Robert Combs; Mark Graham; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; Rob Ewing; David Crompton; Newell Arnerich; Robert Storer; Karen Stepper; Lisa Blackwell; Renee Morgan
**Subject:** Comments on the Magee Preserve DREIR
**Attachments:** DCSD letter to Honorable Candace Andersen and Mary Piepho (1).docx

Dear Danville Town Council, Planning Commission, and Senior Planner David Crompton:

Below are my comments on the Draft Revised Environmental Impact Report for the Magee Preserve Project.

I am a candidate for one of the three open seats on the Diablo Community Services District Board ("DCSD") of Directors. With three of the four candidates running for election to the Board taking seats in December, I thought it'd be important that I share my comments on the Town's draft revised Environmental Impact Report ("DREIR") for the Magee Preserve Project (formerly known as the Magee Ranches Project) with you.

This attached letter (sent to you by the DCSD Board in 2015) demonstrates that pedestrian, bicyclist and motorist safety both on Diablo Road and in our community is of major concern to the Board and to Diablo residents.

Diablo Road (between Green Valley and Athenian) is unsafe for motorists, bicyclists and pedestrians and even wildlife. I drive it every day and I have witnessed near accidents, almost monthly. Just this morning while driving to school, a deer ran into the road out of nowhere. I slammed my brakes, another car behind me almost rear ended me (driving too closely) and the car behind them went into the other lane. Imagine if another car, or biker would have been on the other side at that time. **Imagine that accident.** The Magee Ranches project will add significantly more car-trips to the already congested road (**fact**), and therefore worsen safety significantly. As a condition for its approval, major bicycle safety improvements must be undertaken on the road. It's a no brainer and a win-win for everyone involved. A

Greg Isom

Isom Advisors
1470 Maria Lane, Suite 315
Walnut Creek, CA 94596
Ph. 925.478.7450 Cell 925.389.1883

**DIABLO COMMUNITY SERVICES DISTRICT**

**P.O. BOX 321**

**DIABLO, CA 94528**

February 2, 2015

Honorable Candace Andersen

County Supervisor, District 2

309 Diablo Road
Danville, CA 94526

Honorable Mary Piepho

County Supervisor, District 3

3361 Walnut Boulevard, Suite 140
Brentwood, CA 94513

Dear Supervisors Andersen and Piepho:

We are writing to ask for your assistance in rectifying the intolerably dangerous conditions for motorists, bicyclists, and pedestrians in the community of Diablo and in the Diablo Road corridor between Green Valley Road and Mt. Diablo Scenic Blvd. Each of your districts covers a portion of that area.

As you are likely aware, Diablo Road is the gateway to Mt. Diablo State Park for many tens of thousands of bicyclists every year and the number is steadily increasing**. In fact, we believe that the number of bicyclists traveling Diablo Road to get to the Park during the 2012/13 fiscal year was probably upwards of 40,000 judging from the following California State Park System Statistical Reports, found at** http://www.parks.ca.gov/?page_id=23308 .

California State Park System Statistical Reports

| Fiscal Year of Report | Free Day Use (entering through the north or the south entrances) |
|---|---|
| 2012/13 | 79,824 (page 21) |
| 2011/12 | 74,631 " |

| | | |
|---|---|---|
| 2010/11 | 66,965 | (page 21) |
| 2009/10 | 63,845 | " |
| 2008/09 | 53,918 | " |
| 2007/08 | 47,693 | " |

The "Free Day Use" statistical category is almost exclusively bicycle traffic, rather than pedestrian; very few pedestrians enter the park through either of the two entrance gates because those gates are too far from residential neighborhoods and parking areas outside the park.

Bicycle counts for 2014 (which haven't yet been officially published) received from Park Superintendent Ryen Goering (Contra Solano Sector Superintendent, California State Parks) indicate that more than half of the counted bicyclists typically enter through the south gate. **So that implies that for 2012/2013, over 40,000 cyclists entered the Park through the south gate.** And that number is clearly an underestimate, according to Superintendent Goering and Supervising Ranger Dan Stefanisko, because many cyclists enter the gates when due to understaffing there is no ranger there to count them.

Based on our observations and information from local bicyclists, we believe that the vast majority of those 40,000+ bicyclists using the South Gate entrance travel east along Diablo Road from Green Valley Road to Mt. Diablo Scenic Blvd. to get there, rather than traveling from Blackhawk Road west to Mt. Diablo Scenic. Most of those bicyclists then travel west along Diablo Road as they return home. In addition some of the bicyclists entering through the north gate park entrance subsequently exit the park through the south gate and then travel west along Diablo Road. **So it is reasonable to believe that in fiscal year 2012/2013 there were over 80,000 bicyclist trips on Diablo Road associated with travel to and from Mt. Diablo State Park.**

Furthermore, there has been a tremendous 67% increase in bicyclists between fiscal years 2007/2008 and 2012/2013, and there is every reason to believe the numbers will continue to grow.

The tremendous numbers of bicyclists coupled with the high volumes of traffic on Diablo Road have created an intolerably dangerous situation. Although Diablo Road west of Green Valley Road has safe bicycle lanes in both directions, the 1 ½ mile stretch of Diablo Road east of Green Valley Road to Mt. Diablo Scenic Blvd. ("the stretch") is narrow, winding, upslope, with virtually no shoulders, limited sightlines, and no bicycle lanes. The stretch is extremely congested with thousands of vehicles every day. Despite the double yellow lines the length of the stretch, many

vehicles' drivers break the law as they veer across the lines to avoid the cyclists. Others slow to well below the speed limit, creating back-ups and the risk of rear-end collisions as they travel behind the cyclists.

Danville police accidents reports (attached) show that from 2005 until March 2014 there were 6 bicyclist accidents along the portion of the stretch patrolled by the Danville police. The number of accidents is undoubtedly much higher because of the following: 1. the reports do not even identify whether there was a car or bike involved in many of accidents; and 2. the reports do not include accidents reported to the California Highway Patrol, which patrols the one-mile northern portion of the stretch that is contiguous to the community of Diablo. Most importantly, the accident reports do not reflect the conditions on the dangerous portion of Diablo Road contiguous to the community of Diablo because almost all of the bicyclists avoid that portion by cutting through the community of Diablo. But for the cutting through, there would be far more---and likely some fatal--- bicycle accidents.

That diversion of cyclists does not solve the problem of public safety, however. **The influx of cyclists into Diablo has merely has moved the dangerous condition from Diablo Road onto Diablo's even more constrained residential streets.** As you know, Diablo's streets are narrow and winding, have no sidewalks or even shoulders, and have limited sight lines. Moreover, Diablo's streets serve both as streets and walkways: pedestrians; baby strollers; young children on bicycles; dogs on leashes; automobiles; golf carts; and construction, service, and delivery vehicles travelling to and from the Diablo Country Club, the Diablo Post Office, and Diablo homes all compete for space.

The influx of ever more cyclists cutting through Diablo's residential streets to avoid dangerous Diablo Road has caused those streets to become unsafe for their intended users as well as for the cut-through cyclists themselves. **The Diablo Community Services District, the government agency responsible for roads and public safety within the community of Diablo, is obligated to act to resolve this dangerous condition on our roads.**

We believe that the best way to solve the safety issues within our community is to address the dangerous situation on Diablo Road. **The solution is obvious: if Diablo Road were made safe for cyclists and vehicles by adding bicycle lanes, cyclists would no longer need to divert into Diablo.**

Accomplishing the goal of building safe Diablo Road bicycle lanes will require the cooperation and efforts of many interested parties. And prior to building the lanes, there are likely other

short-term, inexpensive ways that could quickly improve safety somewhat along Diablo Road (for example, adding "Share the Road" signs; lowering speed limits and enforcing them; improving some of the sightlines).

The time to start is now, before there are any more accidents, and before someone is killed. As you undoubtedly know, just a few days ago a cyclist was killed along Highland Road in unincorporated Contra Costa County. Like Diablo Road, the dangers there were well-known, but no one acted to improve safety on the road in time to prevent the cyclist's death.

**As a first step toward improving safety, we ask that your offices convene a Diablo Road Public Safety Task Force, comprised of representatives from your offices, the Town of Danville, Diablo Community Services District, Diablo Property Owners' Association, Valley Spokesmen (a local bicyclist organization), Bike East Bay (an East Bay bicycle advocacy group), Save Mt. Diablo, Contra Costa Transportation Authority, and any other interested HOAs or groups. The long-term goal of the Task Force would be to obtain funding for the designing and building of safe bicycle lanes between Green Valley Road and Mt. Diablo Scenic Blvd. In the near term, the goal would be to make the road safer through inexpensive means such as road signs, lower speed limits, and more police enforcement until the lanes are built.**

Thank you so much for your consideration of our request. We look forward to hearing from you at your earliest convenience and, we hope, working with members of the proposed Task Force to address these urgent public safety matters.

Sincerely,

Raymond F. Brant

President

Diablo Community Services District

Attachment: Danville Police Accident Reports, 2005- March 2014

Cc with attachment: Christopher Liddicoat, President, Diablo Property Owners' Association

Joseph Calabrigo, Manager, Town of Danville

Eric Niles, Head of School, Athenian School

Cc with attachment: Nancy Nagramada, Athenian School

Marcus Van Raalte, President, Valley Spokesmen Bicycle Touring Club

William Well, Danville Liaison, Valley Spokesmen Bicycle Touring Club

Bonnie Powers, Past President, Valley Spokesmen Bicycle Touring Club

Renee Rivera, Executive Director, Bike East Bay

David Campbell, Advocacy Director, Bike East Bay

Alan Kalin, President, Mount Diablo Cyclists

Ronald Brown, Executive Director, Save Mt. Diablo

## 59: RESPONSE TO GREG ISOM

**59A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

## David Crompton

**From:** JON ISOM <jonpat@sbcglobal.net>
**Sent:** Thursday, October 4, 2018 12:10 PM
**To:** David Crompton
**Subject:** Magee /Preserve/EIR

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Danville Municipal Code 31-25.7

Under the Danville Municipal Code, (a) Major channels must have sufficient capacity for a a 50 year flood. (b) Secondary channels should be able to contain a 25 yr flood event (c) Minor drainage facilities shall be able to contain a 10 yr flood event. A

With all of the construction that has occurred the last years, and the proposed construction, we believe that the down stream drainage will no longer comply with the Danville Municipal Code 31-25.7.

Pat Isom

## 60: RESPONSE TO PAT ISOM (1)

**60A:** The comment asks whether the existing off-site culvert under Alameda Diablo complies with Danville Municipal Code Section 31-26.1. This section of the Municipal Code states that the culvert "shall be of a size adequate to carry the design flow." This section applies to improvements within a subdivision; it does not apply to off-site culverts such as the one described. Please also refer to the Master Responses in Section 2.4.5 regarding hydrology.

## David Crompton

**From:** JON ISOM <jonpat@sbcglobal.net>
**Sent:** Friday, October 5, 2018 9:58 AM
**To:** David Crompton
**Subject:** Magee Ranches/Preserve EIR

Danville Municipal Code:

Culvert 31-26.1

(b) Street-Crossing Culverts "Culverts crossing the street shall be of a size adequate to carry the design flow"

A

Does the Town of Danville believe the culvert in question is in compliance with the Municipal Code?

Thank you for your help.

Pat Isom

## 61: RESPONSE TO PAT ISOM (2)

**61A:** The comment expresses the belief that existing off-site, downstream drainage will no longer comply with Danville Municipal Code Section 31-25.7, which requires that in new subdivisions, 1) major channels have capacity for a 50-year flood, 2) secondary channels have capacity for a 25-year flood, and 3) minor drainage facilities have capacity for a 10-year flood. As explained in the RDEIR and in the Master Responses in Section 2.4.5, the project would not, and legally cannot, increase downstream flooding. All major and secondary channels and minor drainage facilities within the proposed project site would be required to comply with Municipal Code Section 31-25.7.

## David Crompton

**From:** JON ISOM <jonpat@sbcglobal.net>
**Sent:** Wednesday, October 10, 2018 8:09 PM
**To:** David Crompton; Newell Arnerich; Renee Morgan; Paul Radich
**Subject:** Response to Revised Draft EIR for Magee Preserve

(1) When did the Vesting Tentative Map for Summerhill/Magee expire? Were the court actions represented by the Town and Summerhill in regard to this project taken on behalf of a project with an expired Vesting Tentative Map? A

(2) Does the Revised EIR agree with the Administrative Staff Report of September 12, 2018 regarding the paved trail. (An addition of 6,685 linear feet of paved bicycle and pedestrian facility (minimum 8-foot wide) to the Town's trail network)? (Does the property owner agree with this? In the May 9, 2011 letter from Summerhill, it appeared that the property owner was not in agreement) B

(3) Does the Town agree that this is not sufficient to comply with the new requirements of the Highway Capacity Manual as submitted at the Planning Commission meeting? C

(4) Does the Town agree that the Barbara Hale Trail is not a Class I bicycle trail or "bicycle route" as the carefully chosen words of the draft EIR indicate? D

(5) It has been a practice in the past to have "conditions of approval" as part of the approval of the project and then to have no enforcement of these conditions. The Elworthy West project and the original Magee Ranch project are examples of this. Is this the strategy of the Magee/Preserve project? The houses will be built. We will have more and more traffic in a corridor that can ill afford traffic. The property owner will have his money. The developer will have his money and the Town will have conditions of approval, which in this case cannot be met and cannot be enforced. E

Pat Isom

## 62: RESPONSE TO PAT ISOM (3)

**62A:** As part of the previous 2013 approval, the Town approved a Vesting Tentative Map. That previous approval, along with all other approvals, was rescinded by the Town on April 19, 2016.

**62B:** As shown on the proposed vesting tentative map, the developer would build a paved trail segment from the intersection of Jillian Way, along Green Valley Creek back to Diablo Road near Avenida Nueva (approximately 3,085 linear feet). The developer also agreed to dedicate a public easement that would allow the Town to construct the remainder of the paved trail, separated but generally parallel to Diablo Road (estimated at 3,600 linear feet). The segment would then connect to the existing asphalt trail on the north side Diablo Road. In total, the two trail segments would add approximately 6,685 linear feet of paved bicycle and pedestrian facility (minimum 8-foot wide) to the Town's trail network.

**62C:** The commenter asks whether the Town's potential multi-use trail on the project site and the applicant's proposed trail would meet the design standards of the Highway Design Manual (the comment references the Highway Capacity Manual, which measures levels of service, not design criteria). While the Town's potential trail has not been designed, the intent would be to comply with all applicable design standards. As explained in Master Response 2.4.2.IV, the ultimate design of the Town's portion of the trail would be subject to subsequent design and environmental review. It should be noted that both the Highway Design Manual (Chapter 80) and Streets and Highways Code Section 891 recognize the flexibility and engineering judgment necessary and permitted in designing bicycle facilities.

**62D:** Please see Master Responses in Section 2.4.2 regarding bicycle safety regarding trail concerns.

**62E:** Town-adopted conditions of approval are legally binding commitments. Compliance with conditions of approval is reviewed and enforced at a number of stages and through a number of methods, depending on the nature of the condition. They can occur during the plan review process and inspections in the field. Applicants must post bonds and other financial securities and cannot move from one stage of construction until the next without review and confirmation of compliance. If the conditions are not either legally amended or enforced by the Town, the remedy is a petition for writ of mandate that is filed before the statute of limitations expires. No such petitions were filed with respect to the conditions of approval for the projects listed in the comment.

## David Crompton

**From:** JON ISOM <jonpat@sbcglobal.net>
**Sent:** Monday, October 15, 2018 10:33 AM
**To:** David Crompton
**Subject:** Response to Revised Draft EIR for Magee Preserve

In the Administrative Staff Report regarding the Status Update on Diablo Road Trail dated September 12, 2018, It states, "give right-of-way-constraints in the corridor, all options necessitate a dedication of land from the Magee property located on the south side of Diablo Road."

Specifically, what are the dedications that have been obtained? What are the dedications that have been offered? What are the dedications that would be required? A

Given the letter sent to you on May 9, 2011, it appears that what the Town needs and what is possible are not the same.

Pat Isom

## 63: RESPONSE TO PAT ISOM (4)

**63A:** Please refer to Response 62B.

## David Crompton

**From:** JON ISOM <jonpat@sbcglobal.net>
**Sent:** Monday, October 15, 2018 12:58 PM
**To:** David Crompton
**Subject:** Response to Revised Draft EIR Magee Preserve

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

When you refer to easements, would you clearly specify the width, the length, and the location of these easements? If they are not sufficient to comply with the Highway Design Manual, Dec. 2015, Chapter 1000, these easements are irrelevant in any discussion of bicycle pathways. A

With regards to the May 9, 2011 letter referenced, ENGEO clearly states geologic concerns. Would you please show us where ENGEO has repudiated these geologic concerns. It also states the property owner is not agreeable to any further trail easements. Would you please show us where the owner is in agreement to these easements and specifically easements that comply with the Highway Design Manual, Chapter 1000. B

Pat Isom

## 64: RESPONSE TO PAT ISOM (5)

**64A:** The location of easements to be dedicated to the Town would depend on the Town's decision regarding a bicycle/pedestrian trail alignment. This decision is a separate process subject to its own design and environmental review process and is not part of the proposed project, which would only provide the land for any selected trail at no cost to the Town.

**64B:** This comment refers to a partial copy of a May 9, 2011 letter that has been submitted for the record, but that was not written by the project applicant or ENGEO, does not attach a statement from ENGEO, and pre-dated the Town's original project approvals by two years. The current applicant proposes to build the bicycle and pedestrian access shown on the trail exhibit in Master Response 2.4.2. As noted above, the applicant would dedicate land for the new trail alignment extending from the end of the proposed emergency vehicle access to the Calle Arroyo intersection, should the Town approve an alignment for such a trail.

## David Crompton

**From:** JON ISOM <jonpat@sbcglobal.net>
**Sent:** Monday, October 15, 2018 4:49 PM
**To:** David Crompton
**Subject:** A Response tp Revised Draft EIR for Magee Preserve

Highway Capacity Manual, Dec. 2015 Chapt. 1000 Section 891 regarding bicycle pathways. A

"Local Agencies Must Comply"

Pat Isom

## 65: RESPONSE TO PAT ISOM (6)

**65A:** The comment appears to refer to Streets and Highways Code Section 891, a portion of the California Bicycle Transportation Act. Section 891(a) provides that local agencies designing bikeways use safety design standards developed by CalTrans. Section 891(b) provides a process for local agencies to utilize different safety design criteria when there are unique circumstances or surrounding environs. Please refer to Master Response 2.4.2.IV and Response 62C for a description of the future design and review process.

**David Crompton**

**From:** Kristin Johnson <kengel@gmail.com>
**Sent:** Sunday, September 16, 2018 5:05 PM
**To:** David Crompton
**Subject:** Magee ranches project is HORRIBLE for the town

I live in Magee Ranch and want to voice my strong opposition to the Proposed new development. I sit in traffic every day on Diablo Road driving my children to school (some days up to 30 mins to go 3 miles) and a new development would cause even more congestion there.

Your study apparently doesn't address this or propose a reasonable solution. I invite you to drive this route Tuesday mornings (when Athenian traffic is also there, in addition to Los Cerros, Monte Vista, Green Valley and Vista Grande traffic). Drive from Magee Ranch to Green Valley elementary between 8 and 8:30 and you will see how bad the congestion is. A

You are ruining the environment, the quality of life in Danville, and depressing our home prices by considering this new development. Vote NO on allowing the development.

Regards,
Kristin Johnson
144 Sunhaven rd
650-793-8272

## 66: RESPONSE TO KRISTIN JOHNSON (1)

**66A:** The commenter's opposition to the project is noted. Please also refer to the Master Responses in Section 2.4.1 regarding traffic.

**David Crompton**

**From:** Kristin Johnson <kengel@gmail.com>
**Sent:** Monday, October 15, 2018 3:50 PM
**To:** David Crompton
**Subject:** Fwd: Summerhill Homes Concerns

I have not received a reply (not even a form letter) and want to be sure you saw my email.

---------- Forwarded message ---------
From: **Kristin Johnson** <kengel@gmail.com>
Date: Mon, Nov 15, 2010 at 9:24 AM
Subject: Summerhill Homes Concerns
To: <DCrompton@danville.ca.gov>

Dear David Crompton,

I am a homeowner in Magee Ranch and would like to express my concern about the proposed Summerhill Homes development. My main concerns are

1) increased traffic on Diablo Road (particularly around the McCauley intersection). Will Diablo Road be expanded to accommodate this traffic? That would be a shame. A
2) severe increase in enrollment at Green Valley School. Would the district lines be redrawn at all? I am concerned that Magee Ranch residents would get bumped from Green Valley School. B
3) reduction in beautiful open space along Diablo Road and at the intersection of McCauley. That is one of the nicest drives in Danville and it should remain open, rural and unadulterated. C

If you have a chance to respond to my questions that would be most appreciated. If there is a better forum to express these concerns please let me know.

Regards,
Kristin Johnson
Magee Ranch
925-406-4077

## 67: RESPONSE TO KRISTIN JOHNSON (2)

**67A:** The commenter's opposition to the project is noted. Please also refer to the Master Responses in Section 2.4.1 regarding traffic. Section 4.3 of the RDEIR identifies mitigation to install a traffic signal at the intersection of Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard at the applicant's expense. No other study intersections along Diablo Road were found to be significantly impacted. The project also includes improvements at the McCauley intersection.

**67B:** Please refer to the Master Responses in Section 2.4.4 regarding school capacity.

**67C:** Please refer to Master Response 2.4.3 regarding open space. The project has been designed to minimize or eliminate visibility of new residences by motorists on Diablo Road and Blackhawk Road, and would permanently protect 381 acres of the site as open space.

**David Crompton**

**From:** Yasmin Kotval <ykotval@gmail.com>
**Sent:** Monday, September 17, 2018 4:21 PM
**To:** David Crompton
**Subject:** Magee Ranch rezoning

Dear Mr. Crompton,

I am writing to express my opposition to the proposed rezoning of Magee Ranch open space. Please honor the results of Measure S and keep this as open space. A

Thank you,

Yasmin Kotval
Danville, CA

## 68: RESPONSE TO YASMIN KOTVAL

**68A:** The commenter's opposition to the project is noted. Please also refer to the Master Responses in Section 2.4.3 regarding Measure S and open space.

BARBARA KURTENBACH

P.O. BOX 763

DIABLO, CA 94528

(925) 200-2572

October 14, 2018

David Crompton

Dcrompton@Danville.ca.gov

RE: Magee Ranch Preserve

Dear Mr. Crompton,

I live at 1996 Diablo Road, Danville, CA 94506 across from Avenida Nueva, and I believe my home is the only one that faces out from the intersection of Mc Cauley and Green Valley to the intersection of Tassajara and Crow Canyon Road. Since my kitchen in particular faces out, I can see all the traffic that backs up, in the morning, as well as the afternoon due to the schools.

Here are some of reasons I feel the building of the development will affect the environment.

*Due too more cars sitting, this will cause more exhaust.

*The roads will back up more, sometimes I see the cars backed up 2 miles from Mt Diablo Scenic going West in the morning…

*Diablo Road going past Vista Grande into town is already backed up and different times of the day, so more cars will affect the Town

*I see the drivers do the craziest things in front of my house. Such as stop and go forward and backward to go the opposite direction.

*I've seen several rear end accidents that do not get reported.

A

*More detours through Diablo, such as car, bike & motorcycle accidents, trees falling as well as power lines.

*I doubt the people trying to get of Jillian onto Blackhawk Road will easily be able to do so, therefore causing more of a backup on Blackhawk.

A Cont'd

All the points I have made will cause not only environmental problems, but a huge cost to the police department that needs to take care of the problems.

As far as I know, no one has ever come and observed traffic from my house. Mr. Crompton, we talked about you coming to my house to view the early morning traffic. I called and left a message for you to do so and advised when you could come. I never heard back.

Best Regards,

*Barbara Kurtenbach*

Barbara Kurtenbach

(925) 200-2572

## 69: RESPONSE TO BARBARA KURTENBACH

**69A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic.

**David Crompton**

| | |
|---|---|
| **From:** | Shahin Lavasani <shahin.lavasani@gmail.com> |
| **Sent:** | Monday, October 15, 2018 9:52 AM |
| **To:** | David Crompton; Maryann.cella@gmail.com; Archie Bowles; Robert Combs; Mark Graham; Lisa Blackwell; Renee Morgan |
| **Subject:** | Fwd: Magee Ranch Development Project-Oct 12, 2018 |
| **Attachments:** | IMG_3067.JPG; IMG_3068.JPG; IMG_3065.JPG; IMG_3057.JPG; IMG_3056.JPG; IMG_3074.JPG; IMG_3194.JPG; To Town of Danville.docx; View 1.JPG; view 2.JPG; Inspection and Evaluation Letter For Shahin Lavasani.pdf; view 3.JPG |

October 15, 2018
From: Shahin Lavasani

47 Diablo Creek Pl. Danville, CA

(With Attachments)

To the Town of Danville:

On behalf of my family, I'm writing to let you know our concerns about the Davidon/Magee Ranch development project.

We moved to our house at 47 Diablo creek pl. (right adjutant to Magee's property) last year. One of the main reason we bought this house was because the house is **in a safe, quiet neighborhood** with beautiful **view of open space** from our rooms and back yard.

After we found out about development project, we assessed the situation carefully, with every pros and cons, and below we've summarized our concern and why we are opposing the Davidon development project until all recommended actions are completed:

1. **Creek causing erosion (Please see attached engineering report and pictures)**: As I mentioned, our house is adjutant to Magee's' property and the creek. Within last 2 years, the creek had eroded significantly mainly because of not being maintained, lots of debris, dead trees, piled up on creek, blocked/narrowed the water flow and rain had caused significant damage to embankment (please see pictures). The erosion is expanding every winter and after each rain. It is getting very close to my property and we are worried about the safety of our child who is playing in backyard. The erosion has damaged my neighbor's property (on south) and erosion caused to block/narrow down the water flow of water, causing water jam in front of my property and more erosion toward my property as such result. A

    a. If such development is considered for approval we strongly believe the creek should be cleaned/maintained, damages should be repaired, and all recommendation provided by engineering report should be followed/completed to prevent further damage to our property.

2. **View and Privacy (please see attached pictures):** As mentioned our house is adjutant to Magee ranch with beautiful view of open space, trees, cows, and other animals. This view has given us a peace in mind and life, one of the reason we chose this place. IF such project gets approved, we will completely loose our privacy, and instead of seeing beautiful open space we would see cars, houses, people running, every day from our bedroom and backyard. B

3. **Noise/dust pollution:** Just imagine that the open space behind our backyard will be transitioned to a noisy street with hundreds and hundreds of cars commuting during day and night. Also, the development project would cause a lot of noise and dust during the construction for at least 2-3 years. C

4. **Traffic:** It has mentioned many time by other Danville residence and we would like to reemphasis it too; Adding 1000 car per day to a windy/narrow/ unstandardized diablo road will have significant impact on traffic and danger of bicyclists. Unless you are residence on this neighborhood and have to drive this road every day, you can't imagine what does that mean to add additional 1000 cars to the daily commute on Diablo road. D

    a. In our opinion the Town of Danville should take serious step towards improving the condition of this road (e.g. widening the road and make it standard) BEFORE approving such a big development project and letting 1000 more cars to be added to daily traffic.

So, as residence of Danville, me and my family are against the Davidon/Magee development project unless all proposed actions/improvements shall be taken/completed.

Thank you for taking time reading my concerns and please contact me with any questions.

Sincerely yours,

Shahin Lavasani, PhD

925-915-9125

Shahin.Lavasani@gmail.com















October 12, 2018

From: Shahin Lavasani

47 Diablo Creek Pl. Danville, CA

(With Attachments)

To the Town of Danville:

On behalf of my family, I'm writing to let you know our concerns about the Davidon/Magee Ranch development project.

We moved to our house at 47 Diablo creek pl. (right adjutant to Magee's property) last year. One of the main reason we bought this house was because the house is **in a safe, quiet neighborhood** with beautiful **view of open space** from our rooms and back yard.

After we found out about development project, we assessed the situation carefully, with every pros and cons, and below we've summarized our concern and why we are opposing the Davidon development project until all recommended actions are completed:

1. **Creek causing erosion** (Please see engineer report and pictures): As I mentioned, our house is adjutant to Magee's' property and the creek. Within last 2 years, the creek had eroded significantly mainly because of not being maintained, lots of debris, dead trees, piled up on creek, blocked/narrowed the water flow and rain had caused significant damage to embankment (please see pictures). The erosion is expanding every winter and after each rain. It is getting very close to my property and we are worried about the safety of our child who is playing in backyard. The erosion has damaged my neighbor's property (on south) and erosion caused to block/narrow down the water flow of water, causing water jam in front of my property and more erosion toward my property as such result.
    a. If such development is considered for approval we strongly believe the creek should be cleaned/maintained, damages should be repaired, and all recommendation provided by engineering report should be followed/completed to prevent further damage to our property.
2. **View and Privacy** (please see picture): As mentioned our house is adjutant to Magee ranch with beautiful view of open space, trees, cows, and other animals. This view has given us a peace in mind and life, one of the reason we chose this place. IF such project gets approved, we will completely loose our privacy, and instead of seeing beautiful open space we would see cars, houses, people running, every day from our bedroom and backyard.
3. **Noise/dust pollution:** Just imagine that the open space behind our backyard will be transitioned to a noisy street with hundreds and hundreds of cars commuting during day and night. Also, the development project would cause a lot of noise and dust during the construction for at least 2-3 years.
4. **Traffic:** It has mentioned many time by other Danville residence and we would like to reemphasis it too; Adding 1000 car per day to a windy/narrow/ unstandardized diablo road will have significant impact on traffic and danger of bicyclists. Unless you are residence on this

neighborhood and have to drive this road every day, you can't imagine what does that mean to add additional 1000 cars to the daily commute on Diablo road.

a. In our opinion the Town of Danville should take serious step towards improving the condition of this road (e.g. widening the road and make it standard) BEFORE approving such a big development project and letting 1000 more cars to be added to daily traffic

So, as residence of Danville, me and my family are against the Davidon/Magee development project unless all proposed actions/improvements shall be taken/completed.

Thank you for taking time reading my concerns and please contact me with any questions.

Sincerely yours,

Shahin Lavasani, PhD

925-915-9125

Shahin.Lavasani@gmail.com





Shams Mahallati, P.E.
Trans Engineering Group
201 Via La Paz
Greenbrae, CA 94904
(415) 246-8765

Mr. Shahin Lavasani
47 Diablo Creek Place
Danville, CA. 94526

September 27, 2017

Subject: Visual Inspection & Engineering Evaluation of Creek Embankment

Dear Mr. Lavasani,

Per your request, on September 27, 2017, I inspected the back yard of your property along the south side where a creek is running below almost parallel to the barbed fence line at about 15-20 ft below grade.

Per my observation, a part of the creek embankment below the fence has been eroded and some large pieces of rocks also known as rip raps, have been placed at the bottom of the eroded area. I have also noticed that the plastic sheathing has been placed partially on top of the eroded area within your property.

In my opinion, the existing rip raps have no adverse impact on the natural path of the water flow inside the creek. On the contrary, the rocks have positive role in preventing further erosion of the creek embankment, in case if the creek becomes subject to flooding in the future.

Per my observation, which was limited to the area of your property and part of the adjacent property on the west side, the creek embankments on both sides of the creek bed have been subject to moderate to severe erosion at some parts. On the west side, across from your property, some large tree roots were exposed. The creek bed has been narrowed at many locations with heave vegetation. Some debris and dead tree branches were observed, as well.

In my opinion, the steep eroded area close to your backyard should not be left, unmitigated, as-is. Further heavy rain and a flooded creek, similar to the 2016 season, will most likely deteriorate the existing eroded surface and will undermine the embankment stability.

**Recommendation:** As a part of limited mitigation to reduce the possibility of further erosion for the time being, I recommend the following:

1. Remove the existing debris along upstream and downstream and clean the creek bed and embankment as much as possible. Otherwise, in a future heavy flood event, the flood water will rise up and will erode the embankments on both sides further. Remove the dead trees downstream and upstream stream, so that the flow path will be clear.

2. Increase the layers of the existing rip rap rocks approximately parallel to the embankment grade. Increase the height of rip raps for at least 4-5 ft more, inclined, if possible. An effective layer of rip raps will prevent further erosion and reduce the possibility of the embankment collapse because the rip raps would also act as a buttress force to resist sliding. Ensure that the natural grading of the embankment will be preserved. Use ¼ -ton size of rip raps for erosion control along the bottom of the creek.

3. Ensure that the natural path of the creek will be preserved as much as possible during cleaning and regular maintenance and during the rip rap installation.

The above recommendations are based on visual inspection and my engineering judgement. For more extensive and comprehensive evaluation, an engineering hydraulic report with more detailed permanent mitigations is required. The evaluation, conclusion and recommendation expressed in this report are based on a limited visual inspection. If you have any questions, please contact me at (415) 246-8765.

Sincerely,



Shams Mahallati, P.E.




Attachment: Selected Photo of the slide area, September 27, 2017



Photo1: Side view of the eroded area with rip raps at bottom.



## 70: RESPONSE TO SHAHIN LAVASANI

**70A:** With respect to requests that the applicant restore Green Valley Creek for the purpose of avoiding further erosion, the ongoing erosion is an existing condition and the project would not accelerate that erosion. Accordingly, the project would not be responsible for mitigation to improve upon existing conditions for adjoining property owners. However, as part of the mitigation for potential project impacts to the California red-legged frog, Biological Resources Mitigation Measure 4.4-2 requires restoration of natural flow conditions in portions of Green Valley Creek and riparian habitat restoration along the entire creekside pathway. These improvements would provide some of the benefits requested in the comment letter. Further details (e.g., regarding use of riprap) are expected to be included in resource agency permits, particularly from the Regional Water Quality Control Board. The applicant has committed that in its discussions with the resource agencies, it will seek approval of creek bed enhancements to minimize erosion of the bank for the benefit of adjoining properties, even if such enhancements are not required by the agencies. If the necessary agencies approve, the applicant will fund the approved enhancements.

**70B:** The commenter expresses concerns regarding the alteration of private views from her property and loss of privacy from development of the project. CEQA does not specifically address the issue of privacy as it is not considered an environmental concern. In addition, CEQA is concerned with public rather than private views. Visual impacts of the project from public viewpoints are addressed in Appendix A of the RDEIR.

**70C:** Noise is addressed in Appendix A of the RDEIR as are the effects from fugitive dust generation during project construction.

**70D:** As described in the RDEIR, the project would generate approximately 841, and not 1,000, daily vehicle trips. Please refer to the Master Responses in Section 2.4.1 regarding traffic.

## David Crompton

**From:** Adam Leftik <aleftik@gmail.com>
**Sent:** Monday, October 15, 2018 10:56 AM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

I am strongly opposed to the Magee Ranches project and the development of the agricultural spaces off of Diablo and Old Blackhawk Roads. These roads which will endure additional traffic are narrow, single lane, windy roads and already glutted with traffic. Many cyclists use these streets and are at increased risk from additional vehicles. The development of this agricultural space is a matter that should be voted on by the community and not decided by a select few. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers. This will be a very negative change to our community. I will vote only for counsel members who oppose this development. A

Respectfully,
Adam Leftik

## 71: RESPONSE TO ADAM LEFTIK

**71A:** The commenter's opposition to the project is noted. Please also refer to the Master Responses in Section 2.4.1 regarding traffic, Section 2.4.2 regarding bicycle safety, and Section 2.4.3 regarding Measure S.

## David Crompton

**From:** Elizabeth Rauch Leftik <elizrauch@gmail.com>
**Sent:** Saturday, October 13, 2018 11:09 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project.

I am firmly opposed to the Magee Ranches project and the development of the agricultural spaces off of Diablo and Old Blackhawk Roads. These roads which will endure additional traffic are narrow, single lane, windy roads and already glutted with traffic. Many cyclists use these streets and are at increased risk from additional vehicles. The development of this agricultural space is a matter that should be voted on by the community and not decided by a select few. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers. This will be a very negative change to our community. I will vote only for counsel members who oppose this development. A

Respectfully,
Elizabeth Leftik

## 72: RESPONSE TO ELIZABETH LEFTIK

**72A:** Please refer to Response 71A.

**David Crompton**

**From:** Michael Levine <michael.levine@sbcglobal.net>
**Sent:** Monday, September 10, 2018 2:55 AM
**To:** David Crompton
**Subject:** Reply: Magee Preserve Comment

**I would like to challenge the supposition within the DEIR that:**
The project trips added to the intersection of Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard under Cumulative plus Project Conditions will increase the V/C ratio by more than 5 percent during the AM and School PM peak hours, which constitutes a significant impact based on the established thresholds of significance. This represents a significant, potentially unavoidable impact.

My challenge is based on the fact that Davidon is proposing some floor plans of only ± 3,100 square feet. These units will most likely be occupied by empty nesters who will not increase the V/C ratio during the AM and School PM peak hours at all.
I propose that the following be done:
1. Identify the number of housing units by their square footage proposed by Davidon.
2. Those units with smaller square footage be **omitted** from the Traffic Statistics
--**define smaller square footage** as **single story models, and/or models under 3600 SF** since these are most likely to be occupied by a household **without school age children.**
3. Re evaluate the increase the V/C ratio during the AM and School PM peak hours with this modification

A

Note: there are over 2000 homes in the Blackhawk Rd. corridor. A majority portion of 67 is 3% or under this number; so how could a 5% increase be expected?

Is this email sufficient for such a challenge?
If not, what format is acceptable?

Michael Levine
--empty nester and probable buyer of a single story model or model under 3600 SF (along with numerous other Baby Boomers who want to downsize in retirement in this area)

---

**From:** David Crompton <DCrompton@danville.ca.gov>
**To:** Michael Levine <michael.levine@sbcglobal.net>
**Sent:** Thursday, September 6, 2018 9:14 AM
**Subject:** RE: Magee Preserve Comment

http://www.danville.ca.gov/MageeRanch

**From:** Michael Levine [mailto:michael.levine@sbcglobal.net]
**Sent:** Thursday, September 6, 2018 4:06 AM

## 73: RESPONSE TO MICHAEL LEVINE

**73A:** Please refer to the Master Response in Section 2.4.1 for an explanation of the methodology used in analyzing traffic. As explained in the RDEIR, the analysis of potential traffic impacts is deliberately conservative. Rather than use standard Institute of Transportation Engineers trip generation rates, the Town selected higher trip generation rates that have actually been experienced at two other residential developments in the Town that include accessory dwelling units.

## David Crompton

**From:** Steven McCann <sfmccann52@icloud.com>
**Sent:** Sunday, September 16, 2018 3:17 PM
**To:** David Crompton
**Subject:** Re-zoning of Magee Ranch Open Space

Mr. Crompton,
Please do NOT allow for this space to be re-zoned.
The people of Danville need to be part of this decision.
Please make sure this is done correctly and in accordance with good governance.
Please call me if you'd like to discuss.
Steven McCann
1019 McCauley Road
Danville, CA 94526
925-381-6284

Sent from my iPhone

A

## 74: RESPONSE TO STEVEN MCCANN

**74A:** The commenter's opposition to the project is acknowledged. Please refer to Master Responses in Section 2.4.3 regarding Measure S.

## David Crompton

**From:** Eileen McCauley <eileenmccauley925@gmail.com>
**Sent:** Monday, September 17, 2018 4:43 PM
**To:** David Crompton
**Subject:** Magee Preserve

Dear Mr. Compton:
I live at 1 Jillian Way, Danville. I have studied the proposed "Magee Preserve" Project and I would like to let you know that I am in favor of approval of this project. I am definitely in the minority in my stance on this issue. I would feel very vulnerable speaking publicly at the upcoming hearing on September 25th. Therefore, I thought I'd state my position in writing, instead. I am afraid that development is inevitable, and it is only fair that Jed be allowed to develop his property in a reasonable fashion. As I understand it, the current A-4 and A-2 designation would allow him to sell the entire 410 acre hillside in 5-acre parcels (approximately 80 home sites (?)). I most definitely would not like to see that happen. I believe that 66 homes clustered in the flat areas (with 3 more home down by Hidden Valley), is far preferable. Feel free to share this note, if you think it will help the discussion. A
Thank you.
Eileen McCauley
1 Jillian Way

## 75: RESPONSE TO EILEEN MCCAULEY

**75A:** The commenter's support for the proposed project is acknowledged.

**David Crompton**

**From:** Greg McPherson <Greg@McPhersonRealEstate.com>
**Sent:** Monday, October 15, 2018 4:42 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project.
I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more car trips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulder less, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists, including my own family, use these streets frequently (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government, which is what Measure S promised. Of the community members who are aware of this not widely-publicized re-zoning from agricultural/open space to planned unit developments, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The consequences of THEIR actions are OURS to live with. The project will be a very negative change to our community. A

Respectfully,
Greg McPherson
4085 Sugar Maple Dr.
Danville, CA 94506

## 76: RESPONSE TO GREG MCPHERSON

**76A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Maria Medina-Kirby <medinakirby@yahoo.com>
**Sent:** Saturday, October 13, 2018 9:01 AM
**To:** David Crompton
**Subject:** 66+ new homes in the Open Space new Magee Ranch Development

To whom it may concern:
I am current resident of Hidden Oaks, which is across the new Magee Ranch Development. I would like to voice my disagreement with the possibility of building 66 or more houses in the new Magee Ranch Development. The road infrastructure of this area is so poor, there is only one two lane road to access Hidden Oaks and all the communities along the Blackhawk Road, as it is. If that many house would be built in the area, the traffic will become unbearable and the commute unbearable.
Please help up avoid this situation.
Thank you
Maria Kirby
2277 Deer Oak Way
Danville, CA 94506

A

## 77: RESPONSE TO MARIA MEDINA-KIRBY

**77A:** The commenter's opposition to the project is acknowledged. Please refer also to the Master Response 2.4.1 regarding traffic.

## David Crompton

**From:** Michelle Merkel <themerkel@aol.com>
**Sent:** Monday, October 15, 2018 7:36 AM
**To:** David Crompton
**Subject:** Magee Ranch development

This is a public safety nightmare. The roads cannot handle these homes. The road already backs up for miles every morning and evening. This is very bad for Danville and is not safe for existing residents. A

Michelle Merkel
224 Belgian Drive
Danville

## 78: RESPONSE TO MICHELLE MERKEL

**78A:** Please refer to Master Responses in Section 2.4.1 regarding traffic.

## David Crompton

**From:** Rama Murty <rmurty4@yahoo.com>
**Sent:** Sunday, October 14, 2018 8:16 PM
**To:** David Crompton
**Cc:** Archie Bowles; Robert Combs; Mark Graham; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; Rob Ewing; Newell Arnerich; Robert Storer; Karen Stepper; Lisa Blackwell; Renee Morgan
**Subject:** Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead is designed to benefit only special interests---the developers and landowners. The project will be a very negative change to our community.

Respectfully,

Rama Murty

49 Vicezna Court

Danville, CA 94526

Virus-free. www.avast.com

## 79: RESPONSE TO RAMA MURTY

**79A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Valerie Nealis <valerie@valeriesellshomes.com>
**Sent:** Monday, October 15, 2018 10:12 AM
**To:** David Crompton
**Subject:** Magee Ranches project

Mr. Crompton,

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural use land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. A

The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead is designed to benefit only special interests---the developers and landowners. The project will be a very negative change to our community.

Respectfully,

Valerie Nealis

## 80: RESPONSE TO VALERIA NEALIS

**80A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Crystal Nelson <crystalnelson@hotmail.com>
**Sent:** Monday, October 15, 2018 4:29 PM
**To:** David Crompton; David Crompton
**Subject:** Comments on the Dreir for Magee Ranches Project

**Importance:** High

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government, which is what Measure S promised. Of the community members who are aware of this not widely-publicized re-zoning from agricultural/open space to planned unit developments, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The consequences of THEIR actions are OURS to live with. The project will be a very negative change to our community.

A

Sincerely,
Crystal Nelson
2450 Roundhill Drive
Alamo, CA 94507

## 81: RESPONSE TO CRYSTAL NELSON

**81A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Mark Oney <markoney@mac.com>
**Sent:** Monday, September 24, 2018 9:12 PM
**To:** David Crompton; Newell Arnerich
**Cc:** maryann.cella@gmail.com
**Subject:** Possible Re-Zoning of Magee Ranch Open Preserve

I am strongly opposed to this possible re-zoning, and am personally appalled that it could be approved without being put to a vote with Danville residents, as Measure "S" was intended to ensure.

I am a long-time resident of Magee Ranch, work in San Francisco, and commute to BART in Lafayette every morning. Diablo Road is already congested enough with traffic to Monte Vista High School each morning. The increase in traffic resulting from the proposed residential re-zoning would only aggravate the situation. A

Please do right by the residents of Danville, and bring this to a vote by the your constituents as was intended with the overwhelming support for Measure "S". Preserving Danville as the unique community that it is, and avoiding the sprawl evident in Dublin and San Ramon is the right thing to do.

Sincerely,

Mark & Gail Oney
450 Brightwood Circle
Danville, CA 94506

c: (925) 984-6724

## 82: RESPONSE TO MARK & GAIL ONEY

**82A:** The commenter's opposition to the project is acknowledged. Please also refer to the Master Responses in Section 2.4.1 regarding traffic and Section 2.4.3 regarding Measure S.

October 10, 2018

From: Louis Palandrani – Resident - 51 Cameron Court Danville CA

To: David Crompton – Principal Planner – Town of Danville

RE: Revised Draft EIR - Magee Preserves – Transportation and Circulation – Construction Traffic

The purpose of the Magee Preserves Revised Draft Environmental Impact Report (RDEIR) issued on August30, 2018, is to "inform the public generally of the significant environmental effects of the project, identify possible ways to minimize the significant effects and describe reasonable alternatives that support objects of the project".

The RDEIR includes a Transportation and Circulation Study (see Article 4.3 and Appendix E). The Study notes significant impacts to both the overall Roadway System Level of Service (LOS) and the Bicycle Level of Service (BLOS) associated with the completed project. The traffic study included in the RDEIR does not address traffic increases and differing conditions during the 3.5 year construction phase of Magee Preserves.

During construction, which is projected to start in July 2019 and complete in December 2023, there will be a significant increase in construction vehicles, equipment and material deliveries as well as job labor traffic supporting the Magee Preserves project. This construction related traffic will further stress the Roadway System and the impacts on LOS and BLOS should be addressed in the EIR. While there will be the increase of traffic there also will be the differing condition of larger construction related vehicles utilizing the roadways on a regular basis during the construction phase. The EIR should provide recommended Mitigation Measures for these impacts and review the need for enhanced traffic control efforts such as directing construction related traffic to access and egress the jobsite from less traveled / impacted or alternate routes and possibly requiring construction related deliveries to be scheduled outside of Peak AM and PM traffic periods. Additionally, heightened attention to the maintenance and repair program for the subject roadways during construction should be addressed.

A

The significant Transportation & Circulation impacts noted in the RDEIR are not only travel time related issues, but also potential safety issues for vehicular traffic, bicyclists and pedestrians in and around the area. It is requested that the construction phase related traffic impacts be more thoroughly addressed in the EIR, and Mitigation Measures be presented and instituted.

## 83: RESPONSE TO LOUIS PALANDRANI

**83A:** Please refer to the Master Response 2.4.1 regarding traffic and specifically traffic during the construction period.

## David Crompton

**From:** Tom Parker <tparker@parkertechnicalsales.com>
**Sent:** Monday, October 15, 2018 12:00 PM
**To:** David Crompton
**Subject:** Comments on the DREIR Magee Ranch Project

Dear Mr. Crompton,

Please accept these comments on the DREIR for the Magee Ranches project. I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. There are times of the day when a vehicle cannot enter onto Diablo Road from side streets due to long lines of traffic. In addition, I worry about emergency vehicles being able to respond in a timely manner in a fire prone area or if there is a medical emergency. This is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The project will be a very negative change to our community.
Respectfully,

A

Tom Parker

Parker Technical Sales
Office: 925.362.9450
Cell: 925.413.6017



*Since 1988 Neon Controls Regulators have been proudly made in the USA. We offer line, cylinder, and semi-automatic cross-over manifold regulators.*

## 84: RESPONSE TO TOM PARKER – PARKER TECHNICAL SALES

**84A:** Please refer to response to Letter 6.

**David Crompton**

**From:** Mary Peart <marykpeart@yahoo.com>
**Sent:** Wednesday, September 26, 2018 5:50 PM
**To:** David Crompton
**Subject:** Building in MaGee Ranch

I have lived in Hidden Oaks going on 6 years and have kids currently in Highschool at Monte Vista, Middle School at Los Cerros and Elementary at Green Valley.

I'm very concerned about the proposed house building project which will bring upwards of 60 homes into our area. I serve on the Traffix advisory board and am well aware of the enormous traffic problem on Blackhawk/Diablo Road. Traffix is not equipped to expand their program and there are no busses to MV Highschool which is the biggest problem time in the morning and afternoon. Traffix struggles to hire drivers and money is tight. This year's Freshman class is the largest ever at 700 kids and it's growing. We cannot handle the traffic and that school cannot handle more kids.

My two younger kids ride the bus, but I have no bus option for my high schooler. We spend too much time sitting in traffic as it is and it's a huge stress on my family to try and figure out ways to get around it and get him to school on time. A

I also believe a huge part of the problem is the stop sign at Diablo Ranch Road. If any building is to occur, which I hope it does not, there needs to be a signal put in. This would alleviate a lot of the daily back up.

Blackhawk Road is curvy, dangerous, and filled with bikers even on weekday mornings. Bringing more cars on that road brings more danger to bikers and to us drivers. I'm terrified of my oldest driving to school on this road and playing chicken with other cars as he tries to avoid the bikers in the road.

Please do whatever you can to halt this project.

Thank you,
Mary Peart

Sent from Yahoo Mail for iPhone

## 85: RESPONSE TO MARY PEART

**85A:** Please refer to the Master Response 2.4.1 regarding traffic, which includes a discussion of TRAFFIX. It appears that the commenter's reference to Diablo Ranch Road is actually Mt. Diablo Scenic Boulevard. Section 4.3 of the RDEIR addresses the traffic impacts at the intersection of Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard and finds the impact from project traffic to be significant. Mitigation Measure 4.3-1 calls for installation of a traffic signal at this intersection. Please refer to Response 2.4.2 regarding bicycle safety.

**David Crompton**

**From:** Kasia Proctor <leskaole@gmail.com>
**Sent:** Monday, September 17, 2018 10:07 AM
**To:** David Crompton
**Subject:** Comments on Magee Ranch

Hello,

My name is Kasia Proctor and I am a Danville resident, residing on Creekledge Ct. I have several concerns about the proposed development at Magee Ranch.

1. Traffic is a major concern. As it is today we experience daily back up of traffic either trying to get my daughter to Green Valley Elementary at the Diablo Rd/Green Valley Rd intersection in the morning or coming home after picking her up after 3pm at the Diablo Rd/Blackhawk Rd/Mt Diablo Scenic Blvd intersection. An additional 841 daily trips as shown in the new traffic study is a lot of traffic to have to deal with on top of the current traffic. A

2. Proposed traffic mitigation - it is my understanding that there is a traffic light proposed instead of the current stop sign at Diablo Rd/Blackhawk Rd and Mt Diablo Scenic Blvd. That is 50ft from the end of our street (Creekledge Ct). It is hard enough for us to get out and make a left turn into Diablo Rd as is today even when people are stopped in an already long line waiting for the stop sign. If the oncoming traffic is not stopping when they have a green light, it will be very dangerous and next to impossible to get out of our street and with more traffic when the light is red we will truly be stuck. B

3. Pedestrian safety - when I take our dog for a walk or try to take my girls out for a walk down to Diablo Country Club, the short distance between Creekledge and Ave Nueva is NOT safe. I have to walk on people's property and their driveways to stay out of the oncoming traffic as there is NO sidewalk other than outside of my house. I don't understand how the study can say that this is sufficient. C

4. Bicycle safety - claiming that Diablo rd is safe for bicycles is a joke. Good luck trying to bike up or down that lane. I would never let my children ride their bikes on that street and I would be terrified if I ever had to do it myself. It is narrow, it is windy and with wild life such as deer or turkeys on the road, it can get unpredictable. D

5. Danville appeal - we moved to Danville recently and I must say that we fell in love with it. The small town atmosphere, which you promote with the City tag line is one of a kind. I am very glad we didn't move to San Ramon, where there are so many more developments. I think rezoning and building in the current open spaces is a mistake, which little by little will change the feel of this town. We love hearing the cows in the morning and saying Good morning to them and the turkeys on the way to school. I don't want to loose that. E

I look forward to hearing your response.

Sincerely,
Kasia Proctor

## 86: RESPONSE TO KASIA PROCTOR

**86A:** Please refer to Master Responses in Section 2.4.1 regarding traffic and Response 35A.

**86B:** If Contra Costa County approves the installation of a traffic signal at the intersection of Diablo Road/Blackhawk Road & Mt. Diablo Scenic Boulevard, the traffic engineering design of that signal would include provisions for access to and from existing streets.

**86C:** The courts rejected the lawsuit's challenges to the 2013 EIR's adequacy regarding pedestrian safety and did not require additional analysis in the 2018 RDEIR.

**86D:** Please also refer to the Master Response in Section 2.4.2 regarding bicycle safety.

**86E:** The comment does not raise a significant environmental issue and, therefore, does not require response in this Final REIR. The comment is part of the project record and will be available to decisionmakers.

## David Crompton

**From:** Katie Robinson <kirspr@sbcglobal.net>
**Sent:** Saturday, September 15, 2018 7:49 PM
**To:** David Crompton
**Subject:** McGee ranch property

Dear mr Crompton,

I am writing to voice my concerns over the refining if the McGee ranch property. I vehemently oppose this idea and urge you to fight for ALL of the McGee ranch property to remain open space rather than be developed. I have lived, and voted, in Danville for more than 20 years. The idea that this land would be subject for consideration of rezoning and development is deplorable. The traffic and congestion on Diablo Rd is dangerous as it is. Adding more cars and people will cause accidents and create mayhem for the residents. Most important, it is our duty to preserve the open space for future generations. A

Katie Robinson

Sent from my iPhone.

## 87: RESPONSE TO KATIE ROBINSON

**87A:** Please refer to the Master Responses in Section 2.4.1 regarding traffic and Section 2.4.2 regarding bicycle safety. In other respects, the comment does not raise a significant environmental issue and, therefore, does not require response in this Final REIR. The comment is part of the project record and will be available to decisionmakers.

## David Crompton

**From:** Rachel Rogers <qqrachel@sbcglobal.net>
**Sent:** Monday, October 15, 2018 1:47 PM
**To:** David Crompton
**Subject:** Magee Ranch

I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government, which is what Measure S promised. Of the community members who are aware of this not widely-publicized re-zoning from agricultural/open space to planned unit developments, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The consequences of THEIR actions are OURS to live with. The project will be a very negative change to our community. Respectfully,

A

Rachel Rogers
50 Marseille Court
Danville, Ca 94506

## 88: RESPONSE TO RACHEL ROGERS

**88A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Renee ROGERS <qqrenee@sbcglobal.net>
**Sent:** Monday, October 15, 2018 1:43 PM
**To:** David Crompton
**Subject:** DREIR for Magee Ranches Project

I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government, which is what Measure S promised. Of the community members who are aware of this not widely-publicized re-zoning from agricultural/open space to planned unit developments, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The consequences of THEIR actions are OURS to live with. The project will be a very negative change to our community. Respectfully,

A

Renee Rogers
50 Marseille Court
Danville, Ca 94506

## 89: RESPONSE TO RENEE ROGERS

**89A:** Please refer to the responses to Letter 6.

**David Crompton**

**From:** Nancy Salvo <henckensalvo@gmail.com>
**Sent:** Sunday, October 14, 2018 9:40 PM
**To:** David Crompton
**Subject:** Comments on DREIR for Magee Ranch Project

I hope you will consider the following comments on the DREIR for the Magee Ranch project.
My husband and I are firmly opposed to the Magee Ranch project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable.

We live just off Avenida Nueva and the intersection at Diablo Road. This intersection is already congested many times of the day, particularly at the start and end of school hours. There are three Danville schools which are affected, Green Valley Elementary, Los Cerros Middle and Monte Vista High, as well as Athenian. This added congestion will also affect Blackhawk neighborhoods beyond Diablo Scenic.
Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists also use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which we believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The project will be a very negative change to our community. A

Respectfully,

Nancy and Hank Salvo
2030 Calle Los Callados
Diablo, CA. 94528

--
Nancy Salvo

## 90: RESPONSE TO NANCY & HANK SALVO

**90A:** Please refer to the responses to Letter 6.

**David Crompton**

**From:** Carrie Sawyer <csawyer76@yahoo.com>
**Sent:** Sunday, September 16, 2018 9:00 PM
**To:** David Crompton
**Subject:** Open Space

Dear Mr. Crompton,

I am sending this letter in opposition of developing the Magee open space. This area has been purposefully put aside for future generations to enjoy. Once it is gone, there will be no going back. If this is to proceed, why is it not being put on a ballot for voters to decide? I feel that the re-zoning process has been kept under wraps and should be handled more publicly. I am also concerned that should the project for forth, that will be a precedent for more of the open space to be utilized for other puposes. A

Please consider Danville's natural beauty that makes living here so incredible.

Thank you for your time,

Carrie Sawyer, Danville Resident

Sent from Yahoo Mail on Android

## 91: RESPONSE TO CARRIE SAWYER

**91A:** Please refer to the Master Responses in Section 2.4.3 regarding Measure S.

**David Crompton**

**From:** Patty Sherve <p_sherve@yahoo.com>
**Sent:** Saturday, September 22, 2018 1:21 PM
**To:** David Crompton
**Subject:** Magee Project

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Hello Mr. Crompton,

I am writing to get a better indication as to how close to the ridge line above Anderson Ranch this development will be encroaching. As you know, the hillside below this ridge has collapsed in the past and the undulations of earth across that entire hillside make it appear there could be more slide movement. I'm concerned as to the amount of run-off coming downhill from the properties. The gully, which sits beside our property, and carrying hillside runoff during heavy rains is already overwhelmed. If any water runoff from above is channelled to that same gully, our home could easily be flooded. From the proximity of the proposed lot lines to that of the existing oak trees, it appears as though these homes will be built right up to the edge of the hillside. Their yard waste water and drains could likely be placed to send water down the slope to our development.

Having homes built right to the edge of that hillside would greatly impact the value of the homes below. In the drawing presented, the grey informational box covers the development I reside in. The development planned appears to be built to impact the greater number of already established developments than it would if it were set back. A

I understand there is to be a meeting on 9/25 which I hope I'll be able to attend to learn more about my questions.

Please consider addressing this water diversion question at the meeting. Homes along Hill Meadow Place were inundated by water and mud because developers and planners did not take enough consideration of the hill's slope and drainage.

Respectfully,

Patricia Sherve
1020 Hill Meadow Place
Anderson Ranch

## 92: RESPONSE TO PATRICIA SHERVE

**92A:** The proposed project would not modify any areas near the ridgeline referenced by the commenter.

**David Crompton**

**From:** Denis J. Squeri <dsqueri@babenefits.com>
**Sent:** Monday, October 8, 2018 4:58 PM
**To:** David Crompton
**Subject:** Opposition to Magee Ranch Project

Dear Danville Planning Commission,

We offer two more voices to the Magee Ranch Project dissent. I walked away from the September 25th meeting with the impression that the current Draft EIR was completely bought and paid for by the developers and it misrepresented the facts in a number of areas. I need not belabor the point about bicycle safety as any resident driver on Diablo can tell you how challenging the "Khyber Pass" can be for cyclists and motorists. Before you pass this measure, please pause and ask your conscience if you are ready to bear some responsibility for the inevitable accident or fatality that will likely occur on this ungodly stretch of road. This is the most human issue tied to this disastrous project, but there are certainly more points to consider.

I sat through the Planning Commission on the 25th and appreciated the professionalism and politeness of the council. I also believe you have a tough job in moving forward while placating long-term residents. I applaud and thank you for your service as somebody has to do it and I love Danville enough to appreciate the excellent job that you and your predecessors have done. I hope you can continue to keep true to the spirit of what the vast majority of Danville residents prefer. However, we do not need a new skate park at the cost of our beautiful and envied open space. There is a reason that hawk, owl and other wildlife sightings are down. There is a reason that coyote, pig and deer invasions are growing. Our continued development is killing off one set of animals while forcing another into proximity with humans. These are unavoidable, but please, don't make it worse!!! A

After the meeting on the 25th, I left with many unanswered issues in mind. Please just answer a couple of quick questions and perhaps you will help me point out the obvious insanity of the current planning process and decision:

1. How does bicycle comfort and convenience represent anything to do with safety? Spend a simple hour on the weekend to see what cyclists and motorists endure. Consider adding another 5% to the intensity, distraction or anger and you can guess the ultimate results B
2. Is the stop light on the corner of Mt. Diablo Scenic and Diablo Road approved? Do you have plans and permits for this? How is that going to impact the upstream backup all the way to Magee Ranch entrance or beyond? How fast do you think MV drivers are going to drive to make up for this terrible delay? C
3. How does the EIR have road width and lane measurements that are 20% wider than the actual lanes they purport to measure? Do they use a different system than inches and feet when doing EIR's for developers? D
4. How is that the 1989 (I believe) promises of the builders of Magee Ranch are still unfulfilled? Diablo Road is a near, third world artery that is collapsing in places, yet somehow, all the fixes promised from 1989 have never come to fruition. Developers continue to overpromise and under-deliver once they make their profit and move on E
5. Flooding from current developments plagues my current neighborhood on Creekledge Court. Please don't tell me you have this under control as the town will do nothing to fix the problem we have already. Our lots are awash with heavy rain from an undersized, poorly planned development culvert above and behind our property. Now developers want to add more hardscape and runoff from 69 F

more homes above this. Are you going to provide proper drainage to the bottom of the hill and away from Danville? All we can do is attempt at best to get run-off to go past or under our house to the neighbors below. Ultimately, somebody is at the bottom of the ladder. You are going to cause a serious, damaging flood when you take away this much open space. Even 5% more water will put me under! F Cont'd

6. Is the additional revenue worth it? Why do I not hear anything about the positive impact of this development? What are the trade-offs? More importantly, are there any pay-offs? It is hard to believe that this repackaged development under a different name is anything but a wolf in sheep's clothing. Other than G

7. Even the developers slick website touting the benefits is nothing but a pig's ear in silk wrapping. It is an advertising piece at best and thinly veiled. It is amazing what good lighting, drone videos and positive spin can do, but like the EIR, it seems positioned to sell more homes, not answer questions. Do you believe the representation is accurate? H

We are just two more voices, but hopefully there will be enough refrain to convince the council that this development is just another attempt at a bad idea. Unless you plan on a major change to Diablo Road and the downstream drainage, this development is terrible legacy for this council and this administration. Is this what you want to be remembered as and is this what you want to hand to your heirs? Hopefully not! Thanks for hearing us out.

Sincerely,

Denis Squeri & Ronni Carlier
8 Creekledge Court, Danville, CA 94506

## 93: RESPONSE TO DENIS SQUERI & RONNI CARLIER

**93A:** The commenter's general opposition to the project is acknowledged.

**93B:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**93C:** Please refer to the Master Responses in Section 2.4.1 regarding traffic, including the signalization of the Diablo Road/Blackhawk Road/Mt. Diablo Scenic Boulevard intersection. As noted in the Master Responses, the County Public Works Department staff has indicated support for the signal (see Letter 1). Nevertheless, the Town must account for the possibility that the County might not ultimately approve the signal; if it does not, the impact would be significant and unavoidable. As described in Section 2.4.1, the addition of this signal would significantly improve the existing backups on the Diablo Road/Blackhawk Road corridor.

**93D:** For the RDEIR, engineers measured road widths at 100' intervals along the Diablo Road/Blackhawk Road corridor. The Town is unaware of any inaccuracies in these measurements.

**93E:** This comment alleges that the Town did not make the improvements described in a 1994 capital improvement project. Please refer to the Master Responses in Section 2.4.1 regarding this issue.

**93F:** Please refer to the Master Responses in Section 2.4.5 regarding hydrology.

**93G:** The comment does not raise a significant environmental issue and therefore does not require response in this Final REIR. The comment is part of the project record and will be available to decisionmakers.

**93H:** The comment does not raise a significant environmental issue and, therefore, does not require response in this Final REIR. The comment is part of the project record and will be available to decisionmakers.

**David Crompton**

**From:** Michael Steinbrecher <mjsvelo@gmail.com>
**Sent:** Thursday, September 27, 2018 5:00 PM
**To:** David Crompton
**Cc:** Newell Arnerich
**Subject:** Magee Preserve - Revised Draft Environmental Impact Report

Dear Mr. Crompton,

I write to register my opposition to the proposed rezoning of the 410 acre parcel described in the Revised Draft Environmental Impact Report (RDEIR) for the Magee Preserve project. In particular, the RDEIR is deficient in that it fails to address bicycle safety issues which were the basis for the successful lawsuit that defeated the previous iteration of this project. (*SOS-Danville Group v. Town of Danville,* Contra Costa County Superior Court Case No. MSN13-1151 (filed 7/25/2013); Order Re: Petition for Writ of Mandate (CEQA) (7/28/2014); Opinion, First District Court of Appeal, Case No. A143010 (9/11/2015)). A

With respect to bicycle safety, the RDEIR is deficient in at least the following respects:

1. The RDEIR explicitly concedes that analysis of the project's impact on bicycle safety has not been done. "As to bicycle safety, further CEQA analysis is required before the Town considers approval of the proposed project." (RDEIR at 1-1). Because the RDEIR ignores the essential issue upon which the Court of Appeal found the previous environmental impact report deficient, the RDEIR is vulnerable to legal challenge on the same grounds. B

2. In describing the changes to the failed Summerhill Homes proposal, the RDEIR fails to explain how the Davidon proposal does anything different to address bicycle safety issues: "[The Davidon proposal] differs from the project described in the 2013 EIR in three respects: the proposed project reduces developed acreage and increases open space by approximately nine acres; replaces, rather than removes, the corral on the site; and adds electric vehicle charging stations for each proposed residence." (RDEIR at 1-1). Because the RDEIR and proposed project apparently differ in no significant regard from the Summerhill Homes proposal, the RDEIR is vulnerable to legal challenge on the same grounds. C

3. The developers of this project have no idea how to mitigate risks to the many cyclists who use Diablo and Blackhawk roads. In Figure 4.3-2 accompanying the discussion of bicycle facilities, the RDEIR states: "Planned Bicycle Facility (Type Undetermined)." Apparently, the developers are suggesting that they will figure out later how to mitigate risks to cyclists. The lack of detail on this point is glaring and an "approve now, develop a solution later" approach does not strike me as sound planning policy or an adequate revision of the deficient original EIR. D

4. The bicycle safety level of service analysis (BLOS) grossly underestimates the number of weekend bicycle trips on Diablo and Blackhawk roads. It projects bicycle usage rates based only on cyclists who begin their trip from the existing housing development located south of Blackhawk Road at Magee Ranch Road. (RDEIR at 4.3-14). This is ludicrous as Mount Diablo is a popular destination for cyclists who approach the mountain from all over the Diablo Valley, not simply from one existing housing development. The RDEIR concludes that based on this analysis, "the results for existing conditions show acceptable levels of operation on most segments during all peak hours except between Avenida Nueva and Diablo Creek Place in both directions during all peak hours." (RDEIR at 4.3-14). While this is clearly inaccurate since it understates the number of cyclists using these roads it is also worth noting that the table accompanying the analysis finds BLOS scores of 'C' and 'D' for virtually all segments of roadway affected by the project. (RDEIR Table 4.3-5 at 4.3-14). While apparently a score of 'D' is considered acceptable, it is logical to assume that the addition of 69 single-family homes, seven attached secondary dwelling units, and associated E

roadways and infrastructure will markedly increase vehicular traffic and present even greater risks to bicyclists using these roads. It does not require a planning tool such as a BLOS to demonstrate that these stretches of the road where there is no bike lane and vehicular traffic rushing past at ~40 mph already pose an extreme risk to cyclists that would only be exacerbated by approval of the Magee Preserve project. The failure to adequately evaluate existing conditions makes woefully deficient the conclusory analysis presented at RDEIR 4.3-26 that purports to describe the existing plus project conditions as an "acceptable BLOS D or better on all segments."

E Cont'd

Finally, while I will not take the time to re-state the many concerns voiced by other citizens (which I share), I will make one final comment. Mr. Arnerich was a proponent of Measure S, passed by 74.4% of the citizens of the Town of Danville in the November 2000 election. He went so far as to sign the ballot argument in favor of Measure S as well as the rebuttal to the arguments against Measure S. Apparently, Mr. Arnerich is now taking the position that Measure S does not apply to this project as evinced in the form letter response he has been sending to email commenters: "Measure S does not apply to this parcel." This response fails to explain exactly *why* Measure S does not apply so there is no basis to challenge this assertion on legal grounds. But even if a legal argument can be made that Measure S does not apply by the letter of the law, Measure S clearly *does* apply if we consider the spirit of the law wherein the citizens of the Town of Danville have expressed a desire to vote on projects that would rezone agricultural land in favor of planned unit development. Let me state it as plainly as possible: if the Town believes this project will be beneficial to the citizens of Danville, then it owes those same citizens the right to vote on whether this project should go forward. Good government requires nothing less.

F

Thank you for the opportunity to comment,

Michael Steinbrecher
60 Torino Court
Danville

## 94: RESPONSE TO MICHAEL STEINBRECHER (1)

**94A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**94B:** The quote from the RDEIR at page 1-1 is introductory text that explains, with reference to the findings of the 2013 lawsuit, why the RDEIR was prepared. Section 4.3 of the RDEIR addresses bicycle safety in accordance with the Court of Appeal's mandate.

**94C:** The Court of Appeal ruling required the Town to analyze potential impacts of increased vehicle traffic on bicycle safety is contained in the RDEIR. The Court did not dictate changes to the proposed project.

**94D:** The proposed project's bicycle and pedestrian access trails and the Town's potential trail are not mitigation measures for the project, although both trails would provide options for bicyclists who wish to avoid the Diablo Road/Blackhawk Road corridor north of the project site.

**94E:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety. Bicycle volume (which is, as indicated by commenters, highly variable) is not part of the BLOS calculation and is not calculated in the RDEIR.

**94F:** Please refer to the Master Responses in Section 2.4.3 regarding Measure S.

**David Crompton**

**From:** Michael Steinbrecher <mjsvelo@gmail.com>
**Sent:** Wednesday, October 3, 2018 4:57 PM
**To:** Newell Arnerich
**Cc:** David Crompton
**Subject:** RE: Magee Preserve - Revised Draft Environmental Impact Report

Dear Mr. Arnerich,

In your response to my September 28, 2018 comment regarding this Project, you dismiss the issue of bicycle safety and the failure of the original EIR to adequately address the increased impacts to bicyclists using Diablo and Blackhawk roads which will be an obvious consequence if this Project is built. You deliberately minimize the importance of this issue in your statements that the discrepancy identified by the Court "was an unsupported comment regarding bicycles. Bicycles are not part of the CEQA process." Both of those statements are, in fact, untrue. The Court of Appeal spent six pages in its opinion discussing the issue of bicycle safety in detail as part of its CEQA analysis, identifying numerous deficiencies with the original EIR and refuting each of the Town's arguments:

- In conducting its independent review, the Court of Appeal stated: "substantial evidence does not support the Town's finding that the Project would have no significant impact on bicycle safety."
- In discussing the Town's failure to meet CEQA's substantial evidence standard, the Court noted: "Here, the only pertinent facts set forth in the final EIR are that the roadways at issue are already dangerous for cyclists, the Project would increase traffic on those roadways, and widening the roadways would be difficult. While the final EIR concludes the Project would not change existing conditions, it does not explain why or point to any facts or evidence that would support the conclusion." A
- Finally, the Court noted "Defendants argue we should infer the draft EIR concludes the Project would not have a significant impact on bicycle safety. They point out the draft EIR states the Project's main entrance had the potential to provide an unsafe condition for pedestrians, but it does not contain a similar finding with respect to cyclists. Defendants are essentially arguing the EIR's failure to discuss an impact constitutes substantial evidence that impact is not significant. The position is untenable..."

In the event you, the Town's consultants, or the Town's attorneys choose to respond to this comment, please refrain from minimizing the issue of bicycle safety which was the linchpin of the trial court and Court of Appeal's decisions against the Project and which will likely result in the rejection of the revised EIR due to that document's deficiencies with regard to the same issue. To reiterate the points that I identified in my September 27, 2018 note to you and Mr. Crompton:

1. The RDEIR explicitly concedes that analysis of the Project's impact on bicycle safety has not been done. "As to bicycle safety, further CEQA analysis is required before the Town considers approval of the proposed project." (RDEIR at 1-1). Because the RDEIR ignores the essential issue upon which the Court of Appeal found the previous environmental impact report deficient, the RDEIR is vulnerable to legal challenge on the same grounds. B

2. In describing the changes to the failed SummerHill Homes proposal, the RDEIR fails to explain how the Davidon proposal does anything different to address bicycle safety issues: "[The Davidon proposal] differs from the project described in the 2013 EIR in three respects: the proposed project reduces developed acreage and increases open space by approximately nine acres; replaces, rather than removes, the corral on the site; and adds electric vehicle charging stations for each proposed residence." (RDEIR at 1-1). Because the RDEIR and proposed Project apparently differ in no significant regard from the SummerHill Homes proposal, the RDEIR is vulnerable to legal challenge on the same grounds. C

3. The developers of this Project have no idea how to mitigate risks to the many cyclists who use Diablo and Blackhawk roads. In Figure 4.3-2 accompanying the discussion of bicycle facilities, the RDEIR states: "Planned Bicycle Facility (Type Undetermined)." Apparently, the developers are suggesting that they will figure out later how to mitigate risks to cyclists. The lack of detail on this point is glaring and an "approve now, develop a solution later" approach does not strike me as sound planning policy or an adequate revision of the deficient original EIR. D

4. The bicycle safety level of service analysis (BLOS) grossly underestimates the number of weekend bicycle trips on Diablo and Blackhawk roads. It projects bicycle usage rates based only on cyclists who begin their trip from the existing housing development located south of Blackhawk Road at Magee Ranch Road. (RDEIR at 4.3-14). This is ludicrous as Mount Diablo is a popular destination for cyclists who approach the mountain from all over the Diablo Valley, not simply from one existing housing development. The RDEIR concludes that based on this analysis, "the results for existing conditions show acceptable levels of operation on most segments during all peak hours except between Avenida Nueva and Diablo Creek Place in both directions during all peak hours." (RDEIR at 4.3-14). While this is clearly inaccurate since it understates the number of cyclists using these roads it is also worth noting that the table accompanying the analysis finds BLOS scores of 'C' and 'D' for virtually all segments of roadway affected by the project. (RDEIR Table 4.3-5 at 4.3-14). While apparently a score of 'D' is considered acceptable, it is logical to assume that the addition of 69 single-family homes, seven attached secondary dwelling units, and associated roadways and infrastructure will markedly increase vehicular traffic and present even greater risks to bicyclists using these roads. It does not require a planning tool such as a BLOS to demonstrate that these stretches of the road where there is no bike lane and vehicular traffic rushing past at ~40 mph already pose an extreme risk to cyclists that would only be exacerbated by approval of the Magee Preserve Project. The failure to adequately evaluate existing conditions makes woefully deficient the conclusory analysis presented at RDEIR 4.3-26 that purports to describe the existing plus Project conditions as an "acceptable BLOS D or better on all segments." E

Sincerely,

Michael Steinbrecher
60 Torino Court
Danville

**From:** Newell Arnerich [mailto:NArnerich@danville.ca.gov]
**Sent:** Friday, September 28, 2018 2:56 PM
**To:** Michael Steinbrecher <mjsvelo@gmail.com>
**Cc:** David Crompton <DCrompton@danville.ca.gov>
**Subject:** Re: Magee Preserve - Revised Draft Environmental Impact Report

Hi Michael,

The discrepancy was an unsupported comment regarding bicycles. Bicycles are not part of the CEQA process, however, in this case, due to the circumstance of how the issue was discussed, it required a supporting statement which was not included at the time. Therefore, the previous process was nullified. However, in the current proposal does study impacts on bicycles and specifically was studied by an outside consultant and not the Town. The project has been resubmitted by a different Owner/Development team and the Town must review all applications by applying our strict standards and process accordingly. If the project application meets the written standards that govern our Town, then we must go through the process of reviewing the project as fairly as possible. The Town does not promote projects as only property owners/developers can make applications. We are legally obligated to have a written and public process for reviewing such applications.

We all look forward to seeing a comprehensive review of all of the issues surrounding any proposed development project. I agree the EIR and all related studies need to be carefully reviewed, studied and considered before any future action on this proposal.

As for Measure S, the specific purpose was to force property owners/developers to stick with their current entitlements and not try to increase development rights and to secure open space on behalf of the public. Measure S is not based on spirit, rather it is based on simple fact, verified by the Courts and has worked to achieve the goal of increasing open space and not allowing greater development rights other than existing rights.

I appreciate hearing your concerns and will carefully take all of your points into consideration should this project get to the Council. Thank you again for taking time to share your views.

Best regards,

**Newell Arnerich**

**Mayor of Danville**

Town of Danville | 510 La Gonda Way | Danville, CA 94526

**Mobile:** +1 510 366 0716 | **Facsimile:** +1 510 556 1258
**LinkedIn:** https://www.linkedin.com/in/newellarnerich

narnerich@danville.ca.gov| www.danville.ca.gov

***"Live Locally"***

*Mayor 1999, 2004, 2009, 2012, 2013 & 2018*
*Elected to the Council in 1995, 2000, 2004, 2008, 2012 & 2016*

*Contra Costa County Mayors Conference, Exec. Committee & Past Chair*
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*EBEDA, East Bay Economic Development Alliance for Business, Exec. Committee*
*Discovery Counseling Center, Board Member*
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*Danville Finance Committee*
*Danville Library Endowment Board Member*
*Street Smarts Committee, Board Member*
*Danville Area Chamber of Commerce*
*Community Mentor Award, Tri-Valley APAPA*
*Contra Costa County Sheriff's Posse*
*100 Club Contra Costa County Life Member*
*CERT, Community Emergency Response Team Certified*

*Honorary Board Member, Tri Valley APAPA*
*Danville Sycamore Valley Rotary Club, Past President/Member-22 years*
*Hospice of the East Bay, volunteer*
*Operation Welcome Home, Co-founder*
*Sentinels of Freedom, Volunteer/Supporter*
*Operation Wounded Minds, Volunteer/Supporter*
*Honorary Principal Silicon Valley Academy*
*Honorary Principal Wenzhou New Star English Training Center*

New! Danville s top stories, right from the source.

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***"Small Town Atmosphere Outstanding Quality of Life"***

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On Sep 28, 2018, at 2:00 PM, Michael Steinbrecher <mjsvelo@gmail.com> wrote:

Dear Mr. Arnerich,

Thank you for the form letter response. The only portion of your response that addressed the issues raised in my comment letter states the project "was previously approved a few years ago, but had to be redone due to a discrepancy in a response to one question during the environmental review process." That "discrepancy" was the failure of the original EIR to adequately address bicycle safety issues. The revised EIR also abjectly fails to address these issues, punting them to some future analysis, using completely inadequate assumptions to measure bicycle traffic patters for the BLOS analysis, and apparently assuming that a green line on a chart labeled "Planned Bicycle Facility (Type Undetermined)" will address the deficiencies in the original EIR identified by the Court of Appeal. This shallow, cursory effort to fix the EIR's deficiencies will not withstand careful scrutiny and, on that basis, the revised EIR should be rejected.

Moreover, I stand by my comment that whether the letter of Measure S applies, the spirit of that ordinance certainly does and a development project of this magnitude should be placed before the citizens of Danville so that we may vote on whether this project benefits our Town.

Sincerely,

Michael Steinbrecher

On Sep 28, 2018, at 12:22 PM, Newell Arnerich <NArnerich@danville.ca.gov> wrote:

Hi Michael,

Thank you for your email. There is a lot of mis information on the Magee project proposal that does have a direct affect on the proposed project particularly on Measure S.

1. The property can and has always had the right to develop up to 69 homes for more than 40 years by Contra Costa County, prior to Danville's incorporation.

2. Danville's tough planning standards encourages parcels with this type of designation to build on the least impactful area and smallest area and to transfer the balance to East Bay Regional Park Open Space preserve or another equivalent entity. Organizations such as Save Mt. Diablo have reviewed this current and previous version of the project and has given their support due to the ability to secure permanent open space and build responsibly.

3. Specifically in this case, the 410 acre site would build 69 homes on aprox. 29 acres and the remaining 381 acres would be preserved in permanent open space. This process is similar to how Danville has historically preserved open space which is now over 40% of all of The Town - significantly greater than any other community.

4. Measure S does not apply to this parcel and there is no public vote involved unless the property requests greater development potential than what they have by right. We wanted Measure S to stop limit larger developments from occurring on three specific parcels including the remaining Magee Ranch. This ruling has been vetted in Court as well.Measure S has worked exactly as planned - developers/owners of these targeted parcels have not requested greater development rights, this this is how we gain all of the open space in Danville. There are a few people who continue to ignore the facts on measure S and misinform others.

This project was previously approved a few years ago, but had to be redone due to a discrepancy in a response to one question during the environmental review process. Danville has some of the highest standards and most difficult regulations to develop property. Danville's restrictions have helped us create over 40% permanent open space which no other City has been able to to so.

The environmental report will be reviewed first by the planning commission, if approved in the next 3 months, then the specific project proposal will return to the planning commission for their consideration. If they recommended approval then it would then come before the Council for consideration. I hope this response answers some of your questions.

Thank you again for voicing your concerns!

Best regards,

<Live locally.png>

**Newell Arnerich**

**Mayor of Danville**

Town of Danville | 510 La Gonda Way | Danville, CA 94526

**Mobile: +1 510 366 0716** | **Facsimile:** +1 510 556 1258
**LinkedIn:** https://www.linkedin.com/in/newellarnerich

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New! Danville s top stories, right from the source.

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http://djphillipfromgalt.hot1035radio.com/images/2013/04/twitter-logo-2.png http://twitter.com/DanvilleINFO

***"Small Town Atmosphere Outstanding Quality of Life"***

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On Sep 27, 2018, at 5:00 PM, Michael Steinbrecher <mjsvelo@gmail.com> wrote:

Dear Mr. Crompton,

I write to register my opposition to the proposed rezoning of the 410 acre parcel described in the Revised Draft Environmental Impact Report (RDEIR) for the Magee Preserve project. In particular, the RDEIR is deficient in that it fails to address bicycle safety issues which were the basis for the successful lawsuit that defeated the previous iteration of this project. (*SOS-Danville Group v. Town of Danville,* Contra Costa County Superior Court Case No. MSN13-1151 (filed 7/25/2013); Order Re: Petition for Writ of Mandate (CEQA) (7/28/2014); Opinion, First District Court of Appeal, Case No. A143010 (9/11/2015)).

With respect to bicycle safety, the RDEIR is deficient in at least the following respects:

1. The RDEIR explicitly concedes that analysis of the project's impact on bicycle safety has not been done. "As to bicycle safety, further CEQA analysis is required before the Town considers approval of the proposed project." (RDEIR at 1-1). Because the RDEIR ignores the essential issue upon which the Court of Appeal found the previous environmental impact report deficient, the RDEIR is vulnerable to legal challenge on the same grounds.

2. In describing the changes to the failed Summerhill Homes proposal, the RDEIR fails to explain how the Davidon proposal does anything different to address bicycle safety issues: "[The Davidon proposal] differs from the project described in the 2013 EIR in three respects: the proposed project reduces developed acreage and increases open space by approximately nine acres; replaces, rather than removes, the corral on the site; and adds electric vehicle charging stations for each proposed residence." (RDEIR at 1-1). Because the RDEIR and proposed project apparently differ in no significant regard from the Summerhill Homes proposal, the RDEIR is vulnerable to legal challenge on the same grounds.

3. The developers of this project have no idea how to mitigate risks to the many cyclists who use Diablo and Blackhawk roads. In Figure 4.3-2 accompanying the discussion of bicycle facilities, the RDEIR states: "Planned Bicycle Facility (Type Undetermined)." Apparently, the developers are suggesting that they will

figure out later how to mitigate risks to cyclists. The lack of detail on this point is glaring and an "approve now, develop a solution later" approach does not strike me as sound planning policy or an adequate revision of the deficient original EIR.

4. The bicycle safety level of service analysis (BLOS) grossly underestimates the number of weekend bicycle trips on Diablo and Blackhawk roads. It projects bicycle usage rates based only on cyclists who begin their trip from the existing housing development located south of Blackhawk Road at Magee Ranch Road. (RDEIR at 4.3-14). This is ludicrous as Mount Diablo is a popular destination for cyclists who approach the mountain from all over the Diablo Valley, not simply from one existing housing development. The RDEIR concludes that based on this analysis, "the results for existing conditions show acceptable levels of operation on most segments during all peak hours except between Avenida Nueva and Diablo Creek Place in both directions during all peak hours." (RDEIR at 4.3-14). While this is clearly inaccurate since it understates the number of cyclists using these roads it is also worth noting that the table accompanying the analysis finds BLOS scores of 'C' and 'D' for virtually all segments of roadway affected by the project. (RDEIR Table 4.3-5 at 4.3-14). While apparently a score of 'D' is considered acceptable, it is logical to assume that the addition of 69 single-family homes, seven attached secondary dwelling units, and associated roadways and infrastructure will markedly increase vehicular traffic and present even greater risks to bicyclists using these roads. It does not require a planning tool such as a BLOS to demonstrate that these stretches of the road where there is no bike lane and vehicular traffic rushing past at ~40 mph already pose an extreme risk to cyclists that would only be exacerbated by approval of the Magee Preserve project. The failure to adequately evaluate existing conditions makes woefully deficient the conclusory analysis presented at RDEIR 4.3-26 that purports to describe the existing plus project conditions as an "acceptable BLOS D or better on all segments."

Finally, while I will not take the time to re-state the many concerns voiced by other citizens (which I share), I will make one final comment. Mr. Arnerich was a proponent of Measure S, passed by 74.4% of the citizens of the Town of Danville in the November 2000 election. He went so far as to sign the ballot argument in favor of Measure S as well as the rebuttal to the arguments against Measure S. Apparently, Mr. Arnerich is now taking the position that Measure S does not apply to this project as evinced in the form letter response he has been sending to email commenters: "Measure S does not apply to this parcel." This response fails to explain exactly *why* Measure S does not apply so there is no basis to challenge this assertion on legal grounds. But even if a legal argument can be made that Measure S does not apply by the letter of the law, Measure

S clearly *does* apply if we consider the spirit of the law wherein the citizens of the Town of Danville have expressed a desire to vote on projects that would rezone agricultural land in favor of planned unit development. Let me state it as plainly as possible: if the Town believes this project will be beneficial to the citizens of Danville, then it owes those same citizens the right to vote on whether this project should go forward. Good government requires nothing less.

Thank you for the opportunity to comment,

Michael Steinbrecher
60 Torino Court
Danville

## 95: RESPONSE TO MICHAEL STEINBRECHER (2)

**95A:** Please refer to Master Responses in Section 2.4.2 regarding bicycle safety.

**95B:** Please refer to Response 94B.

**95C:** Please refer to Response 94C.

**95D:** Please refer to Response 94D.

**95E:** Please refer to Response 94E.

**David Crompton**

**From:** Ryan Stow <ryanstow@rocketmail.com>
**Sent:** Monday, October 15, 2018 2:45 PM
**To:** David Crompton
**Cc:** Kimberlie Stow
**Subject:** Comments on the DREIR for Magee Ranches Project

David,

Please accept these comments on the DREIR for the Magee Ranches Project.

We are opposed to the Magee Ranches Project and any rezoning to allow for the development of agricultural land!

If the town wants to rezone land for use, it needs be voted on by the residents of Danville, per Measure S. Any changes to zoning without a vote is a misuse of power by the town government and is directly against the will of it's people.

A

The town does not need this development and there is no just reason to allow it.

Sincerely,

Ryan Stow
and
Kimberlie Stow

304 Camaritas Way
Danville, CA 94526

## 96: RESPONSE TO RYAN & KIMBERLY STOW

**96A:** Please refer to the Master Response in Section 2.4.3 regarding Measure S.

**Planning Commission, Aug 25, 2018**
**Response to Revised Draft EIR for Magee Preserve**

**Danville wants to maintain a small town atmosphere; and I can appreciate its leaders put a lot of time, money, and effort into maintaining an outstanding quality of life. This makes sense, since all Danville has to offer is itself, which by anyone's definition is a small town. So let's maintain the best positive small town image we can. Part of that is to maintain bicycle safety and acknowledge that bicycles, by law, have all the Rights, Privileges and Responsibilities to use the roads.**

**A bicycle does not have to use a trail!!**

**The Barbara Hale Trail was dedicated for school children. It is also utilized by golf carts, high school track teams, baby strollers, people walking their dogs on leashes, and occasional wheel chairs from the senior residences.**

**Attached is an example of what you don't want to happen. It's the roadside memorial to 'Martin', a bicyclist recently killed in Pleasant Hill.**
**Danville came very close to its own roadside memorial with the two bicyclists that were hit on Diablo Rd. This section of Diablo Rd, from Green Valley to Mt. Diablo Scenic is currently unsafe and is essentially another accident waiting to happen.**
**This section of Diablo Rd has been described by Danville Bicycle Advisory Committee to the Town of Danville as, "One of the most dangerous roads in Contra Costa for bicycles." This is due in part to its fast moving traffic, substandard width lanes and lack of shoulders. The EIR needs to include 4 feet on-grade pave shoulders suitable for bike travel.** A

**I seem to recall reading somewhere when Danville could lay claim to having more horses than citizens. I'm pretty sure it was a bragging point.**
**Obviously, we can't lay claim to that anymore.**
**But nothing, and I do mean nothing, says quality small town character more than laying claim to more bicycles than citizens!**

## 97: RESPONSE TO CLELEN TANNER (1)

**97A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**97B:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety, including the feasibility of adding bike lanes and increasing the shoulder on Diablo Road.

**David Crompton**

**From:** Clelen Tanner <foothilldental@sbcglobal.net>
**Sent:** Tuesday, September 11, 2018 11:38 PM
**To:** David Crompton; Maryann Cella; JON ISOM; Clelen Tanner; Andrew Dillard; Rob Ewing; Todd B. Gary; John Ciccarelli; Stuart Flashman
**Subject:** Re: Magee project Bicycle Facilities 4.3-4 Revised EIR
**Attachments:** Diablo Trail Barbara Hale Trail 12.JPG; Diablo Trail 10 Barbara Hale Trail 3.JPG; Diablo Trail 12 Barbara Hale Trail 5.JPG

As follow up to Pat Isom's email of Sept. 10 and as a **response to the Revised Draft EIR for Magee Preserve**:
The Barbara Hale trail, aka **Diablo Trail**, is essentially 7 to 9 feet wide. Some short sections are 10 feet wide; these are all immediately adjacent to the blind intersections of Calle Arroyo, Fairway Dr. and Clydesdale Dr. 95% of the Trail remains approximately 8 feet wide with sections as narrow as 7 feet wide. (See attached example) Most of the 'truncated domes and detectible warning pavers' are 7 feet wide. (See Attached example) Only one is 10 feet wide.
The debris from the over-growth and overhanging vegetation grows and falls faster than the Town of Danville can clear it. This makes the usable width for the Barbara Hale Trail vary from day to day. (See attached example)
The Barbara Hale Trail is just that, a trail, not a Class I Bikeway. It was dedicated as a trail, it's posted by the Town of Danville as a trail, and it does not meet the criteria of a Class I Bikeway. A
Further, a bicycle has all the rights, privileges, and responsibility to use Diablo Rd., which is the most direct and utilized route to Mt. Diablo State Park. For bicycle safety, Danville needs to improve Diablo Rd, not the Barbara Hale Trail or a trail extension to Blackhawk Rd.
The Revised Draft EIR for Magee Preserve should not be approved as written.

Clelen Tanner

On Monday, September 10, 2018 10:48 AM, JON ISOM <jonpat@sbcglobal.net> wrote:

Dear Mr. Crompton,

Bicycle facilities are divided into three classes: Class I Bikeways, Class II Bikeways and Class III Bikeways. "The Streets and Highways Code Section 890.4 defines a "bikeway" as **a facility that is provided primarily for bicycle travel**." Thus the conclusion that the pathway between Diablo Road and McCauley Road/Green Valley Road and Calle Arroyo is a Class I Bikeway is in error. That path was provided so that children in that neighborhood could safely walk to Green Valley School. It was never intended as a facility "primarily for bicycle travel"

In addition, (a) Traveled Way. "The minimum paved width of travel for a two-way bike path shall be 8 feet, 10 feet preferred." "Where heavy bicycle volumes are anticipated and/or significant pedestrian traffic is expected, the paved width of a two-way bike path should be greater than 10 feet, preferably 12 feet or more." (b) Shoulder. A minimum 2 - foot wide shoulder, composed of the same pavement material as the bike path or all weather surface material that is free of vegetation, shall be provided adjacent to the traveled way of the bike path when not on a structure."

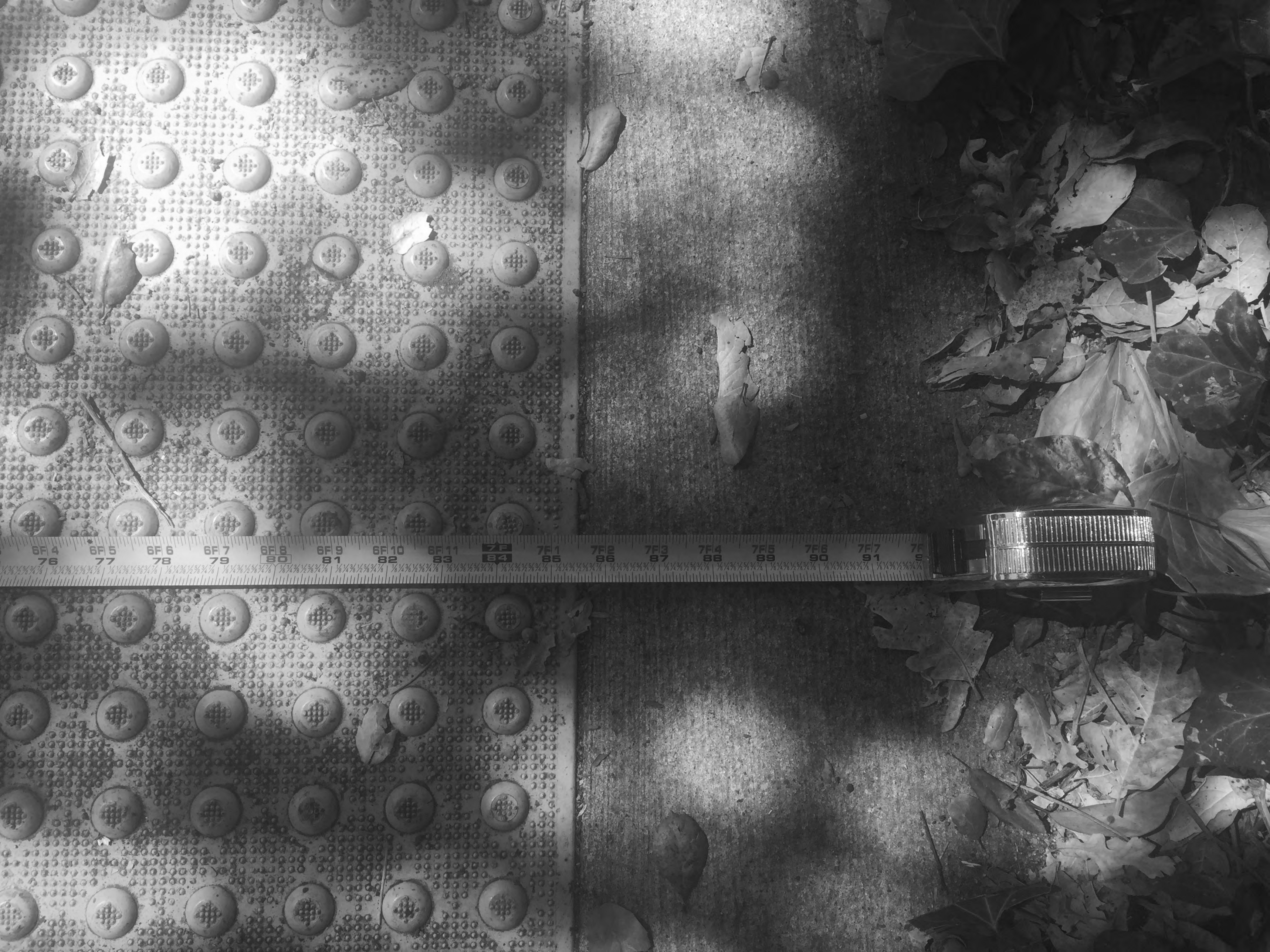
*The Streets and Highways Code Section 891-Local agencies must comply with design criteria and uniform symbols.*

Nothing has been proposed that complies with the design criteria as specified in The Streets and Highways Code. In the area of the project, nothing exists that complies with the design criteria as specified in The Streets and Highways Code.

Pat Isom


Green Valley Rd





## 98: RESPONSE TO CLELEN TANNER (2)

**98A:** Please refer to the Responses to Letters 97-99 and the Master Responses to Comments in Section 2.4.2 regarding bicycle safety.

**David Crompton**

| | |
|---|---|
| **From:** | Clelen Tanner <foothilldental@sbcglobal.net> |
| **Sent:** | Saturday, October 6, 2018 5:01 PM |
| **To:** | Randy Haberl; Archie Bowles; Robert Combs; Graham M.; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; David Crompton; Rob Ewing |
| **Cc:** | Maryann Cella; JON ISOM; Stuart Flashman; John Ciccarelli |
| **Subject:** | Response to Revised Draft EIR for Magee Preserve |
| **Attachments:** | Land Rover_Diablo Rd Accident I.JPG; Land Rover_Dialo Rd II.JPG; Land Rover_Diablo Accident III.JPG |
| **Follow Up Flag:** | Follow up |
| **Flag Status:** | Flagged |

I would like to add the latest accident on Diablo Rd. to the existing list of accidents on Diablo Rd.
This accident occurred on Diablo Rd between Alameda Diablo and Avenida Nueva. It evolved a blue Land Rover and a utility pole. It appears to be a hit and run type accident. I do not believe this accident was reported to Danville Police, but should be included in the accident report for the Draft EIR.
The utility pole is one of the poles that were suppose to be relocated according to Contract C-55B. However, this was never done. The change orders to account for this 'non-relocation' were destroyed by the Town of Danville. Further, **no as-built plans exist.**
This section of Diablo Rd remains high risk for bicyclists due to its substandard width, lack of on grade shoulders, and immediate adjacent utility poles, drainage ditch and trees. This recent accident vividly depicts the high risk this section of Diablo Rd has for cyclists. Bicyclist have all the rights, privileges, and responsibilities to use Diablo Rd. Bicycles are not required to use a Trail. Danville needs to insure bicycle safety. Per John Ciccarelli, bicycle safety expert, bicycle on- grade shoulders need to be added to Diablo Rd. **This does not require widening any lanes!**, as Tai Williams has suggested.

Some of the more recent accidents are as follows: A

1. The accident at Clydesdale Dr./Diablo Rd on Monday, 1/22 around 7 p.m.
2. The accident involving a vehicle that crashed through the wall at 1883 Diablo Road (between Alameda Diablo and Avenida Nueva) approximately 1/22.
3. An accident along Diablo Road between Alameda Diablo and Avenida Nueva in the evening of Monday, 1/22 that resulted in the diversion of traffic into the community of Diablo.
4. An accident in which a car ran into a tree close to Diablo Road between Alameda Diablo and Avenida Nueva on Tues, May 22, between 2-4 p.m.
5. An accident that occurred approximately 2 weeks ago. It resulted the closure o Diablo Rd. till 11:15 pm.

Please include these accidents as a response to the Draft EIR.

Thank you,
Clelen Tanner



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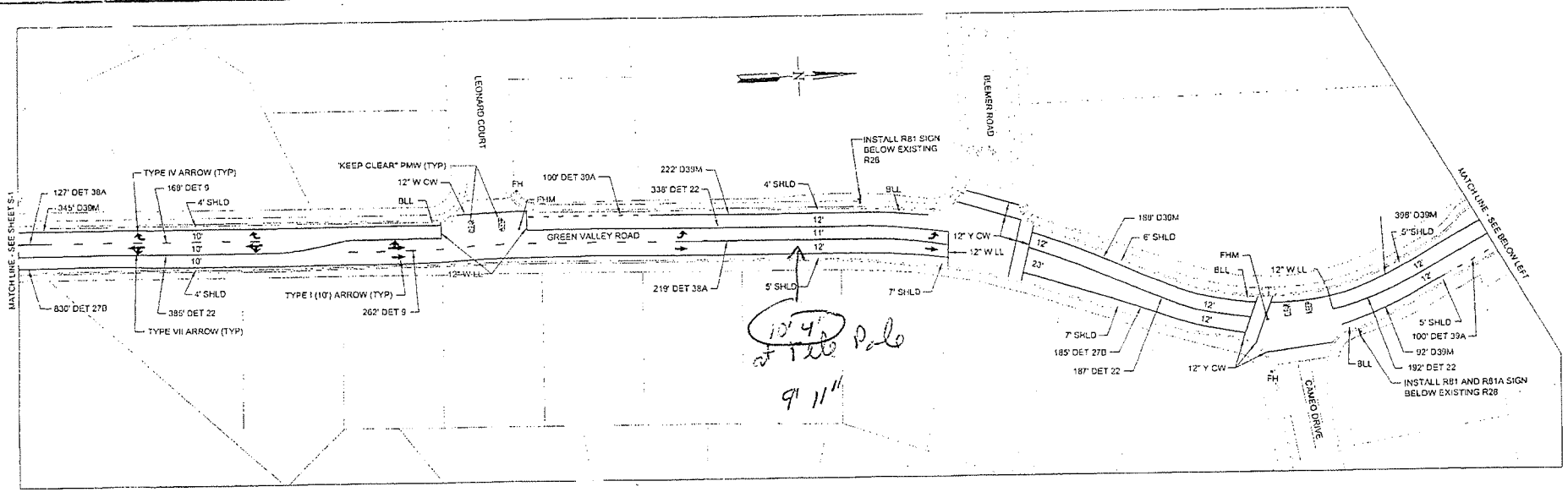


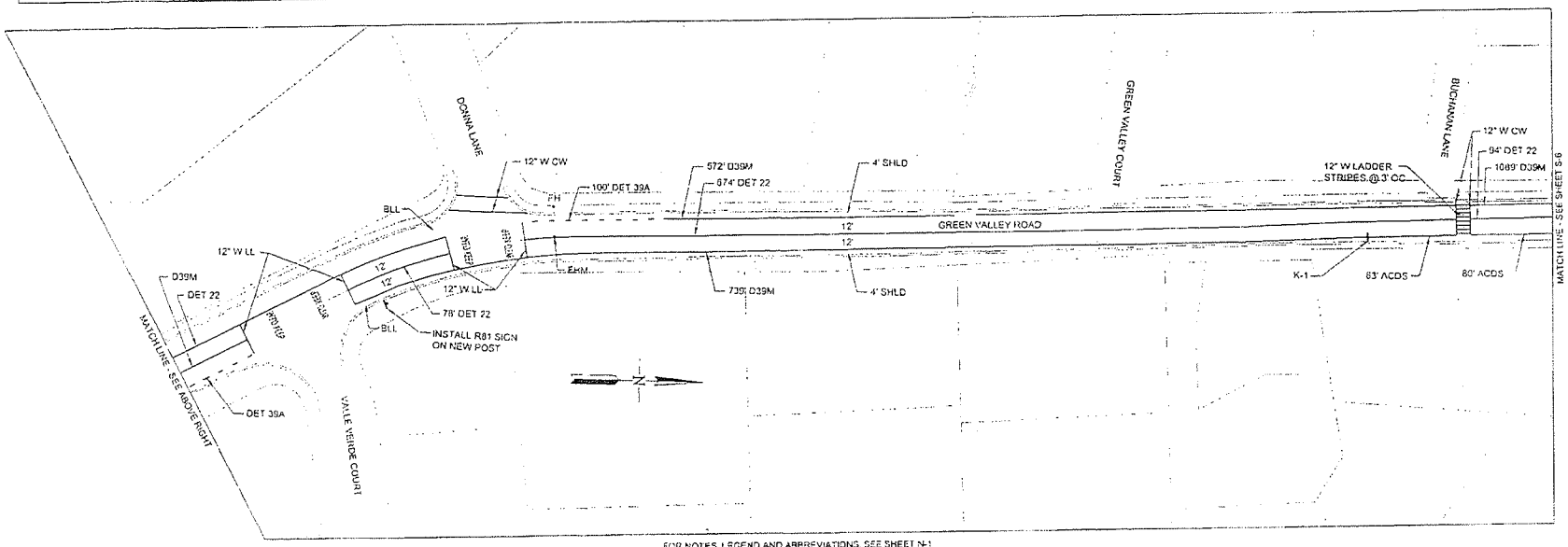


FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO | DATE | APPD | REVISION |
|---|---|---|---|
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|---|---|
| DESIGNED | R. ALLEN |
| DRAWN | R. ALLEN |
| CHECKED | M. STELLA |
| REVIEWED | S. LAKE |
| DATE | 5-1-2009 |

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. STELLA
No. 51642
Exp. 12-31-09
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
REG. 51642
EXPIRES 12/31/09
5/14/09
DATE

DANVILLE

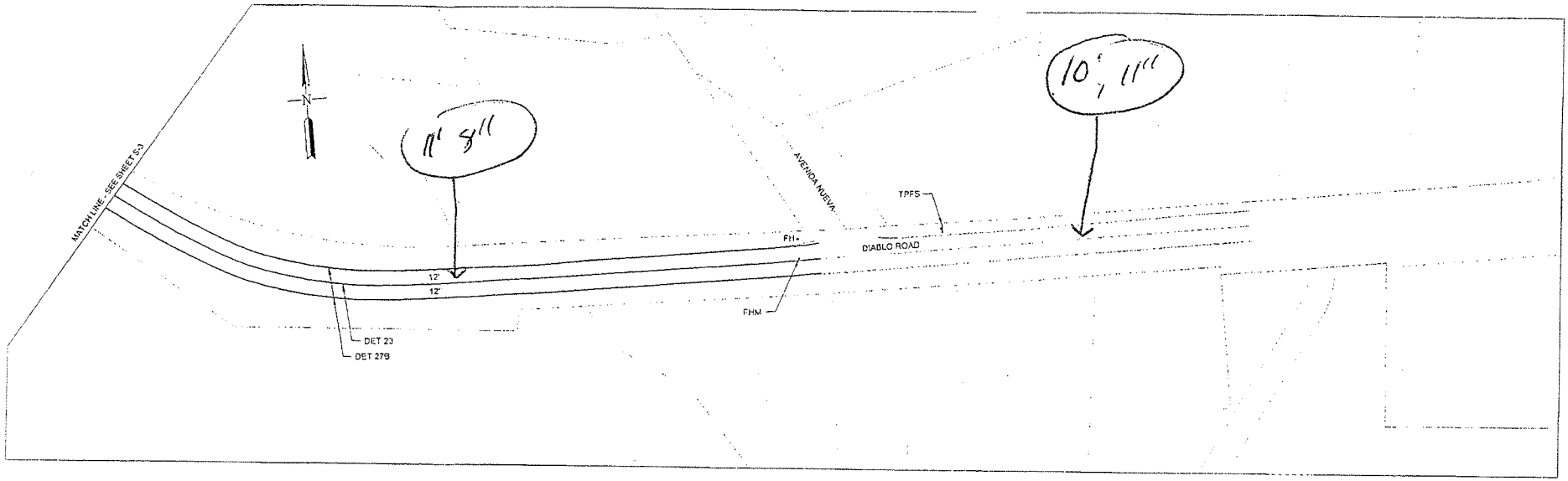
# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## GREEN VALLEY ROAD
## S-5

SCALE 1" = 40' SHEET 19 OF 27




FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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|---|---|
| DESIGNED | R. ALLEN |
| DRAWN | R. ALLEN |
| CHECKED | M. STELLA |
| REVIEWED | S. LAKE |
| DATE | 5-1-2009 |

PLANS PREPARED BY

TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 54642
EXPIRES 12/31/09
5/06/09
DATE

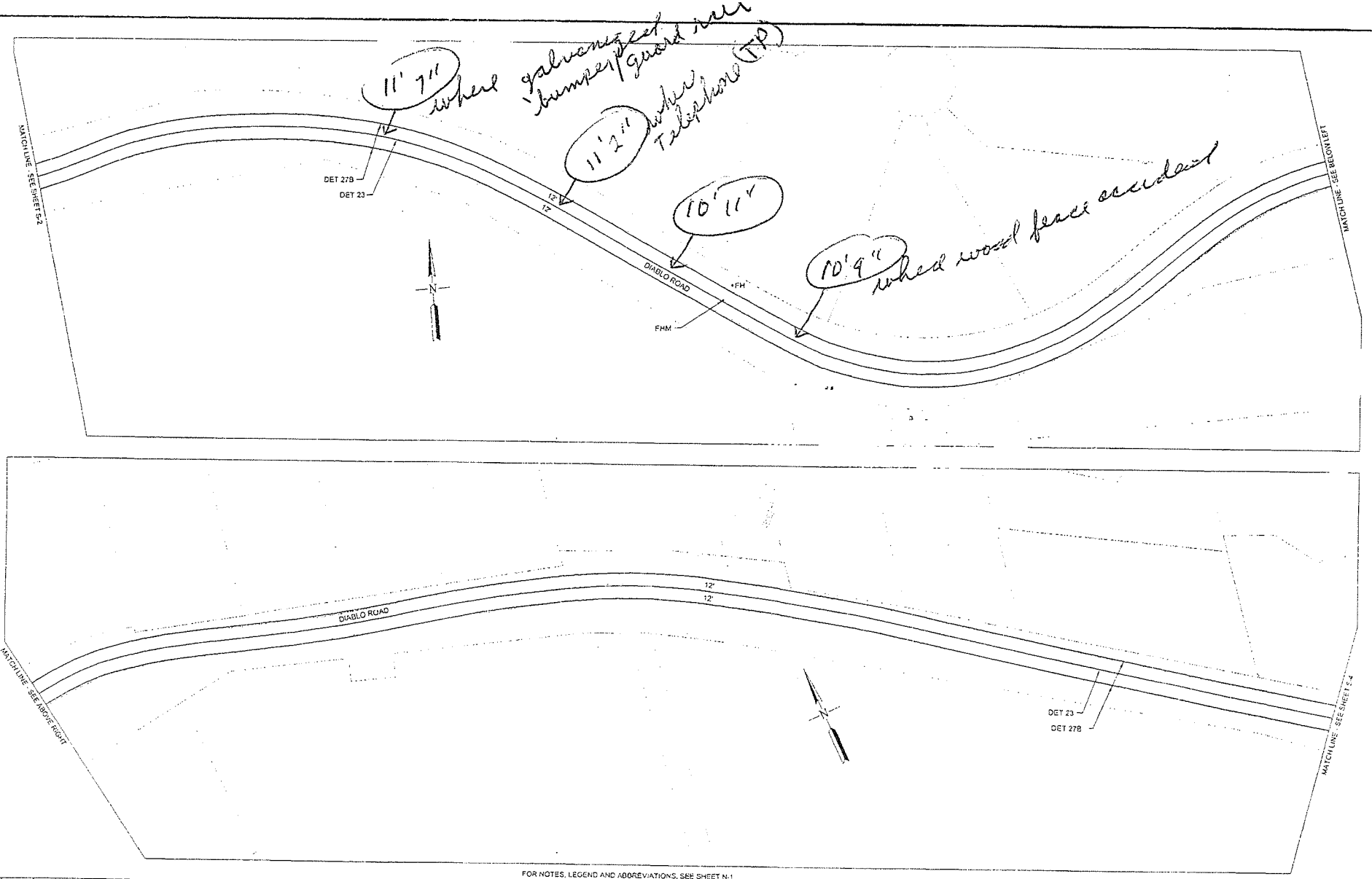
# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## DIABLO ROAD
## S-4

SCALE 1" = 40' | SHEET 18 OF 27




FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD | REVISION |
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|---|---|
| DESIGNED | R. ALLEN |
| DRAWN | R. ALLEN |
| CHECKED | M. STELLA |
| REVIEWED | S. LAKE |
| DATE | 9-1-2009 |

PLANS PREPARED BY:
TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 34627
EXPIRES 12-31-10
DATE

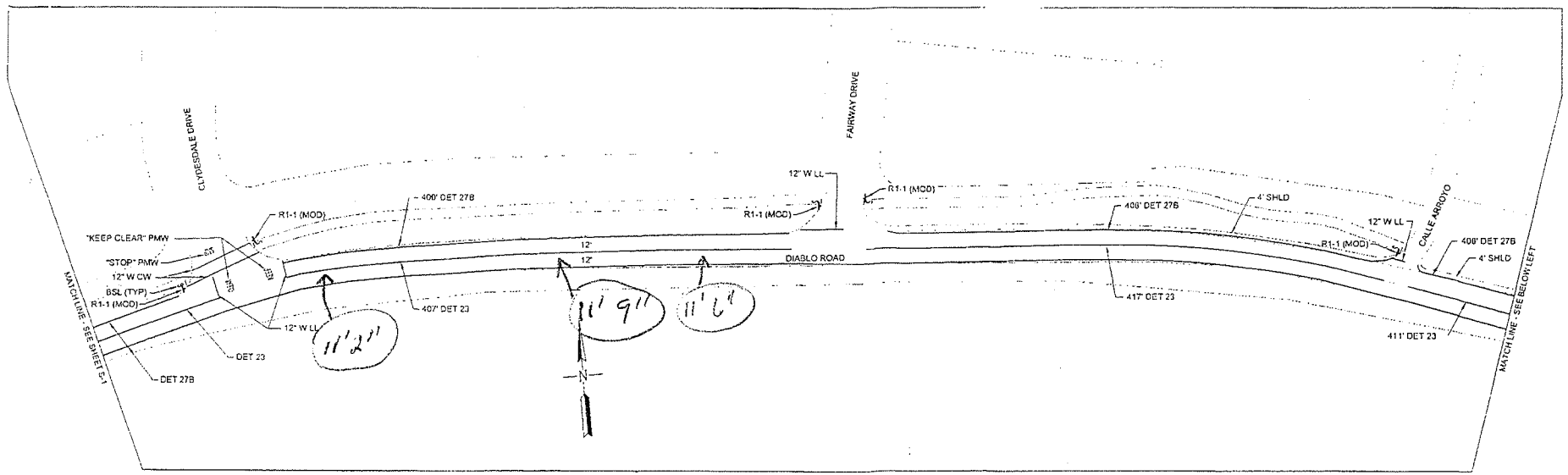
# TOWN OF DANVILLE

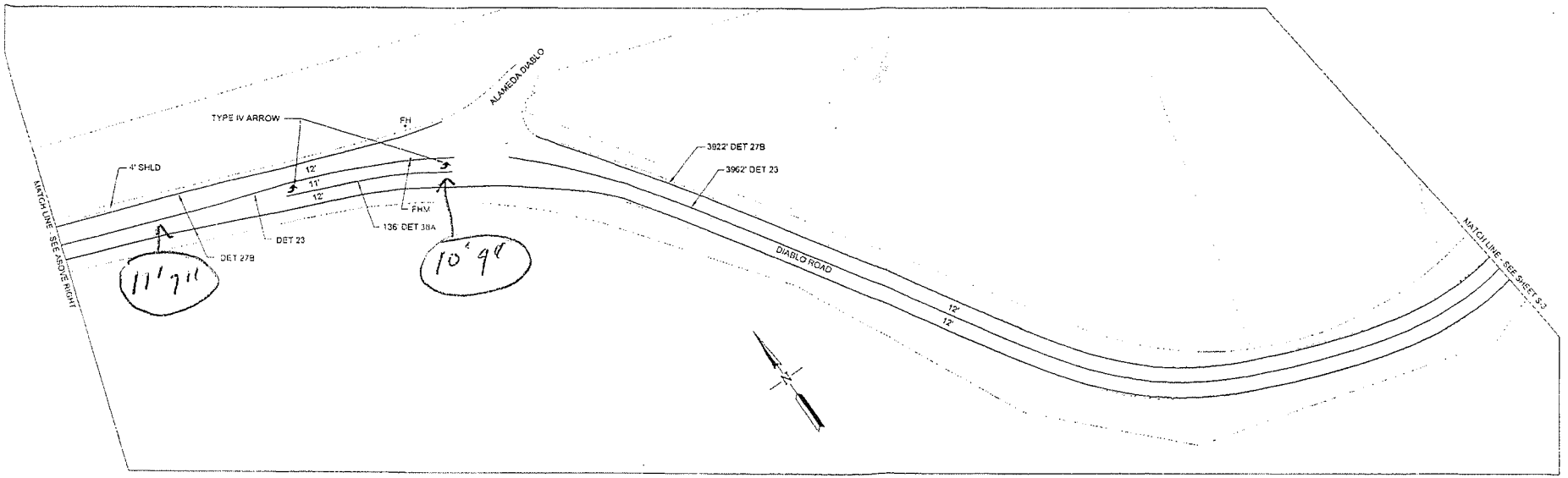
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## DIABLO ROAD
## S-3

SCALE 1" = 40' | SHEET 17 OF 27




FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO | DATE | APPD | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED | R. ALLEN |
| DRAWN | R. ALLEN |
| CHECKED | M. STELLA |
| REVIEWED | S. HAAS |
| DATE | 5/12/09 |

PLANS PREPARED BY: TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
DEPUTY CITY ENGINEER
NOE SAHAZ
EXPIRES 12/31/09
5/19/09
DATE

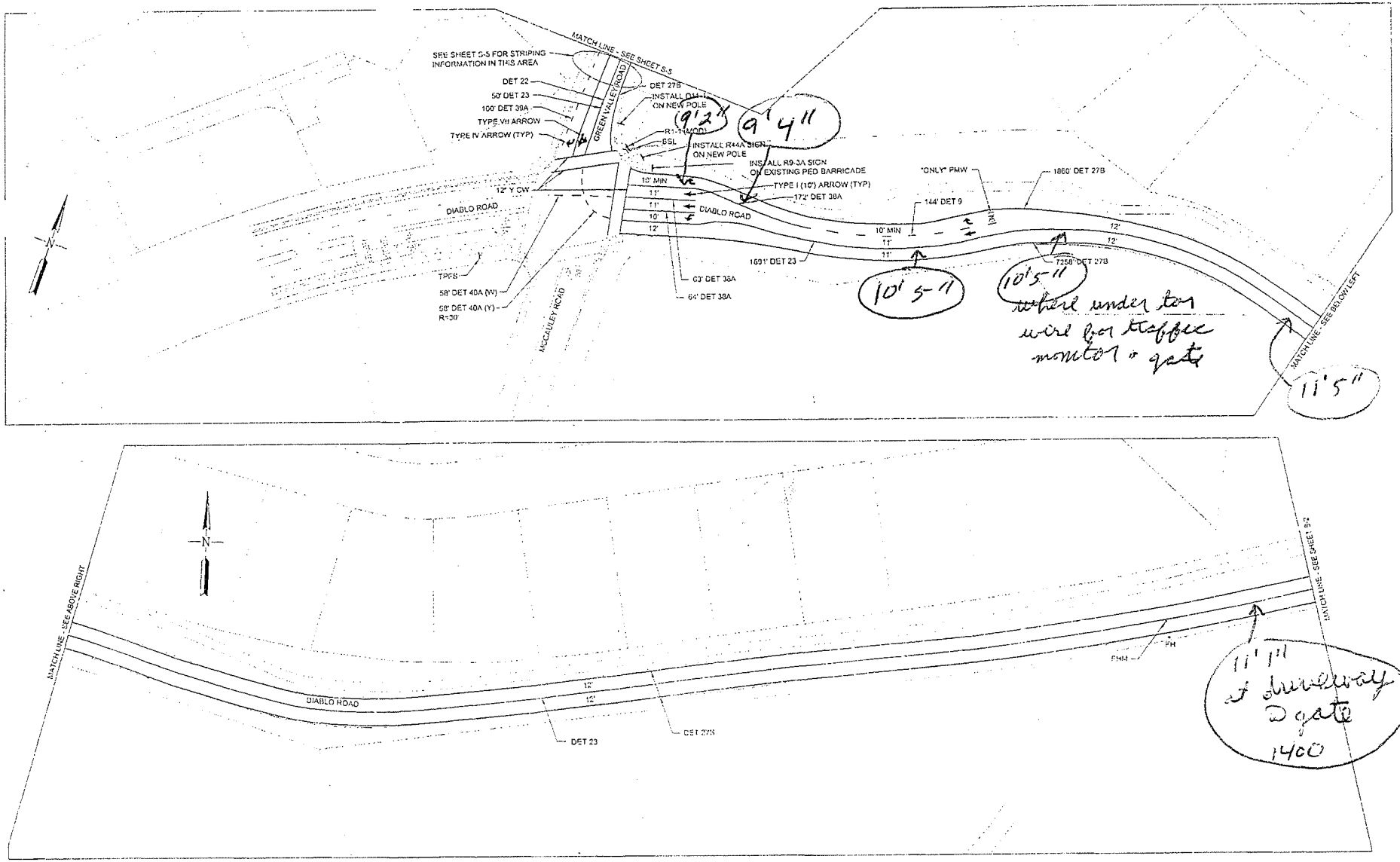
# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## DIABLO ROAD
## S-2

SCALE 1" = 40' | SHEET 14 OF 27




FOR NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET N-1

| NO. | DATE | APPD. | REVISION |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DESIGNED | R. ALLEN |
| DRAWN | R. ALLEN |
| CHECKED | M. STELLA |
| REVIEWED | S. LAKE |
| DATE | 3-1-2010 |

PLANS PREPARED BY:
TOWN OF DANVILLE
DEVELOPMENT SERVICES DEPARTMENT
510 LA GONDA WAY
DANVILLE, CA 94526
(925) 314-3310

APPROVED
MICHAEL A. STELLA
SENIOR CIVIL ENGINEER
RCE 51440
EXPIRES 12-31-09
5/26/2010
DATE

# TOWN OF DANVILLE

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

DIABLO ROAD /GREEN VALLEY ROAD
PAVEMENT REHABILITATION PROJECT
CIP NOS. C-511 AND A-365

## SIGNING AND STRIPING PLAN
## DIABLO ROAD
## S-1

SCALE 1" = 40' | SHEET 15 OF 21

**School just started**.....While driving to work last week.....I noticed.....
There is a bike lane in front of Vista Grande that permits this.

Can't do that along all of Diablo Road. especially from GV to SMt.D
Certainly not from my house.

Much of Diablo Road is... by definition.... a Substandard Width Road.
Meaning it's not 12 feet wide.
The right hand lane directly in front of Green Valley School is 10' 4"
The lane immediately to the left of this is 11" wide.

Mr. Crompton seems to have difficulty understanding the function of his department and the resources available to him.
I asked for the specifications of Diablo Rd.

Mr. Lake and the Town Council has been relying on inaccurate information for the Diablo Road Width.
Contract C-55 and C-511 and A365 were not done in accordance with Plans.
Steve Lake gave Town Council inaccurate information.
Steve Lake "determined" that the plans were completed.
There is patently obvious discrepancies between plans and actual road conditions.

All this makes it impossible to be in compliant with State Law requiring a 3 foot safety clearance when passing a bicycle!

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All this makes it impossible to be in compliant with State Law requiring a 3 foot safety clearance when passing a bicycle!

**Subject:** Re: Danville

**From:** Maryann Cella (maryann.cella@gmail.com)

**To:** foothilldental@sbcglobal.net;

**Cc:** jonpat@sbcglobal.net;

**Date:** Monday, September 4, 2017 5:40 PM

Great. Also show the contract for Improvements C- 55 and say that they "Accepted it as complete" per the 1994 council resolution and it was NOT completed per the plans. Also state that the City Engineer "determined" that it was complete per the plans and has never answered our questons about the patently obvious discrepancies between plans and actual road. Thanks, Clelan!!

On Sep 4, 2017 4:32 PM, "Clelen Tanner" <foothilldental@sbcglobal.net> wrote:

Pat:

Danville Town Council meets 1st and 3rd Tuesday at 7:30 PM.
Could you show up with me tomorrow to inform Council their "Plans" are inaccurate.

- Diablo Rd is not 12' wide per the plans.
- Right and left lanes are not equal widths.
- Line of sight to see bicycles is inadequate.
- 2' foot wide shoulder does not exist.
- Telephone poles were not moved.
- Tree's were not removed.
- 'Sharrows" are not spaced for best practices; every 250 ft.

Why my car randomly flashes "Collision"

All this makes it impossible to be in compliant with State Law requiring a 3 foot safety clearance when passing a bicycle.

Clelen Tanner

Robert Ewing, City Attorney
Town of Danville
510 La Gonda Way
Danville, CA 94526

From
Clelen Tanner

CC; 27 pages
Thumb Drive

**Subject:** Comments on the Town's Notice of Preparation/Initial Study for the Magee Ranches project

**From:** Clelen Tanner (foothilldental@sbcglobal.net)

**To:** dcrompton@danville.ca.gov; rewing@danville.ca.gov; rmorgan@danville.ca.gov;

**Cc:** maryann.cella@gmail.com;

**Date:** Tuesday, September 26, 2017 11:09 AM

**A new metaphor on Diablo Rd.** It's exact location is Contract No. C-55, sheet No. 12, exactly where Steve Lake informed the Town Council it relocated the telephone pole, widened the pavement 2 feet, added a 2 foot shoulder and the lane is 12 feet wide.

The only problem is **the lane is 10 feet 11 inches**, the telephone pole was never relocated, 2 feet of pavement was never added and there is no shoulder.
Looks like: "It should have looked left and it should have looked right." (humor)
**This time a skunk, next time it could be a cyclist.**

I would encourage Steve Lake to do his own measurement of this key area of Diablo Rd. as drivers have to cross the double yellow line to pass a cyclist.... or dead skunk.

Please inform if Danville will measure the width of this key area of Diablo Rd.

Clelen C. Tanner

---

## Attachments

- Dead Skunk I.jpg (827.20KB)

| | |
|---|---|
| **Subject:** | Comments on the Town's Notice of Preparation/Initial Study for the Magee Ranches project |
| **From:** | Clelen Tanner (foothilldental@sbcglobal.net) |
| **To:** | rmorgan@danville.ca.gov; rewing@danville.ca.gov; dcrompton@danville.ca.gov; kstepper@danville.ca.gov; arnerich@danville.ca.gov; rstorer@danville.ca.gov; lblackwell@danville.ca.gov; slake@danville.ca.gov; |
| **Cc:** | maryann.cella@gmail.com; |
| **Date:** | Sunday, October 1, 2017 5:02 PM |

I would like to share the attached recent photograph I took on Sept. 29th. It was taken near the corner of El Cajon Dr. and Diablo Rd. This is near Green Valley Elementary School. Again, the road lane width closest to the sidewalk is 10 feet, 4 inches. I have verified with two Civil Engineers one does not need to be an engineer to measure the width of a roadway.

I asked the fellow in the attached photo why he does not use the bike lane. His answer: "It's not wide enough". I next asked him if he was continuing on Diablo Rd beyond Green Valley/McCauley. His answer, "I can't." His recumbent cycle is battery assisted.

Again, Diablo Rd. between Green Valley/McCauley and Mt. Diablo Scenic is a substandard width road. Numerous sections are less than 12 feet wide. It's obvious Steve Lake never verified that Contract No. C-55B, C-511, and C-365 was completed according to the road specifications in these contracts. For example: there is a section on Diablo Rd near Green Valley/McCauley that is less than 10 feet wide. I leave it to your imaginations what would happen if the attached referenced cyclist were to continue on Diablo Rd. It is not required that cyclists utilize a Trail. Diablo Rd. must be made safe for all cyclists. This fellow's over-all cycle width is approximately 34 inches. By Law, a car must pass a cyclist by 3 feet.

Diablo Rd between Green Valley/McCauley is a substandard width road.

- The road lanes are not consistently 12 feet wide. There are numerous sections less than 12 feet wide. This is most persistent between Alameda Diablo and Ave. Nueva.
- The majority of the Two foot widening specified in Contract No. C-55B was never done. The is easily visible where trenching along Diablo Rd was done due to this years heavy rains and exposed three generations of payment overlays. If any widening had been done, you would not be able to see the previous layers of asphalt. See attached photos.
- The widths of the right and left lanes vary significantly.
- Telephone poles specified to be relocated per Contract No. C-55B were not relocated
- Trees specified to be removed per Contract No. C-55B were not removed.

- A two foot on-grade shoulder as specified in Contract No. C-55B was never installed. Most of Diablo Rd. between Alameda Diablo and Ave. Nueva goes directly from the right-hand white line into a ditch. See attached photo.
- The line of sight along Diablo Rd. is not adequate to anticipate a bicyclist. **This is especially true of a handicapped cyclist!!** Or a slow bicyclist like me.
- Existing 'sharrows' are placed more the 250 feet apart.
- There is a concern that 'Collision Alert' and automatic breaking in cars will unexpectedly activate along Diablo Rd between Green Valley/McCauley and Mt. Diablo Scenic. This has been documented not to be a malfunction and is presumed to be due to the undulating road surface, poor line of sight, telephone poles too close to the road, right + left lanes of different heights and tilts, overgrowth of vegetation, or a combination of any of these existing conditions.
- Many of the safety issues associated with Diablo Rd. between Green Valley/McCauley and Mt. Diablo Scenic is well documented in the Thumb Drive that was given to Karen Stepper and referenced in my emails of May 02, 2016, May 17, 2016, and June 02, 2016. For example, this thumb drive documents **most** of the cars that pass a cyclist between Alameda Diablo and Ave. Nueva cross the double yellow line; including school buses! Please inform if the current whereabouts of this pertinent information is unknown. It is well documented that Ms. Stepper did in fact, receive this thumb drive.
- The thumb-drive given Karen Stepper during a Town Council meeting is included and should be considered a part of the Study for the Magee Ranches project and to further assist the Town of Danville in making Diablo Road safe for cyclists.
- Again, please inform if the Town of Danville needs another copy of this thumb-drive.

Response requested.

Clelen Tanner

---

## Attachments

- Diablo Rd..JPG (3.00MB)
- Diablo Rd. 14.JPG (3.72MB)
- Diablo Rd. overlay 10.JPG (3.24MB)
- Diablo Rd. overlay 8.JPG (3.48MB)

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- Diablo Rd. overlay 10.JPG (3.24MB)
- Diablo Rd. overlay 8.JPG (3.48MB)

**Clelen Tanner** <foothilldental@sbcglobal.net>
To
kstepper@danville.ca.gov
CC
Maryann Cella
May 2 at 10:44 AM

At the last Town Council meeting you asked for a copy of a flash/Thumb drive I referenced in my input to the Town Council.
A copy of that flash/thumb drive was given to the the Town Council.
Specifically and in detail, what will you and Town Council do with this flash drive?
Your prompt and courteous response is most appreciated.
Clelen Tanner



**Clelen Tanner** <foothilldental@sbcglobal.net>
To
kstepper@danville.ca.gov Newell Arnerich Mike Doyle rmorgan@danville.ca.gov storer@danville.ca.gov
CC
Maryann Cella Clelen Tanner
May 9 at 6:18 PM

This email is follow-up to my email of May 02, copy attached, requesting in detail what Town Council will do with the flash drive Ms. Stepper requested at the last Town Council meeting. Please consider this a gentile reminder for a response.
In addition, I would like to request:

- The current specific and detailed road design standards Diablo Road meets
- The specific information the Town relies on to build or approve a 'trail'.
- The specific information the Town relies on to build or approve a "multi-modal transportation alternative'.
- One example of a 'multi-modal transportation alternative' in Danville that meets the information the Town relies on.
- One example of a 'trail' in Danville that meets the information the Town relies on.

Again, your prompt and courteous response is most appreciated.
Clelen C. Tanner

**Clelen Tanner** <foothilldental@sbcglobal.net>
To
Clelen Tanner kstepper@danville.ca.gov Newell Arnerich Mike Doyle rmorgan@danville.ca.gov storer@danville.ca.gov
CC
Maryann Cella
May 17 at 9:13 PM

This email if follow-up to my email of May 09, 2016. Copy attached for your reference.
As of this date I have not received an acknowledgement or response.
Please consider this a gentile reminder for a response.
Again, your prompt and courteous response is most appreciated.
Clelen C. Tanner

**Clelen Tanner** <foothilldental@sbcglobal.net>
To
Clelen Tanner kstepper@danville.ca.gov Newell Arnerich Mike Doyle rmorgan@danville.ca.gov storer@danville.ca.gov
CC
Maryann Cella
Jun 2 at 4:03 PM

This email is follow-up to my email of may 09, 2016, and my subsequent email of May 17, 2016 requesting in detail what Town Council will do with the flash drive Ms. Stepper requested at the last Town Council meeting. Please consider this a gentile reminder for a response.
In addition, I would like to request:

- The current specific and detailed road design standards Diablo Road meets
- The specific information the Town relies on to build or approve a 'trail'.
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- One example of a 'trail' in Danville that meets the information the Town relies on.

Your prompt and courteous response is most appreciated.
Clelen C. Tanner

# input to EIR for Summerhill - traffic(20)

People
**Clelen Tanner** <foothilldental@sbcglobal.net>
To
kstepper@danville.ca.gov Newell Arnerich Mike Doyle rmorgan@danville.ca.gov storer@danville.ca.gov and 3 more...
CC
Maryann Cella
Jun 2 at 8:00 PM

After forwarding my email late this afternoon at 4:03 PM requesting information, I went for a bike ride.
I decided to ride my mountain bike: *Some days I feel like a mountain bike and some days I feel like a road bike. (humor)*
It's my understanding a bicycle has every right to ride the road way. If I recall, all the best practices Danville has stated it follows, states this.
When I got to the end of my street, Cameron Ct., traffic was backed-up as far as I could see both right and left on Blackhawk Rd.
I thought for sure there was a major accident in the Khyber Pass section of Diablo Rd.
I crossed Blackhawk Rd. and went on the far right hand side of Diablo Rd. traveling West down toward Diablo Community. The road way is so narrow several cars crowded me off the roadway into the dirt before I could even get to Scenic Mt. Diablo Blvd. At Scenic Mt. Diablo I continued to travel West on Diablo Rd. with its slow crawling backed-up traffic and turned right on Avenida Nueva. I turned left on La Catena and continued onto Alameda Diablo down to Diablo Rd.
I was surprised to determine there was no accident in the Khyber Pass. Rather traffic was crawling along the entire section and backed-up all the way down to McCauley Rd. and Green Valley Rd. Further, cars crowed the right hand side of Diablo Rd. such that a bicycle could not share the roadway. I had to ride half on the roadway and half in the dirt as there is no **shoulder** on this section of road. I was able to accomplish this because I was riding my mountain bike with wide knobby tires.
When I got to the corner of Diablo Rd. and Green Valley Rd. , with traffic backed up and crawling the entire section of Diablo Rd., I determined it must be graduation night. At this corner, traffic was backed up, stopped, and essentially crawling in all directions!: North, East, South, and West: As far as you could see. Since traffic was stop + crawl, I stood at the corned and lip read the people in their cars; and translated a lot of very colorful language. I won't repeat what I thought they were saying but it was very entertaining.
I crossed Diablo road and saw you changed the 'Trail' sign back to a 'Pathway' sign. Interesting, since the facility you direct bike riders to can't be seen from the yellow bumpy rubber mats on the corner, and from the same type of mat on the other corner.

No matter, the facility you direct bicyclist to does not meet best practices Danville has stated in writing it follows.
So, when does a Pathway become a Trail, and when does a Trail become a Pathway again?
Your prompt and courteous response is most appreciated.
Clelen C. Tanner

**Clelen Tanner** <foothilldental@sbcglobal.net>
To
Newell Arnerich kstepper@danville.ca.gov Mike
Doyle storer@danville.ca.gov rmorgan@danville.ca.gov and 3 more...
CC
Maryann Cella
Jun 7 at 1:55 PM

Thank you very much for your response Mr. Arnerich.
There is a point-of-humor in Physics: There is nothing uglier than a little fact that destroys an otherwise perfect theory.
The theory here is Summerhill, and the ugly fact that destroys this theory is the width of the roadway.

- Some of the roadway is less than 12 feet wide.
- Some of the roadway is less than 11 feet wide.
- And some of the roadway is less than 10 feet wide.

I measured it when I was out riding my road bike. Kind of hard to pass a bike by more than 3 feet with a road width of less than ten feet! The sad part it you guys know exactly were that less than ten feet is.
When you guys approved the roadway you accepted an average width. It's like that one guy who spoke before you at a previous Council meeting and quoted Mark Twain:

- There's lies; there's damn lies, and then there are statistics.

And then there's my statement when I spoke as well:

- It's like having a room full of NBA basketball players and 1st graders and saying the average height in the room is 5', 3". Giving only the average doesn't tell what size chairs to get.

And as for my car Mr. Crompton; my collision alert system is working just fine. I took it into Walnut Creek Honda with a chief complaint of:

- *Customer states the forward collision warning system is not working properly. Check and advise.*

Your guessed it Mr. Crompton. My collision warning system is working just fine, and I have documented proof, beyond a shadow of a doubt, of just that:

- **Performed system diagnostic test, No stored codes. Checked for bulletins and updates. None available. Test drive and tested all**

**driving support systems. No faults noted. Operating to designed intent.**

I would say your roadway is malfunctioning, not my car. That means all 2013, 2014, 2015, and 2016 Honda cars equipped with collision alert system will randomly flash "COLLISION" while traveling through Danville's own Khyber Pass.
Your "statistics" won't get you out of this one.
I would suggest a settlement!
Clelen C. Tanner

**Clelen Tanner** <foothilldental@sbcglobal.net>
To
Clelen Tanner Newell Arnerich kstepper@danville.ca.gov Mike Doyle storer@danville.ca.gov and 3 more...
CC
Maryann Cella
Jun 7 at 4:13 PM

While driving home today, my collision alert system flashed while driving through the Khyber Pass section of Diablo Rd.
Somewhere in the middle of this section of roadway. There was no car in front of me.
In case you folks think this is drama on the part of a concerned citizen, I have **video** while driving this section of road that shows my collision alert system being activated. And my car's system is working just fine!
Again, Mr. Crompton, your roadway is a malfunction; not my car.
Fortunately, my car is not equipped with collision braking. I'm curious what you folks are going to do when:

- "Federal safety regulators...announced an agreement Friday to make automatic emergency braking a standard feature in future car models sold in the U.S." (That's from the newspaper article you cut me off from reading Ms. Stepper.)

I wonder what the liability will be for knowing you have a malfunctioning road, and then did nothing to mitigate it.
Contrary to your lawyers, the Khyber Pass section of Diablo Road is neither:

- Ambling country road
- Bicyclist take an equitable risk

By this email, I would like to make a request for public information.

- **Please provide the contact information for the Town of Danville's liability carrier**.

Your prompt and courteous response is most appreciated. (Ten days!)
Clelen Tanner

**Clelen Tanner** <foothilldental@sbcglobal.net>
To
Clelen Tanner Newell Arnerich kstepper@danville.ca.gov Mike Doyle storer@danville.ca.gov and 3 more...
CC
Maryann Cella
Jun 7 at 4:13 PM

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Clelen Tanner

**Clelen Tanner** <foothilldental@sbcglobal.net>
To
Clelen Tanner Newell Arnerich kstepper@danville.ca.gov Mike Doyle storer@danville.ca.gov and 3 more...
CC
Maryann Cella
Today at 9:42 AM

While driving to work this morning I again encountered stop-and-crawl traffic along of Diablo Rd in the Khyber Pass section. It was exactly 7:58 AM. Traffic was backed up prior to 1783 Diablo Rd. Damn!, I thought; school traffic or an accident. When I finally crawled down to McCauley/Green Valley Rd, the cause appeared to be heavy equipment coming out of Magee property in the area of the Diablo Rd., McCauley/Green Valley intersection. Just another example of Tsunami traffic in this corridor. (A major connector!)

**I noticed that the road width did not accommodate the width of the heavy equipment!!! And hence, traffic was stopped from the lanes going in the opposite direction to accommodate the equipment!**

If it's not the local turkeys backing traffic up in the Khyber Pass, we can now add heavy equipment coming out of Magee property to the list of causes of Tsunami traffic. **Diablo Rd can not accommodate heavy equipment and a bicyclists.** Strange, no 'sharrows' on this section of Diablo Rd.; one of the narrowest lanes of the roadway. **This area of the roadway can not accommodate a bicyclist and a school bus either!**

If Danville is to follow 'best practices' as you have stated, '**sharrows**' need to be placed on the roadway no farther than 250 feet apart along the entire section Diablo Rd, from the intersection of Diablo Rd and McCauley/Green Valley intersection; all the way to the first 40 MPH sign on Blackhawk Rd.

I would suggest Class II bike lanes the entire way.

**If any of this or any of my precious emails is not clear, please contact me for clarification.** I am more than willing to help the Town of Danville meet 'Best Practices' to accommodate traffic and bicyclist along Diablo Rd, all the way through the Khyber Pass.

Clelen C. Tanner

**Clelen Tanner** <foothilldental@sbcglobal.net>
To
Clelen Tanner kstepper@danville.ca.gov Newell Arnerich Mike Doyle rmorgan@danville.ca.gov and 3 more...
CC
Maryann Cella
Jun 7 at 9:17 AM

This email is follow-up to my email of June 02, 2016.
I left for work this morning at 7:55 AM. When I got to the end of my street, Cameron Ct., traffic was backed up on Blackhawk Rd.as far as you can see to the right and all the way to the Stop sign to the left.
This happens every school morning and is well documented in the flash drive Ms. Stepper requested at the Town Council's last meeting.
What came as a little surprise is when I got into the Khyber Pass section of Diablo Rd. between Scenic Mt. Diablo Rd. and 1783 Diablo Rd., traffic came to complete stop/go/crawl all the way to McCauley/Green Valley RD.
This occasionally happens. I have no idea why it happened today. I suspect something to do with school traffic. I call it: **Tsunami Traffic.** It occasionally happens on a reoccurring basis in this corridor. Sometimes to accidents, sometimes to school events, and sometimes to turkeys crossing the road and road kills; and yes, sometimes the bicycle traffic/events.
The point is the EIR for Summerhill needs to take into account the occasional and reoccurring Tsunami Traffic patterns that happens in this corridor and the need to provide safe passage for bicycle traffic as well.
Your prompt and courteous response is most appreciated.
Clelen C. Tanner

of Section 830.36 of, subdivision (a) of Section 830.4 of, or Section 830.6 of, the Penal Code, in the performance of the peace officer's duties, may display a steady or flashing blue warning light that is visible from the front, sides, or rear of the bicycle or motorized bicycle.
(b) No person shall display a steady or flashing blue warning light on a bicycle or motorized bicycle except as authorized under subdivision (a).
*(Added by Stats. 1998, Ch. 877, Sec. 65. Effective January 1, 1999.)*

21201.5.

(a) No person shall sell, or offer for sale, a reflex reflector or reflectorized tire of a type required on a bicycle unless it meets requirements established by the department. If there exists a federal Consumer Product Safety Commission regulation applicable to bicycle reflectors, the provisions of that regulation shall prevail over provisions of this code or requirements established by the department pursuant to this code relative to bicycle reflectors.
(b) No person shall sell, or offer for sale, a new bicycle that is not equipped with a red reflector on the rear, a white or yellow reflector on each pedal visible from the front and rear of the bicycle, a white or yellow reflector on each side forward of the center of the bicycle, and a white or red reflector on each side to the rear of the center of the bicycle, except that bicycles which are equipped with reflectorized tires on the front and rear need not be equipped with these side reflectors.
(c) Area reflectorizing material meeting the requirements of Section 25500 may be used on a bicycle.
*(Amended by Stats. 1980, Ch. 399, Sec. 2. Effective July 11, 1980.)*

21202.

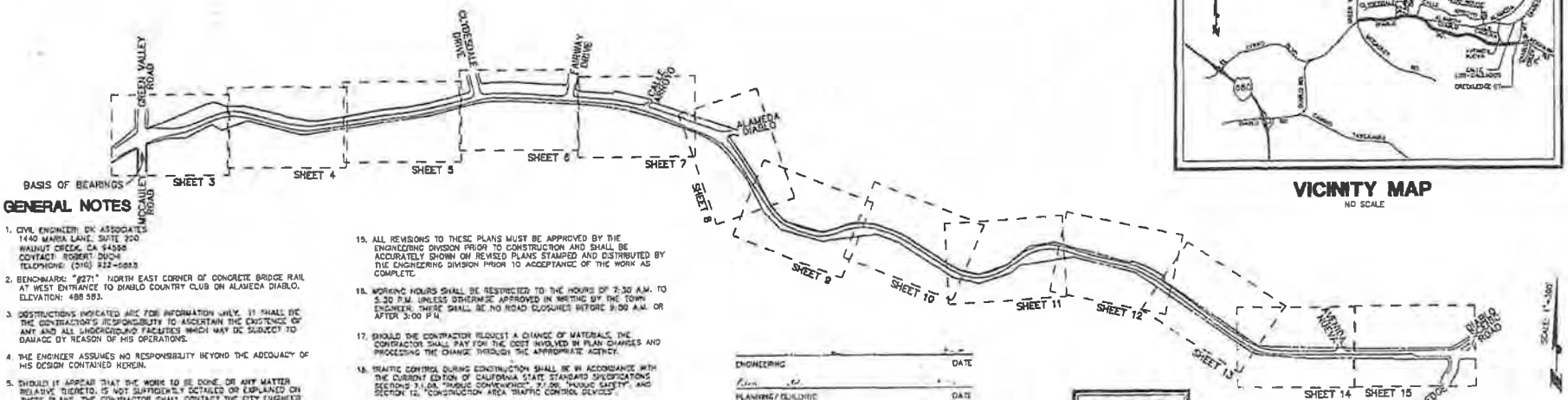
(a) Any person operating a bicycle upon a roadway at a speed less than the normal speed of traffic moving in the same direction at that time shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:
(1) When overtaking and passing another bicycle or vehicle proceeding in the same direction.
(2) When preparing for a left turn at an intersection or into a private road or driveway.
(3) When reasonably necessary to avoid conditions (including, but not limited to, fixed or moving objects, vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes) that make it unsafe to continue along the right-hand curb or edge, subject to the provisions of Section 21656. For purposes of this section, a "substandard width lane" is a lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the lane.
(4) When approaching a place where a right turn is authorized.
(b) Any person operating a bicycle upon a roadway of a highway, which highway carries traffic in one direction only and has two or more marked traffic lanes, may ride as near the left-hand curb or edge of that roadway as practicable.
*(Amended by Stats. 1996, Ch. 674, Sec. 4. Effective January 1, 1997.)*

# DIABLO ROAD IMPROVEMENTS

## GREEN VALLEY ROAD TO DIABLO SCENIC ROAD

## TOWN OF DANVILLE, CALIFORNIA

## CONTRACT NO. C-55B







**VICINITY MAP**
NO SCALE

## GENERAL NOTES

1. CIVIL ENGINEER: DK ASSOCIATES
1440 MARIA LANE, SUITE 200
WALNUT CREEK, CA 94596
CONTACT: ROBERT DUCHI
TELEPHONE: (510) 932-6888

2. BENCHMARK: "#271" NORTH EAST CORNER OF CONCRETE BRIDGE RAIL AT WEST ENTRANCE TO DIABLO COUNTRY CLUB ON ALAMEDA DIABLO. ELEVATION: 488.583.

3. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE EXISTENCE OF ANY AND ALL UNDERGROUND FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.

4. THE ENGINEER ASSUMES NO RESPONSIBILITY BEYOND THE ADEQUACY OF HIS DESIGN CONTAINED HEREIN.

5. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER OF THE TOWN OF DANVILLE SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.

6. ALL STAKING REQUESTS SHALL BE DIRECTED TO THE ENGINEER A MINIMUM OF 48 HOURS PRIOR TO ACTUAL NEED. ANY ADDITIONAL STAKING OR RESTAKING WILL ONLY BE DONE AS DIRECTED AND AUTHORIZED BY THE OWNER OR HIS AUTHORIZED AGENT.

7. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.

8. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THEIR COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTIONS WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER OR ENGINEER.

9. THE CONTRACTOR SHALL PROVIDE THE NECESSARY SAFETY TESTING OF EQUIPMENT AND PERSONNEL.

10. EXISTING UTILITIES MUST NOT BE INTERRUPTED UNTIL THE UTILITY COMPANY HAS PROVIDED ALTERNATIVE SERVICE FACILITIES. THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS WORK WITH P.G.&E. AND THE TOWN OF DANVILLE.

11. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST TOWN OF DANVILLE STANDARD PLANS AND SPECIFICATIONS, AND SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF DANVILLE ENGINEERING DIVISION.

12. ALL EXISTING ELEVATIONS SHOWN ARE AS MEASURED IN THE FIELD, UNLESS OTHERWISE NOTED.

13. THE CONTRACTOR SHALL NOT DESTROY ANY PERMANENT SURVEY POINTS WITHOUT THE CONSENT OF THE ENGINEER. ANY PERMANENT MONUMENTS OR POINTS DESTROYED SHALL BE REPLACED IN KIND BY A LICENSED ENGINEER OR SURVEYOR AT THE CONTRACTOR'S EXPENSE.

14. CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR ENGINEERING DIVISION, AMBULANCE, POLICE AND FIRE DEPARTMENTS. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, (800) 642-2444, 48 HOURS PRIOR TO ANY EXCAVATION. THE USA AUTHORIZATION NUMBER SHALL BE KEPT AT THE JOB SITE.

15. ALL REVISIONS TO THESE PLANS MUST BE APPROVED BY THE ENGINEERING DIVISION PRIOR TO CONSTRUCTION AND SHALL BE ACCURATELY SHOWN ON REVISED PLANS STAMPED AND DISTRIBUTED BY THE ENGINEERING DIVISION PRIOR TO ACCEPTANCE OF THE WORK AS COMPLETE.

16. WORKING HOURS SHALL BE RESTRICTED TO THE HOURS OF 7:30 A.M. TO 5:30 P.M. UNLESS OTHERWISE APPROVED IN WRITING BY THE TOWN ENGINEER. THERE SHALL BE NO ROAD CLOSURES BEFORE 9:00 A.M. OR AFTER 3:00 P.M.

17. SHOULD THE CONTRACTOR REQUEST A CHANGE OF MATERIALS, THE CONTRACTOR SHALL PAY FOR THE COST INVOLVED IN PLAN CHANGES AND PROCESSING THE CHANGE THROUGH THE APPROPRIATE AGENCY.

18. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF CALIFORNIA STATE STANDARD SPECIFICATIONS SECTIONS 7.1.04, "PUBLIC CONVENIENCE", 7.1.05, "PUBLIC SAFETY", AND SECTION 12, "CONSTRUCTION AREA TRAFFIC CONTROL DEVICES".

19. IN CONFORM PAVING AREAS, IF A FULL STREET STRUCTURAL SECTION IS NOT FOUND AT THE APPARENT EDGE OF PAVEMENT, FURTHER STREET EXCAVATION WILL BE REQUIRED UNTIL THE FULL SECTION IS ENCOUNTERED, OR STREET CENTERLINE IS REACHED. PAVING CONFORMS SHALL BE MADE AT A SMOOTHLY TRIMMED BUTT JOINT. DO NOT OVERLAY EXISTING PAVEMENT.

20. EXISTING CURB AND GUTTER THAT IS DAMAGED OR DISPLACED, EVEN THOUGH IT IS NOT SHOWN TO BE REMOVED ON THE PLANS, SHALL BE REPAIRED OR REPLACED EVEN IF THE DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO THE COMMENCEMENT OF ANY WORK BY THE CONTRACTOR.

21. ALL TRENCH BACKFILL, WHICH LIES WITHIN EITHER EXISTING OR NEW ROADWAYS, SHALL CONFORM TO THE ROADWAY PAVEMENT AREA BACKFILL SPECIFICATION OF TOWN STANDARD PLAN 114.

22. PAVEMENT DESIGN STRUCTURAL SECTION MAY BE REVISED PER CITY STANDARD DESIGN CHART IF R-VALUE IS FOUND TO BE DIFFERENT BEFORE OR AT THE TIME OF CONSTRUCTION.

23. ALL STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TOWN ORDINANCE CODE AND SPECIFICATIONS, TITLE 9, AND WILL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DIVISION. CONTACT ENGINEERING DIVISION AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK TO ARRANGE FOR INSPECTION.

24. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING STREETS, SURROUNDING LANDSCAPING AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, DUTT AND GUTTER, GRADING, ETC. AND TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITION.

25. PRIOR TO THE PLACING OF ASPHALT CONCRETE OR SUB-BASE MATERIAL, THE ENGINEERING DIVISION OF THE TOWN OF DANVILLE SHALL BE NOTIFIED BY THE OWNER, OR ACCEPTING AGENCY, OF EACH UTILITY INSTALLATION BENEATH THE AREA TO BE PAVED THAT THE INSTALLATION HAS SATISFACTORILY PASSED FINAL ACCEPTANCE TESTING.

| | |
|---|---|
| ENGINEERING | DATE |
| PLANNING / BUILDING | DATE |
| TRANSPORTATION | DATE |
| MAINTENANCE / PARKS | DATE |

THE GEOTECHNICAL ASPECTS OF THESE PLANS HAVE BEEN REVIEWED. IT IS OUR OPINION THAT THE GEOTECHNICAL ASPECTS OF THESE PLANS ARE IN GENERAL CONFORMANCE WITH THE RECOMMENDATIONS PRESENTED IN THE PROJECT GEOTECHNICAL STUDY. WE ASSUME NO RESPONSIBILITY FOR THE NON-GEOTECHNICAL ASPECTS OF THESE PLANS.

BY: _____ DATE: _____

G.E. NO. 2146

EXP. DATE: 12-31-97

**BASIS OF BEARINGS:**

TAKEN AS N 19°22'23" W BETWEEN TWO FOUND STANDARD STREET MONUMENTS IN MCCAULEY ROAD AS SHOWN ON THE MAP OF SUBDIVISION 6886, FILED OCTOBER 20, 1989, IN BOOK 335 OF MAPS AT PAGE 41.

**LEGEND**

| | |
|---|---|
| | RIGHT OF WAY |
| | SURVEY CONTROL LINE/CENTERLINE |
| | NEW / C OVERLAY |
| | NEW PAVEMENT |
| | EXISTING GAS LINE |
| | EXISTING WATERLINE |
| | EXISTING STORM DRAIN |
| | EXISTING SANITARY SEWER |
| | 6" AC BERM(DETAIL ON SHEET 2) |
| | STORM DRAIN LINE WITH FLARED INLET & OUTLET, SIZE AS NOTED ON PLANS |
| | NEW EARTH SWALE(DETAIL ON SHEET 2) |
| | RETAINING WALL, HEIGHT AS NOTED ON PLANS |
| | NEW POWER POLE |
| | EXISTING POWER POLE |
| EC/BC | END OF CURVE/BEGINNING OF CURVE |
| PCC | POINT OF COMPOUND CURVATURE |
| INV/ FL | INVERT / FLOWLINE |
| S | SANITARY SEWER MANHOLE |
| DW | DRIVEWAY |
| WV | WATER VALVE |
| TW | TOP OF WALL |
| BW | BOTTOM OF WALL |
| AC | ASPHALT CONCRETE |
| EX | EXISTING |
| CMP | CORRUGATED METAL PIPE |
| CCCSD | CENTRAL CONTRA COSTA SANITARY DISTRICT |
| EBMUD | EAST BAY MUNICIPAL UTILITY DISTRICT |
| PG & E | PACIFIC GAS & ELECTRIC |
| CATV | CABLE TELEVISION |

## SHEET INDEX


| NO. | DESCRIPTION |
|---|---|
| 1 | KEY SHEET AND NOTES |
| 2 | DETAIL SHEET |
| 3 | DIABLO ROAD (0+00.00 TO 5+25.00) |
| 4 | DIABLO ROAD (5+25.00 TO 11+75.00) |
| 5 | DIABLO ROAD (11+75.00 TO 18+25.00) |
| 6 | DIABLO ROAD (18+25.00 TO 24+75.00) |
| 7 | DIABLO ROAD (24+75.00 TO 30+25.00) |
| 8 | DIABLO ROAD (30+25.00 TO 37+00.00) |
| 9 | DIABLO ROAD (37+00.00 TO 43+50.00) |
| 10 | DIABLO ROAD (43+50.00 TO 50+00.00) |
| 11 | DIABLO ROAD (50+00.00 TO 55+75.00) |
| 12 | DIABLO ROAD (55+75.00 TO 62+25.00) |
| 13 | DIABLO ROAD (62+25.00 TO 68+00.00) |
| 14 | DIABLO ROAD (68+00.00 TO 73+25.00) |
| 15 | DIABLO ROAD (73+25.00 TO 79+62.01) |


| No. | Date | Apod | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


DK ASSOCIATES Inc.
CIVIL ENGINEERING · PLANNING · SURVEYING
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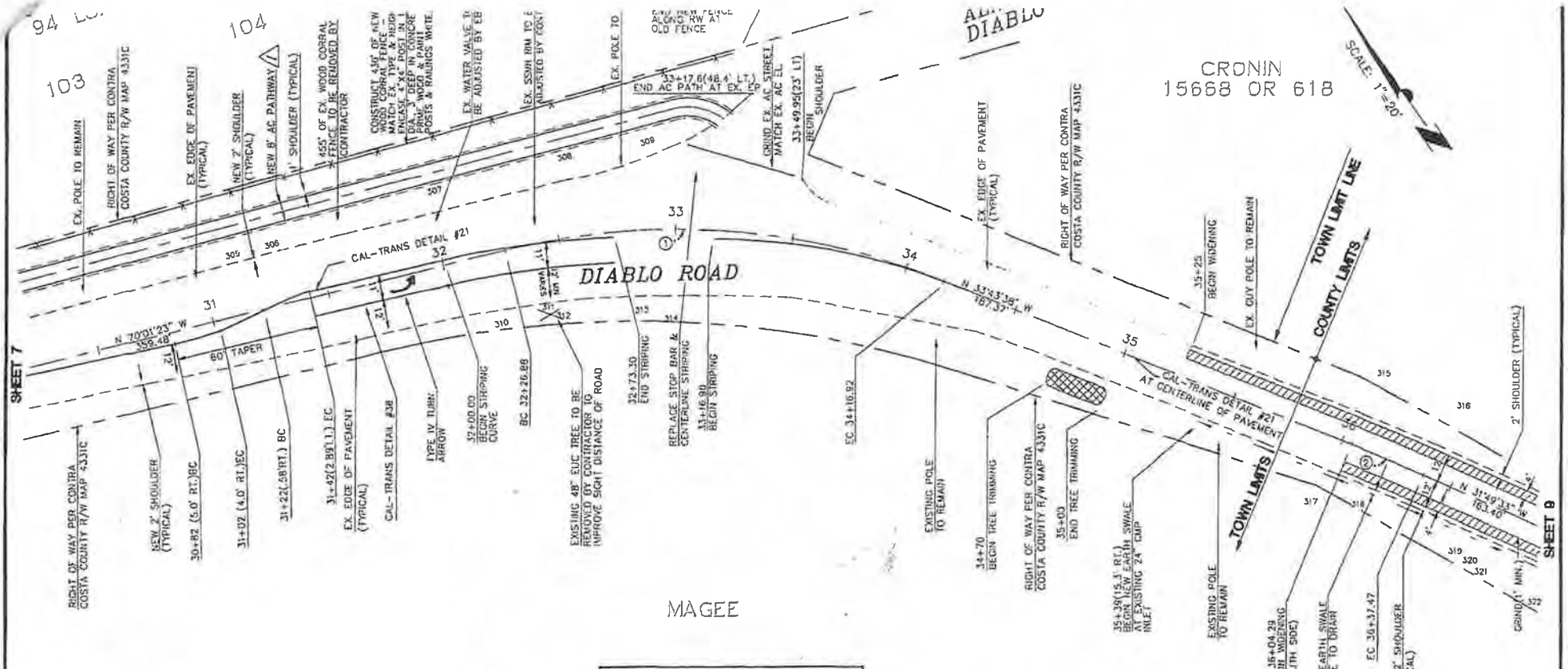
APPROVED
Steven C. Lake
City Engineer
R.C.E. 51870
Expires _____
Date

TOWN OF DANVILLE
DIABLO ROAD IMPROVEMENTS

**COVER SHEET**

SHEET NO. 1 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 300.00' | 190.04' | 36°17'44" |
| CONTROL LINE | 2 | 1000.00' | 33.18' | 01°54'05" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| 1 | 3/1/94 | 44 | [illegible] |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123

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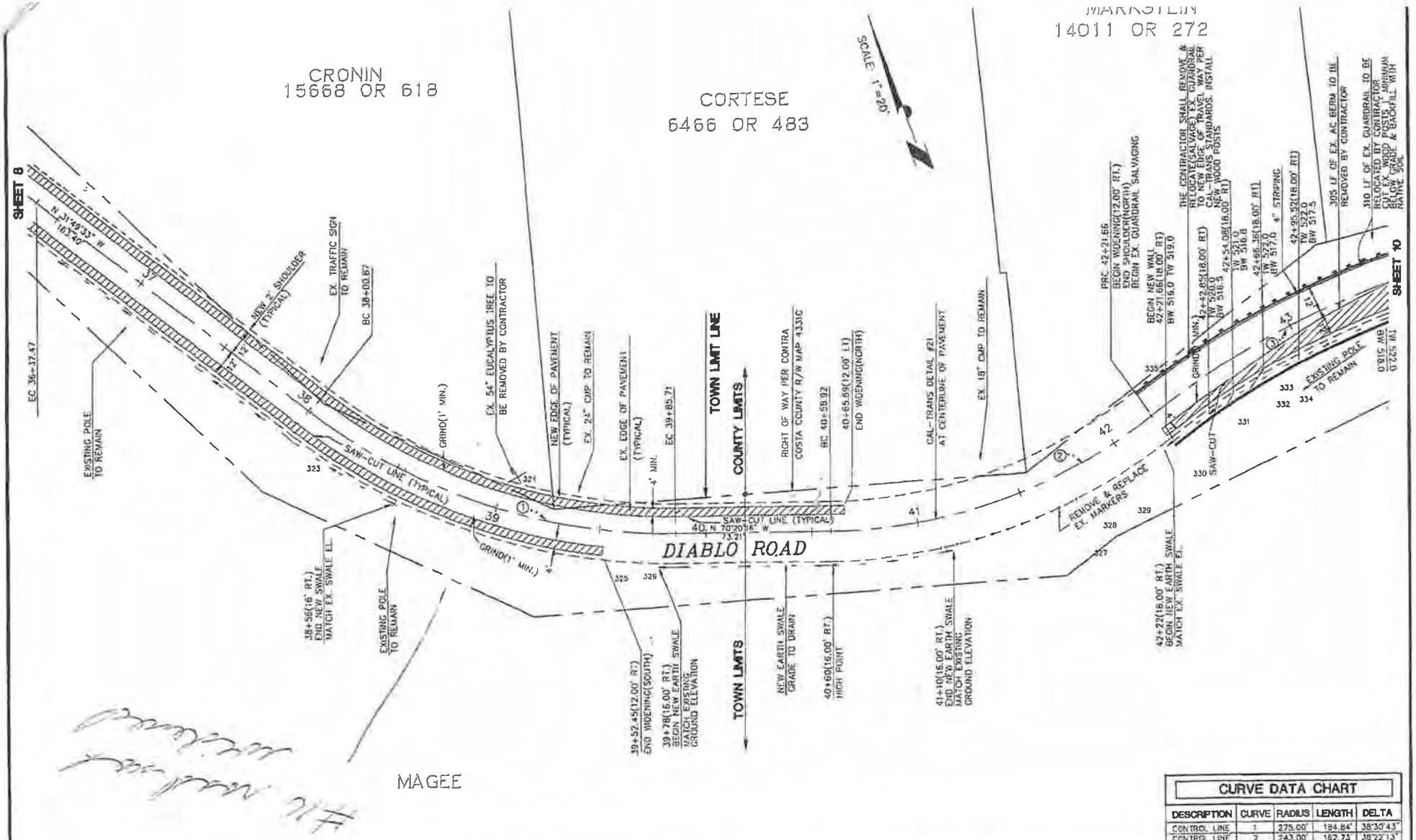
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

DANVILLE

TOWN OF DANVILLE
DIABLO ROAD IMPROVEMENTS

30+25.00 TO 37+00.00

SHEET NO. 8 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 275.00' | 184.84' | 38°30'43" |
| CONTROL LINE | 2 | 243.00' | 162.73' | 38°22'13" |
| CONTROL LINE | 3 | 400.00' | 144.04' | 20°37'57" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


ASSOCIATES inc.
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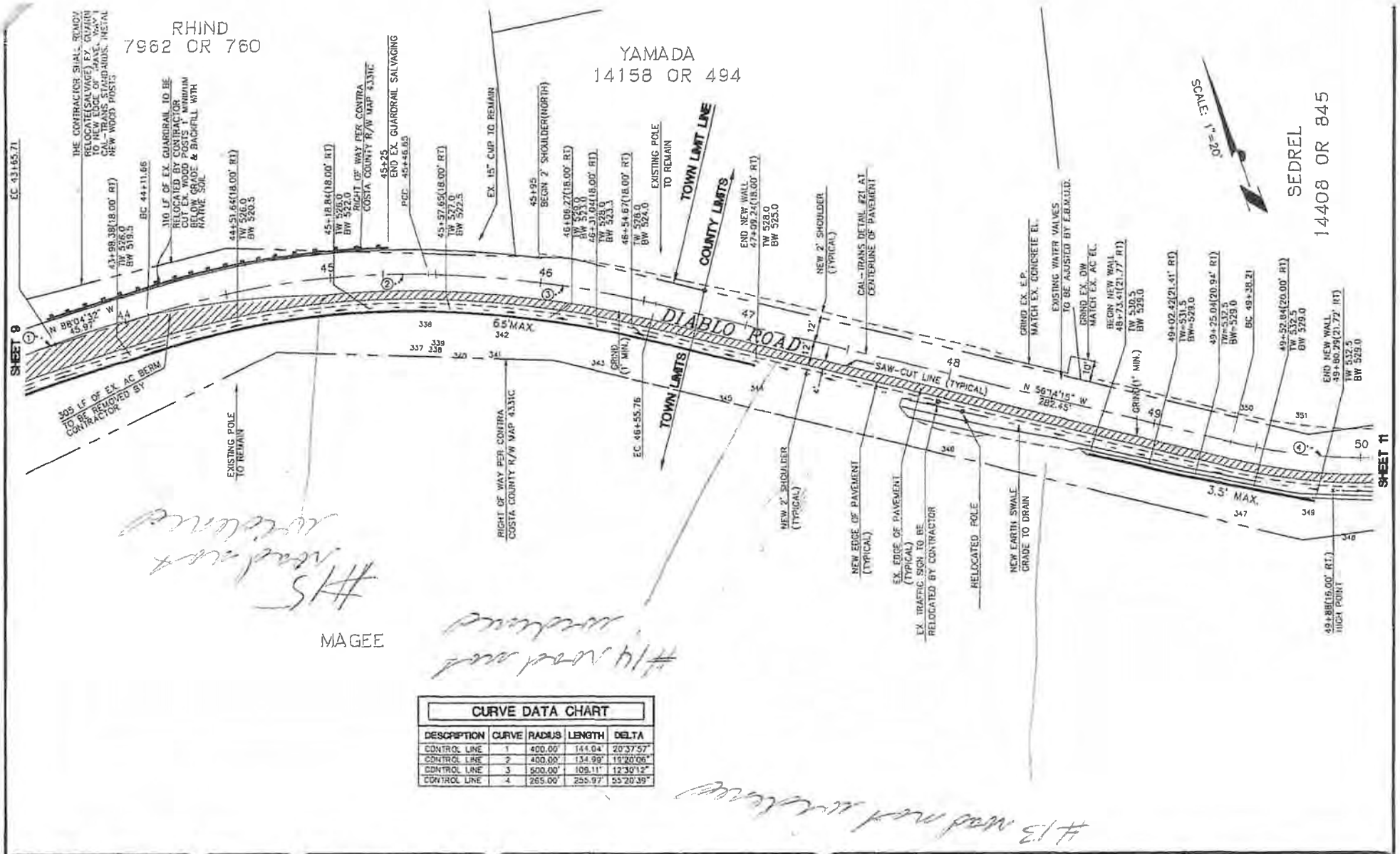
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
EXPIRES
Date

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

37+00.00 TO 43+50.00




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 400.00' | 144.04' | 20°37'57" |
| CONTROL LINE | 2 | 400.00' | 134.99' | 19°20'06" |
| CONTROL LINE | 3 | 500.00' | 109.11' | 12°30'12" |
| CONTROL LINE | 4 | 265.00' | 255.97' | 55°20'39" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D K M
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


ASSOCIATES Inc.
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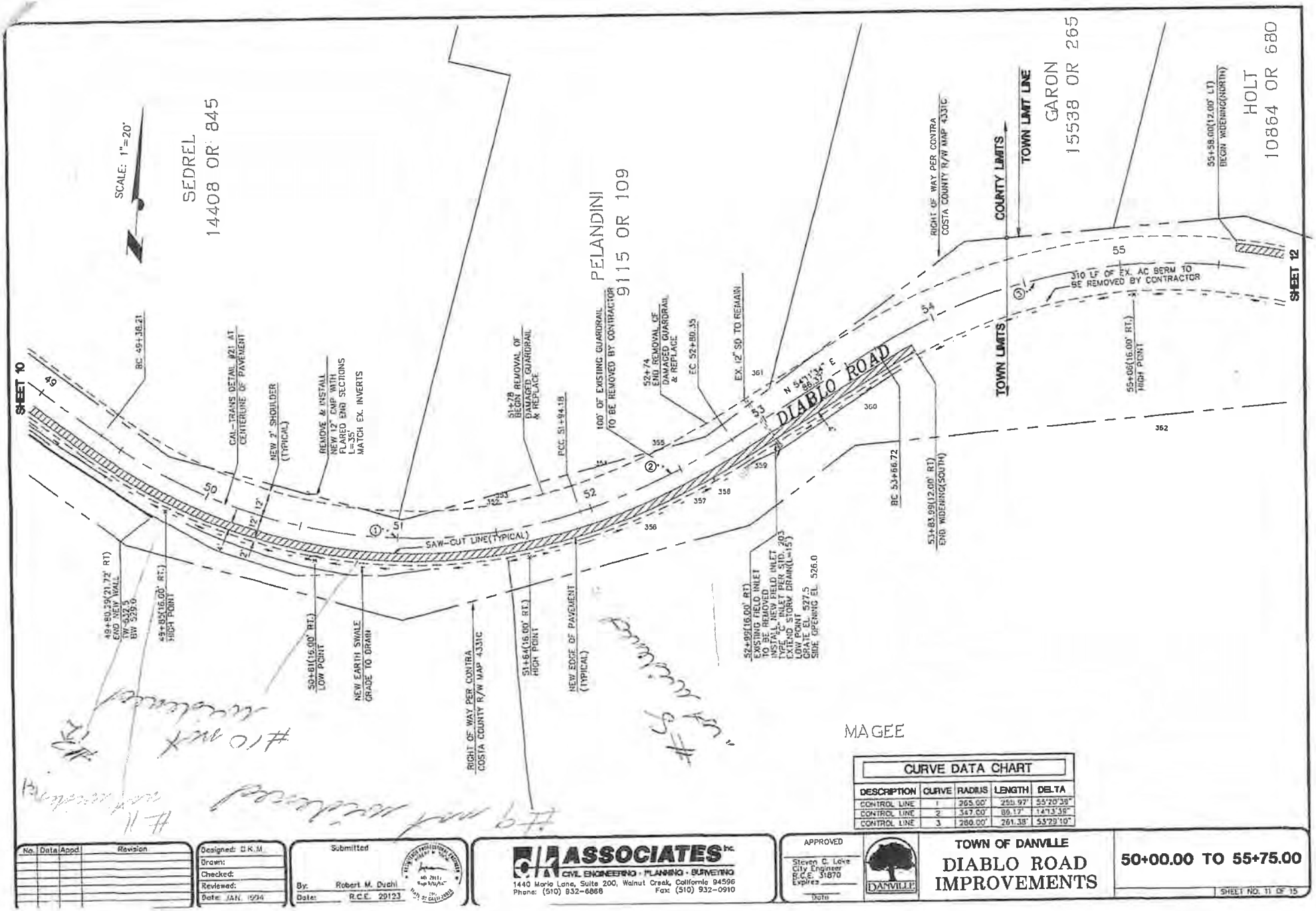
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

**43+50.00 TO 50+00.00**

SHEET NO. 10 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 265.00' | 255.97' | 55°20'38" |
| CONTROL LINE | 2 | 347.00' | 86.17' | 14°13'38" |
| CONTROL LINE | 3 | 280.00' | 261.38' | 53°29'10" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123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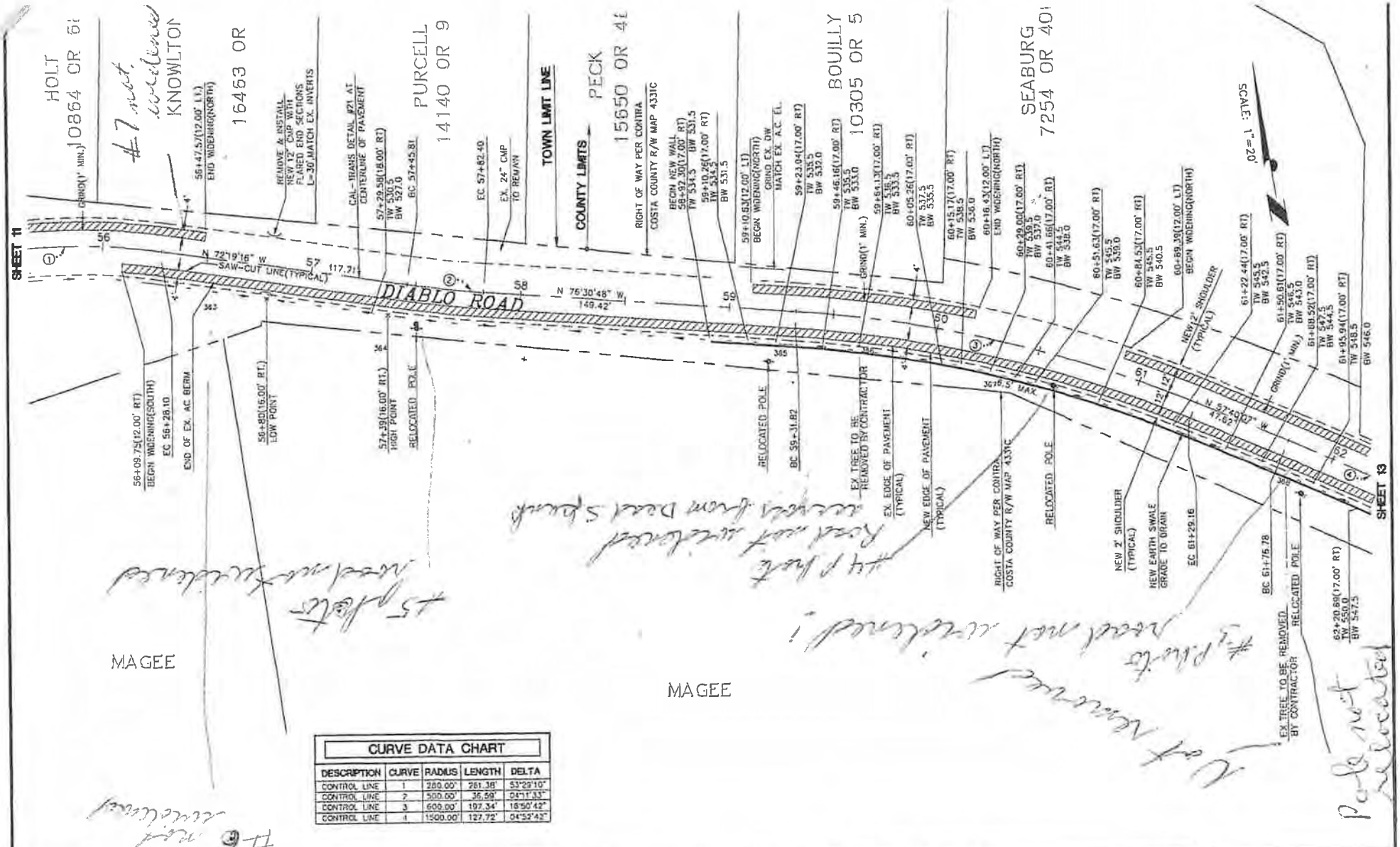
APPROVED
Steven C. Lake
City Engineer
R.C.E. 51870
expires _____
Date

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

50+00.00 TO 55+75.00

SHEET NO. 11 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 280.00' | 261.38' | 53°29'10" |
| CONTROL LINE | 2 | 500.00' | 36.59' | 04°11'33" |
| CONTROL LINE | 3 | 600.00' | 197.34' | 18°50'42" |
| CONTROL LINE | 4 | 1500.00' | 127.72' | 04°52'43" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D K M
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123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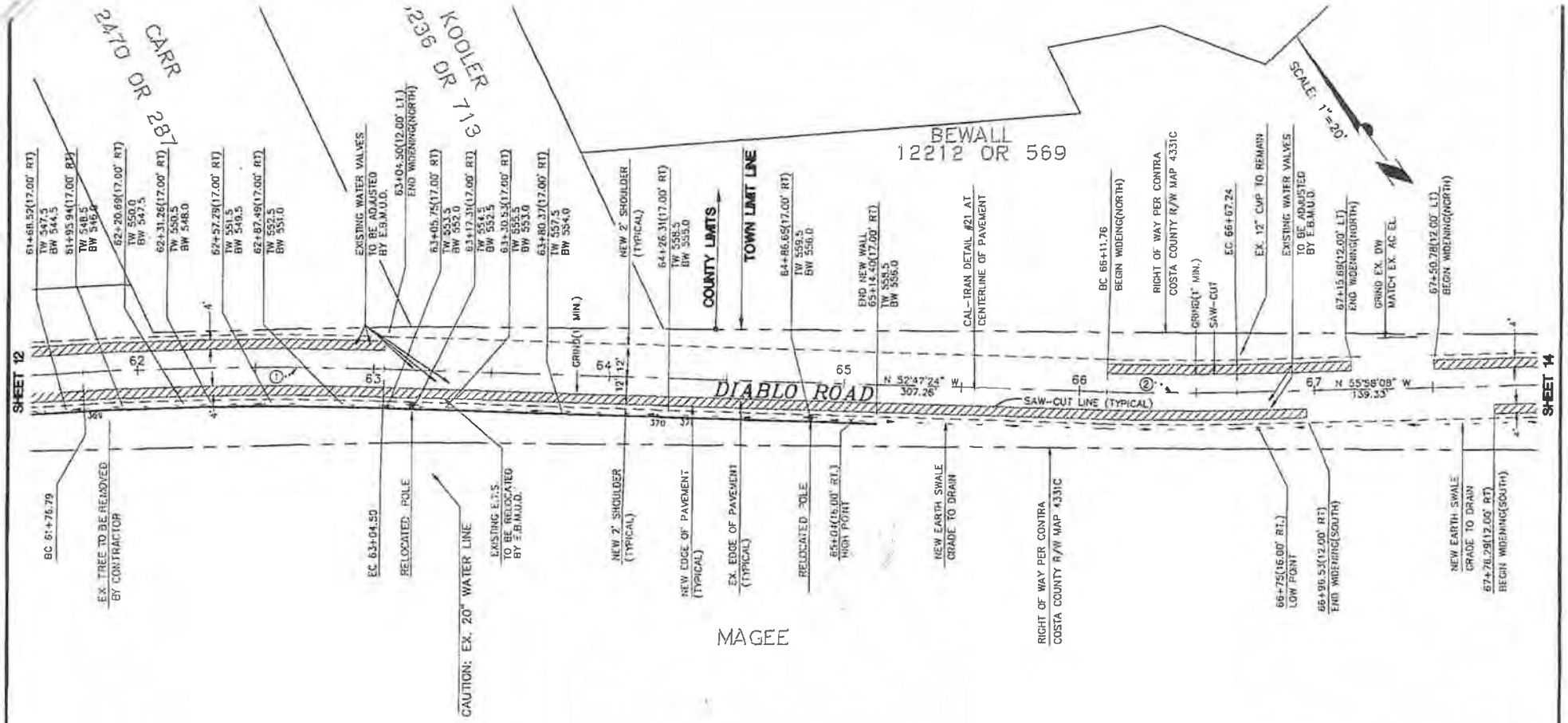
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

TOWN OF DANVILLE

# DIABLO ROAD IMPROVEMENTS

55+75.00 TO 62+25.00

SHEET NO. 12 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 1500.00' | 127.72' | 04°52'42" |
| CONTROL LINE | 2 | 1000.00' | 55.48' | 03°10'44" |

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123


ASSOCIATES Inc.
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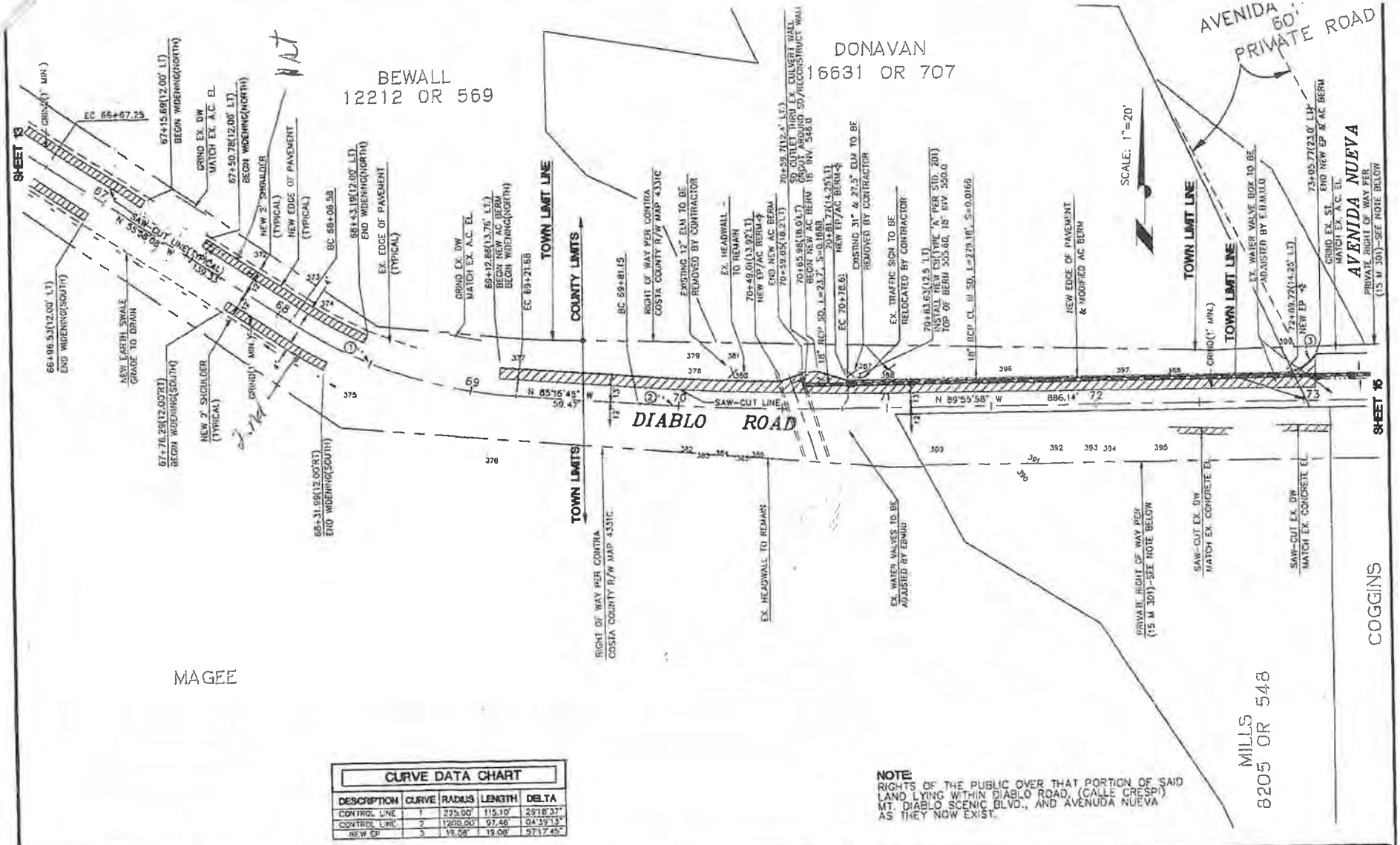
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

DANVILLE

TOWN OF DANVILLE
# DIABLO ROAD IMPROVEMENTS

62+25.00 TO 68+00.00

SHEET NO. 13 OF 15




| CURVE DATA CHART | | | | |
|---|---|---|---|---|
| DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA |
| CONTROL LINE | 1 | 225.00' | 115.10' | 29°18'37" |
| CONTROL LINE | 2 | 1200.00' | 97.46' | 04°39'13" |
| NEW EP | 3 | 19.00' | 19.08' | 57°17'45" |

NOTE:
RIGHTS OF THE PUBLIC OVER THAT PORTION OF SAID LAND LYING WITHIN DIABLO ROAD, (CALLE CRESPI) MT. DIABLO SCENIC BLVD., AND AVENUDA NUEVA AS THEY NOW EXIST.

| No. | Date | Appd. | Revision |
|---|---|---|---|
| | | | |

Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994

Submitted
By: Robert M. Duchi
Date: R.C.E. 29123

BKF ASSOCIATES Inc.
CIVIL ENGINEERING · PLANNING · SURVEYING
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Phone: (510) 932-6868 Fax: (510) 932-0910

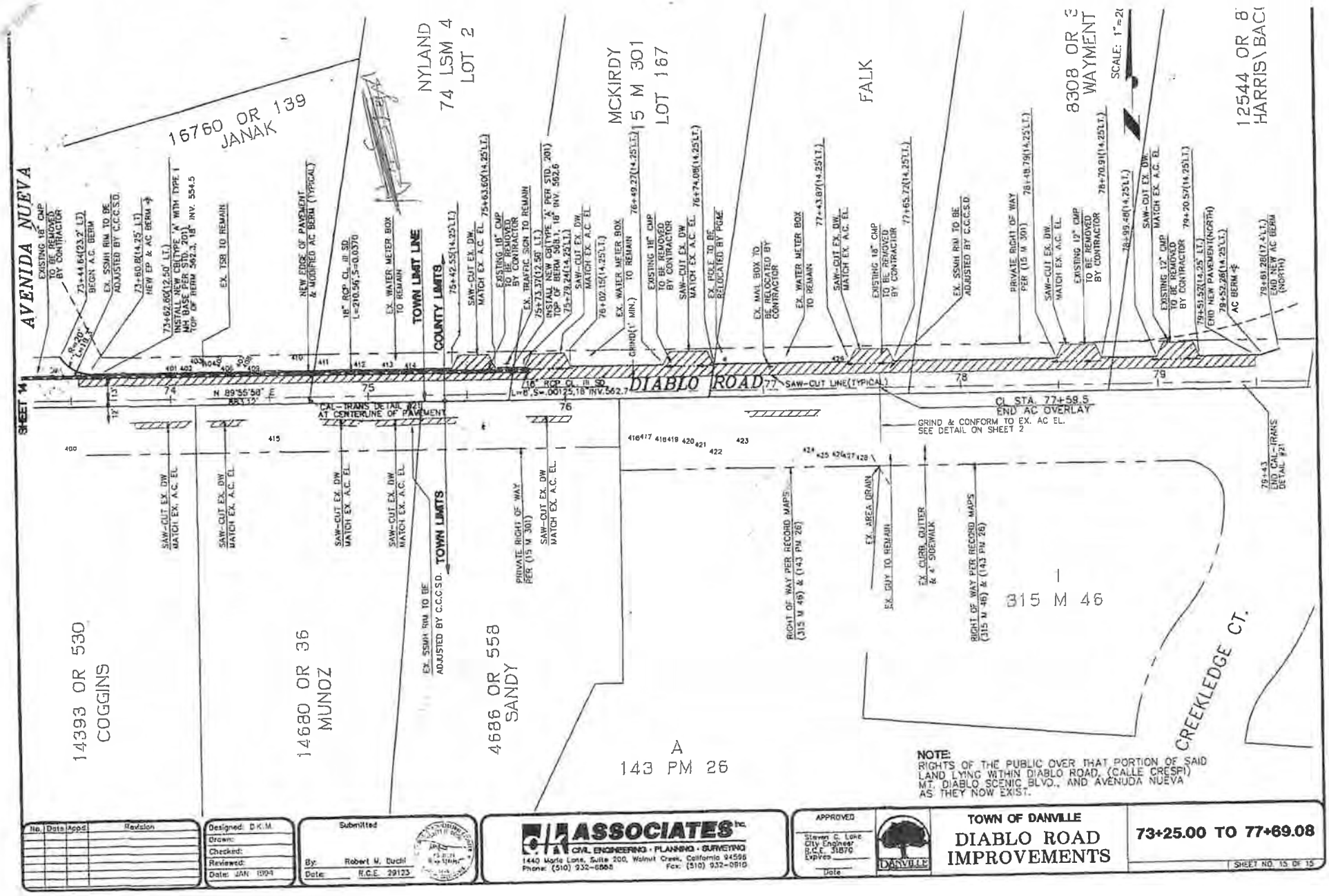
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date

DANVILLE

TOWN OF DANVILLE
DIABLO ROAD IMPROVEMENTS

68+00.00 TO 73+25.00

SHEET NO. 14 OF 15


AVENIDA NUEVA
DIABLO ROAD
TOWN LIMIT LINE
COUNTY LIMITS
TOWN LIMITS
16760 OR 139
JANAK
NYLAND
74 LSM 4
LOT 2
MCKIRDY
15 M 301
LOT 167
FALK
8308 OR
WAYMENT
12544 OR
HARRIS\BAC
14393 OR 530
COGGINS
14680 OR 36
MUNOZ
4686 OR 558
SANDY
A
143 PM 26
315 M 46
CREEKLEDGE CT.
SCALE: 1"=2
CL STA. 77+59.5
END AC OVERLAY
GRIND & CONFORM TO EX. AC EL.
SEE DETAIL ON SHEET 2
CAL-TRANS DETAIL #21
AT CENTERLINE OF PAVEMENT
NOTE:
RIGHTS OF THE PUBLIC OVER THAT PORTION OF SAID LAND LYING WITHIN DIABLO ROAD, (CALLE CRESPI) MT. DIABLO SCENIC BLVD., AND AVENUDA NUEVA AS THEY NOW EXIST.
Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN 1994
Submitted
By: Robert M. Dudil
Date: R.C.E. 29123
APPROVED
Steven C. Lake
City Engineer
R.C.E. 31870
Expires
Date
TOWN OF DANVILLE
DIABLO ROAD IMPROVEMENTS
73+25.00 TO 77+69.08
SHEET NO. 13 OF 15

Clelan Tanner

of Section 830.36 of, subdivision (a) of Section 830.4 of, or Section 830.6 of, the Penal Code, in the performance of the peace officer's duties, may display a steady or flashing blue warning light that is visible from the front, sides, or rear of the bicycle or motorized bicycle.
(b) No person shall display a steady or flashing blue warning light on a bicycle or motorized bicycle except as authorized under subdivision (a).
*(Added by Stats. 1998, Ch. 877, Sec. 65. Effective January 1, 1999.)*

**21201.5.**

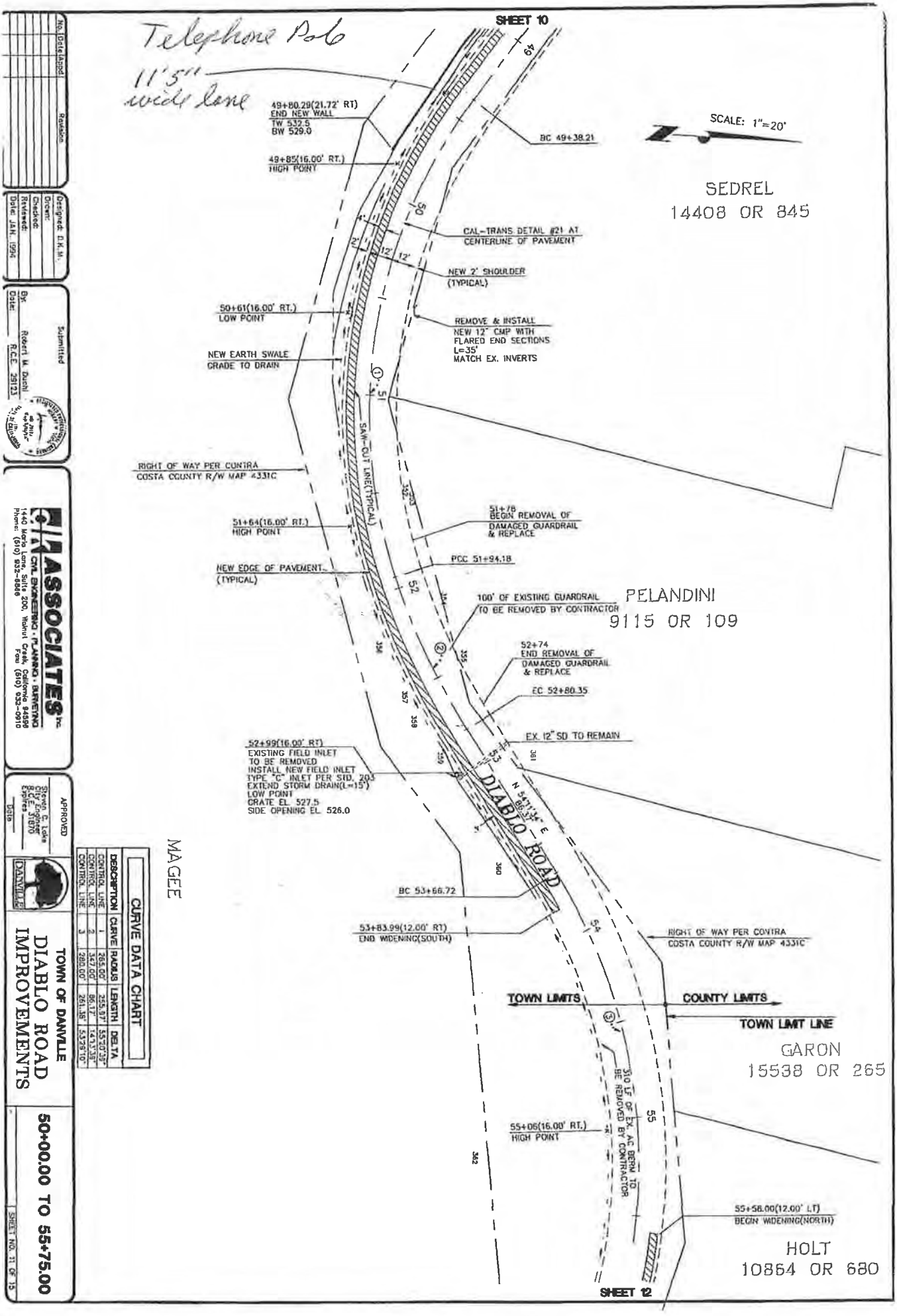
(a) No person shall sell, or offer for sale, a reflex reflector or reflectorized tire of a type required on a bicycle unless it meets requirements established by the department. If there exists a federal Consumer Product Safety Commission regulation applicable to bicycle reflectors, the provisions of that regulation shall prevail over provisions of this code or requirements established by the department pursuant to this code relative to bicycle reflectors.
(b) No person shall sell, or offer for sale, a new bicycle that is not equipped with a red reflector on the rear, a white or yellow reflector on each pedal visible from the front and rear of the bicycle, a white or yellow reflector on each side forward of the center of the bicycle, and a white or red reflector on each side to the rear of the center of the bicycle, except that bicycles which are equipped with reflectorized tires on the front and rear need not be equipped with these side reflectors.
(c) Area reflectorizing material meeting the requirements of Section 25500 may be used on a bicycle.
*(Amended by Stats. 1980, Ch. 399, Sec. 2. Effective July 11, 1980.)*

**21202.**

(a) Any person operating a bicycle upon a roadway at a speed less than the normal speed of traffic moving in the same direction at that time shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:
(1) When overtaking and passing another bicycle or vehicle proceeding in the same direction.
(2) When preparing for a left turn at an intersection or into a private road or driveway.
(3) When reasonably necessary to avoid conditions (including, but not limited to, fixed or moving objects, vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes) that make it unsafe to continue along the right-hand curb or edge, subject to the provisions of Section 21656. For purposes of this section, a "substandard width lane" is a lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the lane.
(4) When approaching a place where a right turn is authorized.
(b) Any person operating a bicycle upon a roadway of a highway, which highway carries traffic in one direction only and has two or more marked traffic lanes, may ride as near the left-hand curb or edge of that roadway as practicable.
*(Amended by Stats. 1996, Ch. 674, Sec. 4. Effective January 1, 1997.)*






SHEET 10
Telephone Pole
11'5" wide lane
49+80.29(21.72' RT)
END NEW WALL
TW 532.5
BW 529.0
49+85(16.00' RT.)
HIGH POINT
BC 49+38.21
SCALE: 1"=20'
SEDREL
14408 OR 845
CAL-TRANS DETAIL #21 AT CENTERLINE OF PAVEMENT
NEW 2' SHOULDER (TYPICAL)
50+61(16.00' RT.)
LOW POINT
REMOVE & INSTALL NEW 12" CMP WITH FLARED END SECTIONS L=35' MATCH EX. INVERTS
NEW EARTH SWALE GRADE TO DRAIN
SAW-CUT LINE(TYPICAL)
RIGHT OF WAY PER CONTRA COSTA COUNTY R/W MAP 433IC
51+64(16.00' RT.)
HIGH POINT
51+78 BEGIN REMOVAL OF DAMAGED GUARDRAIL & REPLACE
PCC 51+94.18
NEW EDGE OF PAVEMENT (TYPICAL)
100' OF EXISTING GUARDRAIL TO BE REMOVED BY CONTRACTOR
PELANDINI
9115 OR 109
52+74 END REMOVAL OF DAMAGED GUARDRAIL & REPLACE
EC 52+80.35
EX. 12" SD TO REMAIN
52+99(16.00' RT)
EXISTING FIELD INLET TO BE REMOVED
INSTALL NEW FIELD INLET TYPE "C" INLET PER STD. 203
EXTEND STORM DRAIN(L=15')
LOW POINT
GRATE EL. 527.5
SIDE OPENING EL. 526.0
DIABLO ROAD
N 54°11'34" E 88.37'
BC 53+66.72
53+83.99(12.00' RT)
END WIDENING(SOUTH)
RIGHT OF WAY PER CONTRA COSTA COUNTY R/W MAP 433IC
TOWN LIMITS
COUNTY LIMITS
TOWN LIMIT LINE
GARON
15538 OR 265
310 LF OF EX. AC BERM TO BE REMOVED BY CONTRACTOR
55+06(16.00' RT.)
HIGH POINT
55+58.00(12.00' LT)
BEGIN WIDENING(NORTH)
HOLT
10864 OR 680
SHEET 12
MAGEE
CURVE DATA CHART
DESCRIPTION | CURVE | RADIUS | LENGTH | DELTA
CONTROL LINE | 1 | 265.00' | 255.97' | 55°20'35"
CONTROL LINE | 2 | 347.00' | 86.17' | 14°13'38"
CONTROL LINE | 3 | 280.00' | 261.38' | 53°29'10"
No. Date(Appd) Revision
Designed: D.K.M.
Drawn:
Checked:
Reviewed:
Date: JAN. 1994
Submitted
By:
Date:
Robert M. Ducht
R.C.E. 29123
APPROVED
Steven C. Lake
R.C.E. 36870
Expires
Date
TOWN OF DANVILLE
DIABLO ROAD IMPROVEMENTS
50+00.00 TO 55+75.00
SHEET NO. 11 OF 15
ASSOCIATES Inc.
CIVIL ENGINEERING • PLANNING • SURVEYING
1440 Maria Lane, Suite 200, Walnut Creek, California 94596
Phone: (510) 932-6866 Fax: (510) 932-0910

STATE LAW
PASS
3 FT MIN

**VEHICLE CODE - VEH**

**DIVISION 11. RULES OF THE ROAD [21000 - 23336]** *( Division 11 enacted by Stats. 1959, Ch. 3. )*

**CHAPTER 3. Driving, Overtaking, and Passing [21650 - 21759]** *( Chapter 3 enacted by Stats. 1959, Ch. 3. )*

**ARTICLE 3. Overtaking and Passing [21750 - 21760]** *( Article 3 enacted by Stats. 1959, Ch. 3. )*

**21760.** (a) This section shall be known and may be cited as the Three Feet for Safety Act.

(b) The driver of a motor vehicle overtaking and passing a bicycle that is proceeding in the same direction on a highway shall pass in compliance with the requirements of this article applicable to overtaking and passing a vehicle, and shall do so at a safe distance that does not interfere with the safe operation of the overtaken bicycle, having due regard for the size and speed of the motor vehicle and the bicycle, traffic conditions, weather, visibility, and the surface and width of the highway.

(c) A driver of a motor vehicle shall not overtake or pass a bicycle proceeding in the same direction on a highway at a distance of less than three feet between any part of the motor vehicle and any part of the bicycle or its operator.

(d) If the driver of a motor vehicle is unable to comply with subdivision (c), due to traffic or roadway conditions, the driver shall slow to a speed that is reasonable and prudent, and may pass only when doing so would not endanger the safety of the operator of the bicycle, taking into account the size and speed of the motor vehicle and bicycle, traffic conditions, weather, visibility, and surface and width of the highway.

(e) (1) A violation of subdivision (b), (c), or (d) is an infraction punishable by a fine of thirty-five dollars ($35).

(2) If a collision occurs between a motor vehicle and a bicycle causing bodily injury to the operator of the bicycle, and the driver of the motor vehicle is found to be in violation of subdivision (b), (c), or (d), a two-hundred-twenty-dollar ($220) fine shall be imposed on that driver.

(f) This section shall become operative on September 16, 2014.

*(Added by Stats. 2013, Ch. 331, Sec. 3. Effective January 1, 2014. Section operative September 16, 2014, by its own provisions.)*

- Know where your kids are. Make sure they are away from your vehicle and in full view before moving your vehicle.
- If other children are nearby, make sure you can see them before backing up.
- Do not depend only on your mirrors or only looking out a side window.
- Turn and look over your right and left shoulders before you begin backing. As a safety measure, look over your right and left shoulders again while backing.
- Back slowly to avoid collisions.

Check traffic behind you often to know if you are being tailgated (another driver is following too closely). If you are being tailgated, be careful! Brake slowly before stopping. Tap your brakes lightly a few times to warn the tailgater you are slowing down.

"Lose" the tailgater as soon as you can. Change lanes and allow the tailgater to pass you, or slow down to allow enough space between you and the car in front of you. If this does not work, pull off the road when it is safe and let the tailgater pass.

### How Well Can You Stop?

If something is in your path, you need to see it in time to stop. Assuming you have good tires, good brakes, and dry pavement:

- At 55 mph, it takes about 400 feet to react and bring the vehicle to a complete stop.
- At 35 mph, it takes about 210 feet to react and bring the vehicle to a complete stop.

Adjust your driving speed to the weather and road conditions (refer to the "Basic Speed Law" in the "Speed Limits" section on page 30). Turn on your lights during the day, if it is hard to see or you cannot see at least 1,000 feet ahead of you.

## LANE CONTROL

### Line Colors

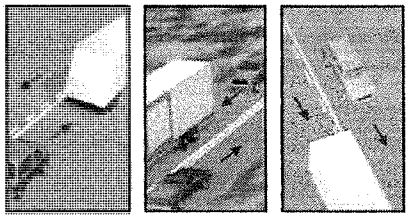
**Solid yellow lines** mark the center of a road used for two-way traffic.

**Broken yellow lines** indicate that you may pass if the broken line is next to your driving lane.

**Two solid yellow lines** indicate no passing. Never drive to the left of these lines unless you are:

- In a carpool lane/high occupancy vehicle (HOV) lane that has a designated entrance on the left.
- Instructed by construction or other signs to drive on the other side of the road because your side of the road is closed or blocked.

**Examples of lane markings**



**(1) Solid yellow line: No passing if the solid yellow line is on your side.**
**(2) Double solid lines: DO NOT pass.**
**(3) Broken yellow line: May pass if movement can be made safely.**

You may turn left across a single set of double yellow lines to enter or exit a driveway, make a U-turn, or into or out of a private road.

(5) *Outer Separation.* The portion of an arterial highway between the traveled ways of a roadway and a frontage street or road.

(6) *On-Street Parking.* In urban, and rural main street place types where parking in the shoulder of the roadway is permitted and expected for access to local business or residences. Permitted parking in the shoulder on a rural non-main street is not considered "on-street" parking for the purposes of this manual although it is legal.

(7) *Roadbed.* That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line. Divided highways are considered to have two roadbeds.

(8) *Roadside.* A general term denoting the area adjoining the outer edge of the roadbed to the right of way line. Extensive areas between the roadbeds of a divided highway may also be considered roadside.

(9) *Roadway.* That portion of the highway included between the outside lines of the sidewalks, or curbs and gutters, or side ditches including also the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

(10) *Shoulder.* The portion of the roadway contiguous with the traveled way for the accommodation of stopped vehicles, for emergency use, for errant vehicle recovery, and for lateral support of base and surface courses. The shoulder may accommodate bicyclists and pedestrians, see the guidance in this manual as well as DIB 82.

(11) *Sidewalk.* A surfaced pedestrian way contiguous to a roadbed used by the public where the need for which is created primarily by the local land use. See DIB 82 for further guidance.

(12) *Traveled Way.* The portion of the roadway for the movement of vehicles and bicycles, exclusive of shoulders.

## 62.2 Highway Structures

(1) *Illustration of Types of Structures.* Figure 62.2 illustrates the names given to common types of structures used in highway construction. This nomenclature must be used in all phases of planning.

(2) *Bridges.* Structures that span more than 20 feet, measured along the centerline of the road between undercopings of abutments, and multiple span structures, including culverts, where the total measurement of the individual spans are in excess of 20 feet, measured from center to center of supports along the centerline of the road and the distance between individual culvert barrels is less than one-half the culvert diameter. Culverts that fit the definition of a bridge will be designed and maintained by the Division of Engineering Services - Structures Design and assigned a bridge number.

(3) *Culverts.* See Index 806.2.

## 62.3 Highway Types

(1) *Freeway.* A freeway, as defined by statute, is a highway in respect to which the owners of abutting lands have no right or easement of access to or from their abutting lands or in respect to which such owners have only limited or restricted right or easement of access. This statutory definition also includes expressways.

The engineering definitions for use in this manual are:

(a) Freeway--A divided arterial highway with full control of access and with grade separations at intersections.

(b) Expressway--An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections.

(2) *Controlled Access Highway.* In situations where it has been determined advisable by the Director or the CTC, a facility may be designated a "controlled access highway" in lieu of the designation "freeway". All statutory provisions pertaining to freeways

harm to impacting vehicles. Category 2 temporary traffic control devices include barricades and portable sign supports.

**Category 3 temporary traffic control devices:** Temporary traffic-handling equipment and devices weighing 100 pounds or more that are expected to produce significant changes in the vehicular velocity of impacting vehicles. Category 3 temporary traffic-handling equipment and devices include crash cushions, impact attenuator vehicles, temporary railing, temporary barrier, and end treatments for temporary railings and barriers.

**hours of darkness:** As defined under Veh Code § 280.

**useable shoulder area:** Any longitudinal paved or unpaved contiguous surface adjacent to the traveled way with:

1. Enough weight-bearing capacity to support traffic control vehicles and equipment, such as flashing arrow signs, portable changeable message signs, and impact attenuator vehicles
2. Slope not greater than 6:1 (horizontal:vertical)

### 12-3.01A(3) Submittals

Upon notification submit the following informational submittals:

1. Self-certification for crashworthiness of Category 1 temporary traffic control devices at least 5 business days before starting any work using the devices or within 2 business days after the notification if the devices are already in use. Either you or the manufacturer must perform the self-certification. Include the following information:
   1.1. Date
   1.2. Federal Aid number if applicable
   1.3. Contract number, district, county, route and post mile of project limits
   1.4. Company name of certifying vendor, street address, city, state and zip code
   1.5. Printed name, signature and title of certifying person
   1.6. Types of Category 1 temporary traffic control devices
2. List of proposed Category 2 temporary traffic control devices at least 5 business days before starting any work using the devices or within 2 business days after the notification if the devices are already in use.

Obtain a standard form for self-certification from the Engineer.

Submit a sample of the type of portable delineator that you will be using on the project before placing portable delineators on the job site.

### 12-3.01A(4) Quality Control and Assurance

Category 2 temporary traffic control devices must be on the Authorized Material List for acceptable, crashworthy Category 2 hardware for work zones.

Category 2 temporary traffic control devices must be labeled with the FHWA acceptance letter number and the name of the manufacturer. The label must be legible and permanently affixed to the traffic control device by the manufacturer.

Category 3 temporary traffic control devices must be the type shown and on the Authorized Material List for highway safety features.

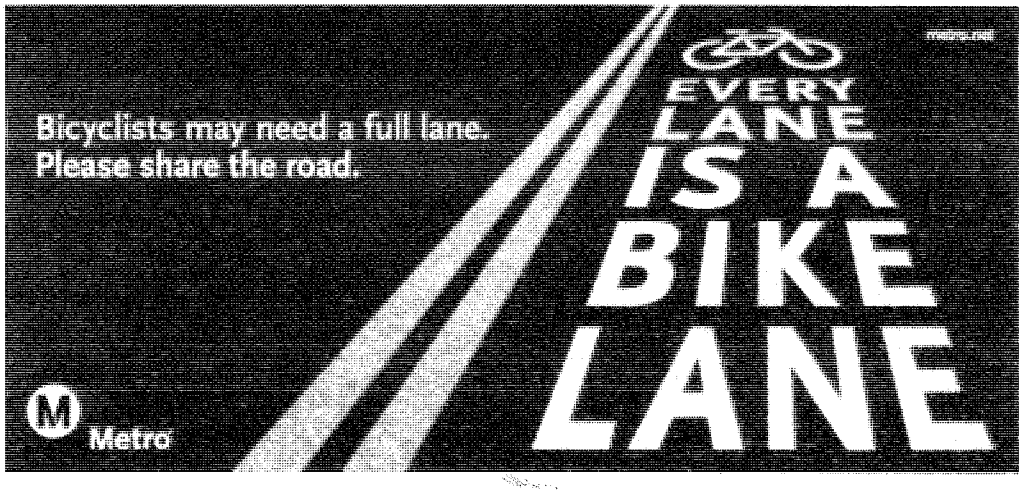
Retroreflectivity for the following materials must comply with Table 2A-3, "Minimum Retroreflectivity Requirements," of the *California MUTCD* and be on the Authorized Material List for signing and delineation materials:

1. Retroreflective sheeting for barricades
2. Retroreflective bands for portable delineators
3. Retroreflective sheeting for construction area signs
4. Retroreflective sheeting for channelizers
5. Reflectors for Type K temporary railing
6. Retroreflective cone sleeves
7. White and orange-colored retroreflective stripes for plastic traffic drums.


MAY USE
FULL LANE

# Share the road, it's the law

BY ANNA CHEN , MARCH 4, 2013




(http://thesource.metro.net/2013/03/04/share-the-road-its-the-law/13-1362_otd_bike_traffic_safety_30sheet_jl_lo/)

Metro is launching a new campaign to increase bicycle traffic safety in Los Angeles County. The campaign will include signs on buses, billboards and radio spots with the message "Every Lane is a Bike Lane ... Bicyclists may need a full lane; Please share the road." The ads will run from March to May, leading up to Bike Week (http://www.bikeleague.org/programs/bikemonth/) May 13 through 17.

As per California Vehicle Code (CVC) 21200 (http://www.dmv.ca.gov/pubs/vctop/d11/vc21200.htm), bicycle riders

may use any lane in the street since they have the same rights and must follow the same laws as car drivers. Bicyclists may need the full lane to safely navigate specific road and traffic conditions. In addition, CVC 21202 (http://www.dmv.ca.gov/pubs/vctop/d11/vc21202.htm) sets out several situations in which bicyclists are specifically permitted to leave their usual position on the far right of the street:

- To avoid obstacles and unsafe conditions (including the door zone along parallel-parked vehicles)
- To pass another bicyclist, car or bus
- To prepare for a left turn
- To avoid an area where right turns are made
- When traveling as fast or faster than other traffic at that time and place
- When the lane is too narrow to share with a vehicle

With bicycling growing in popularity as a serious mode of transportation, it's important for everyone to work together to create a safe transit environment.

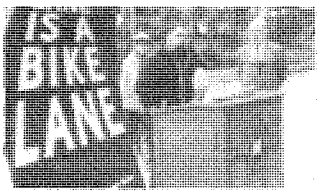
**Related**

Metro press release on

Metro press release on its new bike safety campaign; cyclists have legal right to take a full lane
March 18, 2013
In "Bicycle"

Every lane is a bike lane

Every lane is a bike lane
April 11, 2013
In "Bicycle"




Every lane is a bike lane, but do you know how to use those lanes?
July 11, 2013
In "Bicycle"








**W8-9a**

Sign image from the Manual of Traffic Signs <http://www.trafficsign.us/>
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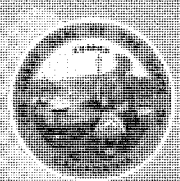
# California Manual on Uniform Traffic Control Devices

FHWA's MUTCD 2009 Edition, Including Revisions 1 & 2 as Amended for use in California

## 2014 Edition

**Revision 2 (April 7, 2017)**

State of California
California State Transportation Agency
Department of Transportation





# PART 1
# GENERAL

## CHAPTER 1A. GENERAL

### Section 1A.01 Purpose of Traffic Control Devices

Support:

01 The purpose of traffic control devices, as well as the principles for their use, is to promote highway safety and efficiency by providing for the orderly movement of all road users on streets, highways, bikeways, and private roads open to public travel (see definition in Section 1A.13) throughout the Nation.

02 Traffic control devices notify road users of regulations and provide warning and guidance needed for the uniform and efficient operation of all elements of the traffic stream in a manner intended to minimize the occurrences of crashes.

**Standard:**

03 **Traffic control devices or their supports shall not bear any advertising message or any other message that is not related to traffic control.**

Support:

04 Tourist-oriented directional signs and Specific Service signs are not considered advertising; rather, they are classified as motorist service signs.

### Section 1A.02 Principles of Traffic Control Devices

Support:

01 This Manual contains the basic principles that govern the design and use of traffic control devices for all streets, highways, bikeways, and private roads open to public travel (see definition in Section 1A.13) regardless of type or class or the public agency, official, or owner having jurisdiction. This Manual's text specifies the restriction on the use of a device if it is intended for limited application or for a specific system. It is important that these principles be given primary consideration in the selection and application of each device.

*Guidance:*

02 *To be effective, a traffic control device should meet five basic requirements:*

*A. Fulfill a need;*

*B. Command attention;*

*C. Convey a clear, simple meaning;*

*D. Command respect from road users; and*

*E. Give adequate time for proper response.*

03 *Design, placement, operation, maintenance, and uniformity are aspects that should be carefully considered by the engineer in order to maximize the ability of a traffic control device to meet the five requirements listed in the previous paragraph. Vehicle speed, geometrics and other relevant factors should be carefully considered as ~~an~~ elements that governs the design, operation, placement, and location of various traffic control devices.*

Support:

04 The definition of the word "speed" varies depending on its use. The definitions of specific speed terms are contained in Section 1A.13.

*Guidance:*

05 *The actions required of road users to obey regulatory devices should be specified by State statute, or in cases not covered by State statute, by local ordinance or resolution. Such statutes, ordinances, and resolutions should be consistent with the "Uniform Vehicle Code" and California Vehicle Code (CVC) (see Section 1A.11).*

06 *The proper use of traffic control devices should provide the reasonable and prudent road user with the information necessary to efficiently and lawfully use the streets, highways, pedestrian facilities, and bikeways.*

## Section 1A.09 Engineering Study and Engineering Judgment

Support:

01 Definitions of an engineering study and engineering judgment are contained in Section 1A.13.

01a Refer to CVC 627 for definition and requirements of "Engineering and Traffic Survey". It is also abbreviated in this manual as E&TS.

**Standard:**

02 **This Manual describes the application of traffic control devices, but shall not be a legal requirement for their installation.**

*Guidance:*

03 *The decision to use a particular device at a particular location should be made on the basis of either an engineering study or the application of engineering judgment. Thus, while this Manual provides Standards, Guidance, and Options for design and applications of traffic control devices, this Manual should not be considered a substitute for engineering judgment. Engineering judgment should be exercised in the selection and application of traffic control devices, as well as in the location and design of roads and streets that the devices complement.*

04 *Early in the processes of location and design of roads and streets, engineers should coordinate such location and design with the design and placement of the traffic control devices to be used with such roads and streets.*

05 *Jurisdictions, or owners of private roads open to public travel (see definition in Section 1A.13), with responsibility for traffic control that do not have engineers on their staffs who are trained and/or experienced in traffic control devices should seek engineering assistance from others, such as the State transportation agency, their county, a nearby large city, or a traffic engineering consultant.*

Support:

06 As part of the Federal-aid Program, each State is required to have a Local ~~Technology~~ Technical Assistance Program (LTAP) and to provide technical assistance to local highway agencies. Requisite technical training in the application of the principles of the MUTCD is available from the State's Local ~~Technology~~ Technical Assistance Program for needed engineering guidance and assistance.

07 In California, Traffic Engineers are classified under a title act and not under a practice act. Traffic engineers can conduct studies but a Civil Engineer must sign plans for traffic control devices that will be placed in the field, per the Professional Engineers Act.

## Section 1A.10 Interpretations, Experimentations, Changes, and Interim Approvals

**Standard:**

01 **Design, application, and placement of traffic control devices other than those adopted in this Manual shall be prohibited unless the provisions of this Section are followed.**

Support:

02 Continuing advances in technology will produce changes in the highway, vehicle, and road user proficiency; therefore, portions of the system of traffic control devices in this Manual will require updating. In addition, unique situations often arise for device applications that might require interpretation or clarification of this Manual. It is important to have a procedure for recognizing these developments and for introducing new ideas and modifications into the system.

**Standard:**

03 **Except as provided in Paragraph 4, requests for any interpretation, permission to experiment, interim approval, or change shall be submitted electronically to the Federal Highway Administration (FHWA), Office of Transportation Operations, MUTCD team, at the following e-mail address:**

**MUTCDofficialrequest@dot.gov.**

Option:

04 If electronic submittal is not possible, requests for interpretations, permission to experiment, interim approvals, or changes may instead be mailed to the

Office of Transportation Operations, HOTO-1,
Federal Highway Administration,
1200 New Jersey Avenue, SE,
Washington, DC 20590.

**Standard:**

01a **When used at a cattle guard, the BUMP (W8-1) or DIP (W8-2) signs shall be supplemented with a diagonal downward pointing arrow (W16-7p) plaque showing the location of the cattle guard.**

Option:

02 These signs may be supplemented with an Advisory Speed plaque (see Section 2C.08).

**Standard:**

03 **The DIP sign shall not be used at a short stretch of depressed alignment that might momentarily hide a vehicle.**

*Guidance:*

04 *A short stretch of depressed alignment that might momentarily hide a vehicle should be treated as a no-passing zone when center line striping is provided on a two-lane or three-lane road (see Section 3B.02).*

## Section 2C.29 SPEED HUMP Sign (W17-1)

*Guidance:*

01 *The SPEED HUMP (W17-1) sign (see Figure 2C-6) should be used to give warning of a vertical deflection in the roadway that is designed to limit the speed of traffic.*

02 *If used, the SPEED HUMP sign should be supplemented by an Advisory Speed plaque (see Section 2C.08).*

Option:

03 If a series of speed humps exists in close proximity, an Advisory Speed plaque may be eliminated on all but the first SPEED HUMP sign in the series.

04 The legend SPEED BUMP may be used instead of the legend SPEED HUMP on the W17-1 sign.

Option:

04a If a series of speed humps exist in close proximity, a SPEED HUMPS AHEAD (W84(CA)) sign (see Figure 2C-6(CA)) may replace the first SPEED HUMP sign in the series, provided additional warning of speed humps are provided through signs or pavement markings at the speed humps.

04b If speed humps exist on a network of streets within an area accessible by a limited number of access points to the area, an optional SPEED HUMP AREA (W85(CA)) sign (see Figure 2C-6(CA)) may be placed at each access point to the area, provided additional warning of speed humps are provided through signs or markings at the speed humps.

Support:

05 Speed humps generally provide more gradual vertical deflection than speed bumps. Speed bumps limit the speed of traffic more severely than speed humps. Other forms of speed humps include speed tables and raised intersections. However, these differences in engineering terminology are not well known by the public, so for signing purposes these terms are interchangeable.

## Section 2C.30 PAVEMENT ENDS Sign (W8-3)

*Guidance:*

01 *A PAVEMENT ENDS (W8-3) word message sign (see Figure 2C-6) should be used where a paved surface changes to either a gravel treated surface or an earth road surface.*

Option:

02 An Advisory Speed plaque (see Section 2C.08) may be used when the change in roadway condition requires a reduced speed.

## Section 2C.31 Shoulder Signs (W8-4, W8-9, W8-17, W8-23, and W8-25)

Option:

01 The SOFT SHOULDER (W8-4) sign (see Figure 2C-6) may be used to warn of a soft shoulder condition.

02 The LOW SHOULDER (W8-9) sign (see Figure 2C-6) may be used to warn of a shoulder condition where there is an elevation difference of less than 3 inches between the shoulder and the travel lane.

*Guidance:*

03 *The Shoulder Drop Off (W8-17) sign (see Figure 2C-6) should be used where an unprotected shoulder drop-off, adjacent to the travel lane, exceeds 3 inches in depth for a significant continuous length along the roadway, based on engineering judgment.*

Option:

04 A SHOULDER DROP-OFF (W8-17P) supplemental plaque (see Figure 2C-6) may be mounted below the W8-17 sign.

05 The NO SHOULDER (W8-23) sign (see Figure 2C-6) may be used to warn road users that a shoulder does not exist along a portion of the roadway.

06 The SHOULDER ENDS (W8-25) sign (see Figure 2C-6) may be used to warn road users that a shoulder is ending.

**Standard:**

07 **When used, shoulder signs shall be placed in advance of the condition (see Table 2C-4).**

*Guidance:*

08 *Additional shoulder signs should be placed at appropriate intervals along the road where the condition continually exists.*

Support:

09 The low shoulder condition (elevation difference up to 3 inches) between shoulder and the travel lane) is not treated as a permanent condition on State highways.

**Standard:**

10 **The black on yellow background LOW SHOULDER (W8-9) sign shall not be used on State highways.**

Option:

11 The black on orange background LOW SHOULDER (W8-9) sign may be used on State highways to warn of a shoulder condition where there is an elevation difference of less than 3 inch between the shoulder and the travel lane. See Section 6F.44.

## Section 2C.32 Surface Condition Signs (W8-5, W8-7, W8-8, W8-11, W8-13, and W8-14)

Option:

01 The Slippery When Wet (W8-5) sign (see Figure 2C-6) may be used to warn of unexpected slippery conditions. Supplemental plaques with legends such as ICE, WHEN WET, STEEL DECK, or EXCESS OIL may be used with the W8-5 sign to indicate the reason that the slippery conditions might be present.

**Standard:**

01a **When used at a cattle guard, the Slippery When Wet (W8-5) signs shall be supplemented with a diagonal downward pointing arrow (W16-7p) plaque showing the location of the cattle guard.**

Option:

02 The LOOSE GRAVEL (W8-7) sign (see Figure 2C-6) may be used to warn of loose gravel on the roadway surface.

03 The ROUGH ROAD (W8-8) sign (see Figure 2C-6) may be used to warn of a rough roadway surface. It may be desirable to supplement this sign with an Advisory Speed (W13-1P) plaque. Where the rough road is 1 mile or more in length, the W8-8 sign may be supplemented with a Next Distance (W7-3a) plaque.

04 An UNEVEN LANES (W8-11) sign (see Figure 2C-6) may be used to warn of a difference in elevation between travel lanes.

05 The BRIDGE ICES BEFORE ROAD (W8-13) sign (see Figure 2C-6) may be used in advance of bridges to advise bridge users of winter weather conditions. The BRIDGE ICES BEFORE ROAD sign may be removed or covered during seasons of the year when its message is not relevant.

*Guidance:*

06 *The ~~FALLEN ROCKS (W8-14) sign (see Figure 2C-6) may~~ Rock Slide Area symbol (W50-1(CA)) sign (see Figure 2C-6(CA) should be used in advance of an area that is adjacent to a hillside, mountain, or cliff where rocks frequently fall onto the roadway.*

*Guidance:*

07 *When used, Surface Condition signs should be placed in advance of the beginning of the affected section (see Table 2C-4), and additional signs should be placed at appropriate intervals along the road where the condition exists.*

*Guidance:*

04 *If two street names are used on the Advance Street Name plaque, the street names and associated arrows should be displayed in the following order:*

*A. For a single intersection, the name of the street to the left should be displayed above the name of the street to the right; or*

*B. For two sequential intersections, such as where the plaque is used with an Offset Side Roads (W2-7) or a Double Side Road (W2-8) symbol sign, the name of the first street encountered should be displayed above the name of the second street encountered, and the arrow associated with the second street encountered should be an advance arrow, such as the arrow shown on the W16-6P arrow plaque (see Figure 2C-12).*

## Section 2C.59 CROSS TRAFFIC DOES NOT STOP Plaque (W4-4P)

Option:

01 The CROSS TRAFFIC DOES NOT STOP (W4-4P) plaque (see Figure 2C-9) may be used in combination with a STOP sign when engineering judgment indicates that conditions are present that are causing or could cause drivers to misinterpret the intersection as an all-way stop.

02 Alternative messages (see Figure 2C-9) such as TRAFFIC FROM LEFT (RIGHT) DOES NOT STOP (W4-4aP) or ONCOMING TRAFFIC DOES NOT STOP (W4-4bP) may be used when such messages more accurately describe the traffic controls established at the intersection.

*Guidance:*

02a *The CROSS TRAFFIC DOES NOT STOP (W4-4p) plaque should be used in combination with a STOP sign at two-way stop-controlled intersections when a conversion from four-way stop to two-way stop operation is implemented.*

03 *Plaques with the appropriate alternative messages of TRAFFIC FROM LEFT (RIGHT) DOES NOT STOP or ONCOMING TRAFFIC DOES NOT STOP should be used at intersections where STOP signs control all but one approach to the intersection, unless the only non-stopped approach is from a one-way street.*

**Standard:**

04 **If a W4-4P plaque or a plaque with an alternative message is used, it shall be mounted below the STOP sign.**

## Section 2C.60 SHARE THE ROAD Plaque (W16-1P)

Option:

01 In situations where there is a need to warn drivers to watch for other slower forms of transportation traveling along the highway, such as bicycles, golf carts, horse-drawn vehicles, or farm machinery, a SHARE THE ROAD (W16-1P) plaque (see Figure 2C-12) may be used.

**Standard:**

02 **A W16-1P plaque shall not be used alone. If a W16-1P plaque is used, it shall be mounted below either a Vehicular Traffic Warning sign (see Section 2C.49) or a Non-Vehicular Warning sign (see Section 2C.50). The background color of the W16-1P plaque shall match the background color of the warning sign with which it is displayed.**

Support:

03 Refer to Section 9B.06 for Bicycles May Use Full Lane (R4-11) sign.

04 Refer to Section 9B.102 for PASS Bicycle 3 FT MIN (R117(CA)) sign.

## Section 2C.61 Photo Enforced Plaque (W16-10P)

Option:

01 A Photo Enforced (W16-10P) plaque or a PHOTO ENFORCED (W16-10aP) word message plaque (see Figure 2C-12) may be mounted below a warning sign to advise road users that the regulations associated with the condition being warned about (such as a traffic control signal or a toll plaza) are being enforced by photographic equipment.

**Standard:**

02 **If used below a warning sign, the Photo Enforced (W16-10P or W16-10aP) plaque shall be a rectangle with a black legend and border on a yellow background.**

05 *When placement of STOP or YIELD signs is considered, priority at a shared-use path/roadway intersection should be assigned with consideration of the following:*

*A. Relative speeds of shared-use path and roadway users,*

*B. Relative volumes of shared-use path and roadway traffic, and*

*C. Relative importance of shared-use path and roadway.*

06 *Speed should not be the sole factor used to determine priority, as it is sometimes appropriate to give priority to a high-volume shared-use path crossing a low-volume street, or to a regional shared-use path crossing a minor collector street.*

07 *When priority is assigned, the least restrictive control that is appropriate should be placed on the lower priority approaches. STOP signs should not be used where YIELD signs would be acceptable.*

## Section 9B.04 Bike Lane Signs and Plaques (R3-17, R3-17aP, R3-17bP)

~~**Standard:**~~

01 ~~**The Bike Lane (R3-17) sign and the R3-17aP and R3-17bP plaques (see Figure 9B-2) shall be used only in conjunction with marked bicycle lanes as described in Section 9C.04.**~~

~~*Guidance:*~~

02 ~~*If used, Bike Lane signs and plaques should be used in advance of the upstream end of the bicycle lane, at the downstream end of the bicycle lane, and at periodic intervals along the bicycle lane as determined by engineering judgment based on prevailing speed of bicycle and other traffic, block length, distances from adjacent intersections, and other considerations.*~~

Standard:

03 The Bike Lane (R81(CA)) sign shall be placed at the beginning of each designated Bike Lane and along each Bike Lane at all major changes in direction. The R81(CA) sign shall be used to regulate bicycle and motor vehicle traffic, in accordance with CVC Sections 21207, 21207.5, 21208, 21209 and 21717.

*Guidance:*

04 *The Bike Lane (R81(CA)) sign should be placed at every arterial street and at 1/2 mile intervals of each designated Bike lane.*

Option:

05 The BEGIN (R81A(CA)) and END (R81B(CA)) signs may be used below the R81(CA) sign to mark the beginning or end of a bike lane.

Support:

06 The R81(CA), R81A(CA) and R81B(CA) signs are shown in Figure 9B-2(CA).

## Section 9B.05 BEGIN RIGHT TURN LANE YIELD TO BIKES Sign (R4-4)

Option:

01 Where motor vehicles entering an exclusive right-turn lane must weave across bicycle traffic in bicycle lanes, the BEGIN RIGHT TURN LANE YIELD TO BIKES (R4-4) sign (see Figure 9B-2) may be used to inform both the motorist and the bicyclist of this weaving maneuver (see Figures 9C-1, 9C-4, and 9C-5).

*Guidance:*

02 *The R4-4 sign should not be used when bicyclists need to move left because of a right-turn lane drop situation.*

## Section 9B.06 Bicycles May Use Full Lane Sign (R4-11)

Option:

01 The Bicycles May Use Full Lane (R4-11) sign (see Figure 9B-2) may be used on roadways where no bicycle lanes or adjacent shoulders usable by bicyclists are present and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side.

02 The Bicycles May Use Full Lane sign may be used in locations where it is important to inform road users that bicyclists might occupy the travel lane.

03 Section 9C.07 describes a Shared Lane Marking that may be used in addition to or instead of the Bicycles May Use Full Lane sign to inform road users that bicyclists might occupy the travel lane.

Support:

04 The Uniform Vehicle Code (UVC) (Also refer to CVC 21202(a)(3)) defines a "substandard width lane" as a

Clelan Tanner
#4.

**Subject:** Closed Request # 17-4163 [3932336666373463]

**From:** Town of Danville (danvilleca@user.govoutreach.com)

**To:** foothilldental@sbcglobal.net;

**Date:** Monday, November 27, 2017 11:03 AM

---If replying by email, enter your reply above this line---

Dear Clelen,

Your request # 17-4163 has been resolved with the following resolution:
Hello,

No. A vehicle is not permitted to cross the double yellow lines for any reason. That includes passing a motor vehicle or a bicycle. I included the vehicle sections below. California Vehicle Code section 21460 pertains to double yellow lines and 21655.8 applies to preferential use lanes. Please let me know if you have any other questions.

Allan Shields, Chief
Danville Police
925-314-3701

California Vehicle Code Sections:
21460.
(a) If double parallel solid yellow lines are in place, a person driving a vehicle shall not drive to the left of the lines, except as permitted in this section.
(b) If double parallel solid white lines are in place, a person driving a vehicle shall not cross any part of those double solid white lines, except as permitted in this section or Section 21655.8.
(c) If the double parallel lines, one of which is broken, are in place, a person driving a vehicle shall not drive to the left of the lines, except as follows:
(1) If the driver is on the side of the roadway in which the broken line is in place, the driver may cross over the double lines or drive to the left of the double lines when overtaking or passing other vehicles.
(2) As provided in Section 21460.5.
(d) The markings as specified in subdivision (a), (b), or (c) do not prohibit a driver from crossing the marking if (1) turning to the left at an intersection or into or out of a driveway or private road, or (2) making a U-turn under the rules governing that turn, and the markings shall be disregarded when authorized signs have been erected designating off-center traffic lanes as permitted pursuant to Section 21657.
(e) Raised pavement markers may be used to simulate painted lines described in this section if the markers are placed in accordance with standards established by the Department of Transportation.

21655.8.
(a) Except as required under subdivision (b), when exclusive or preferential use lanes for high-occupancy vehicles are established pursuant to Section 21655.5 and double parallel solid lines are in

place to the right thereof, no person driving a vehicle may cross over these double lines to enter into or exit from the exclusive or preferential use lanes, and entrance or exit may be made only in areas designated for these purposes or where a single broken line is in place to the right of the exclusive or preferential use lanes.
(b) Upon the approach of an authorized emergency vehicle displaying a red light or siren, as specified in Section 21806, a person driving a vehicle in an exclusive or preferential use lane shall exit that lane immediately upon determining that the exit can be accomplished with reasonable safety.
(c) Raised pavement markers may be used to simulate painted lines described in this section

This is in reference to the Problem regarding Police Services - General you submitted on 11/21/2017 9:48 PM
Description: Is a car or truck permitted to cross the double yellow line to pass a bicyclist?

We are committed to providing you the best service we can. We would appreciate you filling out a brief online survey on how this request was handled. You can complete the online survey by going to:
<http://user.GovOutreach.com/danvilleca/survey.php?cid=3520393&access=3932336666373463>

You may reply to this email to send a response or you can view this request online at:
<http://user.GovOutreach.com/danvilleca/case.php?id=3520393&access=3932336666373463>

Thank you,

Town of Danville

**Subject:** Survey for Closed Request # 17-3913 [6466653732363731]

**From:** Town of Danville (danvilleca@user.govoutreach.com)

**To:** foothilldental@sbcglobal.net;

**Date:** Thursday, November 2, 2017 2:01 AM

Dear Clelen,

Your request # 17-3913 was recently closed with an option to complete our customer service survey. The survey takes less than 60 seconds to complete and we would greatly appreciate your feedback.

Please click on the link below to access this online survey.
http://user.GovOutreach.com/danvilleca/survey.php?cid=3483168&access=6466653732363731

This is in reference to the Problem
you submitted on 10/25/2017 5:51 PM
Description: For Diablo Road between Green Valley/McCauley and Scenic Mt. Diablo Blvd, is it permissible for a car to cross over the double yellow line to pass a bicycle traveling in the same direction?
Reason Closed: Hello sir,
In short, the letter of the law states no driver shall pass left of the double yellow lines with only limited exceptions (bikes not being one of them). That stated, this is more about courtesy than anything else. That is a challenging section of road and cyclist and motorist each share a part in making that section of road safe. Bikes should remain as far to the right as possible so vehicles can safely pass them. On Diablo, this can be a challenge in some sections that are narrow. We recommend that cyclists use the bike trail from Green Valley and then divert through the Diablo area for optimum safety, however not all cyclists are willing to divert. I have attached the vehicle codes for cars as well as bikes to this note for your reference.

CVC 21460.
(a) If double parallel solid yellow lines are in place, a person driving a vehicle shall not drive to the left of the lines, except as permitted in this section.
(b) If double parallel solid white lines are in place, a person driving a vehicle shall not cross any part of those double solid white lines, except as permitted in this section or Section 21655.8.
(c) If the double parallel lines, one of which is broken, are in place, a person driving a vehicle shall not drive to the left of the lines, except as follows:
(1) If the driver is on the side of the roadway in which the broken line is in place, the driver may cross over the double lines or drive to the left of the double lines when overtaking or passing other vehicles.
(2) As provided in Section 21460.5.
(d) The markings as specified in subdivision (a), (b), or (c) do not prohibit a driver from crossing the marking if (1) turning to the left at an intersection or into or out of a driveway or private road, or (2) making a U-turn under the rules governing that turn, and the markings shall be disregarded when authorized signs have been erected designating off center traffic lanes as permitted pursuant to Section 21657.

(e) Raised pavement markers may be used to simulate painted lines described in this section if the markers are placed in accordance with standards established by the Department of Transportation.

California Vehicle Code Section 21202.
(a) Any person operating a bicycle upon a roadway at a speed less than the normal speed of traffic moving in the same direction at that time shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:
(1) When overtaking and passing another bicycle or vehicle proceeding in the same direction.
(2) When preparing for a left turn at an intersection or into a private road or driveway.
(3) When reasonably necessary to avoid conditions (including, but not limited to, fixed or moving objects, vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes) that make it unsafe to continue along the right-hand curb or edge, subject to the provisions of Section 21656. For purposes of this section, a "substandard width lane" is a lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the lane.
(4) When approaching a place where a right turn is authorized.
(b) Any person operating a bicycle upon a roadway of a highway, which highway carries traffic in one direction only and has two or more marked traffic lanes, may ride as near the left-hand curb or edge of that roadway as practicable.

Please feel free to reach out with any suggestions or ideas that might make this section of road more safe for motorists and cyclists alike. Thank you.

Thank you,
Andrew Jensen
Town of Danville





File

For the Good of the Town:

Danville has recognized that it can't put a dedicated bike lane everywhere. A compromise has been implemented. An example can be found on Railroad Ave. where the posted sign for drivers and cyclists is "Bicycles May Use Full Lane", as well as 'Sharrows' applied in the center of the lanes. It appears bicycles and cars can coexist.

I share this with you because Railroad Ave between W. Linda Mesa and W. Prospect is comparable to Diablo Rd. between McCauley and Mt. Diablo Scenic, as both roads are substandard width and makes me wonder why Diablo Rd does not get the same bicycle signage and safety considerations as Railroad.

To be sure these two stretches of road are similar in width, I measured Railroad Ave. and found it to be comparable to Diablo. My measurements, in inches, are documented in the packet I've shared with each of you.

The Town's position for Diablo Rd. between Green Valley and Scenic Mt. Diablo Blvd. is that a bicycle and a car/truck can occupy a lane at the same time and although challenging, if both sides practice courtesy, this section of roadway is safe.

Again, ordaining 'courtesy' to achieve bicycle safety is not a legally recognized mitigation for bicycle safety.

A cyclist needs approximately 5 feet of road space to be legally passed by a car or truck.

- about 1 foot from the edge of the white line
- another foot from the tire to the cyclist's left shoulder
- California State Law requires three feet for safety.

And a tricycle requires 6 feet of road space.

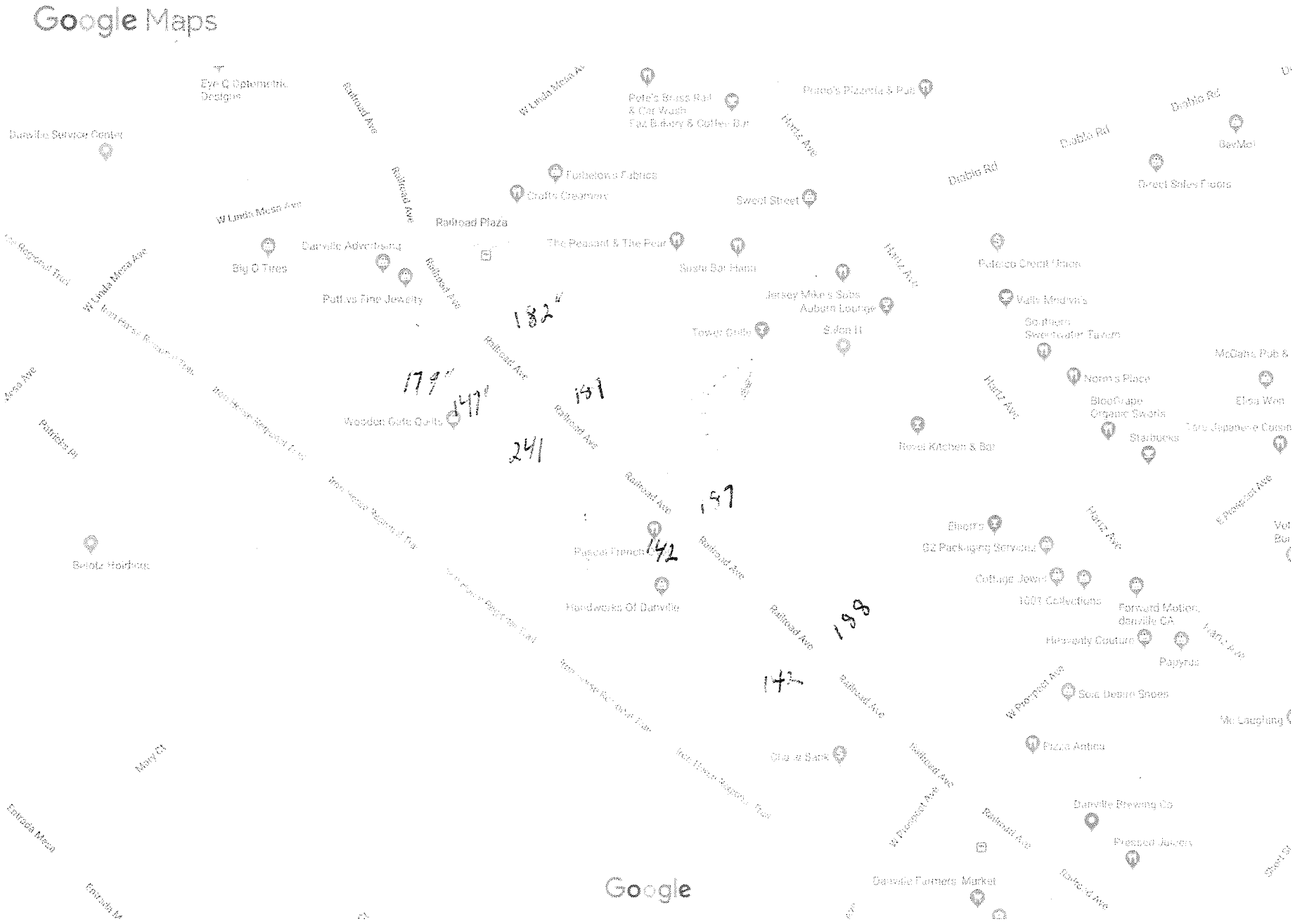
The Diablo Rd. pictures I also share with you in today's packet clearly shows that it's impossible for a bicycle and car/truck to safely occupy the lane at the same time. Further, the line of sight along this section of Diablo Rd. is inadequate, and there is no usable shoulder area for a cyclist, as most of the shoulder area is more than three inches below the level of the road. And utility poles are too close to the roadway.

Although this is not a long-term solution for the bicycle safety issues on Diablo Rd., I ask for the Town Council to consider immediate placement of road signs similar to those on Railroad Ave.

Clelen C. Tanner

1-02-2018

MAY USE
FULL LANE


Google Maps
Eye Q Optometric Designs
Danville Service Center
Railroad Ave
W Linda Mesa Ave
Pete's Brass Rail & Car Wash Faz Bakery & Coffee Bar
Pomo's Pizzeria & Pub
Hartz Ave
Diablo Rd
BayMel
Direct Sales Floors
Furbelows Fabrics
Crafts Creamery
Sweet Street
Railroad Plaza
The Peasant & The Pear
Susie Bar Hann
Big O Tires
Danville Advertising
Puttivs Fine Jewelry
Jersey Mike's Subs
Auburn Lounge
Tower Grille
Salon H
Patelco Credit Union
Valls Modern's
Southern Sweetwater Tavern
McCain's Pub &
Norm's Place
BlooGrape Organic Sworls
Elisa Wen
Starbucks
Revel Kitchen & Bar
Wooden Gate Quilts
Patricks Pl
Belotz Holdings
Pascal French
Handworks Of Danville
Elliott's
G2 Packaging Services
Cottage Jewel
1001 Collections
Forward Motion, danville CA
Heavenly Couture
Papyrus
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Pizza Antica
Danville Brewing Co
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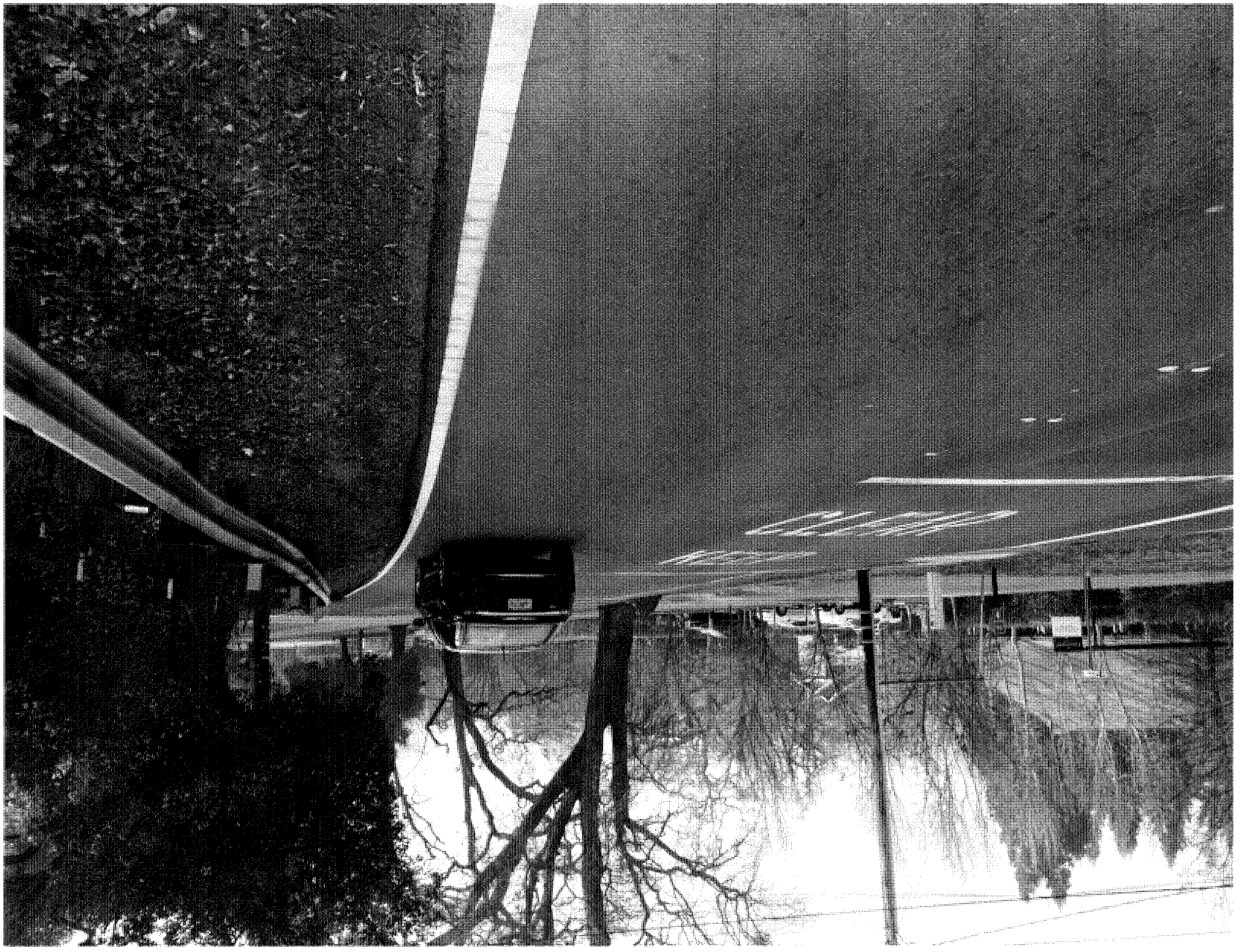


File

Feb. 20, 2018

Danville needs to recognize there are many types of bicycles. I've showed you tricycles utilized by physically handicapped people, and tricycles designed for people who simply feel more comfortable on a tricycle. The point being; a tricycle needs more space for safety. Approximately 6 feet from the edge of the white line. This is especially important for tricycles due to their low visual, close to the road profile.

I've enclosed a photo of another type of tricycle on Diablo Rd. This man is training for a cross-country tour across the United States. And he's using Mt. Diablo as training for getting over the Sierras and Rocky Mountains. I flagged the fellow down and asked him what route he takes. He stated: "Diablo Rd. people are in too much in a rush." I again asked him what route he takes, and he stated:..."I don't take the trail". When I asked him why not, he stated,..."It's gnarly", "people almost hit me coming around turns."

Danville needs to recognize that the line of sight along the Trail that parallels Diablo Rd. is poor, and is not only unsafe for this fellow, but for many other cyclists as well. Courtesy will not mitigate this.

As documented in the material I have provided for you; with statistics provided by Danville Police, Diablo Rd between Green Valley/McCauley and Scenic Mt. Diablo, for the past 5 years there have been no citations issued to drivers for crossing the double yellow line. And only 1% of all speeding tickets for the entire length of Diablo Rd are issued for this section of Diablo Rd. This section of Diablo Rd is 1.4 miles, and the entire length of Diablo is 3.2 miles.
1.4 miles of the 3.2 miles, slightly less than half, only accounts for 1% of speeding citations???

Obviously, Danville police are not observing these violations along this section of roadway. I wonder why they are not observing this!!! One reason, as shared by Danville Police: "There is no shoulder space to pull someone over".

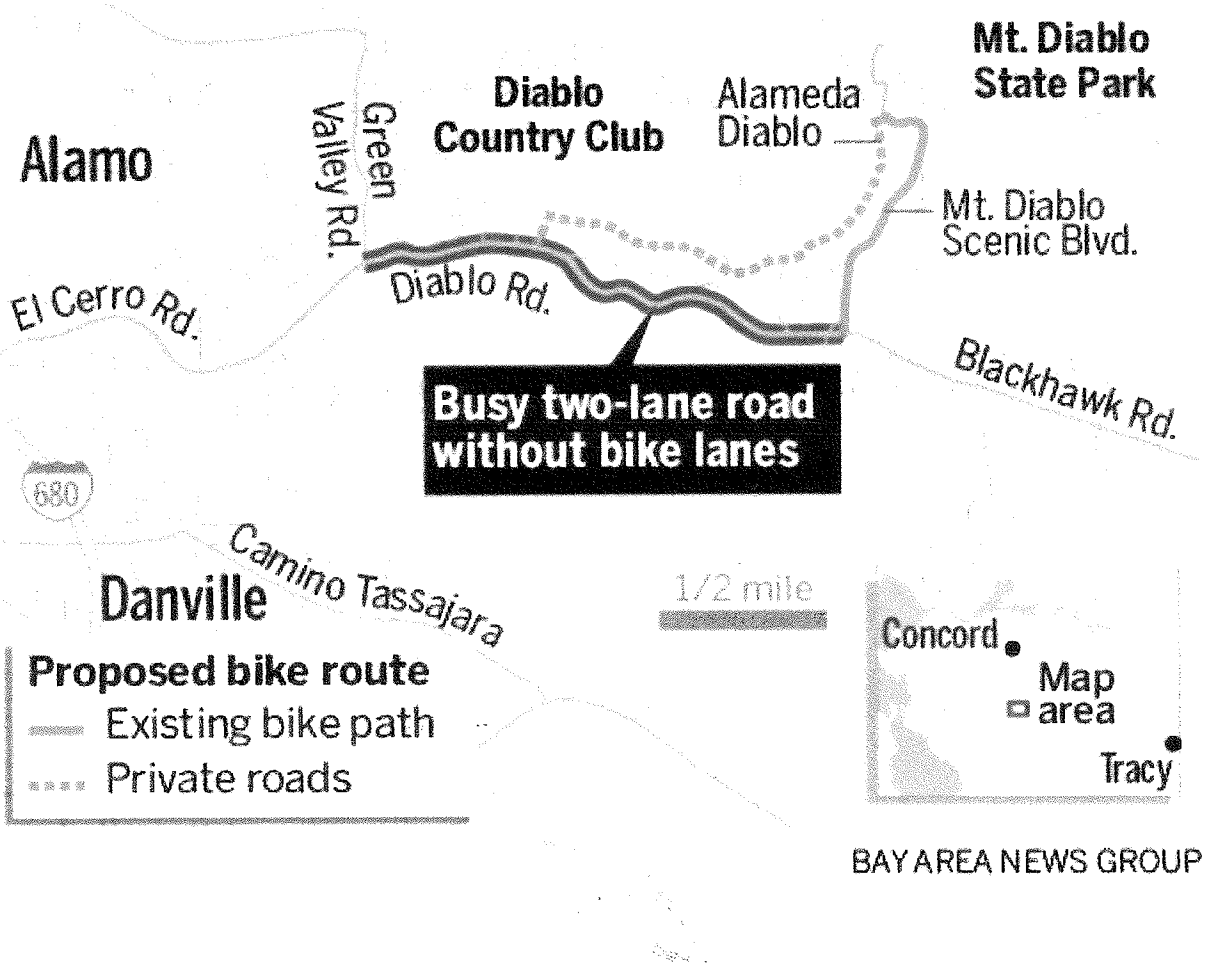
Again, the thumb drive I shared with you earlier clearly shows 70% of the cars cross the double yellow line when passing a bicycle in this section of Diablo Rd. There is no valid rational reason why Danville police have not observed this traffic violation in this section of Diablo Rd. **The statistics clearly show non-observance.**

Danville needs to give the same considerations for Diablo Rd between Green Valley/McCauley and Alameda Nueva as it does for Railroad Ave. The two roadways are comparable and need the same signage.





bicyclist rides along Diablo Road on Tuesday, Oct. 24, 2017, in Danville, Calif. (Aric Crabb/Bay Area News Grou




BAY AREA NEWS GROUP


MAY USE
FULL LANE
1 HOUR
PARKING
7AM - 6PM

| LOCATION | # of Citations TOTAL = 1348 | VC # | | VC # | | VC # | |
|---|---|---|---|---|---|---|---|
| Clydesdale | 7 | 22350 | Speeding | 12500A | Driving w/o a license | 5200A | Driving without a license plate |
| Fariway Lane | 1 | 22350 | Speeding | | | | |
| Calle Arroyo | 1 | 22350 | Speeding | | | | |
| Alameda Diablo | 0 | | | | | | |
| Avenida Nueva | 2 | 22350 | Speeding | | | | |
| Creekledge Court | 0 | | | | | | |
| Mt Diablo Scenic @ Blackhawk | 2 | 22350 | Speeding | | | | |

| | | |
|---|---|---|
| TOTAL # of Citations Green Valley to Mt Diablo Scenic | 13 | 1% |

| | | |
|---|---|---|
| GreenValley Rd/McCauley to Alameda Diablo (Diablo Community entrance) | 9 | 0.7% |
| Alameda Diablo (Diablo Community entrance) to Mt Diablo Scenic Blvd | 4 | 0.3% |

**CITATION REPORT RECAPS**

| | |
|---|---|
| 1710 Report by Officer | 1502 |
| VC222350 Report | 1348 |
| Difference ???? | 154 |

Source: Crime Analysis includes County Sheriff officers
Source: IT Department report, doesn't include County Sheriff

NOTE 1: No safe place to pull drivers over in the vicinity of Green Valley Rd to Mt Diablo Scenic. Source: Danville PD, their reason for low enforcement on Diablo Rd.

NOTE 2: Data shows NO citations recorded for CA VC 22107 & VC 21460a which would be related to drivers crossing a double yellow line.

File

Feb. 20, 2018

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To
Newell Arnerich Renee Morgan Robert Storer Robert Storer Karen Stepper and 2 more...
CC

Feb 20 at 9:17 PM

Tonight Mr. Arnerich described my presentation as, "opinion".
My written detailed presentation was provided to all of you.
Please clarify which specific part(s) of my presentation fall under Mr. Arnerich's criteria for opinion.

Your prompt and courteous response is most appreciated.
Clelen Tanner

To
Clelen Tanner
Feb 21 at 9:29 AM
**Dear Clelen,**

**When you make your speeches you always conclude that what you have said is thereby 'fact', however, it is your opinion that has been expressed as with all of us.**

**Best regards,**

**Newell Arnerich**
**Mayor of Danville**
Town of Danville | 510 La Gonda Way | Danville, CA 94526
**Mobile: +1 510 366 0716** | **Facsimile:** +1 510 556 1258
**LinkedIn:** https://www.linkedin.com/in/newellarnerich

To
Newell Arnerich Karen Stepper Robert Storer Renee Morgan Lisa Blackwell and 2 more...
CC

Feb 21 at 12:37 PM

Unfortunately Mr. Arnerich, due to time restrains of 3 minutes, it's not possible to present all supporting documentation that substantiates my presentation. However, my presentation was also provided to you in writing, Again, please clarify which specific part(s) of my presentation fall under your criteria as opinion.
Your prompt and courteous response is most appreciated.
Clelen Tanner

To
Clelen Tanner
Feb 21 at 2:30 PM

Already responded.
Best regards,

**Newell Arnerich**
**Mayor of Danville**
Town of Danville | 510 La Gonda Way | Danville, CA 94526
**Mobile: +1 510 366 0716** | **Facsimile:** +1 510 556 1258
**LinkedIn:** https://www.linkedin.com/in/newellarnerich

To
Clelen Tanner
CC
Newell Arnerich Renee Morgan Karen Stepper Lisa Blackwell Rob Ewing Maryann Cella
Feb 21 at 3:32 PM

**Thank you for your presentation Mr Clelan.**
**We look forward to our next council meeting.**

**Best**
**Robert Storer**
**Vice Mayor**

Sent from my iPhone

**VEHICLE CITATIONS ISSUED** **2013-2017**

| LOCATION | # of Citations TOTAL = 1348 | VC # | | VC # | | VC # | |
|---|---|---|---|---|---|---|---|
| Clydesdale | 7 | 22350 | Speeding | 12500A | Driving w/o a license | 5200A | Driving without a license plate |
| Fariway Lane | 1 | 22350 | Speeding | | | | |
| Calle Arroyo | 1 | 22350 | Speeding | | | | |
| Alameda Diablo | 0 | | | | | | |
| Avenida Nueva | 2 | 22350 | Speeding | | | | |
| Creekledge Court | 0 | | | | | | |
| Mt Diablo Scenic @ Blackhawk | 2 | 22350 | Speeding | | | | |

| | | |
|---|---|---|
| TOTAL # of Citations Green Valley to Mt Diablo Scenic | 13 | 1% |

| | | |
|---|---|---|
| GreenValley Rd/McCauley to Alameda Diablo (Diablo Community entrance) | 9 | 0.7% |
| Alameda Diablo (Diablo Community entrance) to Mt Diablo Scenic Blvd | 4 | 0.3% |

| CITATION REPORT RECAPS | File Name: VC22350v1.2.xlsx | **Sources**: Doug Muse, Danville Police Department, Adminstrative Lieutenant<br>Alan Shields, Chief, Contra Costa County Sheriff, IT | **Meeting Date:** 1/30/18 meeting w/Lt Muse, @ Danville PD; |
|---|---|---|---|
| 1710 Report by Officer | 1502 | Source: Crime Analysis includes County Sheriff officers | |
| VC222350 Report | 1348 | Source: IT Department report, doesn't include County Sheriff | |
| Difference ???? | 154 | | |

NOTE 1: (Per Doug Muse Lt Danville, PD) No safe place to pull drivers over in the vicinity of Green Valley Rd to Mt Diablo Scenic. Source: Danville PD, their reason for low enforcement on Diablo Rd.

NOTE 2: (Per Doug Muse, Lt Danville PD) Data shows NO citations recorded for CA VC 22107 & VC 21460a which would be related to drivers crossing a double yellow line.

File

As weather gets warmer, more and more people and bicycles will flock to Danville. With this influx, safety should be Danville's first priority. However, Danville's lack of application of bicycle signage on Diablo Rd. from Green Valley to Avenida Nueva is totally lacking for the, "fast moving traffic." Especially since this stretch of, "Diablo Rd has no shoulders, sidewalks or bike path." And this stretch of Diablo Rd has a section of lane less than 10 feet wide!! Which is why it has been referred to as one of the most dangerous roads in Contra Costa for bicycles.

Camino Tassajara and Railroad Ave receives bicycle safety signage but Diablo Rd between Green Valley and Avenida Nueva is totally lacking. And this stretch of Diablo Rd. has lanes consistently less than 12 feet wide, while Railroad Ave. and Camino Tassajara are much wider and receive bicycle signage for safety. It's Obvious there is an unequal application of bicycle safety in Danville.

It's as though Danville wakes up every morning and says: Ya'-know, The Rules don't apply to Diablo Rd.

Let's take a look:

File

Danville; Town Council: 5-01-18

Danville wants to maintain a small town atmosphere; and I can appreciate its leaders put a lot of time, money, and effort into maintaining an outstanding quality of life. It makes sense, since all Danville has to offer is itself, which by anyone's definition is a small town. So let's maintain the best positive small town image we can. Part of that is to maintain bicycle safety and acknowledge that bicycles have all the rights, privileges and responsibilities to use the road.

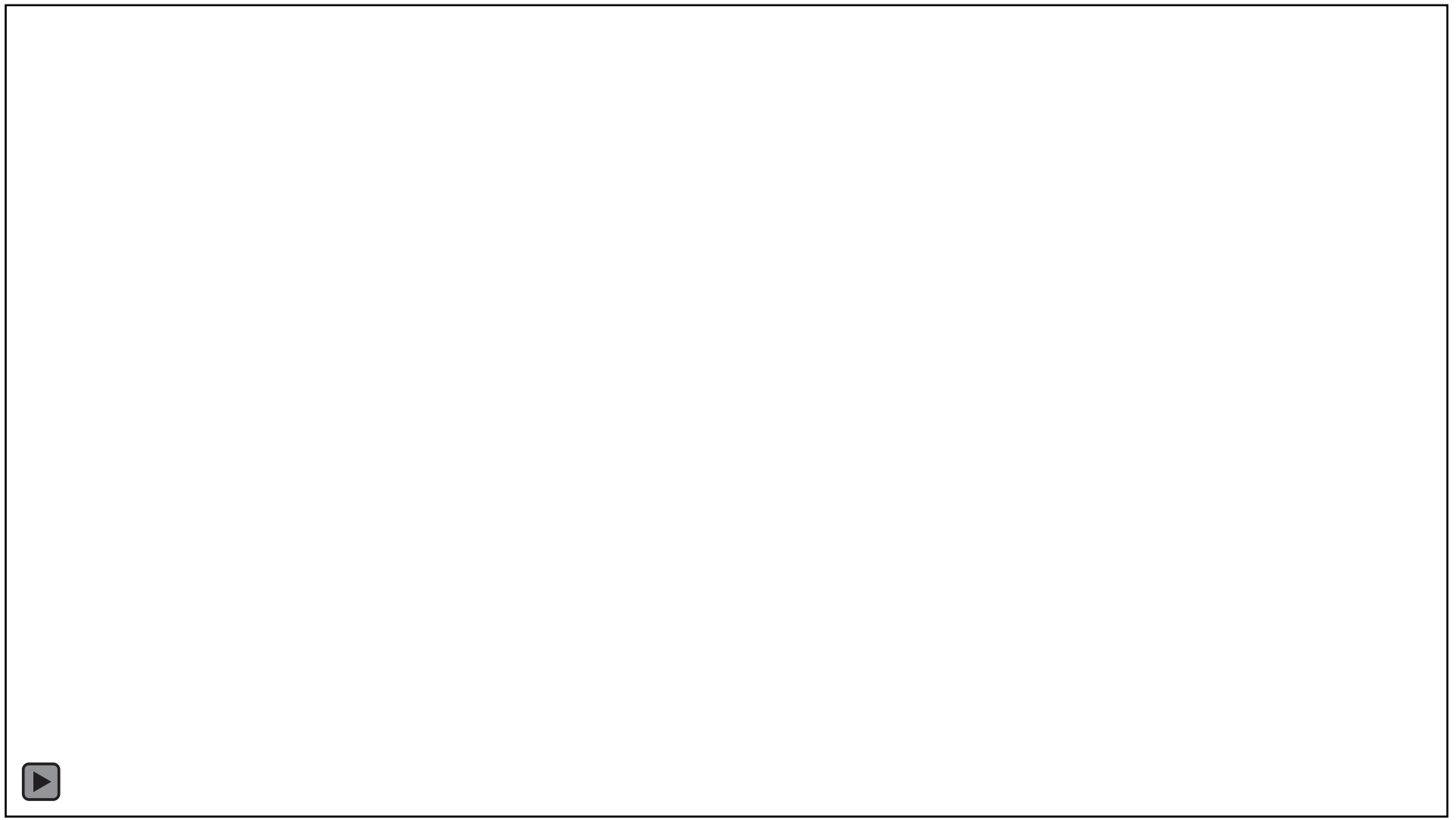
The existing poor bicycle-safety road conditions along Diablo Rd between Green Valley and Scenic Mt. Diablo Blvd could totally destroy Danville's image. All it takes is one reckless driver; and anyone of the constant bicycle pelotons riding up to Mt. Diablo State Park. Fortunately, Danville was able to contain the last bicycle collision between a truck and three cyclists. However, I wouldn't count on this for future collisions. It's like our Town Manager said: Any day you are not in the news is a good day.

Let's take a look and see where risks are:

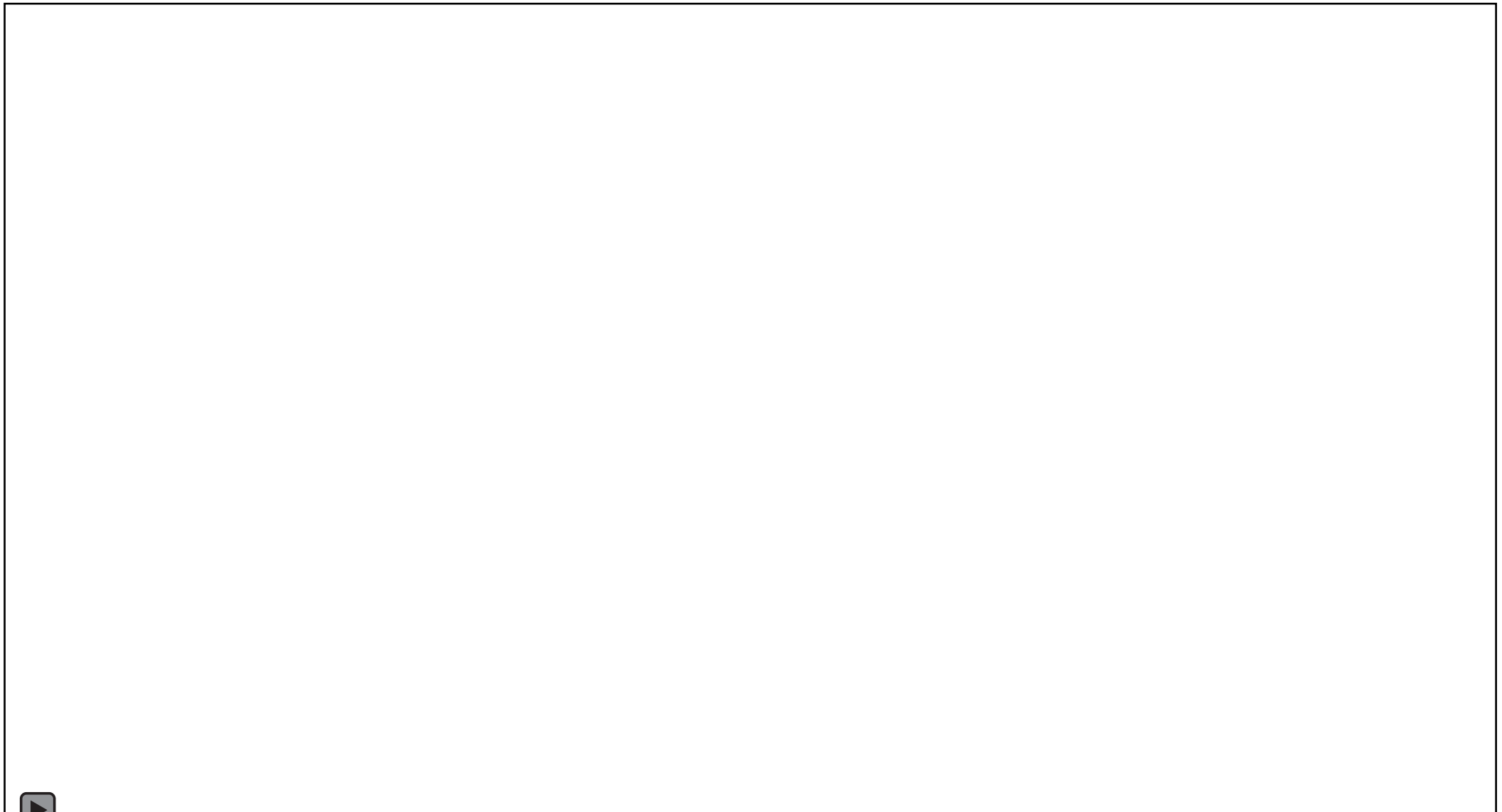
I seem to recall reading somewhere when Danville could lay claim to having more horses than citizens: I'm pretty sure it was a bragging point. Obviously we can't lay claim to that anymore. But nothing, and I do mean nothing, says small town character more than; **bicycles may use full lane**.

I look forward to when Danville can lay claim to more bicycles than citizens!

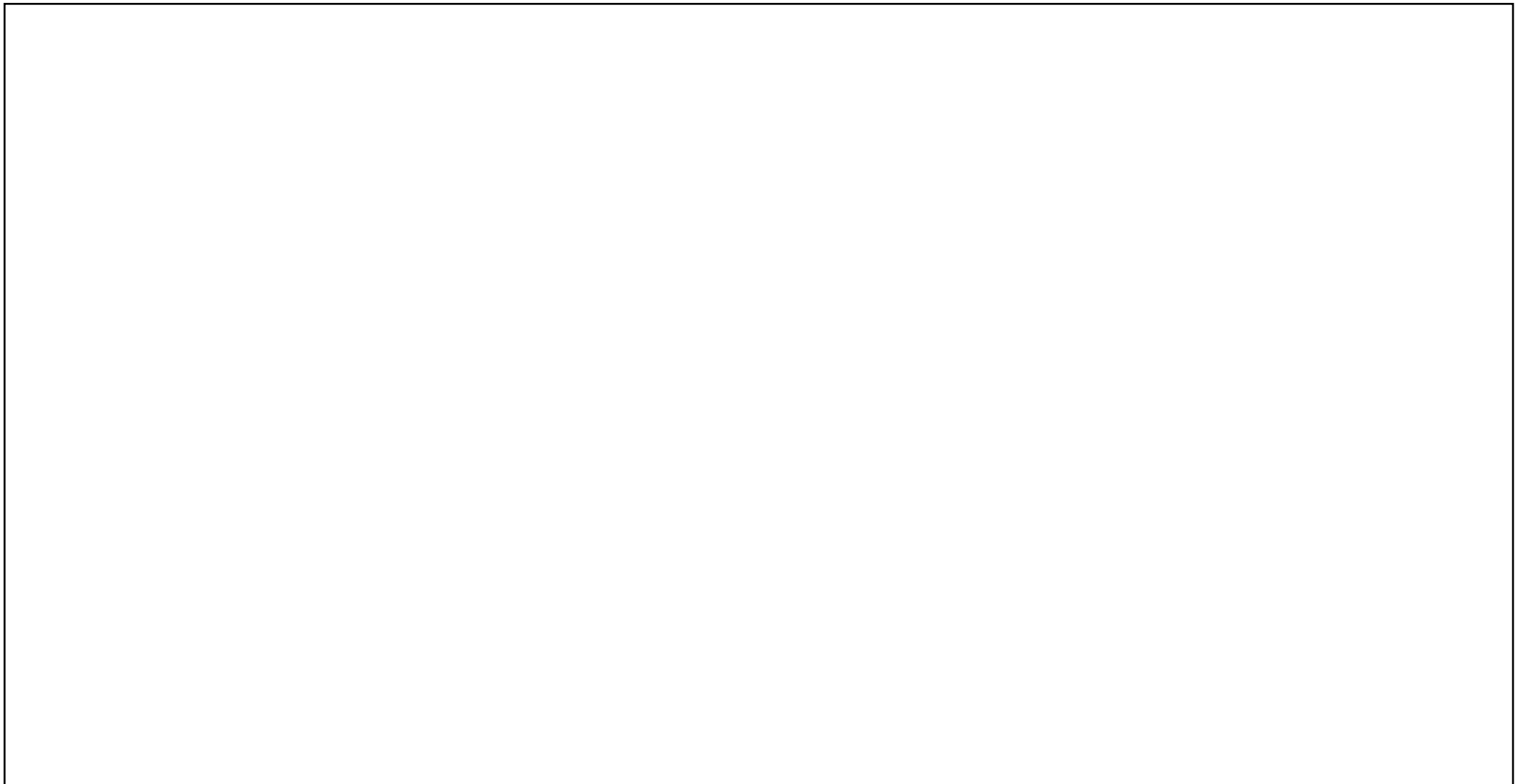
# Goal:  Safety on Diablo Road is always Critical



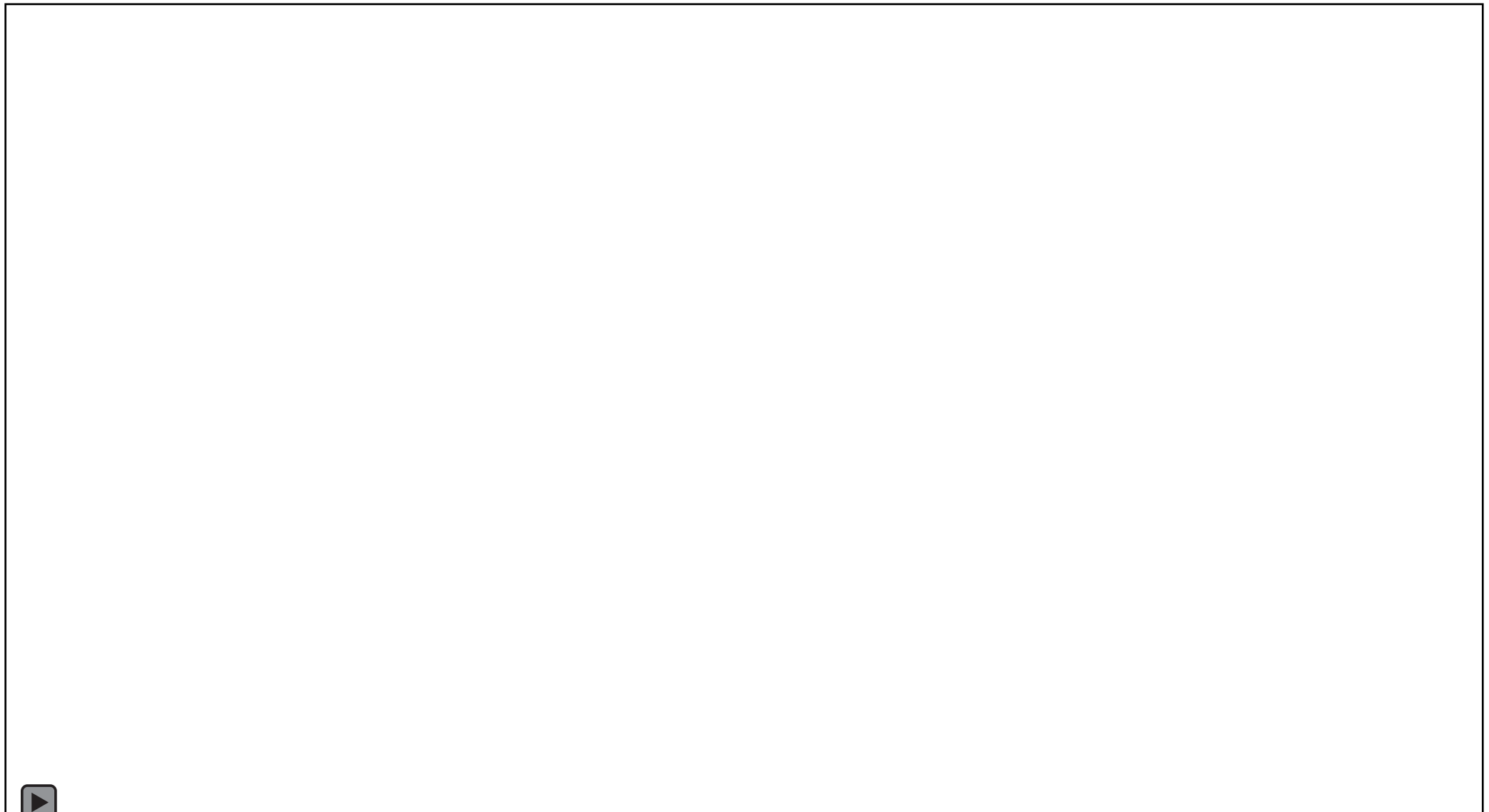
# Goal:  Safety on Diablo Road is always Critical



# Goal:  Safety on Diablo Road is always Critical



# Goal:  Safety on Diablo Road is always Critical



Town Council, April 03, 2018

Good news. Any Council member or Town Staff are invited to attend all general member meetings of Save Open Space, Danville Yes, we are private, but more important we are an open organization and believe in sunshine. Which is unlike Danville Bicycle Advisory Committee which has questionable origins and whose meetings tantamount to a secret society.

The Town of Danville should share the facts that show Diablo Rd., between Green Valley and Mt. Diablo Scenic is safe and should not be described as a substandard width road.

The specifications that Danville relies on, Contract C-55B, is not accurate. For whatever reason, there are no specifications that show what was built. The contractor did not complete this contract in accordance with its original specifications. Further, no Change Orders exists, or as build plans exist. Please, help me understand what the Town is claiming was built. I need written substantiation.

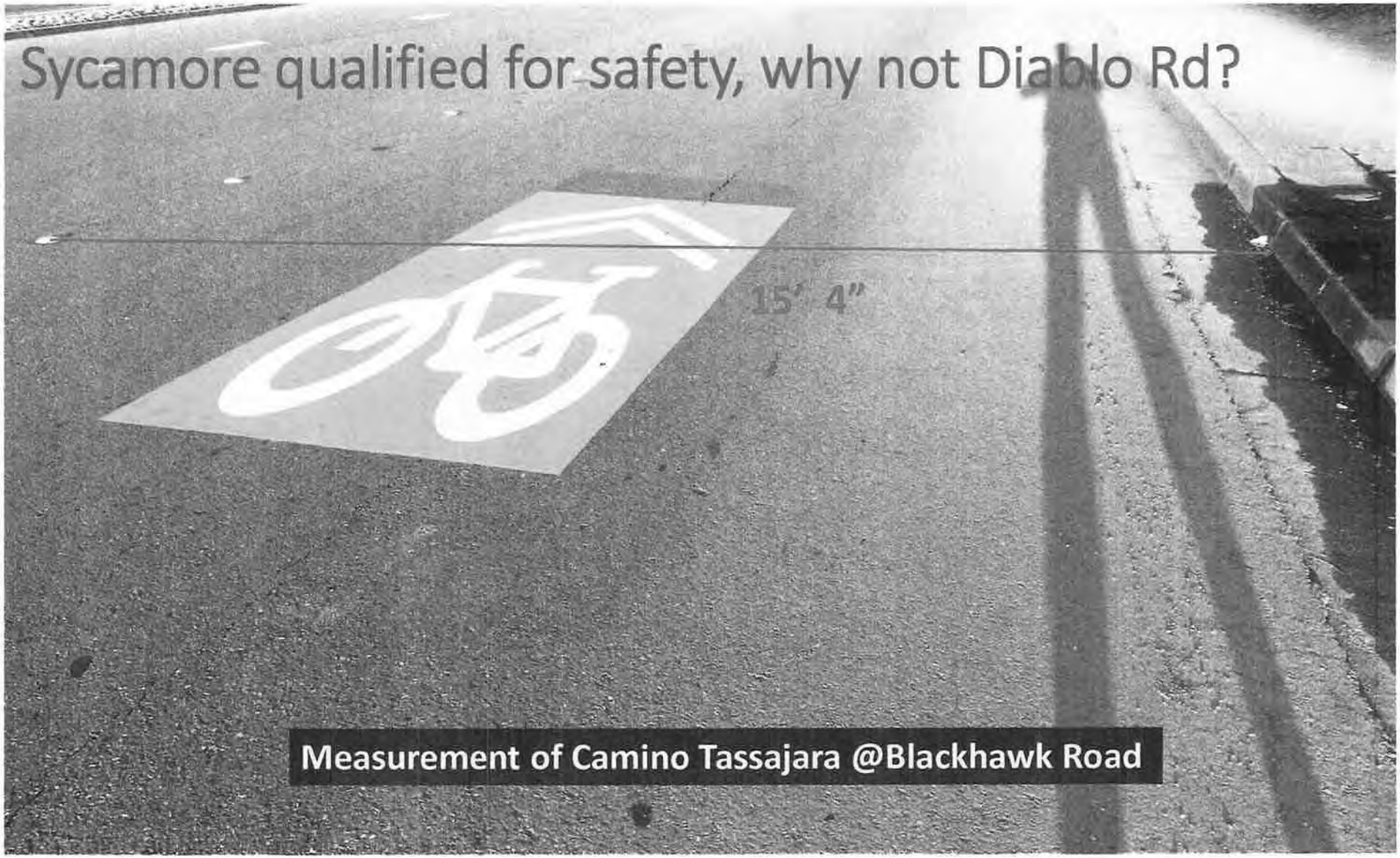
I have consistently shown you my evidence. Let me show you new observations that support the real specifications for Diablo Rd.

**Slide show!**

# Diablo Road has a safety history





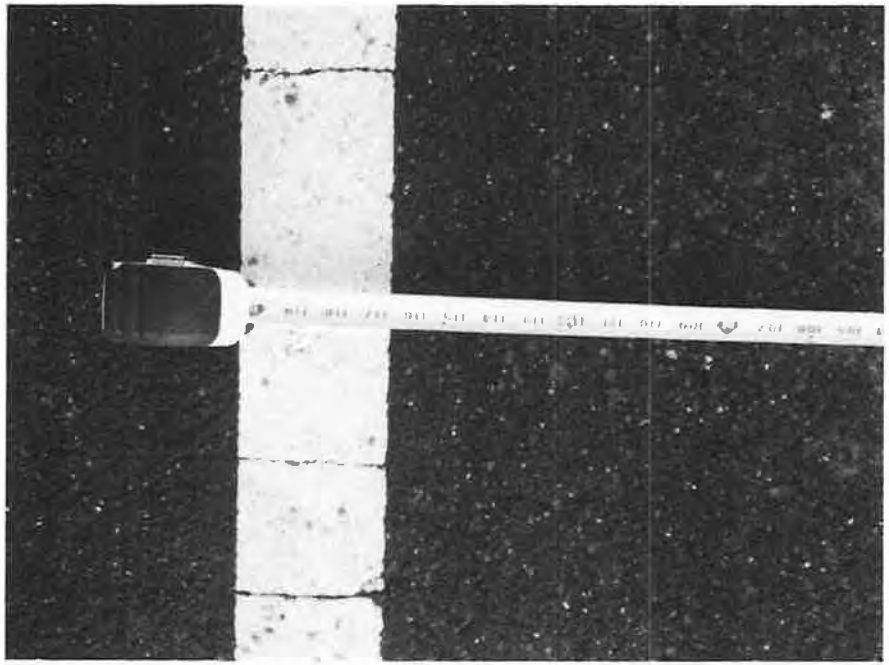

Sycamore qualified for safety, why not Diablo Rd?
15' 4"
Measurement of Camino Tassajara @Blackhawk Road

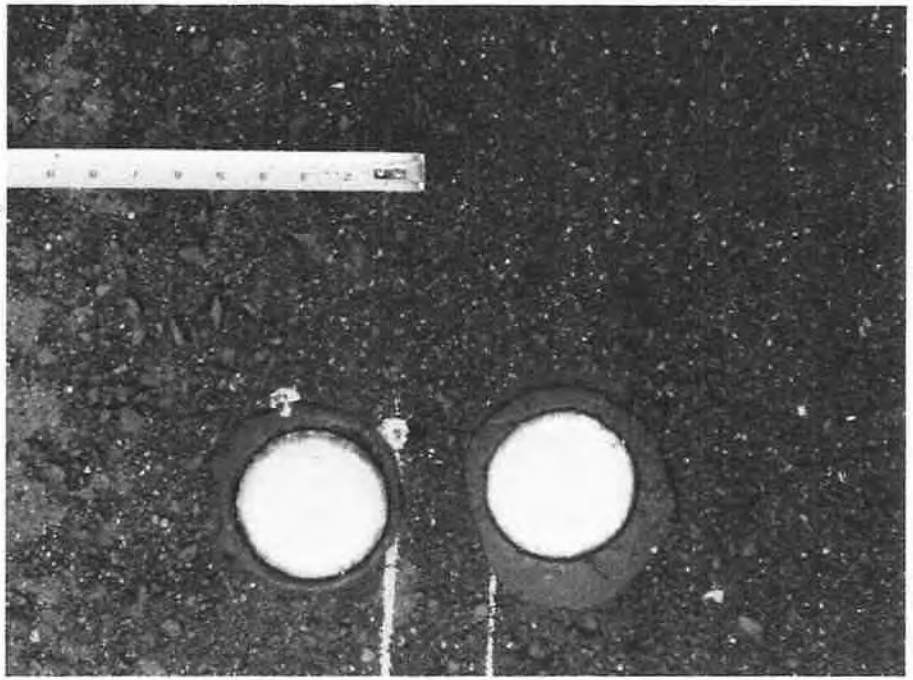
# l: SAFETY on Diablo (even if temporary) is #1 objective

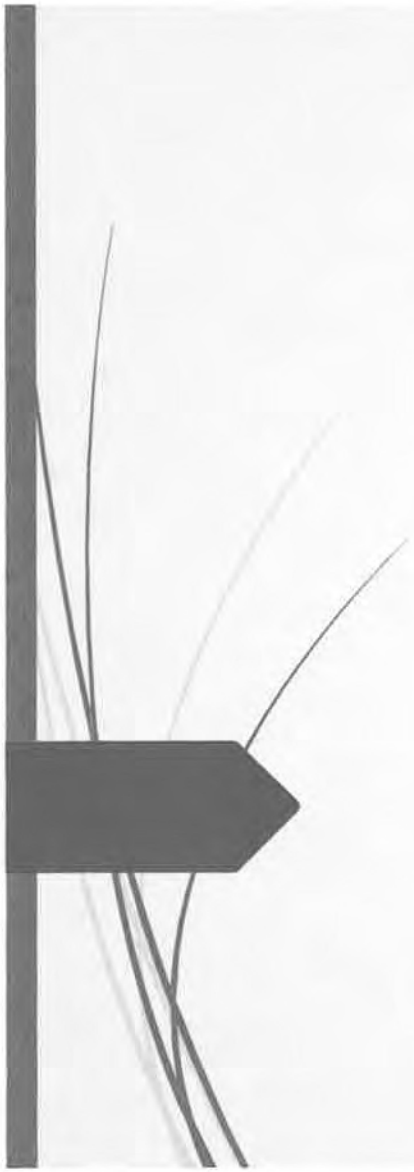


Goal: SAFETY on Diablo (even if temporary) is #1 objective

Less than 10ft







# Diablo Road & Davidon Development

Reality !

# Reality: No disrespect intended…

Today dead skunks, racoons, and utility poles.
Tomorrow a cyclist?







# Reality: Diablo Road

## 1994 Diablo Rd widen & upgraded (C-55B)

- Add 2 feet many sections of road
- Add 2 foot on-grade shoulder to both sides for full length of road
- Relocate some utility poles
- Remove some trees
- Consistent lane width to 12 foot

## 2017 Current Diablo Road

- Lane width varies, <10 ft. to 12 ft.
- Road bed additions <2 ft., if at all
- No additions of on-grade shoulders
- Utility poles not moved, many are too close to the road
- Mature vegetation & debris are consistent hazards
- Impaired line of sight
- **C-55B does not meet specifications**

# Reality: Old road bed is wider, and white line has been moved in





# Reality: Drivers Challenge, to be Compliant

Drivers 3ft Minimum to Pass




Diablo Rd drivers cross double yellow



# Reality: Unsafe Road?

Road width varies within the lane, and right/left lanes are inconsistent widths, challenging drivers, & poor line of sight

Inconsistent lane position



Inconsistent lane position



## Reality: Cyclist rides on Diablo Road Sidewalk

"bike lane isn't wide enough to accommodate my bike"



**Bicycle safety on Diablo Road is required!**

## 99: RESPONSE TO CLELEN TANNER (3)

**99A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety. Information regarding vehicular and bicycle accidents is addressed in the Master Response in Section 2.4.2.III. As stated in this response, it is not feasible for the Town to account for accidents that were not reported to the police. Information regarding CIP Project C-55B can be found in Master Response 2.4.2.IV. Information regarding the condition of Diablo Road and the existing trail can be found throughout the Master Response in Section 2.4.2.




Clelen Tanner
47 Cameron Ct.
Danville, CA 94506
foothilldental@sbcglobal.net

Thursday, October 11, 2018

Rob Ewing, City Attorney
Town of Danville
510 La Gonda Way
Danville, CA 94626

**RE: Response to Revised Draft EIR Magee Preserve**

Dear Mr. Ewing:

Again, I hereby request all written material, all photographs, all audio commentary (from the Town's audio recording of its Council's meetings) and all electronic thumb drive material I presented to Town council members and personally to you under "For the Good of the Town" for the years 2017 and 2018 be submitted as comments to the Revised Draft EIR for the Magee Ranches project.

I would also like to request all of the attached material and thumb drives be submitted as a response to the Revised Draft EIR. The photographs support the written material and the 128 GB thumb drive shows that 70 % of the cars that pass a bicyclist do so by crossing the double yellow line on Diablo Rd., between Green Valley/McCauley and Mt. Diablo Scenic Blvd. This includes school buses. The 128 GB thumb drive also shows the substandard width lanes, lack of meaningful shoulders to the road and the more than 3 inch drop-off from the road to the right hand side of the pavement. The 4 GB thumb drive includes some of the material, not all, I submitted to you and Town Council members at Town Council meeting under 'For the Good of the Town'.

Please acknowledge receipt to the above email.
Thank you for your assistance.

Sincerely,

Clelen Tanner
Enc. 34 pages
128 GB, Flash Drive
4 GB, Flash Drive

With cycling growing in popularity as a serious mode of transportation, which includes the electric pedal assisted cycles, it is important for everyone to work together to create a safe **transit** environment.

A cycle does not have to utilize a trail. And every road lane is a bike lane. It's the law.
I would encourage the Council members to rent a pedal assisted cycle from Pedego Electric Bicycles in downtown Danville and ride an almost effortless bicycle **on Diablo Road**, between Green Valley and Alameda Diablo, and thoroughly enjoy your bucolic view. You'll find it a very interesting and informative experience. Or you can view my thumb drive and see for yourself the 'Sins of Diablo Road'.

Currently, there are no road signs or devices between Green Valley/McCauley and just before Alameda Diablo that informs drivers and cyclists this section of Diablo Road is a substandard width road, with no meaningful usable shoulder area for safety. The lanes do not safely accommodate a cyclist and most vehicles at the same time. Further, a vehicle **may not** cross a double yellow line to pass a cyclist.

Yes, a motorist may pass a cyclists with less than 3 feet, but the motorist must slow to a prudent speed and not endanger the cyclist, and may not under any circumstances cross the double yellow line. Hence, for safety, a cyclist is permitted to utilize the entire lane for this section of roadway.

Danville needs to inform motor vehicles the need to share this section of roadway. Fortunately, Danville has many option for this. I would encourage Danville's engineer to utilize his best engineering judgment for this. Keep in mind, that as a Matter of Law, an engineer's judgment is no better that the facts upon which it is based.

Currently, It appears Danville does not have any current specifications or facts for this roadway. You destroyed all the change orders from the last road plans: contract C-55B. Hence, these plans represent what you tried to achieve, but due to field conditions, were never able to complete. Hence, the lanes are not 12 feet wide, there is no 2 foot shoulder, except for that short section by the pumping station. And Further, the utility poles were not relocated.

This means; when Danville states it completed the plans according to the specifications, it means, **No, not really**, and we destroyed all the change orders;... so, no one knows what the real current specifications are?

Danville cannot make Diablo Road safe, if it doesn't alert cyclists and motorist what the current road specifications and conditions are.



Real disrespect is not listening to the speaker's message and not reviewing the submitted material. The message was Diablo Rd is a substandard with road. The point was, this time a skunk, next time it could be a cyclist. Your little speech Mr. Storer and head shanking antics Mr. Arnrich were nothing more than rhetoric. It was meant to shame me and divert attention from my message. Pathetic

Read definition: Vehicle Code

You need to make Diablo Road safe for all cyclists.

Let me show you another picture. The lane width is 11' 5" and the telephone pole you see isn't noted on the Plans, contract C55-B. Further the road was not widened 2 feet and there is no 2 foot on-grade shoulder. There's a ditch immediately to the right of the white line along most of Diablo Road

There are some sections of Diablo Rd that a narrower than the previous pavement.



# be a treat, then weather turns tricky

**By Paul Rogers**
*progers@bayareanewsgroup.com*

It's only Halloween, but winter is on the way.

Two storm systems moving out of the Gulf of Alaska are on track to bring the first substantial snow of the 2017-18 winter season to the Sierra Nevada, starting Friday, and widespread rainfall across the Bay Area over the weekend.

**EARLY SKI SEASON?**

Planned resort openings:

Mount Rose already open

Mammoth Mountain, Boreal: Nov. 9.

Squaw Valley, Northstar, Heavenly: Nov. 17.

Kirkwood: Nov. 22

Others open Thanksgiving weekend.

Forecasters said Monday that gusty winds and 1 to 2 feet of snow are likely Saturday and Sunday along California's main mountain passes, including Donner Pass near Lake Tahoe, Tioga Pass at Yosemite, Ebbetts Pass and Carson Pass, with perhaps a foot along the shoreline of Lake Tahoe this weekend.

"There's a potential for chain requirements, travel delays and possible road closures," said Chris Hintz, meteorologist with the National

STORM » PAGE 6

mer Trump campaign officials — including onetime campaign chairman Paul Manafort — marking the first criminal allegations to come from probes into possible Russian influence in U.S. political affairs.

The charges are striking for their breadth, touching all levels of the Trump campaign and exploring the possible personal, financial wrongdoing of those involved, as well as what appeared to be a concerted effort by one campaign official to arrange a meeting with Russian officials.

One of the three charged, for-

INDICTMENTS » PAGE 5



WIN MCNAMEE — GETTY IMAGES

Kevin Downing, attorney for Paul Manafort, speaks to reporters after the hearing in Federal Court.

fraudulent pretenses, representations and promises from the United States, banks and other financial institutions. As part of the scheme, Manafort and Gates repeatedly provided false information to financial bookkeepers, tax accountants, and legal counsel, among others."

The indictment says more than $75 million passed through overseas accounts used by Manafort and he laundered more than $18 million.

**MORE INSIDE**

Facebook says up to 126 million Americans saw Russian propaganda posts. PAGE A3

**DANGEROUS ROADWAY**

# Cars vs. bicyclists on scenic Diablo Road

## Serious injuries force town, nervous riders to look for safer routes

**By Sam Richards**
*srichards@bayareanewsgroup.com*

**DANVILLE »** Diablo Road's 19th century rural charm can make for a beautiful and exhilarating stretch on a bike ride to Mount Diablo. But with 21st century vehicle traffic and a steadily increasing volume of bicyclists, the narrow, winding roadway between Green Valley Road and Mount Diablo Scenic Boulevard is a dangerous stretch, too.



DOUG DURAN — STAFF PHOTOGRAPHER

Bicyclists don't have a lot of room on the road as cars pass them on Diablo Road near Mount Diablo Scenic Boulevard.

"I live right near here," said Jason Ham, who last week was running on the tree-lined Barbara Hale Trail adjacent to Diablo Road. "Whenever I hear a siren, I wonder if someone's gotten hit."

Indeed, after two bicyclists were seriously injured Oct. 21 as they pedaled along Diablo Road and were struck by a hit-and-run driver, the long-debated topic of making the road safer has resurfaced with a furor.

The debate involves a complicated mix of geographical barriers, existing and potential lawsuits and the popularity of the Diablo Road corridor not only

DIABLO » PAGE 6

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**WEATHER**
H: 65-72 L: 44-51
Full report on B12

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**Subject:** Re: Comments on the Town's Notice of Preparation/Initial Study for the Magee Ranches project

**From:** Maryann Cella (maryann.cella@gmail.com)

**To:** foothilldental@sbcglobal.net;

**Date:** Monday, October 2, 2017 8:47 AM

BRAVO, Clelan! I will forward to others! Thanks so much!!!

Maryann

On Oct 1, 2017 5:06 PM, "Clelen Tanner" <foothilldental@sbcglobal.net> wrote:

> I would like to share the attached recent photograph I took on Sept. 29th. It was taken near the corner of El Cajon Dr. and Diablo Rd. This is near Green Valley Elementary School. Again, the road lane width closest to the sidewalk is 10 feet, 4 inches. I have verified with two Civil Engineers one does not need to be an engineer to measure the width of a roadway.
>
> I asked the fellow in the attached photo why he does not use the bike lane. His answer: "It's not wide enough". I next asked him if he was continuing on Diablo Rd beyond Green Valley/McCauley. His answer, "I can't." His recumbent cycle is battery assisted.
>
> Again, Diablo Rd. between Green Valley/McCauley and Mt. Diablo Scenic is a substandard width road. Numerous sections are less than 12 feet wide. It's obvious Steve Lake never verified that Contract No. C-55B, C-511, and C-365 was completed according to the road specifications in these contracts. For example: there is a section on Diablo Rd near Green Valley/McCauley that is less than 10 feet wide. I leave it to your imaginations what would happen if the attached referenced cyclist were to continue on Diablo Rd. It is not required that cyclists utilize a Trail. Diablo Rd. must be made safe for all cyclists. This fellow's over-all cycle width is approximately 34 inches. By Law, a car must pass a cyclist by 3 feet.
>
> Diablo Rd between Green Valley/McCauley is a substandard width road.
>
> - The road lanes are not consistently 12 feet wide. There are numerous sections less than 12 feet wide. This is most persistent between Alameda Diablo and Ave. Nueva.
> - The majority of the Two foot widening specified in Contract No. C-55B was never done. The is easily visible where trenching along Diablo Rd was done due to this years heavy rains and exposed three generations of payment overlays. If any widening had been done, you would not be able to see the previous layers of asphalt. See attached photos.
> - The widths of the right and left lanes vary significantly.
> - Telephone poles specified to be relocated per Contract No. C-55B were not relocated

- Trees specified to be removed per Contract No. C-55B were not removed.
- A two foot on-grade shoulder as specified in Contract No. C-55B was never installed. Most of Diablo Rd. between Alameda Diablo and Ave. Nueva goes directly from the right-hand white line into a ditch. See attached photo.
- The line of sight along Diablo Rd. is not adequate to anticipate a bicyclist. **This is especially true of a handicapped cyclist!!** Or a slow bicyclist like me.
- Existing 'sharrows' are placed more the 250 feet apart.
- There is a concern that 'Collision Alert' and automatic breaking in cars will unexpectedly activate along Diablo Rd between Green Valley/McCauley and Mt. Diablo Scenic. This has been documented not to be a malfunction and is presumed to be due to the undulating road surface, poor line of sight, telephone poles too close to the road, right + left lanes of different heights and tilts, overgrowth of vegetation, or a combination of any of these existing conditions.
- Many of the safety issues associated with Diablo Rd. between Green Valley/McCauley and Mt. Diablo Scenic is well documented in the Thumb Drive that was given to Karen Stepper and referenced in my emails of May 02, 2016, May 17, 2016, and June 02, 2016. For example, this thumb drive documents **most** of the cars that pass a cyclist between Alameda Diablo and Ave. Nueva cross the double yellow line; including school buses! Please inform if the current whereabouts of this pertinent information is unknown. It is well documented that Ms. Stepper did in fact, receive this thumb drive.
- The thumb-drive given Karen Stepper during a Town Council meeting is included and should be considered a part of the Study for the Magee Ranches project and to further assist the Town of Danville in making Diablo Road safe for cyclists.
- Again, please inform if the Town of Danville needs another copy of this thumb-drive.

Response requested.

Clelen Tanner







Feb. 20, 2018

Danville needs to recognize there are many types of bicycles. I've showed you tricycles utilized by physically handicapped people, and tricycles designed for people who simply feel more comfortable on a tricycle. The point being; a tricycle needs more space for safety. Approximately 6 feet from the edge of the white line. This is especially important for tricycles due to their low visual, close to the road profile.

I've enclosed a photo of another type of tricycle on Diablo Rd. This man is training for a cross-country tour across the United States. And he's using Mt. Diablo as training for getting over the Sierras and Rocky Mountains. I flagged the fellow down and asked him what route he takes. He stated: "Diablo Rd. people are in too much in a rush." I again asked him what route he takes, and he stated:..."I don't take the trail". When I asked him why not, he stated,..."It's gnarly", "people almost hit me coming around turns."

Danville needs to recognize that the line of sight along the Trail that parallels Diablo Rd. is poor, and is not only unsafe for this fellow, but for many other cyclists as well. Courtesy will not mitigate this.

As documented in the material I have provided for you; with statistics provided by Danville Police, Diablo Rd between Green Valley/McCauley and Scenic Mt. Diablo, for the past 5 years there have been no citations issued to drivers for crossing the double yellow line. And only 1% of all speeding tickets for the entire length of Diablo Rd are issued for this section of Diablo Rd. This section of Diablo Rd is 1.4 miles, and the entire length of Diablo is 3.2 miles.
1.4 miles of the 3.2 miles, slightly less than half, only accounts for 1% of speeding citations???

Obviously, Danville police are not observing these violations along this section of roadway. I wonder why they are not observing this!!! One reason, as shared by Danville Police: "There is no shoulder space to pull someone over".

Again, the thumb drive I shared with you earlier clearly shows 70% of the cars cross the double yellow line when passing a bicycle in this section of Diablo Rd. There is no valid rational reason why Danville police have not observed this traffic violation in this section of Diablo Rd. **The statistics clearly show non-observance.**

Danville needs to give the same considerations for Diablo Rd between Green Valley/McCauley and Alameda Nueva as it does for Railroad Ave. The two roadways are comparable and need the same signage.



03-20-18 Danville Town Council

Based on Town Council's non-response to my previous invitation to share your facts, Town Council is not able to demonstrate what is or is not opinion. Let's review and go into detail to establish the facts about Diablo Rd. Specifically, Diablo Road between Green Valley Rd and Alameda Diablo.

This section of Diablo Rd. has mostly substandard width lanes, meaning a bicycle and vehicle cannot safely occupy a lane at the same time. A Substandard width lane is defined in the Vehicle Code Section 21202 (3): And I Quote:

- For purposes of this section, a "substandard width lane" is a lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the lane.

In the Thumb drive I shared earlier with each Town Council member and the town attorney, 70% of the cars that pass a bicycle in this section of Diablo Rd cross the double yellow line. And what's sad is; for the last 5 years there is no record of a police or sheriff citation for crossing the double yellow line. This is fact! And was shared with you earlier. You need to read the documents I have provided prior to any comments.

Again, I'm left scratching my head why Danville applies the law as it relates to substandard width lanes so unequally. For example, there are share the road signs for Railroad Ave in downtown Danville, Share the road signs for Diablo Rd. between Alameda Diablo and Mt. Diablo Scenic Blvd. and Share the Road markings for sections of Camino Tassajara between Blackhawk Rd. and Blackhawk Plaza Circle. What's fascinating, is the lane sections designated as substandard width lanes on Camino Tassajara are **wider** than lane widths on Diablo Rd. between Green Valley and Alameda Diablo. So why is a wider lane designated with Share the Road green panels and a narrower lane on Diablo Rd. is not so designated. The facts for this are in the documents I have shared with you. As you can see, the widest width for a lane with a Share the Road Green Panel on Camino Tassajara is 15' 4".

Mr. Lake and Mr. Dillard of the Town staff have declined to meet with me on this matter, and Danville Bicycle Advisory Committee has not permitted me to attend any of their meetings.; I've been, "NOT INVITED". Their meetings are, "private". Hence, the Danville Bicycle Advisory Committee activities tantamount to a secret society. Their true origins remain a secret, as is their meetings. Ms. Stepper, Town Staff, and Danville Police Dept. should not be attending and providing input to these secret meetings.


FIRST STUDENT


12' 8"


13'2"

14'-2"


13'2"


15'4"

## 100: RESPONSE TO CLELEN TANNER (4)

**100:** The videos submitted by the commenter have been reviewed and are on-file with the Town of Danville.

**David Crompton**

**From:** Toni Thomas <truth23@sbcglobal.net>
**Sent:** Friday, September 21, 2018 10:47 AM
**To:** David Crompton
**Subject:** Rezoning of Magee Ranch

Dear Mr. Crompton: We oppose the rezoning of the Magee Ranch Open Space for the following reasons:

1. The decision to preserve this bucolic open space has already been decided. Its beauty is one reason we moved to Hidden Valley.
2. The traffic problems are very real in the area, particularly at the intersection of McCauley Road and Green Valley Road.
   a. There are 3 schools in the immediate area - two elementary and one middle school.
   b. Student drivers use the roads to get and from nearby high schools. Green Valley can often be backed up from Stone Valley
      Road to the Diablo Road/ McCauley Road intersection.
   c. Diablo Road is a direct access to the Diablo and Blackhawk communities.
   d. Diablo, El cerro and Green Valley Roads are two lane - with the exception of a short four lane stretch on Diablo Road.
   e. These roads have become major alternate routes for drivers escaping the all too often traffic jams and accidents on
      Highway 680.
3. The rezoning proposition opens up more open space than is being publicized.

Please don't let out rural community become a metropolis!

A

Sincerely, Antoinette and Jay Thomas, Hidden Valley homeowners

## 101: RESPONSE TO ANTOINETTE & JAY THOMAS

**101A:** As described in the RDEIR and in Master Response in Section 2.4.3 regarding open space, the project site zoning currently allows for construction of 78 five-acre residential lots. The site is not currently preserved as open space. If the proposed project is approved, 381 acres of the site would be permanently preserved as open space through scenic, conservation, and East Bay Regional Park trail easements.

Please see Section 4.3 of the RDEIR and Master Response in Section 2.4.1 regarding traffic.

**David Crompton**

**From:** Bob <bobtiernan@msn.com>
**Sent:** Saturday, October 13, 2018 5:00 PM
**To:** Archie Bowles; Robert Combs; Mark Graham; Kerri Heusler; Paul Radich; Andrew Verriere; David Havlik; Rob Ewing; David Crompton; Newell Arnerich; Robert Storer; Karen Stepper; Lisa Blackwell; Renee Morgan; lhumble@ddaplanning.com; sabbs@davidonnewhomes.com
**Subject:** Comments regarding the draft revised Environmental Impact Report ("DREIR") for the Magee Preserve residential development project
**Attachments:** BPBSLLP-#497965-v1-VERIFIED_COMPLAINT.PDF

Dear Mr. Crompton, Planning Commissioners, and Town Council members:

Please accept the following comments , with the Pending lawsuit as an attachment, regarding the draft revised Environmental Impact Report ("DREIR") for the Magee Preserve residential development project:

1. **BICYCLIST SAFETY IMPACTS, NOT BLOS, NEEDS TO BE ASSESSED AND MITIGATED** . The Bicyclist Level of Service (BLOS) analysis fails to comply with the CA Court of Appeal's order to assess bicyclist safety impacts from the project. BLOS has many components, only one of which is bicyclist safety. The draft needs to be revised and recirculated after a fair analysis of ONLY bicyclist safety impacts. A

2. **FAILURE TO ANALYZE SECONDARY IMPACT ON CALLE ARROYO AND ALAMEDA DIABLO PEDESTRIAN AND VEHICLE SAFETY.** Most of the 100,000 or so bicyclists trips that are made every year on Diablo Road are strangely absent from the segment between Calle Arroyo and Mt. Diablo Scenic Blvd. Why? Bicyclists divert from that segment because of its *grave dangers* due to its substandard width, total absence of shoulders, broken edges of pavement, obstacles (trees and telephone poles,walls, and overgrown shrubbery), winding nature with limited sightlines, uphill slope heading east, and fast-moving heavy traffic.

Where do they go instead? They mostly travel the narrow (as little as 12-feet for both lanes total) winding, limited-sightline residential road of Calle Arroyo in Diablo, which must be shared by motorists, golf carts, construction and service trucks, parents with kids in strollers, dogs on leashes, fast-moving road bicyclists, and children and adults on recreational bicycles. There have been several reported car/bicyclist collisions there in recent years, and *many* near misses. At least one child has been hit by a road bicyclist, and in general pedestrians don't feel safe there because of the road bicyclists, and motorists are concerned they will accidentally hit a bicyclist, or a bicyclist will run into their car (which has happened). Two lawsuits involving recent car/bicycle collisions are pending against motorists using that road. Calle Arroyo bicyclists must also use Alameda Diablo to get to their destination. Recently, a bicyclist had to be taken away by ambulance when she was propelled over her handlebars after trying to stop at an Alameda Diablo stop sign. Another bicyclist crashed into a truck when she failed to stop at a stop sign and crashed into a truck legally making a left turn at the Alameda Diablo/Caballo Ranchero intersection. Clearly, Danville's failure to make Diablo Road safe for bicyclists is responsible for accidents and erosion of safety in the Diablo community, and the project's traffic will only increase bicyclist diversion through Diablo and make things worse. B

**Thus, a glaring omission in the DREIR is the lack of candor about the fact that bicyclists themselves have made the judgment that Diablo Road is too dangerous for them to use**. Even the Town tells bicyclists to avoid Diablo Road and use the community of Diablo's roads. Thus, the DREIR fails in its flagrant disregard of the secondary impact on Calle Arroyo, and Alameda Diablo (both used for diversion) caused by the dangerous conditions on Diablo Road. **That secondary impact will be increased by the project's additional traffic,**

**which may cause even more bicyclists to divert into Diablo, causing even more accidents. The DREIR is legally noncompliant because it failed to analyze that secondary impact and must be redone to include such impact.**

B Cont'd

3. **FAILURE TO ANALYZE IMPACT OF PENDING LAWSUIT THAT WILL RESULT IN TENS OF THOUSANDS OF ADDITIONAL BICYCLISTS USING THE MOST-DANGEROUS MILE.** Because of the dangers created in Diablo by the diversion of bicyclists, a group of Calle Arroyo homeowners filed a lawsuit in December, 2017 for quiet title to establish the private status of that road, and the lack of a public right of way.

| | | | |
|---|---|---|---|
| TIERNAN VS. DIABLO COMMUNITY SERVICES DISTRICT | OTHER REAL PROPERTY/QUIET TITLE | CIVMSC17-02529 | 12/21/2017 |

A trial court decision is expected in November 2018. Once the privacy and nonexistence of a public right of way is established, the plaintiffs and other Calle Arroyo homeowners will determine how to proceed with limiting bicyclist access. **The EIR therefore needs to assess what will happen on the most dangerous segment of Diablo Road when tens of thousands more bicyclists are traveling it, and bicyclist safety conditions are further eroded by the project's significant increased traffic.**

C

Another part of the lawsuit is against the Diablo Community Services District ("DCSD"), and if plaintiffs prevail, the DCSD will be required to enforce its longstanding Ordinance Code section prohibiting the creation and maintaining of vehicular connectors such as the one tens of thousands of bicyclists use every year between Alameda Diablo and Mt. Diablo Scenic Blvd. (the access road to Mt. Diablo State Park). Most of the bicyclists diverting through Diablo use that connector, rather than go back onto Diablo Road at Avenida Nueva. **The DREIR needs to analyze bicyclist safety on Diablo Road in the likely event that tens of thousands of additional bicyclists will soon be using Diablo Road's most dangerous segment and each of those bicyclists will be in even more danger because of the project's increased traffic.**

Thank you for your consideration of my comments.

Sincerely,
Robert Tiernan Jr.

FILED

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Attorneys for Plaintiffs
ROBERT TIERNAN; ROBERT TIERNAN AND MARILYN TIERNAN, AS TRUSTEES OF THE ROBERT P. AND MARILYN E. TIERNAN TRUST, DATED JULY 3, 1990; IRVIN D. NICHOLAS, JR., AS TRUSTEE OF THE IRVIN D. NICHOLAS, JR. REVOCABLE TRUST DATED FEBRUARY 16, 2006; MICHAEL P. SCARPELLI AND JANET L. SCARPELLI, AS TRUSTEES OF THE SCARPELLI FAMILY TRUST DATED 8-14-09; KATHLEEN A. NICHOLSON, AS TRUSTEE OF THE NICHOLSON FAMILY TRUST DATED OCTOBER 28, 2004

PER LOCAL RULE 5 THIS CASE IS ASSIGNED TO DEPT 12

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF CONTRA COSTA

ROBERT TIERNAN; ROBERT TIERNAN AND MARILYN TIERNAN, AS TRUSTEES OF THE ROBERT P. AND MARILYN E. TIERNAN TRUST, DATED JULY 3, 1990; IRVIN D. NICHOLAS, JR., AS TRUSTEE OF THE IRVIN D. NICHOLAS, JR. REVOCABLE TRUST DATED FEBRUARY 16, 2006; MICHAEL P. SCARPELLI AND JANET L. SCARPELLI, AS TRUSTEES OF THE SCARPELLI FAMILY TRUST DATED 8-14-09; KATHLEEN A. NICHOLSON, AS TRUSTEE OF THE NICHOLSON FAMILY TRUST DATED OCTOBER 28, 2004,

Plaintiffs,

v.

DIABLO COMMUNITY SERVICES DISTRICT; DIABLO COUNTRY CLUB, a California corporation; ROBERT W. CANEPA AND JEAN M. CANEPA; ALBERT R. RUBEY AND ANGELL L. RUBEY; MICHAEL FITZSIMMONS

Case No. C17-02529

**VERIFIED COMPLAINT FOR QUIET TITLE AND DECLARATORY RELIEF**



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ATTORNEYS AT LAW
WALNUT CREEK, CA

AND STACY SOMMER; RYAN P. HAENER AND JULIE HAENER, CO-TRUSTEES OF THE RYAN P. AND JULIE HAENER FAMILY TRUST A REVOCABLE TRUST CREATED BY DECLARATION OF TRUST DATED MARCH 23, 2005; DONG HOON SHIN AND MIKYUNG KWON; BETTY L. VANVOORHIS; MARK MUSCO AND DOLORES MUSCO, TRUSTEES OF THE MARK MUSCO AND DOLORES MUSCO REVOCABLE LIVING TRUST DATED 01/26/2010; ANTHONY J. PERINO AND CARRIE A. PERINO, TRUSTEES OF THE PERINO FAMILY TRUST DATED MARCH 9, 2001 AND RESTATED DECEMBER 30, 2008; LEONARD S. BECKER AND JOANNE L. BECKER; ROBERT J. CORKERN AND JILL ANN CORKERN, TRUSTEES OF THE CORKERN FAMILY 1997 REVOCABLE LIVING TRUST; PAUL R. AMBROSE AND NGOC ANH AMBROSE; JOSHUA D. FREEMAN AND CHELSEA J. FREEMAN, TRUSTEES, THE JOSHUA D. AND CHELSEA J. FREEMAN FAMILY REVOCABLE TRUST, U/D/T DATED JULY 22, 2005; MARSHALL W. FREEMAN AND MARGARET S. FREEMAN, AS TRUSTEES OR THE SUCCESSOR TRUSTEE OR TRUSTEES, U/A/D APRIL 30, 1987; GERARD S. CLANCY AND DONNA M. CLANCY, CO-TRUSTEES OF THE GERARD S. CLANCY AND DONNA M. CLANCY AB LIVING TRUST DATED JANUARY 13, 2003; JOSEPH GERALD SLAVONIA AND MARGUERITE FIORI SLAVONIA; ALL PERSONS UNKNOWN, CLAIMING ANY LEGAL OR EQUITABLE RIGHT, TITLE, ESTATE, LIEN, OR INTEREST IN THE PROPERTY DESCRIBED IN THE COMPLAINT ADVERSE TO PLAINTIFF'S TITLE, OR ANY CLOUD UPON PLAINTIFF'S TITLE THERETO; and DOES 1-100, inclusive,

Defendants.

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COMES NOW, Plaintiffs ROBERT TIERNAN; ROBERT TIERNAN AND MARILYN TIERNAN, AS TRUSTEES OF THE ROBERT P. AND MARILYN E. TIERNAN TRUST, DATED JULY 3, 1990; IRVIN D. NICHOLAS, JR., AS TRUSTEE OF THE IRVIN D. NICHOLAS, JR. REVOCABLE TRUST DATED FEBRUARY 16, 2006; MICHAEL P. SCARPELLI AND JANET L. SCARPELLI, AS TRUSTEES OF THE SCARPELLI FAMILY TRUST DATED 8-14-09; KATHLEEN A. NICHOLSON, AS TRUSTEE OF THE NICHOLSON FAMILY TRUST DATED OCTOBER 28, 2004 (collectively, "Plaintiffs"), and hereby allege against Defendants DIABLO COMMUNITY SERVICES DISTRICT; DIABLO COUNTRY CLUB; ROBERT W. CANEPA AND JEAN M. CANEPA; ALBERT R. RUBEY AND ANGELL L. RUBEY; MICHAEL FITZSIMMONS AND STACY SOMMER; RYAN P. HAENER AND JULIE HAENER, CO-TRUSTEES OF THE RYAN P. AND JULIE HAENER FAMILY TRUST A REVOCABLE TRUST CREATED BY DECLARATION OF TRUST DATED MARCH 23, 2005; DONG HOON SHIN AND MIKYUNG KWON; BETTY L. VANVOORHIS; MARK MUSCO AND DOLORES MUSCO, TRUSTEES OF THE MARK MUSCO AND DOLORES MUSCO REVOCABLE LIVING TRUST DATED 01/26/2010; ANTHONY J. PERINO AND CARRIE A. PERINO, TRUSTEES OF THE PERINO FAMILY TRUST DATED MARCH 9, 2001 AND RESTATED DECEMBER 30, 2008; LEONARD S. BECKER AND JOANNE L. BECKER; ROBERT J. CORKERN AND JILL ANN CORKERN, TRUSTEES OF THE CORKERN FAMILY 1997 REVOCABLE LIVING TRUST; PAUL R. AMBROSE AND NGOC ANH AMBROSE; JOSHUA D. FREEMAN AND CHELSEA J. FREEMAN, TRUSTEES, THE JOSHUA D. AND CHELSEA J. FREEMAN FAMILY REVOCABLE TRUST, U/D/T DATED JULY 22, 2005; MARSHALL W. FREEMAN AND MARGARET S. FREEMAN, AS TRUSTEES OR THE SUCCESSOR TRUSTEE OR TRUSTEES, U/A/D APRIL 30, 1987; GERARD S. CLANCY AND DONNA M. CLANCY, CO-TRUSTEES OF THE GERARD S. CLANCY AND DONNA M. CLANCY AB LIVING TRUST DATED JANUARY 13, 2003; JOSEPH GERALD SLAVONIA AND MARGUERITE FIORI SLAVONIA; and ALL PERSONS UNKNOWN, CLAIMING ANY LEGAL OR EQUITABLE RIGHT, TITLE, ESTATE, LIEN, OR INTEREST IN THE PROPERTY

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DESCRIBED IN THE COMPLAINT ADVERSE TO PLAINTIFFS' TITLE, OR ANY CLOUD UPON PLAINTIFFS' TITLE THERETO, and DOES 1-100, inclusive (collectively, "Defendants"), as follows:

**PRELIMINARY ALLEGATIONS**

1. Plaintiff Robert Tiernan is an individual, residing in Contra Costa County, California, and the owner of the real property commonly known as 1897 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "A"** attached hereto.

2. Plaintiffs Robert and Marilyn Tiernan, as Trustees of the Robert P. and Marilyn E. Tiernan Trust, dated July 3, 1990, are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1747 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "B"** attached hereto.

3. Plaintiff Irvin D. Nicholas, Jr., as Trustee of the Irvin D. Nicholas, Jr. Revocable Trust Dated February 16, 2006, is an individual, residing in Contra Costa County, California, and the owner of the real property commonly known as 1609 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "C"** attached hereto.

4. Plaintiff Kathleen A. Nicholson, as Trustee of the Nicholson Family Trust Dated October 28, 2004, is an individual, residing in Contra Costa County, California, and the owner of the real property commonly known as 1918 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "D"** attached hereto.

5. Plaintiffs Michael P. Scarpelli and Janet L. Scarpelli, as Trustees of The Scarpelli Family Trust dated 8-14-09 are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1817 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "E"** attached hereto.

6. Plaintiffs are informed and believe, and based thereon allege, that Defendants Robert W. and Jean M. Canepa are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1793 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "F"** attached hereto.

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7. Plaintiffs are informed and believe, and based thereon allege, that Defendants Albert R. Rubey and Angell L. Rubey are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1651 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "G"** attached hereto.

8. Plaintiffs are informed and believe, and based thereon allege, that Defendants Michael Fitzsimmons and Stacy Sommer are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1655 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "H"** attached hereto.

9. Plaintiffs are informed and believe, and based thereon allege, that Defendants Ryan P. Haener and Julie Haener, Co-Trustees of the Ryan P. and Julie Haener Family Trust a Revocable Trust created by Declaration of Trust dated March 23, 2005 are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1669 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "I"** attached hereto.

10. Plaintiffs are informed and believe, and based thereon allege, that Defendants Dong Hoon Shin and Mikyung Kwon are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1685 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "J"** attached hereto.

11. Plaintiffs are informed and believe, and based thereon allege, that Defendant Betty L. Vanvoorhis is an individual, residing in Contra Costa County, California, and the owner of the real property commonly known as 1701 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "K"** attached hereto.

12. Plaintiffs are informed and believe, and based thereon allege, that Defendants Mark Musco and Dolores Musco, Trustees of the Mark Musco and Dolores Musco Revocable Living Trust dated 01/26/2010 are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1733 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "L"** attached hereto.

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13. Plaintiffs are informed and believe, and based thereon allege, that Defendants Anthony J. Perino and Carrie A. Perino, Trustees of The Perino Family Trust dated March 9, 2001 and restated December 30, 2008 are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1761 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "M"** attached hereto.

14. Plaintiffs are informed and believe, and based thereon allege, that Defendants Leonard S. Becker and Joanne L. Becker are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1775 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "N"** attached hereto.

15. Plaintiffs are informed and believe, and based thereon allege, that Defendants Robert J. Corkern and Jill Ann Corkern, Trustees of the Corkern Family 1997 Revocable Living Trust are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1789 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "O"** attached hereto.

16. Plaintiffs are informed and believe, and based thereon allege, that Defendants Paul R. Ambrose and Ngoc Anh Ambrose are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1831 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "P"** attached hereto.

17. Plaintiffs are informed and believe, and based thereon allege, that Defendants Joshua D. Freeman and Chelsea J. Freeman, Trustees, the Joshua D. and Chelsea J. Freeman Family Revocable Trust, U/D/T dated July 22, 2005 are individuals, residing in Contra Costa County, California, and the owners of the real properties commonly known as 16 Campo Pelota, Diablo, California, and 28 Campo Pelota, Diablo, California, the legal descriptions of which is set forth on **Exhibit "Q"** and **Exhibit "R"** attached hereto.

18. Plaintiffs are informed and believe, and based thereon allege, that Defendants Marshall W. Freeman and Margaret S. Freeman, as Trustees or the successor Trustee or Trustees, u/a/d April 30, 1987, as amended, creating the Marshall W. Freeman and Margaret S. Freeman Trust are individuals, residing in Contra Costa County, California, and the owners of the real



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property commonly known as 36 Campo Pelota, Diablo, California, the legal description of which is set forth on **Exhibit "S"** attached hereto.

19. Plaintiffs are informed and believe, and based thereon allege, that Defendants Gerard S. Clancy and Donna M. Clancy, Co-Trustees of The Gerard S. Clancy and Donna M. Clancy AB Living Trust dated January 13, 2003 are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1893 Calle Arroyo, Diablo, California, the legal description of which is set forth on **Exhibit "T"** attached hereto.

20. Plaintiffs are informed and believe, and based thereon allege, that Defendants Joseph Gerald Slavonia and Marguerite Fiori Slavonia are individuals, residing in Contra Costa County, California, and the owners of the real property commonly known as 1615 Club House Road, Diablo, California, the legal description of which is set forth on **Exhibit "U"** attached hereto.

21. Plaintiffs are informed and believe, and based thereon allege, that Defendant Diablo Country Club is a California corporation, doing business in Contra Costa County, California, and the owner of the real properties commonly known by APN 195-210-041-8, 195-160-002-0, 195-380-005-7 and 195-210-038-4, Diablo, California, the legal descriptions of which are set forth on **Exhibit "V"** attached hereto.

22. Plaintiffs are informed and believe, and based thereon allege, that Defendant Diablo Community Services District (the "DCSD") is a California Independent Special District formed in 1969 pursuant to California Government Code §§ 61000 *et seq.*, which has the purpose of providing security services to the residents of Diablo, and maintain roads, culverts, bridges and trails in Diablo.

23. Plaintiffs are informed and believe, and based thereon allege, that Calle Arroyo road lies on a portion of the real property owned by each of the Defendants named herein, with the exception of the DCSD and "all persons unknown, claiming any legal or equitable right, title, estate, lien, or interest in the property described in the complaint adverse to plaintiffs' title, or any cloud upon plaintiffs' title thereto."

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24. Collectively, the real property owned by Plaintiffs and Defendants in Diablo and at issue in this litigation is referred to as the "Properties."

25. Plaintiffs are ignorant of the true names and capacities of the defendants sued herein as DOES 1 through 100, inclusive, and therefore sues these defendants by such fictitious names. Plaintiffs will amend this Verified Complaint to allege their true names and capacities when ascertained.

26. Plaintiffs bring this action for the purpose of quieting title to their properties, confirming that Calle Arroyo is a private road, located on the properties of Plaintiffs, Defendants and the Diablo Country Club, and obtaining a judicial declaration from this Court as to the DCSD's obligation to maintain the security of Calle Arroyo.

## VENUE

27. Venue is proper in this Court because the property at issue is located in Contra Costa County, California.

## GENERAL ALLEGATIONS

28. Diablo is a quiet, private community located in the unincorporated area of Contra Costa County, consisting of approximately 379 homes and a renowned private golf course. Plaintiffs are informed and believe, and based thereon allege, that beginning in the early 1900's, the area now known as Diablo began to be developed with private residences. Construction of the roads and golf course began in 1914-1915. As early as 1914, the road entrances to Diablo were marked with "Private" property signs, confirming the well-known fact that Diablo's roads were privately owned.

29. Plaintiffs are informed and believe, and based thereon allege, that in 1968, the Contra Costa County Board of Supervisors approved a petition to dissolve the Diablo Public Utility District and create the Diablo Community Services District. The primary purpose of the DCSD was to raise funds to address safety concerns of Diablo residents, maintain private security patrols, construct speed bumps to slow down residential traffic and to maintain the private roads within Diablo's boundaries.

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30. Plaintiffs are informed and believe, and based thereon allege, that since its formation the DCSD has enacted ordinances which govern its operations and delineate its obligations to Diablo residents. The most recent iteration of these ordinances were adopted November 14, 2017 (the "Ordinance Code"). Pursuant to the Ordinance Code, the DCSD is expressly authorized to charge and collect fees from Diablo landowners for the purpose of providing "security and police services" and maintaining the security of Diablo's private roads.

31. Pursuant to Ordinance Code 302.c, "the streets within Diablo are private in title and ownership...." Furthermore, Ordinance Codes 302.d and 402 provide that "the streets within Diablo are dedicated to the use of Diablo residents, their invitees and guests, members of the Diablo Country Club and their invitees and guests, persons using the facilities of the United States Post Office in Diablo and person [sic] having legitimate business within Diablo." Finally, Ordinance Code 302.h provides that "the maintenance of Diablo-Maintained Streets by the DCSD and the use of those streets by the persons described in d. above is not a benefit that is substantially available to the public at large."

32. There are three entrances into Diablo from the public Diablo Road—via Calle Arroyo, via Alameda Diablo and via Avenida Nueva. Each entrance has signage indicating that Diablo is a "private" community, and that the roads in Diablo are "private" and the "right to pass is by permission of the Diablo Community Service District, Section 1008 Civil Code." Plaintiffs are informed and believe, and based thereon allege, that signs indicating Diablo is "private" have been posted since 1914. Plaintiffs are further informed and believe, and based thereon allege, that the signs referencing Civil Code section 1008 have been posted since 1972.

33. Plaintiffs are informed and believe, and based thereon allege, that the DCSD has operated continuously since 1969 and remained responsible for both providing security in Diablo and maintaining its roads. Historically, there were few issues with the general public using roads in Diablo. For much of its history, Diablo was located in a rural area with little or no development around it, so it did not see much vehicle, bicycle or foot traffic from the general public. Recently, however, this has changed dramatically. Beginning in approximately 2010, and continuing to the present date, bicycle traffic in Diablo has increased significantly. Recreational



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bicyclists riding up and down Mt. Diablo, via South Gate Road, have begun to take a short cut through Diablo, apparently with the goal of avoiding Diablo Road. The increased bicycle traffic has become a serious safety issue both for the bicyclists and Diablo residents. The DCSD's failure to enforce its Ordinances has compounded the issue, and left Plaintiffs with no choice but to seek relief from this Court.

34. Plaintiffs are informed and believe, and based thereon allege, that the recent safety concerns created by unauthorized bicyclists are most acute on Calle Arroyo, a road frequently used by bicyclists cutting through Diablo. Unauthorized bicyclists ride on Calle Arroyo every day, often at speeds of well over the speed limits of 15 to 20 miles per hour. On Fridays and on the weekends, the number of bicyclists using Calle Arroyo often numbers in the hundreds. Calle Arroyo is a narrow, 12 to 16 foot wide roadway which runs parallel to the 16th, 17th and 18th fairways of the Diablo Country Club. Calle Arroyo is a winding road with blind curves and blind intersections. It is heavily trafficked by golf carts and the Country Club's maintenance vehicles. It is also the primary exit for golf carts and golfers leaving the 18th green. There are 22 homes located on Calle Arroyo, and in many places oak tree branches grow out over the road. The presence of hundreds of bicyclists who careen down Calle Arroyo on a daily basis have resulted in serious safety issues for both the bicyclists, Diablo residents and Calle Arroyo homeowners. For example, bicyclists have run into small children, hit vehicles and destroyed property. Many bicyclists routinely ignore stop signs and frequently interrupt golfers on the 16th, 17th and 18th fairways. The serenity of this once quiet neighborhood is now frequently disrupted by loud packs of bicyclists.

35. To compound matters, some bicyclists travel in large packs which result in them clogging the entirety of Calle Arroyo. Plaintiffs are informed and believe, and based thereon allege, that Diablo residents have been tail-gated by bicyclists, verbally abused, had their vehicles kicked and sustained property damage and vandalism. Plaintiffs are further informed and believe, and based thereon allege, that at least one personal injury lawsuit is pending based on crashes between bicyclists and vehicles on Calle Arroyo. Given that the homeowners on Calle Arroyo are personally responsible for maintaining the trees, tree branches and shrubs which grow over



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and next to Calle Arroyo, there is a significant risk of personal liability in the event a tree branch falls on a bicyclist. This is not a risk that Calle Arroyo homeowners expected when they purchased their properties.

36. Plaintiffs are informed and believe, and based thereon allege, that in addition to the bicyclists, there has been a recent influx of both pedestrian and vehicle traffic on Calle Arroyo by unauthorized users. Calle Arroyo is a narrow road without sidewalks, and at points no wider than 12 feet. The additional vehicles and pedestrian traffic, together with the bicyclists, create an unsafe condition and make it difficult for Calle Arroyo homeowners to get to and from their homes.

37. Plaintiffs are informed and believe, and based thereon allege, that the DCSD has failed to comply with its obligations under the Ordinance Code to preclude unauthorized individuals from using Diablo's private roads, specifically Calle Arroyo. The continued use of Calle Arroyo by unauthorized bicyclists is causing a real and significant danger to Calle Arroyo homeowners, Diablo residents and the bicyclists themselves. The DCSD's failure to enforce the Ordinance Code, and keep unauthorized vehicles and bicyclists off Calle Arroyo, is exacerbating a serious health and safety issue.

**FIRST CAUSE OF ACTION**

**Quiet Title**

**(Against All Defendants)**

38. Plaintiffs hereby incorporate by reference paragraphs 1 through 37, inclusive, above, as though fully set forth herein.

39. Plaintiffs are the owners of real property located on Calle Arroyo road, as set forth above. Defendants, with the exception of the DCSD and the unknown Defendants, are owners of real property in Diablo, California, which includes portions of Calle Arroyo road. An actual controversy has arisen and now exists between Plaintiffs and Defendants concerning their respective rights and duties with respect to Calle Arroyo road. Specifically, Plaintiffs contend that Calle Arroyo road is private, owned by the homeowners on Calle Arroyo and Diablo Country Club. Plaintiffs further contend that there has been no express or implied dedication of Calle



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Arroyo for use by the general public, and that there has been no actual use of Calle Arroyo by the general public, including pedestrians, bicyclists and vehicles, based on a belief that Calle Arroyo was public land, without objection or interruption from Calle Arroyo property owners for a period of more than five years. Plaintiffs are informed and believe, and based thereon allege, that Defendants dispute this contention.

WHEREFORE, Plaintiffs pray for judgment as set forth below.

**SECOND CAUSE OF ACTION**

**Declaratory Relief**

**(Against All Defendants)**

40. Plaintiffs hereby incorporate by reference paragraphs 1 through 39, inclusive, above, as though fully set forth herein.

41. Plaintiffs are the owners of real property located on Calle Arroyo road, as set forth above. Defendants, with the exception of the DCSD and the unknown Defendants, are owners of real property in Diablo, California, which includes portions of Calle Arroyo road. An actual controversy has arisen and now exists between Plaintiffs and Defendants concerning their respective rights and duties with respect to Calle Arroyo road. Specifically, Plaintiffs contend that Calle Arroyo road is private, owned by the homeowners on Calle Arroyo and Diablo Country Club. Plaintiffs further contend that there has been no express or implied dedication of Calle Arroyo for use by the general public, and that there has been no actual use of Calle Arroyo by the general public, including pedestrians, bicyclists and vehicles, based on a belief that Calle Arroyo was public land, without objection or interruption from Calle Arroyo property owners for a period of more than five years. Plaintiffs are informed and believe, and based thereon allege, that Defendants dispute this contention.

42. Plaintiffs seek a judicial determination of their rights and duties and a declaration that Calle Arroyo is a private road, owned by the Diablo Country Club and the individual owners of property on Calle Arroyo where the roadway is physically located.

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43. A judicial declaration is necessary and appropriate at this time because Plaintiffs' property rights are being infringed as a result of the uncertainty caused by Defendants concerning whether Calle Arroyo is a private or public road.

WHEREFORE, Plaintiffs pray for judgment as set forth below.

**THIRD CAUSE OF ACTION**

**Declaratory Relief**

**(Against Defendant DCSD)**

44. Plaintiffs hereby incorporate by reference paragraphs 1 through 43, inclusive, above, as though fully set forth herein.

45. Plaintiffs are the owners of real property located on Calle Arroyo road, as set forth above. Defendants, with the exception of the DCSD and the unknown Defendants, are owners of real property in Diablo, California, which includes portions of Calle Arroyo road. An actual controversy has arisen and now exists between Plaintiffs and Defendant DCSD with respect to the DCSD's obligations under the Ordinance Code. Specifically, Plaintiffs contend that the DCSD has an obligation under the Ordinance Code to provide security to Diablo residents, including those who live on Calle Arroyo, and police Calle Arroyo to prevent unauthorized bicyclists, vehicles and pedestrians from trespassing on the roadway. Plaintiffs are informed and believe, and based thereon allege, that Defendant DCSD disputes this contention.

46. Plaintiffs seek a judicial determination of the DCSD's duties and obligations under the Ordinance Code with respect to securing Calle Arroyo from unauthorized use by the general public, including but not limited to by bicyclists, vehicles and pedestrians, and policing it to ensure that unauthorized user stop trespassing on Calle Arroyo.

47. A judicial declaration is necessary and appropriate at this time because Plaintiffs' property rights are being infringed as a result of unauthorized persons using Calle Arroyo on a daily basis, and the DCSD's failure to take any steps to stop this trespass.

WHEREFORE, Plaintiffs pray for judgment as set forth below.

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## PRAYER FOR DAMAGES

### On the First Cause of Action

1. For a judgment quieting title to the Properties such that as of the date each Plaintiff and Defendant who lives on Calle Arroyo purchased their property, the portion of Calle Arroyo road on their respective properties was private property, and remains private property, and that no non-homeowner Defendants, including the general public, have any rights, liens and/or interests whatsoever in said properties or in Calle Arroyo road.

### On the Second Cause of Action

2. For a declaration by the Court that the portion of Calle Arroyo road on Plaintiffs and Defendants properties is private property, and that the general public at large has no rights, liens and/or interests whatsoever in said properties.

### On the Third Cause of Action

3. For a declaration by the Court that the DCSD has an obligation under the Ordinance Code to provide security for the homeowners on Calle Arroyo and take steps to police the roadway to prevent unauthorized bicyclists, vehicles or others from using Calle Arroyo.

### On all Causes of Action

4. For the costs of suit herein incurred, including reasonable attorneys' fees to the extent permitted by law; and

5. For such other and further relief as this Court may deem proper.

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BUCHMAN PROVINE BROTHERS SMITH LLP
ATTORNEYS AT LAW
WALNUT CREEK, CA

Dated: December 20, 2017

**BUCHMAN PROVINE BROTHERS SMITH LLP**

By: _____
Dominic V. Signorotti
Attorneys for Plaintiffs
ROBERT TIERNAN; ROBERT TIERNAN AND MARILYN TIERNAN, AS TRUSTEES OF THE ROBERT P. AND MARILYN E. TIERNAN TRUST, DATED JULY 3, 1990; IRVIN D. NICHOLAS, JR., AS TRUSTEE OF THE IRVIN D. NICHOLAS, JR. REVOCABLE TRUST DATED FEBRUARY 16, 2006; MICHAEL P. SCARPELLI AND JANET L. SCARPELLI, AS TRUSTEES OF THE SCARPELLI FAMILY TRUST DATED 8-14-09; KATHLEEN A. NICHOLSON, AS TRUSTEE OF THE NICHOLSON FAMILY TRUST DATED OCTOBER 28, 2004

BUCHMAN PROVINE BROTHERS SMITH LLP
ATTORNEYS AT LAW
WALNUT CREEK, CA

## VERIFICATION

I have read the foregoing VERIFIED COMPLAINT FOR QUIET TITLE AND DECLARATORY RELIEF and know its contents.

☒ I am a party to this action. The matters stated in it are true of my own knowledge except as to those matters which are stated on information and belief, and as to those matters I believe them to be true.

☐ I am _____ of _____, a party to this action, and am authorized to make this verification for and on its behalf, and I make this verification for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

☐ I am one of the attorneys of record for _____, a party to this action. Such party has no principal offices in the county in which I have my office, and I make this verification for and on behalf of that party for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

Executed at Diablo, California on this ___ day of December, 2017.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

ROBERT TIERNAN

BUCHMAN PROVINE BROTHERS SMITH LLP
ATTORNEYS AT LAW
WALNUT CREEK, CA

## VERIFICATION

I have read the foregoing VERIFIED COMPLAINT FOR QUIET TITLE AND DECLARATORY RELIEF and know its contents.

☒ I am a party to this action. The matters stated in it are true of my own knowledge except as to those matters which are stated on information and belief, and as to those matters I believe them to be true.

☐ I am _____ of _____, a party to this action, and am authorized to make this verification for and on its behalf, and I make this verification for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

☐ I am one of the attorneys of record for _____, a party to this action. Such party has no principal offices in the county in which I have my office, and I make this verification for and on behalf of that party for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

Executed at Diablo, California on this 18 day of December, 2017.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Robert P Tiernan

ROBERT P. TIERNAN AS TRUSTEE OF THE ROBERT P. AND MARILYN E. TIERNAN TRUST, DATED JULY 3, 1990

Marilyn E. Tiernan

MARILYN E. TIERNAN AS TRUSTEE OF THE ROBERT P. AND MARILYN E. TIERNAN TRUST, DATED JULY 3, 1990

BUCHMAN PROVINE BROTHERS SMITH LLP
ATTORNEYS AT LAW
WALNUT CREEK, CA

## VERIFICATION

I have read the foregoing VERIFIED COMPLAINT FOR QUIET TITLE AND DECLARATORY RELIEF and know its contents.

☒ I am a party to this action. The matters stated in it are true of my own knowledge except as to those matters which are stated on information and belief, and as to those matters I believe them to be true.

☐ I am _____ of _____, a party to this action, and am authorized to make this verification for and on its behalf, and I make this verification for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

☐ I am one of the attorneys of record for _____, a party to this action. Such party has no principal offices in the county in which I have my office, and I make this verification for and on behalf of that party for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

Executed at Diablo, California on this 18 day of December, 2017.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

IRVIN D. NICHOLAS, JR., AS TRUSTEE
OF THE IRVIN D. NICHOLAS, JR.
REVOCABLE TRUST DATED
FEBRUARY 16, 2006

BUCHMAN PROVINE BROTHERS SMITH LLP
ATTORNEYS AT LAW
WALNUT CREEK, CA

## VERIFICATION

I have read the foregoing VERIFIED COMPLAINT FOR QUIET TITLE AND DECLARATORY RELIEF and know its contents.

☒ I am a party to this action. The matters stated in it are true of my own knowledge except as to those matters which are stated on information and belief, and as to those matters I believe them to be true.

☐ I am _____ of _____, a party to this action, and am authorized to make this verification for and on its behalf, and I make this verification for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

☐ I am one of the attorneys of record for _____, a party to this action. Such party has no principal offices in the county in which I have my office, and I make this verification for and on behalf of that party for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

Executed at Diablo, California on this 18th day of December, 2017.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

_____
MICHAEL P. SCARPELLI, AS TRUSTEE OF THE SCARPELLI FAMILY TRUST DATED 8-14-09

_____
JANET L. SCARPELLI, AS TRUSTEE OF THE SCARPELLI FAMILY TRUST DATED 8-14-09

BUCHMAN PROVINE BROTHERS SMITH LLP
ATTORNEYS AT LAW
WALNUT CREEK, CA

## VERIFICATION

I have read the foregoing VERIFIED COMPLAINT FOR QUIET TITLE AND DECLARATORY RELIEF and know its contents.

☒ I am a party to this action. The matters stated in it are true of my own knowledge except as to those matters which are stated on information and belief, and as to those matters I believe them to be true.

☐ I am _____ of _____, a party to this action, and am authorized to make this verification for and on its behalf, and I make this verification for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

☐ I am one of the attorneys of record for _____, a party to this action. Such party has no principal offices in the county in which I have my office, and I make this verification for and on behalf of that party for that reason. I have read the foregoing document(s). I am informed and believe and on that ground allege that the matters stated in it are true.

Executed at Diablo, California on this 18 day of December, 2017.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Kathleen A. Nicholson

KATHLEEN A. NICHOLSON, AS TRUSTEE OF THE NICHOLSON FAMILY TRUST DATED OCTOBER 28, 2004

BUCHMAN PROVINE BROTHERS SMITH LLP
ATTORNEYS AT LAW
WALNUT CREEK, CA

**EXHIBIT A**

# EXHIBIT "A"

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF CONTRA COSTA, UNINCORPORATED AREA, AND IS DESCRIBED AS FOLLOWS:

PARCEL C ON PARCEL MAP M.S. 73-70, FILED NOVEMBER 20, 1970, IN BOOK 14 OF PARCEL MAPS, PAGE 45, CONTRA COSTA COUNTY RECORDS.

A.P.N. 195-180-019

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN AN UNINCORPORATED AREA, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

Portion Parcel A, as shown on Parcel Map, Subdivision 1-78, filed November 9, 1978 in Book 71 of Parcel Maps, Page 48, Contra Costa County Records, described as follows:

Beginning at a point on the north line of Calle Arroyo, as said street is shown on that certain Parcel Map filed November 20, 1970, Book 14 of Parcel Maps, page 45, Contra Costa County Records, said point being on the east line of Parcel C, as shown on said Parcel Map (14 PM 45); thence along said east line, also being the west line of said Parcel A of said Parcel Map (71 PM 48) and the basis of bearings for this description; north 16° 02' 27" east, 179.45 feet to the northeast corner of said Parcel C; thence leaving said point south 10° 34' 45" east, 5.41 feet to the beginning of a non-tangent curve to the right with a radius of 32 feet, the center of which bears south 64° 27' 56", thence along said curve through a central angle of 37° 28' 56" 20.93 feet to the beginning of a reverse curve with a radius of 55 feet, thence along said curve through a central angle of 40° 48' 09" 39.17 feet; thence south 28° 51' 17" east, 63.29 feet; thence south 11° 46' 45" west, 25.74 feet; thence south 57° 20' 45" west, 36.74 feet to the beginning of a curve to the right with a radius of 65 feet; thence along said curve through a central angle 37° 47' 54" 42.88 feet; thence north 65° 01' 03" west, 1.71 feet to the point of beginning.

EXCEPTING THEREFROM: Any portion of Calle Arroyo lying therein.

RESERVING THEREFROM: An easement, not to be exclusive, as an appurtenance to the remaining lands of the grantor, for a drainage ditch and access for cleanout of said ditch, and any rights incidental thereto, under and across the premises described above.

APN: portion 195-210-035

**EXHIBIT B**

## EXHIBIT "B"

Portion of Lots 91 and 92 as designated on the map of Mount Diablo Estate Park, Subdivision First Unit, which map was filed in the office of the Recorder of the County of Contra Costa, State of California, on May 16, 1916, in Volume 15 of Maps, at page 301, described as follows:

Beginning on the northwestern corner of the parcel of land described in the deed from St. George Development Company, Inc., a corporation to Le Roy H. Hough, et ux, dated July 26, 1963, and recorded August 12, 1963 in Volume 4427 of Official Records, at page 414; thence from said point of beginning south 11° 05' 30" west along the western line of said Hough parcel, 316 feet to the center line of a road known as Calle Arroyo; thence north 69° 56' west along said center line, 125.57 feet; thence north 11° 05' 30 east 296.42 feet to the west 124.03 feet from the point of beginning; thence south 78°54' 30" east along the northern line of Lots 92 and 91, 124.03 feet to the point of beginning.
A.P.N. 195-170-008

**EXHIBIT C**

# EXHIBIT "C"

**THE FOLLOWING DESCRIBED REAL PROPERTY SITUATE IN THE UNINCORPORATED AREA OF DIABLO IN THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:**

PARCEL B, DESIGNATED ON PARCEL OF SURVEY MAP, FILED DECEMBER 26, 1963, BOOK 25, LICENSED SURVEYORS MAP, PAGE 12, CONTRA COSTA RECORDS

**EXHIBIT D**

# EXHIBIT "D"

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF CONTRA COSTA, UNINCORPORATED AREA, AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE

PORTION OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 1 SOUTH, RANGE 1 WEST, MOUNT DIABO BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF THE PARCEL OF LAND DESCRIBED IN THE DEED FROM LAURENCE CURTOLO, ET UX, TO A.J. GELDERMANN, ET AL, RECORDED AUGUST 7, 1951 IN VOLUME 1803 OF OFFICIAL RECORDS, AT PAGE 203; THENCE FROM SAID POINT OF COMMENCEMENT NORTH 9° 54' 15" EAST, 27.36 FEET; THENCE NORTH 12° 32' 45" WEST, 111.86 FEET; THENCE NORTH 79° 07' 23" WEST, 32.31 FEET; THENCE NORTH 63° 26' 10" WEST, 61.40 FEET; THENCE NORTH 72° 10' 43" WEST, 61.08 FEET TO A POINT HEREIN DESIGNATED AS STATION A, AND WHICH POINT IS THE ACTUAL POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL OF LAND; THENCE FROM SAID POINT OF BEGINNING NORTH 72° 10' 43" WEST, 63.92 FEET; THENCE WESTERLY AND SOUTHWESTERLY ALONG THE ARC OF A CURVE TO THE LEFT WITH A RADIUS OF 31.94 FEET, TANGENT TO THE LAST COURSE, AN ARC DISTANCE OF 54.05 FEET; THENCE SOUTH 10° 52' 37" WEST, TANGENT TO SAID CURVE, 28.33 FEET TO A POINT HEREIN DESIGNATED AS STATION B, THENCE SOUTH 15° 43' 47" WEST, 118.19 FEET; THENCE SOUTH 32° 22' 45" EAST, 26.59 FEET TO THE MOST NORTHERLY CORNER OF THE PARCEL OF LAND DESCRIBED IN THE DEED FROM LAURENCE CURTOLA, ET UX, TO LLOYD C. ROSSI, ET UX RECORDED DECEMBER 5, 1949 IN VOLUME 1470 OF OFFICIAL RECORDS, AT PAGE 531; THENCE SOUTH 50° 26' 17" EAST, ALONG THE NORTHEAST LINE OF SAID ROSSI PARCEL (1470 OR 531), 102.63 FEET TO THE WEST LINE OF SAID GELDERMANN PARCEL (1803 OR 203); THENCE NORTH 10° 52' 37" EAST ALONG SAID WEST LINE AND ALONG THE DIRECT EXTENSION NORTH 10° 52' 37" EAST THEREOF 238.73 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM

THAT PORTION GRANTED IN THE DEED TO DIABLO COUNTRY CLUB, A CORPORATION, RECORDED JANUARY 12, 1973, BOOK 6841, PAGE 494, OFFICIAL RECORDS.

PARCEL TWO

THE RIGHT OF WAY GRANTED IN THE DEED FROM COUNTRY LANDS, INC. TO THEODORE S. BEEM, ET UX, DATED JULY 8, 1959 AND RECORDED SEPTEMBER 29, 1959 IN VOLUME 3463 OF OFFICIAL RECORDS, AT PAGE 375, AS FOLLOWS.

"AN EASEMENT (NOT TO BE EXCLUSIVE) AS AN APPURTENANCE TO PARCEL ONE ABOVE FOR USE AS A ROADWAY FOR VEHICLES OF ALL KINDS, PEDESTRIANS AND ANIMALS, AND AS A RIGHT OF WAY FOR WATER, GAS, OIL AND SEWER PIPE LINES AND FOR TELEPHONE, ELECTRIC LIGHT AND POWER LINES TOGETHER WITH THE NECESSARY POLES OR UNDERGROUND CONDUITS TO CARRY SAID LINES OVER AND UNDER THE NORTHERN 10 FEET OF PARCEL ONE AS DESCRIBED IN THE DEED FROM LAURENCE CURTOLA, ET UX, TO COUNTRY LANDS, INC., RECORDED APRIL 16, 1956, IN BOOK 2745 OF OFFICIAL RECORDS, PAGE 481.

PARCEL THREE

THE RIGHT OF WAY GRANTED IN THE DEED FROM COUNTRY LANDS, INC. TO THEODORE S. BEEM, ET UX, DATED JULY 8, 1959 AND RECORDED SEPTEMBER 29, 1959 IN VOLUME 3463 OF OFFICIAL RECORDS, AT PAGE 375, AS FOLLOWS:

"AN EASEMENT (NOT TO BE EXCLUSIVE) AS AN APPURTENANCE TO PARCEL ONE ABOVE FOR INSTALLATION, OPERATION AND MAINTENANCE OF A SEWER PIPE LINE OVER A STRIP OF LAND 5 FEET IN WIDTH THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING ON THE WEST LINE OF PARCEL ONE AS DESCRIBED IN THE DEED FROM LAURENCE CURTOLA, ET UX, TO COUNTRY LANDS, INC., RECORDED APRIL 16, 1956 IN BOOK 2745 OF OFFICIAL RECORDS, PAGE 481; DISTANT THEREON, SOUTH 10° 52' 37" WEST, 36 FEET FROM THE NORTHWEST CORNER THEREOF; THENCE FROM SAID POINT OF BEGINNING, SOUTHEASTERLY IN A DIRECT LINE TO A POINT WHICH BEARS NORTH 79° 07' 23" WEST, 32.31 FEET, SOUTH 28° 26' 49" EAST, 17 FEET AND SOUTH 12° 32' 45" EAST, 2 FEET FROM THE NORTHEAST CORNER THEREOF."

PARCEL FOUR

THE RIGHT OF WAY GRANTED IN THE DEED FROM COUNTRY LANDS, INC. TO THEODORE S. BEEM, ET UX, DATED JULY 8, 1959 AND RECORDED SEPTEMBER 29, 1959 IN VOLUME 3463 OF OFFICIAL RECORDS, AT PAGE 375, AS FOLLOWS:

"AN EASEMENT (NOT TO BE EXCLUSIVE) AS AN APPURTENANCE TO PARCEL ONE ABOVE FOR INSTALLATION, OPERATION AND MAINTENANCE OF A SEWER PIPE LINE, OVER THE WEST 2.5 FEET OF PARCEL ONE AS DESCRIBED IN THE DEED FROM LAURENCE CURTOLA, ET UX, TO COUNTRY LANDS, INC., RECORDED APRIL 16, 1956, IN BOOK 2745 OF OFFICIAL RECORDS, PAGE 481."

PARCEL FIVE

PORTION OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 22, TOWNSHIP 1 SOUTH, RANGE 1 WEST, MOUNT DIABLO BASE AND MERIDIN, DESCRIBED AS FOLLOWS:

BEGINNING AT A 2 X 2 HUB TAGGED L.S. 2298 MARKING THE SOUTHEASTERLY CORNER OF THE PARCEL OF LAND DESCRIBED IN THE QUIT CLAIM DEED FROM THEODORE S. BEEM TO GLEE E. BEER, RECORDED APRIL 27, 1967 IN BOOK 5356 OF OFFICIAL RECORDS OF CONTRA COSTA COUNTY AT PAGE 519; THENCE FROM SAID POINT OF BEGINNING, ALONG THE SOUTHERLY LINE OF SAID BEEM PARCEL, 5356 OR 519; NORTH 50° 26' 17" WEST, 102.62 FEET AND NORTH 32° 22' 45" WEST, 26.59 TO THE SOUTHWESTERLY CORNER OF SAID PARCEL, 5356 OR 519; THENCE ALONG THE WESTERLY LINE OF SAID PARCEL, 5356 OR 519, NORTH 15° 43' 47"

**EXHIBIT E**

# EXHIBIT "E"

the following described property in the Unincorporated area of **Diablo**, County of **Contra Costa**, State of **California**:

**PARCEL D OF PARCEL MAP FILED JUNE 13, 1972, BOOK 22, PARCEL MAPS, PAGE 30, CONTRA COSTA COUNTY RECORDS.**

**EXHIBIT F**

# EXHIBIT "F"

the following described property in the **unincorporated area** of , County of **Contra Costa**, State of **California**;

**A PORTION OF LOTS 86, 87 AND 88, AS SHOWN ON THE MAP OF MOUNT DIABLO ESTATE PARK SUBDIVISION FIRST UNIT, FILED MAY 6, 1916, IN BOOK 15 OF MAPS, PAGES 301 AND 302, IN THE OFFICE OF THE COUNTY RECORDER OF CONTRA COSTA COUNTY, DESCRIBED AS FOLLOWS:**

**BEGINNING AT THE MOST WESTERLY CORNER OF LOT 87, AS SHOWN ON THE MAP OF MOUNT DIABLO ESTATE PARK SUBDIVISION FIRST UNIT, FILED MAY 6, 1916 IN BOOK 15 OF MAPS, PAGES 301 AND 302 IN THE OFFICE OF THE COUNTY RECORDER OF CONTRA COSTA COUNTY, SAID CORNER BEING ON THE CENTER LINE OF THE PRIVATE ROAD KNOWN AS CALLE ARROYO AS SHOWN ON SAID MAP; THENCE SOUTH 37° 38' EAST, 1.05 FEET TO THE TRUE POINT OF BEIGNNING; THENCE NORTH 15° 14' 30" EAST, 397.50 FEET; THENCE SOUTH 74° 45' 15" EAST, 129.04 FEET; THENCE SOUTH 15° 14' 30" WEST, 417.20 FEET TO A POINT ON THE SOUTHERLY LINE OF LOT 86 AS SHOWN ON SAID MAP, SAID POINT BEING ALSO ON THE CENTER LINE OF THE PRIVATE ROAD KNOWN AS CALLE ARROYO; THENCE NORTH 87° 32' 30" WEST, 6.00 FEET; THENCE NORTH 77° 55' 30" WEST, 89.04 FEET; THENCE NORTH 37° 38' WEST, 43.00 FEET TO THE TRUE POINT OF BEGINNING.**

**EXHIBIT G**

# EXHIBIT "G"

THE LAND REFERRED TO HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF CONTRA COSTA, UNINCORPORATED AREA, AND IS DESCRIBED AS FOLLOWS:

PORTION OF LOTS 99 AND 100, MAP OF MOUNT DIABLO ESTATE PARK SUBDIVISION FIRST UNIT, FILED MAY 6, 1916, MAP BOOK 15, PAGE 301, AND A PORTION OF THE NORTHWEST 1/4 OF SECTION 22, TOWNSHIP 1 SOUTH, RANGE 1 WEST, MOUNT DIABLO BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING ON THE NORTHERN LINE OF SAID LOT 99, AT THE NORTHWEST CORNER OF THE PROPERTY DESCRIBED IN THE DEED TO JACK L. GORDON, ET UX, RECORDED NOVEMBER 26, 1963 BOOK 4499, OFFICIAL RECORDS, PAGE 614, THENCE FROM SAID POINT OF BEGINNING SOUTH 11° 05' 30" WEST, 217.34 FEET TO THE CENTER LINE OF A ROAD KNOWN AS CALLE ARROYO; THENCE NORTH 72° 27' 15" WEST, ALONG SAID CENTER LINE, 79.66 FEET; THENCE NORTH 48° 33' WEST, 32.49 FEET; THENCE NORTH 72° 27' 15" WEST, 14.41 FEET; THENCE NORTH 11° 05' 30" EAST, 93.46 FEET; THENCE NORTH 61° 10' 30" EAST, 150.99 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 99, WHICH BEARS NORTH 78° 43' 30" WEST, 5.70 FEET FROM THE POINT OF BEGINNING; THENCE SOUTH 78° 54' 30" EAST, 5.70 FEET TO THE POINT OF BEGINNING."

ASSESSOR'S PARCEL NO.: 195-170-013-5

**EXHIBIT H**

# EXHIBIT "H"

The land referred to is situated in the unincorporated area of the County of Contra Costa, State of California, and is described as follows:

Parcel One:

Portion of Lots 98 and 99, map of Mount Diablo Estate Park Subdivision First Unit, filed May 16, 1916, Map Book 15 page 301, Contra Costa County Records, described as follows:

Beginning on the North line of said Lot 98, at the West line of the Parcel of land desribed in the Deed to Mary A. Wright, recorded November 4, 1963, Book 4485 Official Records, page 352; thence from said point of beginning North 78 degrees 54' 30" West, along said North line and along the North line of said Lot 99, a distance of 119 feet to the East line of the parcel of land described in Deed to William N. Sanders, et ux, recorded January 16, 1967, Book 5285, Official Records, page 82; thence South 11 degrees 05' 30" West, along said East line, a distance of 217.34 feet to the South line of said Lot 99; thence North 72 degrees 27' 15" East, along said South line and along the South line of said Lot 98, a distance of 119.76 feet to a point which bears South 11 degrees 05' 30" West, from the point of beginning; thence North 11 degrees 05' 30" East, 230.80 feet to the point of beginning.

Parcel Two:

Portion of the North ½ of the Northwest ¼ of Section 22, Township 1 South, Range 1 West, Mount Diablo Base and Meridian, described as follows:

Beginning at the Northeast corner of the parcel of land described in the Deed to Jack L. Gordon, et ux, recorded November 26, 1963, Book 4499, Official Records, page 614; thence from said point of beginning North 11 degrees 05' 30" East along the direct extension North 11 degrees 05' 30" East of the East line of said Gordon Parcel, 72.59 feet, more or less, to the North Line of the 1.6 acre parcel of land firstly described in the Deed to Martha H. Ransome, recorded May 27, 1924, Book 462, Deeds, page 457; thence along said North line, South 82 degrees 40' 30" West, 66.42 feet, more or less and South 61 degrees 10' 30" West, 80.42 feet, more or less to the North line of Lot 99 as designated on the map of Mount Diablo Estate Park Subdivision First Unit, filed May 6, 1916, Map Book 15, page 301; thence South 78 degrees 54' 30" East, along said North line and along the North line of Lot 98, as designated on said map, 124.70 feet to the point of beginning.

APN: 195-170-024

**EXHIBIT I**

# EXHIBIT "I"

**The land referred to herein is situated in the State of California, County of Contra Costa, Unincorporated Area, and is described as follows:**

PORTIONS OF LOTS 97 AND 98, AS SHOWN ON THE MAP ENTITLED, "MOUNT DIABLO ESTATE PARK SUBDIVISION FIRST UNIT", WHICH MAP WAS FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, ON MAY 6, 1916, IN BOOK 15 OF MAPS, AT PAGE 301, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHERN LINE OF SAID LOT 98, DISTANT THEREON SOUTH 78 DEGREES 54' 30" EAST 39.70 FEET FROM THE NORTHEASTERN CORNER OF LOT 99 "MOUNT DIABLO ESTATE PARK SUBDIVISION FIRST UNIT", REFERRED TO ABOVE, SAID POINT ALSO BEING DISTANT THEREON NORTH 78 DEGREES 54' 30" WEST 713.53 FEET FROM THE NORTHWESTERN CORNER OF THE PARCEL OF LAND DESCRIBED IN THE DEED FROM ST. GEORGE DEVELOPMENT COMPANY,INC., TO LEROY H. HOUGH, ET UX, DATED JULY 26, 1963, AND RECORDED AUGUST 12, 1963, IN BOOK 4427 OF OFFICIAL RECORDS, AT PAGE 414; THENCE FROM SAID POINT OF BEGINNING SOUTH 11 DEGREES 05' 30" WEST PARALLEL WITH THE EASTERN LINE OF SAID LOT 99, 230.80 FEET TO THE CENTER LINE OF CALLE ARROYO; THENCE SOUTH 72 DEGREES 27' 15" EAST ALONG THE CENTER LINE OF SAID CALLE ARROYO 119.76 FEET; THENCE NORTH 11 DEGREES 05' 30" EAST PARALLEL WITH THE EASTERN LINE OF SAID LOT 98, 244.26 FEET TO A POINT ON THE NORTHERN LINE OF SAID LOT 97; THENCE NORTH 78 DEGREES 54' 30" WEST ALONG THE NORTHERN LINE OF SAID LOTS 97 AND 98. 119.00 FEET TO THE POINT OF BEGINNING.

AP No.: 195-170-010

**EXHIBIT J**

# EXHIBIT "J"

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PORTION OF LOTS 96 AND 97, AS DESIGNATED ON THE MAP OF MOUNT DIABLO ESTATE PARK SUBDIVISION, FIRST UNIT, WHICH MAP WAS FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, ON MAY 6, 1916 IN VOLUME 15 OF MAPS, AT PAGE 301, DESCRIBED AS FOLLOWS

BEGINNING ON THE NORTHERN LINE OF SAID LOT 97 AT THE EASTERN LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED FROM ST GEORGE DEVELOPMENT COMPANY, INC , TO MARY A WRIGHT, RECORDED NOVEMBER 4, 1963 IN VOLUME 4485 OF OFFICIAL RECORDS, AT PAGE 352, THENCE FROM SAID POINT OF BEGINNING SOUTH 11 DEGREES 05' 30" WEST, ALONG SAID EASTERN LINE 244 26 FEET TO THE CENTER LINE OF THE ROAD KNOWN AS CALLE ARROYO, THENCE SOUTH 72 DEGREES 27' 15" EAST ALONG SAID CENTER LINE 119 76 FEET TO THE WESTERN LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED FROM ST GEORGE DEVELOPMENT COMPANY, INC, TO ROBERT G VAN VOORHIS, ET UX, RECORDED JANUARY 6, 1964 IN VOLUME 4525 OF OFFICIAL RECORDS, AT PAGE 793, THENCE NORTH 11 DEGREES 05' 30" EAST ALONG SAID WESTERN LINE 257 72 FEET TO THE NORTHERN LINE OF SAID LOT 96, THENCE NORTH 78 DEGREES 54' 30" WEST ALONG THE NORTHERN LINE OF SAID LOTS 96 AND 97, 119 FEET TO THE POINT OF BEGINNING.

APN: 195-170-007

**EXHIBIT K**

# EXHIBIT "K"

Portion of Lots 95 and 96, Mount (sic) Diablo Estate Park, Subdivision 1st unit, filed May 16, 1916 in Volume 15 of Maps, at page 30, in the office of the Recorder of the County of Contra Costa, State of California, described as follows:

Beginning on the northern line of Lot 95, distant thereon north 78° 54' 30" west 356.53 feet from the northwestern corner of the parcel of land described in the deed from St. George Development Company, Inc., a corporation, to Le Roy H. Hough, et ux, dated July 26, 1963 and recorded August 12, 1963 in Volume 4427 of Official Records, at page 414; thence from said point of beginning, north 78° 54' 30" west along the northern line of said Lots 95 and 96, 119 feet; thence south 11° 05' 30" west, 257.72 feet to the center line of a road known as Calle Arroyo; thence along said center line, south 72° 27' 15" east 10.27 feet and south 34° 50' 30" east, 17.08 feet; thence leaving said center line, which bears south 74° 53' 38" east, 96.75 feet to a point distant thereon south 11° 05' 30" west 277.53 feet from the point of beginning; thence north 11° 05' 30" east, 277.53 feet to the point of beginning.

EXCEPTING THEREFROM: That portion lying within Calle Arroyo.

**EXHIBIT L**

# EXHIBIT "L"

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE:

PORTION OF LOTS 92, 93, 94 AND 95, AS DESIGNATED ON THE MAP OF MOUNT DIABLO ESTATE PARK SUBDIVISION, FIRST UNIT, FILED MAY 6, 1916, MAP BOOK 15, PAGE 301, CONTRA COSTA COUNTY RECORDS, DESCRIBED AS FOLLOWS:

BEGINNING ON THE NORTHERN LINE OF LOT 92 AT THE WESTERN LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED TO ROBERT P. TIERNAN, ET UX, RECORDED DECEMBER 13, 1963, BOOK 4511, PAGE 692, OFFICIAL RECORDS; THENCE FROM SAID POINT OF BEGINNING NORTH 78° 54' 30" WEST, ALONG THE NORTHERN LINE OF LOTS 92 AND 93, 113.50 FEET TO A POINT DISTANT THEREON SOUTH 78° 54' 30" EAST 119 FEET FROM THE NORTHEASTERN CORNER OF THE PARCEL OF LAND DESCRIBED IN THE DEED TO ROBERT G. VAN VOORHIS, ET UX, RECORDED JANUARY 6, 1964, BOOK 4525, PAGE 793, OFFICIAL RECORDS; THENCE SOUTH 11° 05' 30" WEST 162.47 FEET; THENCE SOUTH 36° 22' 00" WEST 54.48 FEET; THENCE SOUTH 71° 50' 00" WEST 52 FEET; THENCE SOUTH 86° 00' 00" WEST 52.17 FEET TO THE EAST LINE OF SAID VAN VOORHIS PARCEL (4525 OR 793), DISTANT THEREON SOUTH 11° 05'30" WEST 250.73 FEET FROM THE NORTHEAST CORNER OF SAID VAN VOORHIS PARCEL (4525 OR 793); THENCE SOUTH 11° 05' 30" WEST 26.80 FEET TO THE SOUTHEAST CORNER OF SAID VAN VOORHIS PARCEL (4525 OR 793); THENCE SOUTH 74° 53' 38" EAST 203.80 FEET TO THE CENTER LINE OF THE ROAD KNOWN AS CALLE ARROYO; THENCE SOUTH 69° 56' EAST ALONG SAID CENTER LINE 29.56 FEET TO THE SOUTHWESTERN CORNER OF SAID TIERNAN PARCEL (4511 OR 692); THENCE NORTH 11° 05' 30" EAST ALONG THE WESTERN LINE OF SAID TIERNAN PARCEL (4511 OR 692) 296.42 FEET TO THEPOINT OF BEGINNING.

PARCEL TWO:

A RIGHT OF WAY (NOT TO BE EXCLUSIVE) AS AN APPURTENANCE TO PARCEL ONE ABOVE, FOR USE AS A ROADWAY FOR VEHICLES OF ALL KINDS, PEDESTRIANS AND ANIMALS, FOR WATER, GAS, OIL AND SEWER PIPE LINES, AND FOR TELEPHONE, ELECTRIC LIGHTAND POWER LINES, TOGETHER WITH THE NECESSARY POLES ORCONDUITS TO CARRY SAID LINES, OVER A STRIP OF LAND 10 FEET IN WIDTH, THE SOUTHERN LINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING ON THE WESTERN LINE OF PARCEL ONE ABOVE, DISTANT THEREON NORTH 11° 05' 30" EAST 26.80 FEET FROM THE SOUTHWESTERN CORNER THEREOF;THENCE FROM SAID POINT OF BEGINNING NORTH 86° 00' 00" EAST 52.17 FEET; THENCE NORTH 71° 50' 00" EAST 52 FEET; THENCE NORTH 36° 22' 00" EAST 54.48 FEET TO THE WESTERN LINE OF PARCEL ONE ABOVE. THE NORTHERN TERMINUS OF SAID STRIP IS TO BE THE WESTERN LINE OF PARCEL ONE ABOVE.

PARCEL THREE:

A RIGHT OF WAY (NOT TO BE EXCLUSIVE) AS AN APPURTENANCE TO PARCEL ONE ABOVE, FOR USE AS A ROADWAY FOR VEHICLES OF ALL KINDS, PEDESTRIANS AND ANIMALS, FOR WATER, GAS, OIL AND SEWER PIPE LINES, AND FOR TELEPHONE, ELECTRIC LIGHT AND POWER LINES, TOGETHER WITH THE NECESSARY POLES OR CONDUITS TO CARRY SAID LINES, OVER A STRIP OF LAND 20 FEET IN WIDTH, THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING IN THE CENTER LINE OF THE ROAD KNOWN AS CALLE ARROYO, AT THE WESTERN LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED FROM ST. GEORGE DEVELOPMENT COMPANY TO ROBERT G. VAN VOORHIS, ET UX, DATED DECEMBER 19, 1963 AND RECORDED JANUARY 6, 1964, BOOK 4525, PAGE 793, OFFICIAL RECORDS;

THENCE FROM SAID POINT OF BEGINNING SOUTH 72° 27' 15" EAST 66 FEET; THENCE NORTH 86° 00' 00" EAST 55.33 FEET TO A POINT ON THE EASTERN LINE OF SAID VAN VOORHIS PARCEL, DISTANT THEREON SOUTH 11° 05' 30" WEST 250.73 FEET FROM THE NORTHEASTERN CORNER THEREOF.

EXCEPTING THEREFROM: THAT PORTION THEREOF LYING WITHIN CALLE ARROYO.

APN: 195-170-017

**EXHIBIT M**

# EXHIBIT "M"

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF CONTRA COSTA, UNINCORPORATED AREA, AND IS DESCRIBED AS FOLLOWS:

PORTION OF LOTS 90 AND 91, AS DESIGNATED ON THE MAP ENTITLED "MOUNT DIABLO ESTATE PARK SUBDIVISION, FIRST UNIT", WHICH MAP WAS FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, ON MAY 6, 1916 IN VOLUME 15 OF MAPS, AT PAGE 301, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTER LINE OF THE ROAD KNOWN AS CALLE ARROYO, AS SHOWN ON SAID MAP, FROM WHICH POINT THE SOUTHEAST CORNER OF LOT 89 OF SAID SUBDIVISION BEARS SOUTH 69 DEGREES 56' EAST, 112.21 FEET; THENCE FROM SAID POINT OF BEGINNING, CONTINUING ALONG THE CENTER LINE OF CALLE ARROYO, NORTH 69 DEGREES 56' WEST, 112.22 FEET; THENCE NORTH 11 DEGREES 05' 30" EAST, 316 FEET TO THE NORTHERN LINE OF SAID LOT 91; THENCE ALONG THE NORTHERN LINES OF LOTS 91 AND 90, SOUTH 78 DEGREES 54' 30" EAST, 103.01 FEET AND SOUTH 74 DEGREES 45' 15" EAST, 18.76 FEET; THENCE SOUTH 12 DEGREES 58' 03" WEST, 67.98 FEET; THENCE SOUTH 78 DEGREES 54' 30" EAST, 7 FEET; THENCE SOUTH 11 DEGREES 05' 30" WEST, 83.52 FEET; THENCE SOUTH 44 DEGREES 12' 30" WEST, 21.65 FEET; THENCE SOUTH 14 DEGREES 00' 30" WEST, 45.17 FEET; THENCE SOUTH 11 DEGREES 40' 30" WEST, 102.35 FEET TO THE NORTHERLY LINE OF CALLE ARROYO; THENCE SOUTH 12 DEGREES 58' 03" WEST, 15.11 FEET TO THE POINT OF BEGINNING.

A.P.N. 195-170-014

**EXHIBIT N**

# EXHIBIT "N"

**Description:** The land referred to herein is situated in the State of California, County of CONTRA COSTA, IN AN UNINCORPORATED AREA, and is described as follows:

PARCEL ONE:

LOTS 89, 90 AND A PORTION OF LOT 91, AS DESIGNATED ON THE MAP ENTITLED "MOUNT DIABLO ESTATE PARK SUBDIVISION FIRST UNIT", WHICH MAP WAS FILED IN THE OFFICE OF THE RECORDER OF THE STATE OF CALIFORNIA, ON MAY 6, 1916 IN VOLUME 15 OF MAPS, AT PAGE 301, DESCRIBED AS FOLLOWS:

BEGINNING ON THE EASTERN LINE OF LOT 89 AT THE CENTER LINE OF THE ROAD KNOWN AS CALLE ARROYO, AS SHOWN ON THE MAP, SAID POINT OF BEGINNING ALSO BEING THE SOUTHEAST CORNER OF SAID LOT 89; THENCE FROM SAID POINT OF BEGINNING NORTH 69° 56' WEST, ALONG SAID CENTER LINE ALSO BEING THE SOUTHERN LINE OF LOTS 89, 90 AND 91, 224.92 FEET; THENCE NORTH 11° 05' 30" EAST, 315.92 FEET TO THE NORTHERN LINE OF SAID LOT 91; THENCE ALONG THE NORTHERN LINES OF LOTS 90, 91 AND 89, SOUTH 78° 54' 30" EAST, 103.01 FEET AND SOUTH 74° 46' 15" EAST, 143.76 FEET TO THE EASTERN LINE OF LOT 89; THENCE SOUTH 15° 14' 30" WEST, ALONG SAID EASTERN LINE, 341.46 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM: THAT PORTION OF LAND CONVEYED IN THE DEED TO LLOYD M. IVES, ET AL, RECORDED MARCH 2, 1919, IN BOOK 4564, AT PAGE 628, SERIES NO. 19256.

PARCEL TWO:

A RIGHT OF WAY (NOT TO BE EXCLUSIVE), AS AN APPURTENANT OF PARCEL ONE ABOVE FOR INGRESS AND EGRESS OVER THE FOLLOWING DESCRIBED PARCEL OF LAND:

COMMENCING AT THE NORTHWESTERLY CORNER OF THE PARCEL OF LAND DESCRIBED ABOVE; THENCE SOUTH 12° 58' 03" WEST, 67.98 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE FROM SAID POINT OF BEGINNING, SOUTH 78° 54' 30" EAST, 7 FEET; THENCE SOUTH 11° 05' 30" WEST, 83.52 FEET; THENCE SOUTH 44° 12' 30" WEST, 21.65 FEET; THENCE NORTHEASTERLY IN A DIRECT LINE TO THE POINT OF BEGINNING.

PARCEL THREE:

A RIGHT OF WAY (NOT TO BE EXCLUSIVE) AS AN APPURTENANCE TO PARCEL ONE, ABOVE, FOR INGRESS AND EGRESS AND FOR SEWER PURPOSES OVER THE FOLLOWING DESCRIBED PARCEL OF LAND:

BEGINNING AT A POINT IN THE CENTER LINE OF THE ROAD KNOWN AS CALLE ARROYO AS SHOWN ON THE MAP, FROM WHICH POINT THE SOUTHEAST CORNER OF LOT 89 OF SAID SUBDIVISION, BEARS SOUTH 69° 56' EAST, 112.21 FEET; THENCE FROM SAID POINT OF BEGINNING; CONTINUING ALONG THE CENTER LINE OF CALLE ARROYO, NORTH 69° 56' WEST, 67.48 FEET; THENCE NORTH 43° 37' 30" EAST, 126.81 FEET; THENCE SOUTH 11° 40' 30" WEST, 102.35 FEET TO THE LINE OF CALLE ARROYO; THENCE SOUTH 12° 68' 03" WEST, 15.11 FEET TO THE POINT OF BEGINNING.

ASSESSOR'S PARCEL NO.: 195-170-015

**EXHIBIT O**

# EXHIBIT "O"

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN AN UNINCORPORATED AREA, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

**Parcel One:**

Parcel B, as said parcel is shown on the map of Subdivision MS 89-84 filed August 15, 1986 in Book 123 of Parcel Maps, Pages 37 and 38, Contra Costa County Records.

**Parcel Two:**

Being a portion of the lands described in the deed to Robert W. Canepa, et ux, recorded August 29, 2003 as Instrument 2003-432016, Contra Costa County Records, further described as follows:

Beginning at the northwest corner of said Canepa parcel;

Thence from said point of beginning along the northerly line of said Canepa parcel, also being the exterior boundary line of Parcel "B", as said Parcel "B" is shown on the Parcel Map of Subdivision MS 89-84, recorded August 15, 1986 in Book 123 of Parcel Maps at Page 37, Contra Costa County Records, south 74° 45' 45" east 26.71 feet to an angle point in said exterior boundary line;

Thence leaving said northerly line and said exterior boundary line south 56° 55' 03" west 40.17 feet to a point on the westerly line of said Canepa parcel;

Thence along said westerly line, also being the exterior boundary line of said Parcel "B", north 15° 14' 15" east 30.00 feet to the point of beginning.

This property transfer completes the requirements of the Lot Line Adjustment LL 03-0054 approved by the Contra Costa County Community Development Department approved November 10, 2003.

APN: 195-180-037

**EXHIBIT P**

# EXHIBIT "P"

**PARCEL ONE:**

LOT 83, "MOUNT DIABLO ESTATE PARK SUBDIVISION, FIRST UNIT", FILED MAY 6, 1916, VOLUME 15 OF MAPS, PAGE 301, CONTRA COSTA COUNTY RECORDS.

EXCEPTING FROM PARCEL ONE:

THAT PARCEL OF LAND DESCRIBED IN THE DEED FROM ETHEL P. LESTER, ET VIR, TO ETTA B. MC NEAR, RECORDED APRIL 16, 1923, VOLUME 434 OF DEEDS, AT PAGE 226, AS FOLLOWS:

"COMMENCING AT A POINT ON THE SOUTHWESTERLY CORNER OF LOT NUMBERED EIGHTY-THREE (83) AS SAID LOTS ARE DESIGNATED ON THAT CERTAIN MAP ENTITLED 'MOUNT DIABLO ESTATE PARK SUBDIVISION, FIRST UNIT', WHICH MAP WAS FILED IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, ON MAY 6TH, 1916 IN VOLUME 15 OF MAPS, AT PAGE 301, AND RUNNING THENCE EASTERLY ALONG THE SOUTHERLY LINE OF SAID LOT NUMBERED EIGHTY-THREE (83) TEN (10) FEET; THENCE AT RIGHT ANGLES NORTHERLY ONE HUNDRED AND TWENTY (120) FEET TO A POINT, THENCE AT RIGHT ANGLES WESTERLY TO A POINT ON THE WESTERLY LINE OF SAID LOT NUMBERED EIGHTY-THREE (83) TEN (10) FEET; THENCE SOUTHERLY ALONG THE WESTERLY LINE OF SAID LOT NUMBERED EIGHTY-THREE (83) ONE HUNDRED AND TWENTY (120) FEET TO THE POINT OF COMMENCEMENT."

**PARCEL TWO:**

THE RIGHT OF WAY GRANTED IN THE DEED FROM VIRGINIA H. BERRYHILL TO ALFRED M. SPERRY, ET UX, RECORDED JUNE 12, 1957, BOOK 2996, PAGE 373, AS FOLLOWS:

A RIGHT OF WAY, NOT TO BE EXCLUSIVE, OVER THAT PORTION LYING WITHIN THE NORTHWEST 1/4 OF SECTION 22, TOWNSHIP 1 SOUTH, RANGE 1 WEST, MOUNT DIABLO BASE AND MERIDIAN, AS AN APPURTENANCE TO PARCEL ONE ABOVE, FOR USE AS A ROADWAY FOR VEHICLES OF ALL KINDS, PEDESTRIANS AND ANIMALS, FOR WATER, GAS, OIL AND SEWER PIPE LINES AND FOR TELEPHONE, ELECTRIC LIGHT AND POWER LINES TOGETHER WITH THE NECESSARY POLES OR CONDUITS BEING A STRIP OF LAND 36 FEET IN WIDTH, THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 83; THENCE FROM SAID POINT OF BEGINNING, SOUTH 74° 45' 30" EAST, ALONG THE NORTH LINE OF SAID LOT 83, 100 FEET TO THE NORTHEAST CORNER THEREOF."

EXCEPTING THEREFROM THAT PORTION THEREOF LYING WITHIN PARCEL ONE ABOVE.

ASSESSOR'S PARCEL NO. 195-180-017

**EXHIBIT Q**

**EXHIBIT "Q"**

ALL THAT PORTION OF LOT 81 LYING WEST OF A LINE DRAWN PARALLEL WITH AND 50 FEET EASTERLY, MEASURED AT RIGHT ANGLES, FROM THE WEST LINE OF SAID LOT 81 AND ALL OF LOT 82, MAP OF MOUNT DIABLO ESTATES PARK SUBDIVISION, FIRST UNIT, FILED MAY 6, 1916, MAP BOOK 15, PAGE 301, CONTRA COSTA COUNTY RECORDS.

THE ABOVE DESCRIBED PROPERTY IS ALSO SHOWN ON THE RECORDS OF SURVEY FILED APRIL 17, 1996, IN BOOK 109 LICENSED SURVEYORS MAPS AT PAGE 2, CONTRA COSTA COUNTY RECORDS.

**EXHIBIT R**

# EXHIBIT "R"

Real property in the unincorporated area of the County of Contra Costa, State of California, described as follows:

PARCEL ONE

PORTION OF LOTS 79 AND 80, AS DESIGNATED ON THE MAP ENTITLED "MOUNT DIABLO ESTATE PARK SUBDIVISION, FIRST UNIT", WHICH MAP WAS FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA ON MAY 6, 1916 IN VOLUME 15 OF MAPS, AT PAGE 301, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST NORTHERLY CORNER OF SAID LOT 80; THENCE FROM SAID POINT OF BEGINNING SOUTH 74° 45' 30" EAST ALONG THE NORTH LINE OF SAID LOT 80, 100 FEET; THENCE SOUTH 15° 14' 30" EAST, 260.95 FEET TO THE CENTER OF CALLE ARROYO; THENCE SOUTH 85° 20' 45" WEST, ALONG SAID CENTER UNE, 101.74 FEET TO THE WEST UNE OF SAID LOT 80; THENCE NORTH 15° 14' 30" EAST ALONG SAID LINE, 279.63 FEET TO THE POINT OF BEGINNING.

PARCEL TWO

ALL THAT PORTION OF LOT 81, LYING EAST OF A LINE DRAWN PARALLEL WITH AND 50 FEET EASTERLY, MEASURED AT RIGHT ANGLES, FROM THE WEST LINE OF SAID LOT 81, AS DESIGNATED ON THE MAP ENTITLED, "MOUNT DIABLO ESTATE PARK SUBDMSION, FIRST UNIT", WHICH MAP WAS FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, ON MAY 6, 1916 IN VOLUME 15 OF MAPS, AT PAGE 301.

APN: 195-180-038

**EXHIBIT S**

# EXHIBIT "S"

Portion of Lots 79 and 80, map of Mount Diablo Estate Park Subdivision First Unit, filed May 6, 1916, Map Book 14, page 301, Contra Costa County Records and portion of the North 1/2 of Section 22, Township 1 South, Range 1 West, Mount Diablo Base and Meridian described as follows:

Beginning on the north line of Lot 80, at the east line of the parcel of land described in the deed to N. B. Douglas, recorded September 1, 1923, Book 444, Deed, page 290, said point being South 74 degrees 45' 30" east, 100 feet from the northwest corner of said Lot 80; thence from said point of beginning south 74 degrees 45' 30" east along the north line of Lot 80 and the north line of Lot 79, 100 feet; thence south 15 degrees 14' 30" west, 277.33 feet to the center line of Calle Arroyo; thence along said center line north 56 degrees 38' 30" west, 71.81 feet to the southeast corner of Lot 79; thence continuing along said center line north 65 degrees 20' 45" west, 32.29 feet to the east line of the above mentioned Douglas Tract, 444 Deed 290; thence north 15 degrees 14' 30" east along the east line of said Douglas Tract, 260.95 feet to the point of beginning.

A.P.N. 195-180-004

**EXHIBIT T**

# EXHIBIT "T"

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA , COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

Parcel B, as shown on the map of MS 73-70, filed November 20, 1970, Book 14, of Parcel Maps, page 45, Contra Costa County Records.

APN: 195-180-022

**EXHIBIT U**

# EXHIBIT "U"

That parcel of land in the unincorporated area of the County of Contra Costa, State of California, described as follows:

Portion of the West 1/2 of the Northeast 1/4 of Section 22, Township 1 South, Range 1 West, Mount Diablo Base and Meridian, containing 0.501 of an acre, more or less, described as follows:

Beginning at the northeast corner of the parcel of land described in the deed to A. J. Geldermann, et al, recorded August 7, 1951, Book 1803, Official Records, page 203; thence from said point of beginning north 9° 54' 15" east, 27.36 feet; thence north 12° 32' 45" west, 111.85 feet; thence north 79° 07' 23" west, 32.31 feet; thence north 53° 26' 10" west, 61.40 feet; thence north 72° 10' 43" west, 61.08 feet; thence south 10° 52' 37" west, 163.99 feet to the northwest corner of said Geldermann parcel, 1803 OR 203; thence south 79° 07' 23" east, along the north line of said Geldermann Parcel, 193.21 feet to the point of beginning.

**EXHIBIT V**

# Exhibit "V"

**For APN/Parcel ID(s): 195-160-002, 195-170-002, 195-170-004, 195-210-038, 195-210-041, 195-220-001 and 195-380-005**

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN AN UNINCORPORATED AREA, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE:

Parcel B, as shown on Parcel Map Subdivision MS 98-78, filed March 18, 1980, in Book 85 of Parcel Maps, at Page 10, and Parcel A, as shown on Parcel Map Subdivision MS 1-78, filed November 9, 1978, in Book 71 of Parcel Maps, at Page 48, and as corrected on Record of Survey, filed February 4, 1980, in Book 66 of Licensed Surveyor's Maps, at Page 36, and portion of Sections 15, 16, 21 and 22, Township 1 South, Range 1 West, Mount Diablo Base and Meridian, and a portion of the Tract of land as shown on the Map of Mount Diablo Estate Park Subdivision, First Unit, filed May 6, 1916, in Book 15 of Maps, Pages 301 and 302, in the office of the County Recorder of Contra Costa County, described as follows:

Beginning at a point on the South line of Section 16, Township 1 South, Range 1 West, which bears South 87° 50' West, 1918.84 feet from the Southeast corner of said Section 16; thence North 21° 13' 30" East, 370.38 feet; thence North 71° 08' 30" East, 2147.28 feet; thence North 45° 49' 45" East, 1309.30 feet; thence South 26° 45' 30" East, 273.69 feet; thence South 4° 48' 30" West, 406.28 feet; thence South 62° 45' 45" East, 635.30 feet and South 82° 31' 15" East, 820 feet to the most Northern corner of the parcel of land described as Parcel Two in the Deed from Diablo Properties, Inc., to Susan G. Hall, recorded June 14, 1948, in Book 1214 of Official Records of the County, at Page 229; thence running along the exterior boundary line of said Hall parcel as follows: South 0° 09' East, 249.17 feet and South 89° 47' 30" West, 216.36 feet to the most Western corner of said parcel, said point also being at the Northeastern corner of the parcel of land described as Parcel One in the Deed from Diablo Properties, Inc., to Susan G. Hall (1214 OR 229); thence along the Northern line of said Parcel One, hereinabove referred to as follows: South 89° 47' 30" West, 49.92 feet North 87° 49' 30" West, 341.09 feet, North 85° 49' West, 118.81 feet and South 20° 45' West, 89.40 feet to the Northeastern corner of the parcel of land described in the Deed from John P. Maxwell to Carelton F. Bryan, et ux, recorded July 3, 1937, in Book 444 of Official Records, of said County, at Page 62; thence running along the exterior boundary line of said parcel as follows: South 79° 19' 30" West, 124.38 feet; North 59° 58' West, 191.21 feet, North 89° 03' West, 137.55 feet, South 76° 28' West, 211.03 feet, South 5° 19' West, 233.60 feet, South 80° 17' East, 341.51 feet, South 63° 06' East, 267.56 feet and North 84° 19' East, 128.88 feet to the Southwestern corner of the parcel of land described as Parcel One in the Deed from Diablo Properties, Inc., to Susan G. Hall (1214 OR 229) hereinabove referred to; thence running along the Southern line of said parcel as follows: North 84° 19' East, 392.47 feet and South 89° 24' 30" East, 96.14 feet to the Southwestern corner of the parcel of land described as Parcel Two in said Hall Deed (1214 OR 229); thence along the Southern line of said Parcel Two as follows: North 89° 24' 30" East, 257.66 feet and South 70° 37' 30" East, 171.30 feet to the Southwestern corner of the parcel of land described as Parcel Three in the Deed from Diablo Properties, Inc., to Susan G. Hall (1214 OR 2239) hereinabove referred to; thence running along the exterior boundary line of said Parcel Three as follows: South 70° 37' 30" East, 76.49 feet, South 84° 07' East, 205.18 feet, North 41° 30' 30" East, 61.26 feet, North 7° 28' 30" West, 159.20 feet, North 32° 25' 30" East, 113.49 feet, North 65° 09' 30" East, 68.30 feet and North 76° 49' East, 148.44 feet to the most Eastern corner of said Parcel Three, said point also being on the exterior boundary line of the parcel of land described as Parcel One in the Deed from Title Insurance and Guaranty Company, a corporation to Diablo Properties, Inc., recorded May 6, 1948, in Book 1195 of Official Records of said County, at Page 487; thence running along the exterior boundary line of said Parcel (1195 OR 487) as follows: South 2° 13' East, 395.42 feet, South 51° 09' 15" West, 276.18 feet, North 82° 29' 45" West, 541.72 feet, North 88° 31' 30" West, 993.45 feet, South 10° 11' West, 86.28 feet, South 74° 43' 15" East, 418.19 feet, South 10° 11' West, 18.64 feet, South 74° 43' 15" East, 1089.56 feet, South 30° 21' 30" East, 163.16 feet, North 68° 30' 45" East, 102.79 feet, Easterly along the arc of a curve concave to the South having a radius of 292.79 feet an arc distance of 323.34 feet, Northeasterly along the arc of a reverse curve having a radius of 60.31 feet, an arc distance of 124.01 feet, South 69° 23' 45" East, 252.86 feet, Southerly along the arc of a curve concave to the West having a radius of 50 feet, an arc distance of 96.17 feet, South 40° 48' 45" West, 127.08 feet and South 15° 27' 30" West, 101.76 feet; thence leaving said exterior boundary line, South 75°

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(continued)

18' 15" West, 151.21 feet, North 78° 39' 45" West, 66.40 feet, South 69° 20' 15" West, 99.60 feet, South 61° 05' 15" West 74.77 feet, North 81° 34' West, 100 feet, North 70° 08' 53" West, 88.52 feet, South 87° 27' 15" West, 25.39 feet, North 79° 07' 23" West, 211.28 feet, South 74° 04' 09" West, 151,11 feet, South 43° 40' 26" East, 95.48 feet, South 32° 22' 45" East, 43.86 feet, Southerly along the arc of a curve concave to the West having a radius of 60 feet, an arc distance of 62.93 feet, South 27° 37' 15" West, 40.77 feet, Southwesterly along the arc of a curve concave to the Northwest having a radius of 20 feet, an arc distance of 22.77 feet, North 87° 08' 45" West, 90.20 feet and North 71° 20' 20" West, 110.24 feet to the direct extension Northeasterly of the Northeastern line of Lot 141, as said lot is shown on the Map of Mount Diablo Estate Park Subdivision, First Unit, hereinabove referred to; thence along said extended line, South 9° 44' 15' West, 20.24 feet, more or less, to the Northeastern corner of said Lot 141; said point also being on the exterior boundary line of said Diablo Properties parcel (1195 OR 487); thence along said exterior boundary line being also along the Northern line of Lots 141, 140, 137, 136, 133, 132, 129, 128, 125, 124, 121, 120, 117, 116, 113, 112, 109, 108, 107, 106, 105, and 104, as shown on said Map hereinabove referred to as follows: Westerly along the arc of a curve concave to the South having a radius of 660.56 feet an arc distance of 133.34 feet; North 77° 21' 30" West, 1028.60 feet, Westerly along the arc of a curve concave to the North having a radius of 1250.65 feet, an arc distance of 304.59 feet, North 63° 23' 15" West, 195.52 feet, Westerly along the arc of a curve concave to the South, having a radius of 1546.88 feet, an arc distance of 250.63 feet, North 72° 41' 15" West, 229.70 feet and Westerly along the arc of a curve concave to the South having a radius of 733.31 feet, an arc distance of 136.47 feet to the most Eastern corner of the parcel of land described in the Deed from Title Insurance and Guaranty Company to Emil A. Hagstrom, recorded December 8, 1941, in Book 627 of Official Records, Page 377; thence along the exterior boundary line of said Hagstrom parcel as follows: North 72° 40' 15" West, 200 feet and South 17° 19' 45" West, 68.90 feet to the Northwestern corner of Lot 102, as shown on said Map of Mount Diablo Estate Park Subdivision, First Unit; thence along the Western line of said Lot 102, being also along the exterior boundary line of said Diablo Properties parcel, South 17° 19' 45" West, 217.06 feet; thence North 72° 40' 15" West, 20 feet to the Southeastern corner of the parcel of land described in the Deed from Mount Diablo Country Club to Henry C. Carlisle, recorded June 29, 1927, in Book 90 of Official Records, Page 142; thence running along the exterior boundary line of said Parcel, as follows: North 17° 19' 45" East, 239.18 feet, North 69° 25' 15" West, 41.76 feet to the most Northern corner of the parcel of land described in the deed from Title Insurance and Guaranty Company to Henry C. Carlisle, recorded September 28, 1942 in Book 703 of Official Records, Page 145; thence along the Northern and Western lines of said Parcel, as follows: South 89° 29' 30" West, 154.86 feet and South 8° 51' West, 1 foot to a corner point on the Eastern line of the parcel of land described in the deed from Title Insurance and Guaranty Company to Frank H. Mills, et ux, recorded December 14, 1943, in Book 766 of Official Records, Page 57; thence running along the Eastern line of said Mills Parcel, as follows: South 89° 29' 30" West, 46.31 feet, North 9° 41' East, 326.52 feet to the Southeastern corner of the parcel of land described in the Deed from Title Insurance and Guaranty to William C. Helfrich, et ux, recorded December 14, 1943, in Book 766, of Official Records, Page 55; thence running along the exterior boundary line of said Helfrich Parcel as follows: North 9° 41' East, 310.08 feet, North 46° 50' West 88.50 feet, North 75° 06' West, 140.55 feet, South 41° 15' West, 98.99 feet, South 86° 15' West, 200 feet, North 48° 45' West, 98.99 feet, South 86° 15' West, 323 feet to the Northeastern corner of the parcel of land described in the Deed from Laurence Curtola, et ux, to William Charles Helfrich, et ux, recorded August 10, 1950, in Book 1611 of Official Records, Page 505; thence running along the exterior boundary of said Helfrich Parcel (1611 OR 505), as follows: South 86° 15' West, 157.85 feet and South 3° 57' 30" West, 832.88 feet more or less to the Southern line of said Diablo Properties Parcel (1195 OR 487); thence along said Southern line as follows: South 86° 07' West, 961.62 feet, North 28° 46' 45" West, 488.05 feet and North 21° 13' 30" East, 330.22 feet to the point of beginning.

Excepting therefrom items 1 through12 below:

1. Lots 79 to 100, inclusive as shown on the Map of Mount Diablo Estate Park Subdivision, First Unit, filed May 16, 1916, in Book 15 of Maps, Page 301, in the Office of the County Recorder of Contra Costa County, and a portion of Section 22, Township 1 South, Range 1 West, Mount Diablo Base and Meridian, described as follows:

Beginning at a point on the Eastern line of the Northwest quarter of Section 22, which is distant South 0° 13' East,

Legal Description
(continued)

728.70 feet from the Northeast corner of said Northwest quarter; thence South 74° 45' 30" East, 265.60 feet; thence South 61° 41' 30" West, 105 feet, more or less to the exterior boundary line of the parcel of land described in the Deed from George D. Greenwood, et ux, to W.W. Potter, recorded April 14, 1928, in Book 128 of Official Records, Page 408; thence along the exterior boundary line of said Potter Parcel, as follows: South 15° 14' 30" East, 29 feet more or less, to an angle point therein, South 33° 03' 30" East, 103.79 feet, South 78° 17' 30" East, 97.72 feet, South 15° 14' 30" West, 195.20 feet, North 65° 49' West, 106.25 feet and North 56° 38' 30" West, 100 feet to the most Southern corner of the parcel of land described in the Deed from Mount Diablo Country Club to Grace M. Rhodin, recorded February 23, 1924, in Book 470 of Deeds, Page 46; thence along the Southern line of said Rhodin Parcel, North 56° 38' 30" West, 177.04 feet to the most Western corner of said parcel (470 D 46) said point also being the Southeastern corner of Exception No. 1, as described in said Deed to Diablo Properties, Inc. (1195 OR 487); thence along the Southern line of said Exception No. 1, as follows: North 85° 20' 45" West, 505.71 feet; South 75° 44' 30" West, 99.38 feet, North 87° 33' 30" West, 137.64 feet; North 77° 55' 30" West, 89.04 feet, North 87° 38' West, 147.92 feet, North 69° 56' West, 444.11 feet, South 81° 35' 45" West, 153 feet, North 57° 47' 15" West, 74.86 feet; North 34° 50' 30" West, 71.35 feet, North 72° 27' 15" West, 448.95 feet, North 48° 33' West, 29.61 feet and North 11° 5' 30" East to the Southeastern line of the parcel of land described as Parcel Two in the Deed from Mount Diablo Country Club to Martha H. Ransome, recorded May 27, 1924, in Book 462 of Deeds, Page 457; thence along the exterior boundary line of said Ransome Parcel as follows: North 72° 27' 15" West, 10.9 feet; North 11° 05' 30" East, 93.46 feet and North 61° 10' 30" East, 18 feet to the Western line of Lot 100, as shown on said map of Mount Diablo Estate Park Subdivision, First Unit; thence North 11° 05' 30" East along said Western line, 91 feet, more or less, to the Northwestern corner of said lot; thence South 78° 54' 30" East along the Northern line of Lots 100 and 99, 108 feet, more or less, to the most Western corner of the parcel of land described as Parcel One in the Deed from Mount Diablo Country Club to Martha H. Ransome, recorded May 27, 1924, in Book 462 of Deeds, Page 457; thence along the Northern line of said parcel as follows: North 61° 10' 30" East, 80.42 feet and North 82° 40' 30" East, 550 feet to the most Northern corner of the parcel of land described in the Deed from Mount Diablo Country Club to Martha Ransome, et al, recorded April 10, 1922, in Book 409 of Deeds, Page 205; thence South 74° 45' 30" East, 1000 feet to the Northwestern corner of the parcel of land described in the Deed from Mount Diablo Country Club to Ethel P. Lestor, recorded April 1, 1925, in Book 493 of Deeds, Page 57; thence Easterly along the Northern line of said Lestor Parcel, 100 feet to the Northeastern corner thereof; thence Southerly along the Easterly line of said Parcel, 200 feet to the Northwestern corner of Lot 82, as said lot is shown on said map hereinabove referred to; thence South 74° 45' 15" East, 334.40 feet to the point of beginning.

2. The parcel of land described as Parcel One in the Deed from Laurence Curtola, et ux, to Community Land Development Co., a California Corporation, recorded March 16, 1951, in Book 1732, of Official Records, Page 237, as follows:

That portion of Parcel One as described in the Deed of Trust from Laurence Curtola, et ux, to Corporation of America, as Trustee for Bank of America National Trust and Savings Association, as beneficiary, dated August 22, 1950, recorded September 1, 1950 under Recorder's Serial No. 44813, and being a portion of the North 1/2 of the Northeast 1/4 of Section 21 and a portion of the South 1/2 of the Southeast 1/4 of Section 16, Township 1 South, Range 1 West, Mount Diablo Base and Meridian, described as follows:

Beginning at the Northwestern corner of the parcel of land described in the Deed from Laurence Curtola, et ux, to William Charles Helfrich, et ux, dated June 12, 1950 recorded August 10, 1950, under Recorder's Serial No. 40324; thence South 3° 57' 30" West along the Western line of Helfrich Parcel, 832.88 feet to the South line of Parcel One as described in the Deed from Title Insurance & Guaranty Company to Diablo Properties, Inc., dated April 28, 1948, recorded May 6, 1948, in Book 1195 of Official Records, Page 487; thence South 86° 07' West along said South line, 961.62 feet to the Southwest corner of said Diablo Properties, Inc., Parcel (1195 OR 487); thence along the West line of said Parcel (1195 OR 487), North 28° 46' 45" West, 488.05 feet, and North 21° 13' 20" East, 481.23 feet; thence leaving said West line, North 85° 53' East to a point which bears North 3° 57' 30" East 57.57 feet from the point of beginning; thence South 3° 57' 30" West, 57.57 feet to the point of beginning.

Legal Description
(continued)

Saving and Excepting therefrom:

That portion of the parcel above lying North of a line drawn parallel with and 30 feet Southerly at right angles from the North line thereof.

3. That portion thereof lying within the parcels of land described as Parcels One and Two in the Deed from Laurence Curtola, et ux, to Country Lands, Inc., a Corporation, dated March 14, 1956, recorded April 16, 1956, in Book 2745, of Official Records, Page 481.

4. The tracts of land described as Parcels One and Two in the Deed from Laurence Curtola, et ux, to Ray O'Flying, et ux, recorded May 29, 1957, in Book 2990, of Official Records, Page 234.

5. The parcel of land described in the Deed from Laurence Curtola, et ux, to Ray O'Flying, et ux recorded July 18, 1957, in Book 3015, Official Records, Page 514.

6. Portion of the Northeast 1/4 of Section 22, Township 1 South Range 1 West, Mount Diablo Base and Meridian, described as follows:

Beginning at the Northwest corner of the parcel of land described as Parcel Two in the Deed from Laurence Curtola, et ux, to Ray O'Flying, et ux, dated March 14, 1957, recorded May 29, 1957, in Book 2990 of Official Records, Page 234; thence from said point of beginning, South 7° 10' 35" West along the Western line thereof, 146.97 feet and South 14° 46' 25" East, 97.55 feet to the Northwest corner of the parcel of land described in the Deed from Laurence Curtola, et ux, to Ray O'Flying, et ux, dated July 17, 1957, recorded July 18, 1957, in Book 3015 of Official Records, Page 514; thence along the Western and Southern line of said O'Flying Parcel (3015 OR 514) South 14° 46' 25" East, 69 feet, and Easterly to the Southeast corner of said parcel (3015 OR 514) being the center line of La Salida; thence leaving the Southern line of said O'Flying Parcel (3015 OR 514) South 15° 27' 30" West along the center line of said La Salida Road to the Northern line of the parcel of land described as Parcel One in the Deed from Laurence Curtola to Robert A. Shipley, et ux, dated July 20, 1951, recorded August 1, 1951, in Book 1800 of Official Records, Page 541; thence along the Northern line of said Shipley Parcel (1800 OR 541) and along the Northern line of the parcel of land described as Parcel Two in said Deed to Shipley (1800 OR 541) as follows: South 75° 18' 15" West, 151.21 feet; North 78° 39' 45" West, 66.40 feet; and South 69° 20' 15" West, 49.60 feet; thence leaving said Northerly line North 17° 28' 32" West, 151.37 feet; thence North 53° 45' East, 120.77 feet; thence Northerly along the arc of a curve to the left with a radius of 75 feet, the center of which bears North 36° 15' West, an arc distance 51.84 feet; thence North 14° 09' East, West an arc distance of 51.84 feet; thence North 14° 09' East 153.31 feet to the center line of said La Salida; thence South 69° 13' 15" East, along said center line to the point of beginning.

7. The parcel of land described in the Deed to William A. Highfield, et ux, recorded July 18, 1980 in Book 9917 of Official Records, Page 794, described as Parcel A, as shown on Parcel Map Subdivisions MS 98-78, filed March 13, 1980, in Book 85 of Parcel Maps, at Page 10, Contra Costa County Records.

8. All of Parcel B, as shown on Parcel Map Subdivision MS 1-78 filed November 9, 1978, in Book 71 of Parcel Maps, at Page 48 and that portion of Parcel A, as shown on said map (71 PM 48) and as shown on the Record of Survey filed February 4, 1980, in Book 66 of Licensed Surveyor's Maps, at Page 36, Contra Costa County Records.

9. The parcel of land described in the Grant Deed to Sherman W. Terry and Betty H. Sherry, Trustees of the Terry Trust dated July 31, 1986, recorded October 15, 1986, Instrument No. 86-181963, Book 13193, Page 806, Official Records.

Legal Description
(continued)

10. The parcel of land described in the Grant Deed to Sherman W. Terry and Betty H. Terry, Trustees of the Terry Trust dated July 31, 1986, recorded March 30, 2000, Instrument No. 2000-63492, Official Records.

11. The parcel of land described in the Grant Deed to Jeffry Miller and Karen L. Miller, recorded May 23, 2012, Instrument No. 2012-119755, Official Records.

12. The parcel of land described in Exhibit "A" Legal Description, Adjusted APN 195-210-037, in the Agreement for Lot Line Adjustment, dated August 1, 2012, executed by and between Diablo County Club, a nonprofit California corporation and Stephen I. R. McNichols, Jr., et al, recorded March 25, 2013, Instrument No. 2013-73349, Official Records.

APN'S: 195-160-002, 195-210-041 (Portion) 195-210-038 (Portion) and195-380-05 (Portion)

Parcel Two:

Lot 9, as shown on the Map of Resubdivision of Lots 330 to 348, inclusive, Mount Diablo Estate Park Subdivision, First Unit, filed July 12, 1924, in Book 19 of Maps, Page 455, Lots 329, 349 and 375 and a portion of Lots 325, 326, 327, 328, 350 and 374, as shown on the Map of Mount Diablo Estate Park Subdivision, First Unit, filed May 6, 1916, in Book 15 of Maps, Pages 301 and 302, in the Office of the County Recorder of Contra Costa County, described as a whole, as follows:

Beginning at the most Southern corner of Lot 9, as shown on said Map (19 M 455); thence running along the Southern line of Lots 329, 328, 327, 326 and 325, (15 M 301 and 302) as follows: North 68° 30' 45" East, 102.79 feet, Easterly along the arc of a curve concave to the South having a radius of 292.79 feet and arc distance of 323.34 feet and Northeasterly along the arc of a reverse curve having a radius of 60.31 feet an arc distance of 124.01 feet to the Southeastern corner of the parcel of land described in the Deed from Laurence Curtola, et ux, to Alfred B. Layton, et ux, recorded October 26, 1948, in Book 1310 of Official Records, Page 332; thence along the Southern and Western line of said parcel as follows: North 75° 57' West 235.44 feet, North 6° 48' 30" East, 57.18 feet and North 22° 35' 30" West, 88 feet to the Southwestern corner of the parcel of land described in the Deed from Louise F. Sims to Alfred B. Layton, et ux, recorded August 8, 1945, in Book 818 of Official Records, Page 395; thence along the Western line of said Layton Parcel (818 OR 395) and the Northerly prolongation thereof, North 13° 58' 30" East, 382.02 feet to a point in the center line of a road, said point also being at the Northwest corner of the Parcel of land described in the Deed from Lorence A. Hutchinson and Ely C. Hutchinson to Alfred B. Layton, et ux, recorded May 3, 1944, in Book 775 of Official Records, Page 478; thence North 66° 01' 30" West along the center line of said road to the center line of the Del Norte as shown on said map; thence North 18° 01' 45" East, along said last named center line, 84.52 feet to the center line of Vista Grande as shown on said map; thence along said last named center line as follows: North 70° 30' 15" West, 36.09 feet and Westerly along the arc of a curb concave to the Northwest, having a radius of 187.17 with an arc distance of 48.09 feet to the most Northern corner of Lot 375, also shown on said map hereinabove referred to; thence running along the exterior boundary line of Lots 375 and 9, hereinabove referred to, as follows: South 51° 09' 15" West, 276.18 feet, North 82° 29' 45" West, 541.94 feet, North 88° 31' 15" West, 248.22 feet, South 83° 31' 30" East, 254.88 feet, South 82° 29' 45" East, 508.82 feet, South 11° 19' 15" West, 392.61 feet and South 30° 21' 30" East, 163.16 feet to the point of beginning.

Excepting from Parcel Two:

The parcel of land described in the Deed from Diablo Country Club, a corporation, to Virginia R. Patten, a widow, recorded April 1, 1974, in Book 7190, Page 296, Official Records of Contra Costa County, Instrument No. 25492.

APN'S: 195-220-006, 195-230-006 & 012

Legal Description
(continued)

Parcel Three:

Lot 8, as shown on the Map of Resubdivision of Lots 330 to 348 inclusive, Mount Diablo Park Estate Subdivision First Unit, filed July 12, 1924, in Book 19 of Maps, Page 455, in the Office of the County Recorder of Contra Costa County.

APN'S: 195-220-001

Parcel Four:

Portion of Lot 79, as shown on the Map of Mount Diablo Estate Park Subdivision First Unit, filed May 6, 1916, in Book 15 of Maps, Pages 301 and 302, in the Office of the County Recorder of Contra Costa County, described as follows:

Beginning at the Northeast corner of said Lot 79; thence from said point of beginning North 74° 50' 30" West to the Northeast corner of the Parcel of land described in the Deed from George D. Greenwood, et ux, to W.W. Potter, dated April 11, 1928, recorded April 14, 1928, in Book 128 of Official Records, Page 408; thence South 15° 14' 30" West to the Southerly line of said Lot 79; thence along the Southerly line of said Lot 79 to the point of beginning.

APN: 195-210-038 (Portion)

Parcel Five:

All that portion of Lots 93, 94 and 95, as shown on the Map of Mount Diablo Estate Park Subdivision First Unit, filed May 6, 1916, in Book 15 of Maps, Pages 301 and 302, in the Office of the County Recorder of Contra Costa County, lying South of a line drawn to connect the Southeasterly corner of Lot 93 with the Southwesterly corner of Lot 95.

APN: 195-170-004

Parcel Six:

Portion of Lots 99 and 100, as shown on the Map of Mount Diablo Estate Park Subdivision, First Unit, filed May 6, 1916, in Book 15 of Maps, Pages 301 and 302 in the Office of the County Recorder of Contra Costa County, described as follows:

Beginning at the Northwest corner of Lot 100; thence South 78° 54-1/2' East, 101.49 feet; thence South 61° 10-1/2' West, 127 feet; thence North 11° 05-1/2 East, 84 feet to the point of beginning.

APN: 195-170-002

Parcel Seven:

Portion of the West 1/2 of the Northeast 1/4 of Section 22, Township 1 South, Range 1 West, Mount Diablo Base and Meridian, described as follows:

Beginning on the exterior boundary of parcel of land described as Parcel Two in the Deed from County Lands, Inc., a corporation to Laurence Curtola, et ux, recorded April 16, 1956, in Book 2745 of Official Records, Page 479, at the most Western corner of the Parcel of land described as Parcel One in the Deed from Country Lands, Inc., a corporation to Theodore S. Beem, et ux, recorded September 29, 1959, in Book 3463 of Official Records, Page 375; thence from said point of beginning along the exterior boundary of said Curtola Parcel (2745 OR 479),

as follows: North 32° 22' 45" West, 17.27 feet, North 43° 40' 26" West, 95.48 feet, and North 74° 04' 09" East, to the West line of said Beem Parcel One (3463 OR 375); thence South 15° 43' 47" West, along said West line, 118.19 feet to the point of beginning.

Excepting Therefrom:

The parcel of land described in the Quitclaim Deed from George F. Shank to Glee Ramsey Shank, a married woman, recorded January 12, 1973, in Book 6841, Page 496, Official Records of Contra Costa County, Instrument No. 3591.

APN: 195-210-038 (Portion)

Parcel Eight:

Portion of the West 1/2 of the Northeast 1/4 of Section 22, Township 1 South Range 1 West, Mount Diablo Base and Meridian, described as follows:

Beginning at a 2 X 2 Hub Tagged L.S. 2298, marking the Southeasterly corner of the parcel of land described in the Quitclaim Deed from Theodore S. Beem to Glee E. Beem, recorded April 27, 1967 in Book 5356 of Official Records of Contra Costa County at Page 519; thence from said point of beginning, along the Easterly line of said Beem Parcel (5356 OR 519), North 10° 52' 37" East, 230.38 feet to the true point of beginning; thence from said true point of beginning, along the arc of a non-tangent curve to the left, whose center bears South 23° 45' 53" West, having a radius of 70.95 feet, through a central angle of 33° 44' 05" an arc distance of 41.77 feet to a point of compound curvature; thence along the arc of said compound curvature to the left, whose center bears South 9° 58' 12" East, having a radius of 180.00 feet, through a central angle of 21° 29' 30", an arc distance of 67.52 feet to a point on the Westerly line of said Beem Parcel (5356 OR 516); thence along said Westerly line, North 10° 52' 37" East, 22.36 feet; thence along the arc of a tangent curve to the right having a radius of 31.94 feet; through a central angle of 96° 56' 40" an arc distance of 54.04 feet; thence South 72° 10' 43" East, 62.91 feet along the Northerly line of said Parcel (5356 OR 519) to the Northeast corner; thence South 10° 52' 37" West along the Easterly line of said Parcel, 8.44 feet to the true point of beginning.

APN: 195-210-038 (Portion)

Parcel Nine:

Portion of the West 1/2 of the Northeast 1/4 of Section 22, Township 1 South Range, 1 West, Mount Diablo Base and Meridian, described as follows:

Beginning at a 2 X 2 Hub Tagged L.S. 2298 marking the Southeasterly corner of the Parcel of land described in the Quitclaimed Deed from Theodore S. Beem to Glee E. Beem, recorded April 27, 1967, in Book 5356 of Official Records of Contra Costa County at Page 519; thence from said point of beginning along the Southerly line of said Beem Parcel (5356 OR 519) North 50° 26' 17" West, 55.06 feet to the true point of beginning; thence from true point of beginning continuing along said Southerly line North 50° 26' 17" West, 47.56 feet and North 32° 22' 45" West, 47.56 feet and North 32° 22' 45" feet; 26.59 feet to the Southwesterly corner of said Parcel (5356 OR 519); thence along the Westerly line of said Parcel (5356 OR 519) North 15° 43' 47" East, 15.52 feet; thence leaving said Westerly line, South 33° 26' 53" East, 15.69 feet; thence South 60° 35' 15" East, 33.58 feet; thence South 13° 00' 16" East, 39.12 feet to the true point of beginning.

APN: 195-210-041 (Portion)

Parcel Ten:

Legal Description
(continued)

Beginning at the Southern end of the course and distance designated as "South 26° 45-1/2' East, 273.69 feet", of the parcel of land firstly described in the Deed from Mount Diablo Park Commission, a corporation and Home Foundation, Inc., a corporation to Diablo Country Club, a corporation, recorded January 31, 1920, in Book 359 of Deeds, Page 153, Contra Costa County Record; thence continuing along the exterior boundary lines of the said parcel of land firstly described in said Deed (being the same as the exterior boundary lines of the parcel of land secondly described in the Deed from the Hibernia Savings and Loan Association, a corporation to G.W. McNear, recorded April 24, 1924, in Book 470 of Deeds, Page 224, Contra Costa County Records), the three following courses and distances: South 4° 48' 30" West, 406.28 feet, South 62° 45' 45" East, 635.30 feet and South 82° 31' 15" East, 820 feet; thence leaving the exterior boundary lines of the land firstly described in said Deed recorded in Book 359 of Deeds, Page 153, Contra Costa County Records, and thence continuing along the exterior boundary lines of the parcel of land secondly described in said Deed recorded in book 470 of Deeds, Page 224, Contra Costa County Records, (being the same as the exterior boundary lines of the lands shown on the Map of Mount Diablo Estate Park Subdivision Third Unit, filed December 12, 1952, in Book 49 of Maps, Page 7, Contra Costa County Records; the five following courses and distances: North 0° 13' West, 100.91 feet; North 82° 31' 15" West, 560 feet; South 81° 51' West, 261.9 feet; North 50° 47' 30" West, 565 feet; and North 17° 28' 30" West, 325 feet to the point of beginning.

APN: 195-380-005 (Portion)

Parcel Eleven:

Being a portion of that certain parcel of land, granted to Sherman W. Terry and Betty H. Terry by Deed, recorded on October 15, 1986 in Book 13193 of Contra Costa County Official Records at Page 806 in the Office of the County Recorder of Contra Costa County, more particularly described as follows:

Commencing at the Easternmost corner of said parcel of land, said corner lying on the centerline of Alameda Diablo;

Thence, along the Northeastern line of said parcel North 50° 26' 17" West 248.51 feet to the Northernmost corner of said parcel and to the point of beginning for this description;

Thence, from said point of beginning continuing along the boundary of said parcel, along the arc of a non-tangent 60.00 foot radius curve to the right, whose radius point bears South 57° 42' 23" West, through a central angle of 53° 52' 48", an arc distance of 56.42 feet;

Thence, leaving said boundary North 21° 35' 11" East 40.48 feet to the previously mentioned Northeastern line (13196 OR 806);

Thence, along said Northeastern line North 50° 26' 17" West 25.90 feet to the point of beginning for this description.

APN: 195-210-038 (Portion)

## 102: RESPONSE TO ROBERT TIERNAN, JR.

**102A:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**102B:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**102C:** The Town is aware of the ongoing litigation, but has no substantial evidence that the current state of the litigation has changed the patterns of cyclists using either Diablo Road and/or the streets within the community of Diablo. A review of minutes for the Board meetings of the Diablo Community Services District would indicate that at least some bicyclists are continuing to ride through Diablo. Any assumptions as to the ultimate impact of that lawsuit would be speculative. Regardless of the outcome of the lawsuit, bike volume is not an input factor in determining BLOS.

## David Crompton

**From:** Kelly B. Trevethan <kellytrevethan@gmail.com>
**Sent:** Sunday, October 14, 2018 12:03 PM
**To:** David Crompton
**Subject:** Comments on the Magee Preserve DREIR
**Attachments:** DCSD letter to Honorable Candace Andersen and Mary Piepho (1).docx

Dear Town of Danville City Council and Planning Commission, and Senior Planner David Crompton:

Please accept this letter as comments on the Draft Revised Environmental Impact Report for the Magee Preserve Project.

Diablo residents are your neighbors. I am a candidate for one of the three open seats on the Diablo Community Services District Board ("DCSD") of Directors. As the attached letter sent to you by the DCSD Board in 2015 attests, pedestrian, bicyclist and motorist safety both on Diablo Road and in our community is of grave concern to the Board and to Diablo residents.

In that three of the four candidates running for election to the Board will be taking seats as of December 7th (when we may be sworn in), I thought it especially important that I share my comments on the Town's draft revised Environmental Impact Report ("DREIR") for the Magee Preserve Project (formerly known as the Magee Ranches Project) with you.

Diablo Road is unsafe for motorists, bicyclists and pedestrians. The Magee Ranches project will add significantly more car-trips to the already congested road, and therefore worsen safety significantly. Before the project is approved, or as a condition for its approval, major bicycle safety improvements must be undertaken on the road. In my view, it is a matter of common sense and public safety.

A

Thank you for your consideration.

Warmest Regards,

Kelly

Kelly Trevethan
DCSD Candidate

**DIABLO COMMUNITY SERVICES DISTRICT**

**P.O. BOX 321**

**DIABLO, CA 94528**

February 2, 2015

Honorable Candace Andersen

County Supervisor, District 2

309 Diablo Road
Danville, CA 94526

Honorable Mary Piepho

County Supervisor, District 3

3361 Walnut Boulevard, Suite 140
Brentwood, CA 94513

Dear Supervisors Andersen and Piepho:

We are writing to ask for your assistance in rectifying the intolerably dangerous conditions for motorists, bicyclists, and pedestrians in the community of Diablo and in the Diablo Road corridor between Green Valley Road and Mt. Diablo Scenic Blvd. Each of your districts covers a portion of that area.

As you are likely aware, Diablo Road is the gateway to Mt. Diablo State Park for many tens of thousands of bicyclists every year and the number is steadily increasing**. In fact, we believe that the number of bicyclists traveling Diablo Road to get to the Park during the 2012/13 fiscal year was probably upwards of 40,000 judging from the following California State Park System Statistical Reports, found at** http://www.parks.ca.gov/?page_id=23308 .

California State Park System Statistical Reports

| Fiscal Year of Report | Free Day Use (entering through the north or the south entrances) |
|---|---|
| 2012/13 | 79,824 (page 21) |
| 2011/12 | 74,631 " |

| | | |
|---|---|---|
| 2010/11 | 66,965 | (page 21) |
| 2009/10 | 63,845 | " |
| 2008/09 | 53,918 | " |
| 2007/08 | 47,693 | " |

The "Free Day Use" statistical category is almost exclusively bicycle traffic, rather than pedestrian; very few pedestrians enter the park through either of the two entrance gates because those gates are too far from residential neighborhoods and parking areas outside the park.

Bicycle counts for 2014 (which haven't yet been officially published) received from Park Superintendent Ryen Goering (Contra Solano Sector Superintendent, California State Parks) indicate that more than half of the counted bicyclists typically enter through the south gate. **So that implies that for 2012/2013, over 40,000 cyclists entered the Park through the south gate.** And that number is clearly an underestimate, according to Superintendent Goering and Supervising Ranger Dan Stefanisko, because many cyclists enter the gates when due to understaffing there is no ranger there to count them.

Based on our observations and information from local bicyclists, we believe that the vast majority of those 40,000+ bicyclists using the South Gate entrance travel east along Diablo Road from Green Valley Road to Mt. Diablo Scenic Blvd. to get there, rather than traveling from Blackhawk Road west to Mt. Diablo Scenic. Most of those bicyclists then travel west along Diablo Road as they return home. In addition some of the bicyclists entering through the north gate park entrance subsequently exit the park through the south gate and then travel west along Diablo Road. **So it is reasonable to believe that in fiscal year 2012/2013 there were over 80,000 bicyclist trips on Diablo Road associated with travel to and from Mt. Diablo State Park.**

Furthermore, there has been a tremendous 67% increase in bicyclists between fiscal years 2007/2008 and 2012/2013, and there is every reason to believe the numbers will continue to grow.

The tremendous numbers of bicyclists coupled with the high volumes of traffic on Diablo Road have created an intolerably dangerous situation. Although Diablo Road west of Green Valley Road has safe bicycle lanes in both directions, the 1 ½ mile stretch of Diablo Road east of Green Valley Road to Mt. Diablo Scenic Blvd. ("the stretch") is narrow, winding, upslope, with virtually no shoulders, limited sightlines, and no bicycle lanes. The stretch is extremely congested with thousands of vehicles every day. Despite the double yellow lines the length of the stretch, many

vehicles' drivers break the law as they veer across the lines to avoid the cyclists. Others slow to well below the speed limit, creating back-ups and the risk of rear-end collisions as they travel behind the cyclists.

Danville police accidents reports (attached) show that from 2005 until March 2014 there were 6 bicyclist accidents along the portion of the stretch patrolled by the Danville police. The number of accidents is undoubtedly much higher because of the following: 1. the reports do not even identify whether there was a car or bike involved in many of accidents; and 2. the reports do not include accidents reported to the California Highway Patrol, which patrols the one-mile northern portion of the stretch that is contiguous to the community of Diablo. Most importantly, the accident reports do not reflect the conditions on the dangerous portion of Diablo Road contiguous to the community of Diablo because almost all of the bicyclists avoid that portion by cutting through the community of Diablo. But for the cutting through, there would be far more---and likely some fatal--- bicycle accidents.

That diversion of cyclists does not solve the problem of public safety, however. **The influx of cyclists into Diablo has merely has moved the dangerous condition from Diablo Road onto Diablo's even more constrained residential streets.** As you know, Diablo's streets are narrow and winding, have no sidewalks or even shoulders, and have limited sight lines. Moreover, Diablo's streets serve both as streets and walkways: pedestrians; baby strollers; young children on bicycles; dogs on leashes; automobiles; golf carts; and construction, service, and delivery vehicles travelling to and from the Diablo Country Club, the Diablo Post Office, and Diablo homes all compete for space.

The influx of ever more cyclists cutting through Diablo's residential streets to avoid dangerous Diablo Road has caused those streets to become unsafe for their intended users as well as for the cut-through cyclists themselves. **The Diablo Community Services District, the government agency responsible for roads and public safety within the community of Diablo, is obligated to act to resolve this dangerous condition on our roads.**

We believe that the best way to solve the safety issues within our community is to address the dangerous situation on Diablo Road. **The solution is obvious: if Diablo Road were made safe for cyclists and vehicles by adding bicycle lanes, cyclists would no longer need to divert into Diablo.**

Accomplishing the goal of building safe Diablo Road bicycle lanes will require the cooperation and efforts of many interested parties. And prior to building the lanes, there are likely other

short-term, inexpensive ways that could quickly improve safety somewhat along Diablo Road (for example, adding "Share the Road" signs; lowering speed limits and enforcing them; improving some of the sightlines).

The time to start is now, before there are any more accidents, and before someone is killed. As you undoubtedly know, just a few days ago a cyclist was killed along Highland Road in unincorporated Contra Costa County. Like Diablo Road, the dangers there were well-known, but no one acted to improve safety on the road in time to prevent the cyclist's death.

**As a first step toward improving safety, we ask that your offices convene a Diablo Road Public Safety Task Force, comprised of representatives from your offices, the Town of Danville, Diablo Community Services District, Diablo Property Owners' Association, Valley Spokesmen (a local bicyclist organization), Bike East Bay (an East Bay bicycle advocacy group), Save Mt. Diablo, Contra Costa Transportation Authority, and any other interested HOAs or groups. The long-term goal of the Task Force would be to obtain funding for the designing and building of safe bicycle lanes between Green Valley Road and Mt. Diablo Scenic Blvd. In the near term, the goal would be to make the road safer through inexpensive means such as road signs, lower speed limits, and more police enforcement until the lanes are built.**

Thank you so much for your consideration of our request. We look forward to hearing from you at your earliest convenience and, we hope, working with members of the proposed Task Force to address these urgent public safety matters.

Sincerely,

Raymond F. Brant

President

Diablo Community Services District

Attachment: Danville Police Accident Reports, 2005- March 2014

Cc with attachment: Christopher Liddicoat, President, Diablo Property Owners' Association

Joseph Calabrigo, Manager, Town of Danville

Eric Niles, Head of School, Athenian School

Cc with attachment: Nancy Nagramada, Athenian School

Marcus Van Raalte, President, Valley Spokesmen Bicycle Touring Club

William Well, Danville Liaison, Valley Spokesmen Bicycle Touring Club

Bonnie Powers, Past President, Valley Spokesmen Bicycle Touring Club

Renee Rivera, Executive Director, Bike East Bay

David Campbell, Advocacy Director, Bike East Bay

Alan Kalin, President, Mount Diablo Cyclists

Ronald Brown, Executive Director, Save Mt. Diablo

## 103: RESPONSE TO KELLY TREVETHAN

**103A:** Please refer to the Master Responses in Sections 2.4.1 and 2.4.2 regarding traffic and bicycle safety. These responses address the feasibility issues related to provision of bike lanes and increasing the shoulder along Diablo Road.

**David Crompton**

**From:** Jami Tucker <tuckerjami@gmail.com>
**Sent:** Monday, October 15, 2018 12:37 PM
**To:** David Crompton
**Cc:** Jami Tucker
**Subject:** Comments on the DREIR for Magee Ranches Project

To dcrompton@danville.ca.gov

Subject: Comments on the DREIR for Magee Ranches Project

Please accept these comments on the DREIR for the Magee Ranches project.

I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads.

Of the community members who are aware of this **not widely-publicized** re-zoning of agricultural and open space to planned unit development districts, most Danville residents are vehemently opposed to it. This project is not in the best interests of the community but instead only in the interests of the developers and landowners for financial reasons. The developers do not live with the consequences. We do. The project will be a very negative change to our community, causing denser population centers and school overcrowding, increased traffic congestion, reduced cyclist and pedestrian safety, and many more harmful impacts. A

Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant and not mitigated. That is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. B

Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review. The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided in a solo by the Town's government which does not reflect the majority of the Danville residents' opinions. It is unacceptable that, in spite of Measure S, the town government is making decisions contrary to what was promised. C

Respectfully,

Jami Tucker

400 Edinburgh Circle

Danville CA 94526

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Best, Jami

## 104: RESPONSE TO JAMI TUCKER

**104A:** Please refer to the Master Responses in Section 2.4 with regards to the specific concerns raised in this comment on schools, traffic, and other issues.

**104B:** Please refer to the Master Responses in Section 2.4.1 regarding traffic.

**104C:** Please refer to the Master Response in Section 2.4.2 regarding bicycle safety and Section 2.4.3 regarding Measure S and open space.

## David Crompton

**From:** Ellen <ellenfred@aol.com>
**Sent:** Saturday, October 13, 2018 2:54 PM
**To:** David Crompton
**Subject:** Magee Ranch "Preserve"

To Whom It May Concern:

As longtime residents of Diablo Road, we object to the non-democratic way this new housing development is being pushed through. We citizens voted on basically this same proposal not long ago and were decidedly against it. Substantial improvements to Diablo Road must be made before any new housing is added to this over-stressed corridor.

You cannot thwart the democratic process in the interest of lining your own pockets; the people of Danville and Diablo will have their say. Those of you who support developers over the common people who live, work, and most importantly drive their children to school here will be voted out of office.

A

Please record our severe objection to the new development.

Sincerely,
Mark and Ellen Whitfield
2019 Diablo Road
Diablo, CA 94528

## 105: RESPONSE TO MARK AND ELLEN WHITFIELD

**105A:** The commenter's opposition to the project is noted. Please also refer to the Master Responses in Section 2.4.3 regarding Measure S.

**David Crompton**

**From:** Vicky Wong <vickykimwong@gmail.com>
**Sent:** Monday, October 15, 2018 4:34 PM
**To:** David Crompton
**Subject:** Comments on the DREIR for Magee Ranches Project

Dear Mr. Crompton,

I live in Magee Ranch and am directly impacted by this project. Please do what is right for our precious community and consider an alternative for this land. If you truly care about what is best for our town and citizens, you will not approve this development.

Please accept these comments on the DREIR for the Magee Ranches project.
I am firmly opposed to the Magee Ranches project and any rezoning to allow the development of the agricultural land accessed from Diablo and Blackhawk Roads. Those roads will endure (according to the DREIR) about 850 more cartrips per day, and the DREIR admits the impact on traffic congestion at the Mt. Diablo Scenic Blvd. intersection will be significant, and not mitigated. That is simply unacceptable. Most of the additional traffic will be traveling on the narrow, substandard, shoulderless, windy Diablo Road between Mt. Diablo Scenic Blvd. and Green Valley Road. Many cyclists use these streets (an estimated 100,000 cyclists trips there per year) and each cyclist will be at significantly increased risk from the great number of additional vehicles. A

The DREIR fails to fairly assess the additional dangers to cyclists from the increased traffic, which I believe will in fact be significant. For that reason alone, the DREIR needs to be revised and recirculated for public review
The development of this agricultural space for residential use is a matter that should be voted on by the community and not decided by the Town's government.That is what Measure S promised. Of the community members who are aware of this planned development, most are opposed to it. This project is not in the best interests of the community but instead only in the interest of the developers and landowners. The project will be a very negative change to our community.
Respectfully,
Vicky WongMagee Ranch Resident

## 106: RESPONSE TO VICKY WONG

**106A:** Please refer to the responses to Letter 6.

## David Crompton

**From:** Erika Woolley <erikawoolley@gmail.com>
**Sent:** Wednesday, September 26, 2018 4:27 PM
**To:** David Crompton
**Subject:** Oppose Magee Ranch Development

Mr Crompton,

I am writing this email to express my opposition for the proposed building of 66+ homes in the Magee Ranch neighborhood. Building a new housing development would negatively impact ALL neighborhoods along Blackhawk Road in many different ways.

#1-Adding new homes would increase traffic congestion to school and work. I live in the Hidden Oaks community and when trying to get to work or take my kids to school which is 3 miles from home it can take up to 25 minutes because of increase traffic congestion with stop and go traffic all along this 3 miles stretch. I have lived in Hidden Oaks for 9 years now and have noticed over this time how traffic has worsened with no improvements in site. A
Some may argue that school age children should use the bus. The council is probably not aware that buses are at max capacity where at times some kids have to sit on the floor, and some neighborhoods such as Hidden Oaks, Magee Ranch and others do not have a bus available for Monte Vista High School so these neighborhood high schoolers have to drive to school with no other options. Our San Ramon Valley School District also looked into contracting more buses for our communities but they cannot find available bus drivers.

#2- Increase traffic also poses a huge risk for emergency evacuations since there is 1 single road and no other open routes available. When there was an accident last year along Blackhawk road it to me 1 1/2 hours to drive 3 miles- imagine if there was a real disaster or emergency there would be no viable evacuation plan. B

#3-Increased danger to motorists and bicyclists with more cars on this dangerous stretch of road. C

#4- This housing development also poses as an insult to our environment with increased erosion to our creeks and impact on our wildlife. D

The above are some reasons why I and my community oppose this development. I am part of a Hidden Oaks/Magee Ranch Mom's Group and we are outraged by such a proposal.

Those of us who live in this Danville community moved here because we love its small town community and closeness to the mountain and wildlife. We wish to preserve this natural beauty which is unique to Danville and not have it overrun by housing developments which have wiped out the uniqueness of many surrounding cities.

I hope you take these concerns seriously so that you may realize what the sentiments are of this community- we are not sell outs, this is our home and we hope to preserve its natural beauty. We as a community need to have representatives who listen to their constituents and who share our same values and love of Danville otherwise I'd question their motivation to serve as our representatives for the town of Danville.

Thank you.

Dr Erika Woolley

## 107: RESPONSE TO ERIKA WOOLEY

**107A:** Please refer to the Master Responses in Section 2.4.1 with regards to traffic including the TRAFFIX program.

**107B:** Please refer to the Master Responses in Section 2.4.9 with regards to emergency access.

**107C:** Please refer to the Master Responses in Section 2.4.1 and 2.4.2 with regards to traffic and bicycle safety.

**107D:** Please refer to the Master Responses in Section 2.4.5 regarding hydrology and erosion and Section 2.4.10 regarding biological resources.

**David Crompton**

**From:** Gloria Wright <gacsw@yahoo.com>
**Sent:** Monday, October 15, 2018 6:49 PM
**To:** David Crompton
**Subject:** Magee Ranches

I am a long time resident of Danville. I have seen the traffic increase, the the time people mention is understated.
I have been in the line to Mt Diablo Scenic for more than 15 minutes then waiting to cross Green Valley Road. Here the traffic to 3 schools backs up even thou there is a light. If someone gets killed on this road we should sue the people that let more cars and bikes on this dangerous road. I remember years ago when a vote was taken and council voted no, after those protesting left the vote was taken again and passed. When will someone listen to the people who are protesting a dangerous situation? We are watching and will remember when the vote comes up. We care about lives, why don't you? Is the money more important then lives? This is about safety. Please remember to consider, what would you want for your children? A

Looking for you to do the right thing
Gloria Wright

**In God we trust**

Gloria

## 108: RESPONSE TO GLORIA WRIGHT

**108A:** Comments noted. Please refer to the Master Responses in Section 2.4.

**RESPONSES TO ORAL COMMENTS - TRANSCRIBED FROM DANVILLE PLANNING COMMISSION PUBLIC HEARING ON MAGEE PRESERVE RDEIR ON SEPTEMBER 25, 2018**

**PUBLIC COMMENTS**

**SPEAKER 1: MR. RAY BRANT**

MR. BRANT: Good evening. And I thank you for the input. I'm Ray Brant, the president of the Diablo Community Service District and the Diablo Municipal Advisory Council.

**S1A Comment**: And as president, we are resubmitted our letter of September 12, 2017, regarding the undersized and damaged Diablo Road culvert located just east of Diablo Road and Alameda Diablo.· The letter contains our concerns, and there's 10 copies here, I believe.· Thank you.

**Response**: Please see the Master Responses in Section 2.4.5 regarding hydrology.

**SPEAKER 2: MS. LINDA GATES**

MS. GATES: My name is Linda Gates.· We live at 2052 Diablo Road.·

**S2A Comment**: Our property directly abuts the proposed development.· And my concern is I do not feel the EIR adequately addresses the impact of the hydrology biology on the creek and the risk, frankly, to our property because the plans do not actually show the existing condition, and that makes it impossible for the EIR to evaluate it.

So you guys are all familiar with these plans.· They're in your packet.· I live in this house right here.· This is my property line along there.· In the packet right now there's a cross section here done by the engineers.· It's reflected up here.· Notice they conveniently did the cross section at the area where it's the very widest across the creek. I took a cross section right here. So I want to share with you that existing condition.· Okay. So the -- this is the cross section the engineers are showing.· In fact, this creek is very deeply incised.· It is not a three to one slope to the bottom of the creek.· It drops off, and actually there's a 30-foot vertical drop here. You can see -- I know it's hard to see, but this erosion that is happening here.· So the cross section actually -- on this side, this is the existing little Jeep road that Jed drives on, and then there's a 30-foot drop to the bottom of the creek. They're proposing that they can build this 20-foot EVA and go 3 to 1 to the toe of the creek. Not possible.· If you went to the toe of the creek and went back at three to one, you'd never daylight.· My conclusion is that they'll have to put some gabions or some vertical walls in here 30 feet high.· I don't think the EIR anticipates that level of impact at all of what would have to happen, how you'd have to construct this in here.· The tree removal that's happening in here and is not commenting on that at all.

I'm further concerned -- I'm sorry.· I'm operating two devices here, going back the other way. Because -- right here.· So this is the area where we just saw the cross section.· These are areas where you have these vertical cuts.· The subdivision itself, the storm water for the subdivision, impervious coverage there, will be taken to this detention basin. However, all the water that

currently comes down the hill, so all these red lines, our new storm drain system that's being put in to pick this water up. Currently the water sheet drains into the creek, but now it will all be picked up.· And we have a 48-inch culvert dumping into the creek right here, aimed at my property right above where we have these 30-foot cuts. So I'm concerned about, basically, a fire hose eroding this.· I'm concerned if they harden this edge with a 30-foot gabion wall or a series of walls, what will be the impacting?· When you harden one side of a creek, you have potential erosion on the other. I don't think the EIR has -- how could they even discuss this because it's not even accurately shown in the drawings that have been provided.· That's my comment.

**Response**: Please refer to the Master Responses in Section 2.4.5 regarding hydrology as well as responses to Letter 46.

**SPEAKER 3: MR. ROGER TUMA**

MR. TUMA: My name is Roger Tuma. First, thanks for what all you people do.· I appreciate it. Thanks for letting me speak.

**S3A Comment**: So my concern is with the three houses that are off McCauley Road.· And the big issue there is the driveway for those three houses comes out on McCauley Road 200 feet from the intersection.· Now, that intersection, the people that go through that intersection every morning or in the evening too feeds four schools in that area.· So the traffic is incredible. In addition to the traffic going through that intersection, you have all the people walking to Green Valley School.· There's grandparents walking their kids.· There's parents.· In addition to walking their kids, they're bringing their siblings in strollers. They're bringing the family dog, and the only way to ever, you know, get the feel of that is to go there some morning, park your car behind Green Valley School, and stand there and watch it for 15 minutes. And imagine how anybody in those three houses and that driveway, how they'll ever be able to come out of that road and get out of McCauley Road.· That's the big thing.

The next issue is that intersection is the only in and out for the people that live in Green Valley.· There's 220 homes there, and there's no other -- there's no backway.· So if that intersection, if there's an accident, they're stuck.· Just this last week, there was a medical emergency.· A young man had an allergic reaction.· Fire truck was there like that. If there was an accident there, that wouldn't have happened.· So you have to -- you know, I mean, that's the big concern is the safety. I mean, that's -- also in that area the cows graze.· Maybe -- I guess that's not even an issue any more about saving the environment or anything.· It's just -- but the safety is a big thing. And at some point -- I know you're not going to vote tonight.· At some point you're going to vote on this, and before you do, I want you to think that in our lives, you know, we all make decisions, you know, where we going to eat, what car we're going to buy, and all that.· An example, maybe you go to Costco, and somebody says, oh, that cheese is so great.· Take a sample, take it home, you know.· It's not that great, and you think, you know, I spent $15, no big deal.· But if you make a decision on safety in these houses and some child is injured, that's something that you're going to remember the rest of your life.· It's not going to go away like a bad haircut.· Thanks for your time.

**Response**: Please refer to the Master Responses in Section 2.4.1 regarding traffic, Section 2.4.6 regarding alternatives (specifically the discussion of the McCauley Road lots), and Section 2.4.7 regarding emergency access and evacuation.

**SPEAKER 4: MR. MARK BELOTZ**

MR. BELOTZ: Good evening, Commissioners. After looking through my comments, they do not directly relate to the EIR tonight.· So I'd like to save them for a future meeting.

**SPEAKER 5: MR. TOM SUTAK**

MR. SUTAK: My name is Tom Sutak. I've been a resident of Danville for 40 years.· For the last 25 years, we lived at 8 Eastward Lane, which is in Magee Ranch, the real one.· Sorry about that.

**S5A Comment**: The last EIR was very heavily flawed.· The current one is not nearly as flawed because it avoids many of the same issues and problems, but that may be because it obfuscates the issues.· I'm not really sure, can't really tell. What I can say is, though, it would be very helpful to reduce the jargon and make the whole thing more readable.· There are two paragraphs in it that -- in the current EIR that are particularly good that did not exist in the last one, and I hope they remain. And I'd like to read them. It says to, "Maintain the LOS standards," and that's part of the jargon.· "Maintain LOS standards for Danville streets, which balance vehicle speed and travel time objectives with other considerations such as the safety and comfort of pedestrians, bicyclists, and transit users.· Standards may vary according to roadway function and the character of surrounding uses." The second paragraph, shortly thereafter, describes the impact of this project.· It says, "Impact.· The project trips added to the intersection of Diablo Road, Blackhawk Road, and Mt. Diablo Scenic Boulevard under existing plus project conditions will increase the VC ratio by more than five percent during the a.m. and school p.m. peak hours, which constitutes a significant impact based on establishment thresholds -- established thresholds of significance.· This represents a significant, potentially unavoidable impact," which is very, very true.· And a thousand of my closest neighbors and several thousand that's within Danville and several thousand who don't live in Danville all would certainly agree with that. So I think there are a number of issues. Another one that's very critical is the bicycle safety issue.· I do not think that is adequately addressed in the EIR.· I don't ride a bicycle down the road, but I dodge them all the time.· Thank you very much.

**Response**: Please see the Master Response in Section 2.4.1 regarding traffic (specifically the traffic signal) and Section 2.4.2 regarding bicycle safety.

**SPEAKER 6: MR. KEN JOHNSON**

MR. JOHNSON: Ken Johnson, 5 Creekledge Court, 27 years at this home, in fact, right next to -- behind Linda Gates.· So we're neighbors.

**S6A Comment**: I was asked to read a letter, and I apologize for reading a letter; but it is -- it's more succinct than what I could bring to you.· So I'm just going to read it, and it's from the -- by the way, Mr. Commissioner Verriere, it goes after this methodology that you were asking a question on bicycle safety. So it's from the Law Offices of Stuart Flashman in Oakland.· Stuart

Flashman comments on revised draft EIR.· "Good evening, Chair and Commissioners.· In 2016, the California Court of Appeal ruled in a lawsuit brought my client, SOS Danville Group, that the Magee Ranch's project environmental impact report had failed to address the impacts of the projects nearby (sic) 1000 more car trips per day and the safety of the bicyclists that make up over 100,000 bicyclist trips per year through the Diablo Road corridor east of Green Valley Road to Mt. Diablo Scenic Boulevard and one quarter mile beyond the project's entrance next to the current Jillian Court.· As a result, the town council had to rescind its approval of the project and its EIR and prepare a revised EIR to adequately address bicycle safety impacts.· These comments lead off three speakers, including two experience local bicyclists and a bicycling expert.· Together we will show why the draft EIR's analysis of the project's impact on bicyclist safety fails to comply with the court's ruling and is, thus, inadequate and legally noncompliant. ·

Instead of evaluating bicyclist safety, the town has added a new EIR section that evaluates bicycle level of service, BLOS" -- so that acronym BLOS you'll hear throughout this.· It's bicycle level of service -- "on several sections of Diablo Road between Green Valley Road and Jillian Court.· The EIR concludes that each section is currently rated as BLOS-D, which the town considers acceptable, except for the section between Avenida Nueva and Jillian Court, which the town rated as BLOS-E and currently unacceptable to the town. However, the EIR goes on to state that the additional project traffic will not significantly worsen the existing BLOS of D and E. And thus, it concludes that no bicyclist safety improvements are needed for the town to approve the Magee Ranch's project.· That analysis and its conclusions are just plain wrong.·

BLOS is an inappropriate tool to measure bicyclist safety impacts from the project.· BLOS analysis is designed to evaluate subjective bicyclist comfort on urban streets, not bicyclist safety on a rural road like Diablo Road.· BLOS considers multiple aspects of a roadway, but only some of them, like lane width and auto speed are factors which can affect bicyclist safety.· Dangerously low bicyclist safety is, thus, counterbalanced by other factors that positively affect bicyclist comfort to achieve a better BLOS measurement. Moreover, the BLOS fails to consider crucial aspects of bicyclist safety.· The BLOS analysis does not address the disproportionate frequency of bicycle accidents on the curvy, one-half mile crucial segment of Diablo Road between Green Valley Road and Alameda Diablo because the vast majority of bicyclist now deferred off Diablo Road into the community of Diablo to avoid the most dangerous one mile of Diablo Road between Alameda Diablo and Mt. Diablo Scenic Boulevard.· Almost all of the bicyclist accidents in this area occur on that one-half mile stretch. Between late January 2005 and December 2017, nine reported accidents have occurred on that one-half mile segment."· And it says, "See the Diablo bike collision history emailed to the town with the SOS Danville Group's comments.

One accident involved two bicyclists being hit.· An additional accident occurred in August 2018 at the Diablo Road/Alameda Diablo intersection subject to the Diablo Road bike collision history prepared by the town.· Those nine accidents represent about six percent of all bicycle accidents in Danville during that time period, 143 according to the SWITRS collision report, included with SOS Danville Group's comments, a frequency 20 times higher than expected because that one lane mile represents only 0.3 of the total length of Danville's road system, 323.3 lane miles, according to Danville's Pavement Management Report Final Report dated February 2018.· This discrepancy needs discussion.

Two.· The BLOS excludes key determinates of bicyclist safety: sight distances, very short of Diablo Road between Green Valley and Jillian Court; slopes, which are sometimes steep on that segment; shoulder width, very narrow or nonexistent on that segment; and the lane widths on the narrowest parts of the segment, which after all resembles a rural two lane highway and not an urban street like most Danville streets.

Three.· The BLOS analysis uses average lane widths and average speeds bicyclists and cars drive on averages.· The specific lane widths, shoulder widths, speeds, slopes, curves, and sight distances, and their interactions are all important and should have been considered."

Four.· BLOS analysis focuses on a bicyclist's subjective comfort, not his or her perceived or objective safety.· It factors in bicyclist delay at intersections, bicyclist running speed, and overall travel speed, faster is better.· These factors only dilute the bicyclist safety factors.· Further, it emphasizes factors that are unimportant on a rural roadway like this, while ignoring factors such as sight distance, shoulder width, curve, slopes.· They are much more important on a rural road like Diablo Road.

Our experienced local bicyclists and a bicyclist consultant will elaborate on these unaddressed safety issues. In short, the court asks for an analysis of bicycle safety, not BLOS.· If a specific bar had five murders in a year, you would not analyze the overall crime rate in the entire town of Danville to decide if there was a problem.· You'd look at murders at that bar.· The same applies here.· BLOS might be an appropriate metric for bicyclist comfort in downtown Danville.· It is inadequate to assess bicyclist safety on Diablo Road or the effect this project's additional traffic will have on bicycle safety there."

Last sentence.· "The draft EIR does not satisfy the court's order that bicyclist safety, not bicyclist level of service, be fairly addressed prior to any approval of the Magee Ranch project."· Thanks.

**Response**: Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety.

**SPEAKER 7: MR. CLELEN TANNER**

**S7A Comment**: MR. TANNER: Danville wants to maintain a small town atmosphere, and I can appreciate its leaders put a lot of time, money, and effort into maintaining an outstanding quality of life.· This makes sense since all Danville has to offer is itself, which by anyone's definition is a small town. So let's maintain the best positive small town image we can.· Part of that is to maintain bicycle safety and acknowledge that bicycles, by law, have all the rights, privileges, and responsibilities to use the roads. Bicycles do not have to use a trail.· The Barbara Hale Trail was dedicated for school children. It was also utilized -- it's also utilized by golf carts, high school track teams, baby strollers, worst of all, people walking their dogs on leashes, and occasional wheelchairs from the senior residences.

Attached is an example of what you don’t want to happen.· To the left is the roadside memorial to Martin, a bicyclist recently killed in Pleasant Hill. Danville came very close to its own roadside memorial with the two bicyclists that were hit on Diablo Road, which is to the left.· This section of Diablo Road from Green Valley to Mt. Diablo Scenic is currently unsafe and essentially another

accident waiting to happen. This section of Diablo Road has been described by Danville Bicycle Advisory Committee to the Town of Danville as "one of the most dangerous roads in Contra Costa for bicycles."· This is due, in part, to the fast-moving traffic, substandard width lanes, and lack of shoulders.· The EIR needs to include four feet on-grade paved shoulders suitable for bike travel.

And let's see -- let's see what it's like to stand on the edge.· Now, I'm in -- not even on the road where a bicycle should be.· Do you really want to ride down this road with me?· Do any of you want to ride?· Does the consultant want to ride with me? I don't think so.· It's just not safe. · · · ·

Now, if we take a look.· Here's down at the intersection.· I want you to watch this bus right here.· That's a school bus.· Let's take a ride.· Now, put your helmets on.· I'm sure the consultant would like to ride with me, but this is what it's like to ride on Diablo Trail. We'll speed it up here a little bit.· Now watch the bus.· School bus with children in it crosses the double yellow line while passing a bicyclist. About 70 percent of the cars pass a bicyclist by crossing the double yellow line.· And watch this car here, same thing.· There is goes, crosses the double yellow line.· Car behind it crosses the double yellow line.· The one behind it is really good.· Look at it. I mean, it just makes its own lane.· Why not?· Now let's go down at the intersection here. I want you to take a look at this car right here or this SUV here.· This SUV has to back up for the school bus to make the road.· The road here is where it's less than 10 feet wide.· Danville always inflates the road width, inflates the shoulder width, inflates everything to their advantage.· But the real world is it's less than 10 feet, and I've measured it.· I don't think anybody wants to ride on that trail. Now the question is: can you make Diablo Road safe?· You need to pass a bicyclist with three feet. There just isn't the width there to have a car and a bicycle without crossing the double yellow line.· It's just not safe.· You need to put -- the EIR needs to include four feet on-grade paved shoulders suitable for bike travel.

I seem to recall somewhere when Danville could lay claim to having more horses than citizens. I'm pretty sure it was a bragging point.· Obviously, we can't lay claim to that anymore, but nothing – and I do mean nothing says quality small town character more than laying claim to more bicycles than citizens.

**Response**: Please refer to the Master Response in Section 2.4.2 regarding traffic and the responses to Letters 97-99.

**SPEAKER 8: MR. JOHN CICCARELLI**

MR. CICCARELLI: My name is John Ciccarelli. I'm the owner of Bicycle Solutions, bicycle and pedestrian planning, design and safety consultants based in San Francisco. I want to thank you also for the bike lanes on Danville Boulevard on the way -- down here from Walnut Creek Park today. During my 25-year transportation career I've worked on many active transportation master plans, corridor studies, trail studies, and safety analyses.

**S8A Comment**: SOS Danville asked me to advise on safety and potential improvements to Diablo Road between Green Valley and the proposed development.· I drove, bicycled, and walked the entire corridor, observed, photographed, and measured cross sections, especially east of Alameda Diablo. I agree with the conclusions of Stu Flashman's letter regarding the inappropriateness and

also the misleading calculations of bicycle level of service for evaluating existing and width project level of risk to bicyclists on Diablo Road.· I will not repeat those points. Instead I'd like to focus on the segment with the poorest conditions and safety for bicyclists, the narrow curving stretch between Alameda Diablo and Avenida Nueva.· The RDIR's traffic impact analysis Appendix E tabulates lane and shoulder widths.· This segment has 12-foot lanes, which is a standard for a rural road, but almost no paved shoulder.

As Clelen Tanner described, bicyclists either hug the edge, which invites unsafe passing, or claim the lane but have to deal with impatient motorists understandably -- it's a mile segment – especially while ascending slow to eastbound. Other states have specific exceptions for passing slow moving traffic, which is classified as an obstacle, over the double yellow line.· California has no such exception in its vehicle code, but that's routine behavior on rural roads without shoulders. However, on this segment there's also 4 feet of mostly unpaved shoulder on the north side and a 4- foot ditch on the south side.· So we've got roughly 32 feet fence to fence.· A relatively -- and I say relatively -- low cost improvement would dramatically improve safety and operations for both bicyclists and motorists.· Paved shoulders just 4 feet wide would let motorists pass bicyclists with the legal 3-foot clearance without crossing the center line.· A 12-foot lane accommodates a 7-foot wide SUV with a 3-foot shoulders, at least as far west as Alameda Diablo. Thank you, Commission, for your time and for diligence in ensuring that the DEIR squarely addresses the issue that's so important to residents and visitors.

**Response:** Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety and the responses to Letters 25 and 26.

**SPEAKER 9: MR. TODD GARY**

MR. GARY: My name is Todd Gary.· I'm a resident of Danville.· I'm a cyclist. I'm a coach and ride leader of the San Ramon High Mountain Bike Team.· And in August I was hit by a car on Diablo Road just west of Alameda Diablo, just west of the section that's colloquially known as Khyber Pass.

**S9A Comment**: I'd like to address the bike safety components of the draft environmental impact report with three points. First, the project includes dedication of land for multiuse trail on the south side of Diablo. The proposed multiuse trail is no answer to the unsafe condition of the road for two reasons. · · First, it won't be used by serious cyclists or commuters.· Any alignment of it is too circuitous-- I should use simpler words -- too slow.· It's merely an alternate for casual exercisers, and it will not improve the condition of the road for cyclists. Second, all of the alignments require an at grade crossing of Diablo Road west of Alameda Diablo and east of Green Valley, the very dangerous section of this road we're talking about.· There are only two options for such a crossing.· One is a signalized crossing.· That means a red light for the traffic. That is going to gravely exacerbate the already impacted traffic on that road, and we're not just talking about lines of sight to that crosswalk.· As traffic backs up, you'll get the cars coming at 40 miles around those curves of Khyber Pass with traffic stopped dead in front of them.· It's going to gravely exacerbate the conditions for car-to-car collision and for cyclists.

The second option would be an unprotected crosswalk where pedestrians or cyclists have to dash across Diablo Road, which I believe the 85th percentile in your report indicated was 40 miles per hour.· That is not safe for anyone.· Significantly, neither of these options has been analyzed or considered in the DEIR's traffic analysis or bike safety analysis. This trail is a town priority.· It is the capital improvement project C-055.· The dedication is a condition of the project, and it should be included in the EIR study.

My second point is a point mentioned by an earlier speaker, so I want to add a personal emphasis to it.· The DEIR purports to address bike safety by addressing a comfort-based bike level of service through HCM 2010 methodology.· I don't know what goes into that number, and I can't now.· I do know it places significant weight on running speeds and delays at intersections, which are not relevant for bike safety.

The bottom line is that any model or analysis that concludes that Diablo Road from the project to Green Valley has an acceptable level of safety for cyclists is utterly and preposterously wrong.· That roadway is ultra-hazardous, and I think everybody in this room knows that for all the reasons mentioned by my previous speakers.

I want to put that into a personal perspective.· I ride that road three to four times a week.· I ride downhill only when my speeds are 20 to 30 miles an hour, so I'm passed by fewer cars. I won't ride up it.· At no place on that road is there room to allow me 18 or 24 inches with the hazards on the right side of the road, 3 feet of clearance on my shoulder, and for a car to pass me safely.· And yet, in each and every commute, I'm passed dozens of times. I'm passed by box trucks, school trucks, town maintenance trucks, tree trimming trucks with trailers, SUVs with parents facing backwards to argue with their kids, teenagers texting in their BMWs, F-250s with lift kits and mirrors that extend out 16 inches.· Some hold off for one curve of clear sight then fly around a blind curve.· Most don't hold off or cross the double yellow going down.· They just go right past.· For many of them, I feel the wind from their side view mirrors.· That is not an exaggeration, and in August I was finally hit.

That brings me to my third point.· Your DEIR concludes, wrongly, that there are not a substantial number of car-bike accidents in this corridor.· Your DEIR devotes all of seven sentences to this critical issue.· It concludes there are 10 bicycle-car collisions in 13 years, and that, that's not substantial.· It fails to account for all of the accidents.· It doesn't account for all of the accidents between Green Valley and the project that I'm personally aware of.· It doesn't account for the accidents in 2018, of which I was one. At least seven cyclists have been hit on this section of the road in the last two years.· Four of those have left cyclists in critical condition, requiring airlifts off that road.· Fortunately, mine was not, but I can attest even a single car-bike accident, even a minor one like mine is substantial. It is 200 pounds against 2000 pounds.· It is terrifying, and it is life-changing. We are not objects.· We are not cyclists. We, like you, are husbands, and wives, fathers, mothers.· We cannot look the children of one of these four cyclists that's been critically injured in the eye and say that the accidents were not substantial. Even one is too many.· Your DEIR, with respect, is just flat wrong on this point.

And in that lies my conclusion.· I ride that route often for both commuting to work in Danville and for pleasure.· We cannot, with any legitimacy, say that adding nearly 1,000 car trips a day on this

road -- and I'm going to repeat that number -- 1 – nearly 1,000 car trips every day on this road, 7,000 a week, 28,000 a month does not materially increase the danger to my life and those of the lives of your Danville neighbors who ride on this road. I do not ask to be made completely safe. I do ask that we not necessarily -- excuse me – not needlessly increase the hazard that cyclists face while claiming that we aren't doing so.· Your DEIR gets this analysis dead wrong.· I ask you to correct that before we have dead cyclists.

I ask you to do two things.· And I apologize for the dramatic flair, but this is not about numbers or methodologies.· It's about flesh and blood.· Before you accept an EIR that claims that there are not a substantial number of bicycle injuries with cars on this road, call up the families of those four cyclists and talk to them. Before you accept an EIR that says the bicycle level -- the bicycle safety on this section of the road is acceptable or that 1,000 car trips a day will not materially increase that, come ride the road with me.· I mean, this very seriously.· My phone number is on my interest card.· Grab your bikes. Let's take a morning commute.· You will see, in a very personal way, that this is not a numbers game.· It is a very deadly one.· Cyclists, husbands, wives, mothers, fathers deserve more from an EIR than this one.· Thank you very much.

**Response**: Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety and the responses to Letters 44 and 45.

**SPEAKER 10: MS. MARYANN CELLA**

MS. CELLA: I'm Maryann Cella, commenting on behalf of SOS Danville Group.· We believe the draft revised EIR is unacceptable in many respects.· I will highlight a few and include more with additional written comments.

**S10A Comment**: First of all, as you've heard from the prior four speakers, bicycle safety impacts, not bicycle level of service, needs to be assessed, and bicycle safety impacts mitigated.· Prior speakers have explained why. Number two.· Diablo Road improvements are needed.· Please listen carefully to the following quote: "Impact number six: a portion of Diablo Road most affected by cumulative traffic would be the section from west of Mt. Diablo Scenic Boulevard" -- that would be around Green Valley intersection -- "to the beginning of the improved segment of Blackhawk Road.· Single family homes front on this section of Diablo Road, making widening of the roadway or right-of-way infeasible.· The overall condition of Diablo Road is substandard.· Limitations of sight distance create hazardous conditions along portions of the roadway.· Additional traffic would exacerbate safety problems. The City's proposed capital improvement program would allocate approximately $700,000 for repaving, some realignment work, and the addition of wider shoulders along this length."· This is a quote from the final environmental impact report for the 1987 Magee Ranch project, now known simply as Magee Ranch. To date, the community is still waiting for completion of Diablo Road improvements promised as part of that 1987 Magee Ranch project.· To pay for those improvements, the town created the Northeast Roadway Improvement Assessment District to tax owners of the new Magee Ranch homes.· One such improvement project was Town of Danville capital improvement project C-55B for the substandard Diablo Road segment I just discussed between Green Valley and Mt. Diablo Scenic Boulevard.

Here are the plans for C-55B.· These plans specify uniform 12-feet wide lanes with 2-feet wide shoulders.· Per a 1994 town council resolution, C-55B was accepted as having been completed per the plans, yet a comparison of these plans and the actual roadway between Green Valley Road and Mt. Diablo Scenic Boulevard shows that the promised minimum 2-feet wide shoulders on each side were never built, and the lanes were never standardized to 12-feet widths.· According to the plans, they were supposed to be, but they weren't. Amazingly and wrongly -- and now we're talking -- we're 30 years later now here – the revised EIR's traffic impact analysis concludes that no improvements will be required for Diablo Road, despite the additional project traffic expected to approach 1,000 more car trips per day. This lack of road improvements, as a condition of approval of this project, is simply unacceptable.· Let's start by requiring these improvements, promised 30 years ago, in contract C-55B be part of any approval of this new Magee Ranch Number 2 project and also require an additional 2 more feet of bicycle usable shoulders on each side to account for the incredible bicyclist traffic, 100,000 bicyclist trips per year, that the road now carries. It sure didn't carry that back in 1987.· That was unimaginable 30 years ago.

Number three.· The traffic buses' costs are rising.· The traffic buses now serve the Diablo Road corridor.· A realistic assessment of traffic is needed in the EIR.· According to press reports provided in the packet I just gave you and the minutes of the January San Ramon Valley Unified School District Board Meeting, there is a risk that the number of traffic buses serving 11 school districts within the district might need to be reduced. According to my conversation today with School Board Director Ken Mintz, the San Ramon Valley Unified School District will not be taking on the program to try to get lower costs.· So it's unclear what is happening now, in that the buses are currently operating under a contract for only 2018-2019. Four schools accessed from the Diablo Road corridor are currently served by traffics – Green Valley Elementary, Vista Grande, Los Cerros Middle, and Monte Vista High School.· But the entire traffic study in the draft revised EIR is premised on the shaky assumption that traffic buses, in place for only nine years, will continue forever.

We believe that the town should require an assessment of traffic without the traffic school buses to at least understand what will happen if they are discontinued.· Wouldn't you want to know that before you approve this project, which will be there forever? Final point, number four.· The undersized and failing culvert flooding impacts need to be assessed, and the culvert needs to be replaced.· As mentioned by Ray Brant, Chairman of the Diablo Community Services District, earlier, the EIR fails to assess the new information that the 12-feet diameter failing culvert under Diablo Road, just east of Alameda Diablo intersection, is too small to carry the expected peak flows in the east branch of Green Valley Creek during a 100-year 6-hour storm event, which the county flood department has recently determined will be 1879 cubic feet per second at that culvert.· The capacity estimated by the Danville city engineer is only 1,700 cubic feet per second.· That's a shortfall of nearly 200 cubic feet per second, a lot of water. The project is expected to increase peak flow duration, according to Questa Engineering, letter submitted to you, during storms and would exacerbate the already expected flooding.· More analysis needs to be done. Flooding is not a theoretical issue.· During the 2013 review of this project, much evidence regarding existing recurrent flooding downstream from the project was reported.· An extensive Diablo corridor-wide flood occurred in the winter of 1966, long before any of the hundreds of· homes east of Mt. Diablo Scenic were built.· A resident of Roan Drive in the St. Timothy Church neighborhood has stated that the '66 flooding was "so bad it reached the doorstep next to my house and filled the street to

the point that people were wearing rubber boots to get around the neighborhood."· Residents of the Diablo community reported that floodwaters were running down Alameda Diablo toward the main entrance.· Quite possibly, the too small culvert, built around 1960 by the county, exacerbated the flooding that occurred in '66. It is simply unacceptable to approve this project and just hope for the best regarding the too small culvert.· As a condition of any project approval, the culvert must be replaced with one of adequate size.· Don't waste money on just repairing it.· Thank you very much for your time.

**Response**: Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety, Section 2.4.1 regarding TRAFFIX, and responses to Letters 1 and 18-22.

**SPEAKER 11: MS. PAT ISOM**

MS. ISOM: My name is Pat Isom. I live at 310 Matadera Court.·

**S11A Comment**: I'd like to address the Magee Trail.· In the original EIR, 3-13, it said the Magee Trail was to be built with decomposed granite. In the revised EIR, 4.3-33, all it says is we propose a parallel path. In the letter I've handed out to people – it was a letter from SummerHill to Mr. Crompton dated May 9, 2011 -- and it stated that, "SummerHill respectfully disagrees with the feasibility of an eight-foot path on any portion of the property, but particularly the Magee West portion, which is topographically difficult and faces many environmental challenges, including ground movement and unknown biology."

Under public trail easements it says, "Based on the advice from ENGEO, SummerHill feels that at most a six-foot wide aggregate base or decomposed granite trail is feasible in this location.· SummerHill and the property owner are not agreeable to any further trail easements on the Magee Ranch's property from Alameda Diablo to the McCauley Road/Blackhawk Road intersection." With regard to the law, under -- in the highway design manual, it says, "The Streets and Highway Code Section 890.4 defines a bikeway as a facility that is provided primarily for bicycle travel.· Thus, the Barbara Hale pathway does not even qualify as a bikeway. Under Section 891 of the Streets and Highway Code, "Local agencies must" -- must is the word -- "comply with design criteria and uniform symbols." Under the bikeway design criteria, "A pathway must be eight feet wide with two-foot shoulders on each side.· Ten foot is preferred.· The maximum grade for the recommended bike path should be five percent. Sustained grade should be limited to two percent.· The material and the structure of a bike path should be designed in the same manner as a highway with a recommendation from the district materials branch." If the town is unable to comply with the state requirements, eight-foot path width and two-foot shoulders; if NGO says that eight-foot paved paths are geologically not feasible; if the owner says that they will not agree to any further trail easements, how does the EIR address these issues?· Thank you.

**Response**: Please refer Please refer to the Master Responses in Section 2.4.2 regarding bicycle safety, as well as the responses to Letters 60-65.

**SPEAKER 12: MS. JAMI TUCKER**

MS. TUCKER: My name is Jami Tucker. I live at 400 Edinburgh Circle.· I appreciate you all giving people extra time to express their concerns. I noticed that, and I appreciate it very much.

**S12A Comment**: I have to say that hearing what has happened to my fellow residents in this town is beyond disturbing.· I feel that you all have an obligation to ensure the safety of our residents and to hear the voice of the people and to follow through with that. In reviewing the draft EIR for the Magee Ranch Davidon Homes residential development application, I have serious concerns, and I want to express my opposition to several elements. In the draft EIR on page 3-11, Table 3-2, the proposed zoning changes to 410 acres of beautiful open space, which is also home to hawks, deer, turkeys, the things that we -- I think we all love about our town. Rezones that from public and open space to planned unit development districts.· I'm not sure how you can say that, that's preserving open space. When I look up the definition for a planned unit development district, that means it's a designated grouping of varied land uses, including housing.· So you're just opening the door to more development.· I'm not sure where this is coming from or what your interest is in doing that, so I'm very curious to hear that. I worked multiple jobs simultaneously in my life, and I saved and I saved every dollar so that I could live in Danville someday.· I waited for a house to be available for sale.· I made an offer, and I was finally able to buy it for my family.· I can guarantee you that I didn't do it because I expected to have more and more traffic to deal with and more stress. I didn't do it because I want to spend my evenings, after working a long day, coming here and having to fight to keep my town the way it is.· I didn't do it because I wanted fewer parking spots, and I wanted higher ratios of children to teachers in our classrooms.· And I certainly didn't do it because I wanted our open space to be heavily built upon. I paid for my dream home, not just with my money but with my time, 25 years of saving every extra dollar I could and with my undeterred passion for the beauty of our town.· You have no right to turn my dream town into a tight, crowded city.· Enough is enough.

I don't know where this issue with rezoning came from, but I can guarantee you that I am not in support of it.· You will not have the majority of your citizens in support of it, and once you get past this draft EIR that, obviously, is going to have to be revised again, you're going to have other issues to deal with.· Thank you.

**Response**: Please refer to the Master Responses in Section 2.4.3 regarding Measure S and open space, as well as responses to Letter 104.

**SPEAKER 13: MR. JEFF MINI**

MR. MINI: My name is Jeff Mini, 2339 Caballo Ranchero Drive in Diablo.· I'll be brief.

**S13A Comment**: I've spoke to the town council before, and I've been here speaking before also.· And I'm just in opposition of the trail paralleling Diablo Road.· It's had three landslides this year -- or not this year, actually last year in the big heavy rains, and it's almost a trail to nowhere.· When you get down to the bottom, you'd have to cross the Diablo Road somehow, as it was stated earlier, that the problem with that is, you know, you would incur a problem with the traffic coming down going back the other way.· The path could only work out if the bike path was going on both sides of the street so it wouldn't impair traffic. And that's basically just what I want you to remember when you're making your decision on the EIR for that trail.· Thank you.

**Response**: Please refer to the Master Reponses in Section 2.4.2 regarding bicycle safety and the Town's potential trail.

**SPEAKER 14: MR. CHRISTIAN VIANI**

MR. VIANI: Ladies and gentlemen of the Council, my name is Christian Viani.· I've lived in Danville for 22 years.· I live at 225 Belgian Drive.

**S14A Comment**: I'm here today to address the absolute ridiculousness of the proposal to build the Magee Preserve.· The main thing I want to address is the fact that there will be resulting ecological displacement.· They do not have to address this in their reports because there is no way to stop ecological displacement when you build. Just this year alone, since June, there have been at least seven coyote attacks on pets in the Danville/Alamo area.· Four have results in deaths and fatalities of dogs and cats.· This is only going to increase with the building of these homes. How ecological displacement works is when you build property, you're literally removing the land that the animals use.· So they have to find other land, and it's not like animals are like people.· They can't just move right next to the homes.· They're going to go somewhere where they find suitable, and when the summers are hot and the winters are scarce with food, that means they're going to move into our neighborhoods, which means increased deer population, increased coyote population, and rattlesnake population.

The other thing I wish to address about the proposal is the lackluster sum of the percentage of traffic.· Their study is showing that traffic will be only increased by four percent.· I believe that these numbers are minuscule and not correct.· These studies would be based on the fact that a home can own 1 to 1.5 cars.· In truth, this is Danville.· Let's be realistic.· People don't own 1 to 1.5 cars here; they generally own 2 to 3.· And as far as what I'm concerned in my neighborhood, most people drive 2 to 3 per day because you have large families, which means your number is going to be closer to 8 percent on the increase in traffic. Last year alone, from what I witnessed, Diablo Road was washed out three times in the large rains last winter.· That completely shut the road down and made it chaotic and dangerous for me and several other people in Danville to get to work, in Blackhawk and in Alamo, both ways. If you increase the traffic percentage by letting these homes be built, you're only increasing the danger that is going to incur when something like a road washout occurs or anything else occurs, such as a car accident on a two lane road that is

heavily used by all the town's citizens. · Thank you for hearing me today, and I hope you guys make the correct decision in the future.

**Response**: Please see the Master Responses in Section 2.4.1 regarding traffic and Section 2.4.8 regarding biological resources. Trip generation rates used for the RDEIR are rates based on experience in Danville and are higher than Institute of Transportation Engineers rates. Accordingly, the RDEIR's analysis is conservative.

**SPEAKER 15: MR. RAM NAMBURI**

MR. NAMBURI: Good evening, Commissioners and Chair.· My name is Ram Namburi.· I live on 171 La Questa Drive, Danville, which is off of Diablo Road.

**S15A Comment**: The same project, same impacts, a new (indiscernible) name.· The Magee Ranch now is renamed to Magee Preserve.· Still I don't find any land that's actually being preserved. We are opening doors for future construction if the town decides to.· Despite eight years of public outcry, the project remains widely unacceptable on multiple grounds.

The first one - the town is, again, denying (indiscernible) public quote, despite the fact that development is on land designated in the 2030 Danville (indiscernible) plan for agricultural open space use only. There is no acceptable mitigation for the increased car trips per day from this project. Number three.· There is no mitigation for the increased dangers with the additional traffic to the bicyclists, which has actually been covered, rightly covered, and which is illustrated by the videos by the fellow residents. There is no acceptable mitigation for the greater flooding and erosion this project will cause. This is also raised by several citizens. There is no realistic assessment and mitigation for the project's negative effect on emergency response and their (indiscernible) times, especially this being a really congested corridor. And the last one, actually, which is not covered yet, there is continued refusal to acknowledge that the project will likely eradicate the last known thriving breeding population of the endangered California red-legged frog. That's all.· I would like to ask you all to consider all these points while actually taking information on this EIR.· Thank you.

**Response**: Please refer to the Master Responses in Section 2.4.1 regarding traffic, Section 2.4.3 on open space and Measure S, Section 2.4.7 on emergency access, and Section 2.4.8 on biological resources.

**SPEAKER 16: MR. GARY RICH**

MR. RICH: So my name is Gary Rich.· I live at that corner of Alameda Diablo and Diablo Road, next to the brick wall where there were -- I see car accidents and bicycle accidents.· And I wanted to just speak to everybody today to bring up additional information on topics already discussed.

**S16A Comment**: So I have an agenda.· I would like to build a bridge on my property that goes over the creek, but based on the calculations that we have from three engineers, I have to build the bridge about three feet up in the air.· So I'm trying to find out from anybody from the Back to the Future 2 series is around so I'll get a Hoover bridge, you know, to go in. But basically what I

wanted to submit to the group is that I hired an engineer back in 2015 that said that when they calculated the flows with the detention basins that they had information on, that their 500 cubic feet per second overflow at that intersection where the culvert is that Mrs. Maryann Cella brought up. So I hired a second engineer, who worked for the county, and he said, "No.· It's not 500 cubic feet per minute.· It's 560 cubic feet per minute."· So he came up with a similar calculation. Went to the county, and they happened to have some additional information that it was about 200 cubic feet per minute, still in excess of what it should be.· So I have the calculations.· I'd be happy to submit those calculations.

So in short, I wanted to summarize what they had mentioned from the Diablo Community Services District, that, that culvert is too small.· I would, obviously, like to get my bridge built.· If it stays the way it is and there's another flood like there was in the 60s, I will have flooding my house, and St. Timothy's Church area will also be flooded like it was in the 60s. Thank you for your time.· I hope that this was helpful to the group, and my calculations are available upon request.

**Response**: Please refer to the Master Responses in Section 2.4.5 regarding hydrology and specifically the culvert capacity.

**SPEAKER 17: MR. STEVE ABBS**

MR. ABBS: Good evening, Commissioners.· I'm Steve Abbs with Davidon Homes. I'm the applicant and wasn't really planning on speaking.·

**S17A Comment**: I just wanted to introduce myself, and I wanted to thank you all for your time tonight.· And wanted to thank staff and Leianne, the EIR consultant, on putting together a really thorough EIR document.

But I also wanted to thank the public for coming out and providing their comments.· This is a very important part of the EIR process.· But I think there were some good comments that I'm sure the experts will cover over here in the next several months.· But again, just wanted to thank you for your time.

And I also thank staff for the real use of that fact sheet that was put out a couple days ago. It is important that everybody reads that because those are the true facts of the project.· So anyway, just thanks again for your time tonight.

**Response**: Comments noted.

**COMMISSIONER COMMENTS**

**SPEAKER 18: COMMISSIONER VERRIERE**

**S18A Comment:** COMMISSIONER VERRIERE: So I think most of my comments were addressed.· But I guess to put it succinctly, I'd just like the EIR to pretty clearly address the issue of bicycle safety.· I know that was, obviously, something we dealt with last go-around. I'd like to have that pretty clearly fleshed out here.

And along those lines, in the -- I don't know if this would go under the alternative section or what, but we're obviously dealing with a legislative process here as well.· I'd like to see what impacts on both traffic and bicycle and pedestrian safety it may have, if part of the legislative process included something that would close Diablo Road between Mt. Diablo Scenic and McCauley to bicycles, just to see if that solves the problems, helps issues with traffic, and if that's even feasible.

Another thing I noticed in the bicycle safety analysis is -- I could be reading it incorrectly, and maybe it's just a question of clarifying it, but it looked to me like there was study done on one day. That was a Wednesday.· To the extent we're looking at bicycle safety, I've got concerns about that being an adequate representation of the bicycle safety conditions just because so many of the folks are riding up there on weekends.· You know, obviously, if we're looking at commute and traffic issues, that's going to be more of a weekday thing.· If we're looking at safety issues, I'd like to see something on weekend studies as well.

**Response**: Please see the Master Responses in Section 2.4.2 regarding bicycle safety. The BLOS analysis includes both weekend peak and weekday peak analyses.

**SPEAKER 19: COMMISSIONER RADICH**

**S19A Comment:** COMMISSIONER RADICH: This is more of a question for the consultant, and I asked this two weeks ago to the previous consultant at Rincon.· Can you just kind of tell us how -- and this is more for the benefit of people here as well -- how much of the EIR is subjective and how much is factual when you do this?

**Response**: As required by CEQA, the EIR must be based on substantial evidence. Substantial evidence includes facts, reasonable assumptions predicated on facts, and expert opinion supported by facts. See CEQA Guidelines Section 15384.

**SPEAKER 20: CHAIRMAN HABERL**

**S20A Comment:** CHAIRMAN HABERL: Quick follow-up on that. Is there -- do you compare different, in this case, the bicycle studies?· They keep saying there was a different study that presents different information. Is that taken into consideration, or is -- do we just do the bicycle study that you just did?

**Response**: Please see the Master Responses in Section 2.4.2 regarding bicycle safety.

Chairman Haberl: But the methodology of getting through those numbers, is there various methods doing it, or is there -- is it one acceptable method?

**Response**: Please see the Master Responses in Section 2.4.2 regarding bicycle safety, which addresses the BLOS methodology.

**SPEAKER 21: COMMISSIONER HAVLIK**

**S21A Comment:** COMMISSIONER HAVLIK: I'm probably asking the same question as our Chairman.· But is there an accepted standard methodology for bicycle safety as opposed to a bicycle level of service or something like that? You know, in here, for all of your traffic studies, you cite either one institute or another sort of thing, and most of the criticisms we've heard today are that the BLOS is really not getting at the real problem on Diablo.· Is there a nationally accepted or universally accepted methodology that's provided by some institute or something that would address the kinds of concerns we heard here today?

**Response**: Please see the Master Responses in Section 2.4.2 regarding bicycle safety, which addresses the reasons the Town selected the BLOS methodology.

**SPEAKER 22: COMMISSIONER COMBS**

**S22A Comment:** COMMISONER COMBS: A level of service on that section of Diablo Road, the only safe conveyance on that road is zero trips though because there is no shoulder.· So I can't imagine -- being a bike rider, I can't even imagine how we can consider any level of service on that street safe.· That's my comment.

**Response**: Please see the Master Responses in Section 2.4.2 regarding bicycle safety, which addresses the BLOS methodology.

**SPEAKER 23: COMMISSIONER BOWLES**

**S23A Comment:** COMMISSIONER BOWLES: Having been a 35-year resident, driven that road many times -- I drove it today all the way past Athenian -- I think we need to also address the county portion of the road past Ave Nueva.· I know everybody here is thinking about just Diablo.· I'm looking at it more of a global view because if you go past east toward Blackhawk, you have the same issues, and I'd liked to see that addressed as well.

**Response**: Please see the Master Responses in Section 2.4.2 regarding bicycle safety. The BLOS analysis addressed Blackhawk Road and Diablo Road.

**SPEAKER 24: COMMISSIONER HEUSLER**

**24A Comment:** COMISSIONER HEUSLER: Just following along on that thought process.· I wanted to ask a question or make a comment just in terms of the 4.3 transportation and circulation, 4.3-1.· At what point in the process do we have an understanding of the county's intentions with that intersection?· Is that an appropriate question to ask tonight, or is that more for the project?

**Response**: Please see the Master Responses in Section 2.4.1 regarding traffic, which addresses the County’s position on Mitigation Measure 4.3-1.

# 3.0 REVISIONS TO THE REVISED DRAFT EIR

The following section provides revisions to the text of the RDEIR, in amendment form, pursuant to CEQA Guidelines Section 15088(d). The revisions are listed by page number. All additions to the text are presented in underline, and all deletions are shown in ~~strike out~~. These revisions are made to the text in response to comments offered during public circulation of the DEIR and to provide minor corrections as needed. These changes might be considered important clarifications or amplifications, but are not significant modifications to the text or conclusions of the DEIR.

**Page 3-11, last paragraph, the following text is inserted after the third sentence:**

> Specifically, the existing Short Ridge Trail at the westernmost border of Sycamore Valley Preserve provides a connection to the nearest available project fire road, providing a continuous trail option for the public between Sycamore Valley Preserve and the project.

**Page 3-10, the second row of Table 3-1 is corrected as shown below:**

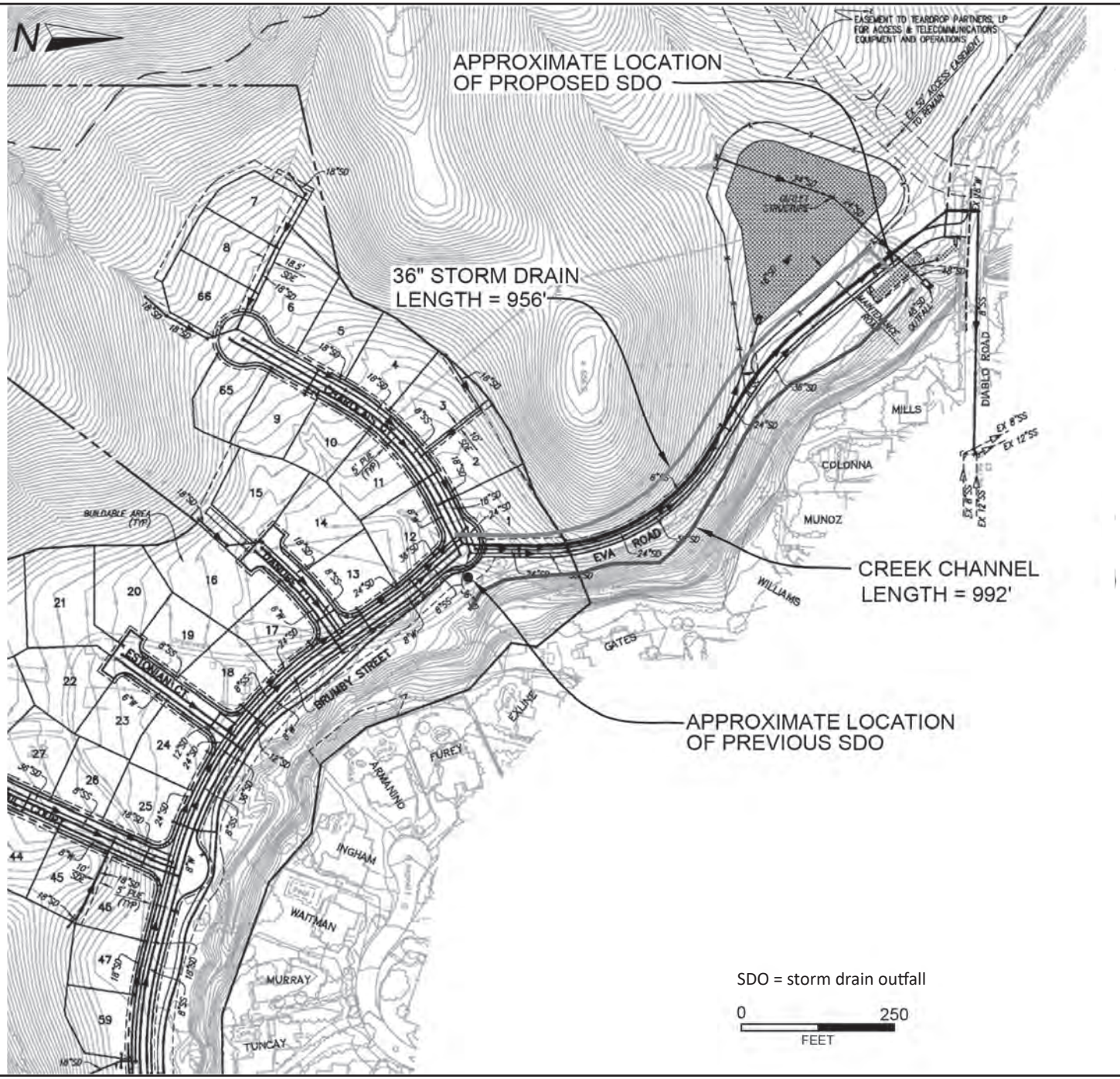
**Table 3-1**
**Magee Preserve Lot Summary**

| Lot | Area (s.f.) | Lot | Area (s.f.) |
|---|---|---|---|
| 2 | 13,522~~31,522~~ | 37 | 16,689 |

**Page 3-13, first paragraph, the following text is added after the second bullet:**

- The project is proposing to relocate the storm drain outfall originally to be located near the intersection of proposed Charolais Court and emergency vehicle access (EVA) road. The new outfall would be located approximately 1,000 feet downstream, closer to the intersection of Diablo Road and proposed EVA Road. The relocated outfall would discharge in the same general location as the proposed detention basin. The location of the proposed outfall is shown in Figure 3-5.

**Page 3-13, insert Figure 3-5 after page 3-13, as shown in the attached figure.**




Source: ENGEO, April 2019

Title:

# Relocated Outfall Location


Monterey | San Jose | Santa Barbara

**Denise Duffy and Associates, Inc.**

Environmental Consultants Resource Planners

947 Cass Street, Suite 5
Monterey, CA 93940
(831) 373-4341


Figure

3-5

## Section 4.3 Transportation

Due to a calculation error in the RDEIR, Tables 4.3-5, 4.3-11, 4.3-12, 4.3-14, 4.3-17, and 4.3-18 have been revised as presented below. The revisions show that the westbound Diablo Road segment from McCauley Road/Green Valley Road to Calle Arroyo would operate at BLOS D rather than BLOS C at all peak hours under all scenarios. They also show that the Diablo Road segment from Calle Arroyo to Alameda Diablo, in both directions, would operate at BLOS C rather than BLOS D at all peak hours under all scenarios. Finally, the revisions show that the westbound Blackhawk Road segment from Diablo Creek Place to Magee Ranch Road/Hidden Oak Drive would operate at BLOS D rather than BLOS C during the PM peak hour under Cumulative Plus Project conditions. These revisions do not change the results of the analysis in the RDEIR; the proposed project would not cause a significant impact to bicycle safety on any segment of the Diablo Road/Blackhawk Road corridor. Please refer to Attachment B of this FREIR for the revised pages of the Transportation Impact Analysis (Appendix E of the RDEIR).

**Page 4.3-15, Table 4.3-5 is revised as shown below.**

**Revised Table 4.3-5**
**Peak Hour Roadway Segment**
**Bicycle Level of Service for Existing Conditions**

| Roadway | From | To | Direction | AM Peak | | School PM Peak | | PM Peak | | Weekend Peak | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLOS Score | BLOS | BLOS Score | BLOS | BLOS Score | BLOS | BLOS Score | BLOS |
| Diablo Rd | McCauley Rd/ Green Valley Rd | Calle Arroyo | EB | 3.75~~68~~ | D | 3.77~~2~~ | D | 3.73~~65~~ | D | 3.71~~63~~ | D |
| | | | WB | ~~4.00~~3.~~50~~ | ~~D~~C | 3.96~~48~~ | ~~D~~C | 3.94~~47~~ | ~~D~~C | 3.83~~45~~ | ~~D~~C |
| Diablo Rd | Calle Arroyo | Alameda Diablo | EB | 3.36~~61~~ | ~~C~~D | 3.38~~68~~ | ~~C~~D | 3.33~~57~~ | ~~C~~D | 3.31~~53~~ | ~~C~~D |
| | | | WB | 3.29~~68~~ | ~~C~~D | 3.28~~64~~ | ~~C~~D | 3.27~~64~~ | ~~C~~D | 3.24~~53~~ | ~~C~~D |
| Diablo Rd | Alameda Diablo | Avenida Nueva | EB | 3.59~~73~~ | D | 3.61~~81~~ | D | 3.57~~68~~ | D | 3.55~~64~~ | D |
| | | | WB | 3.69~~81~~ | D | 3.68~~78~~ | D | 3.68~~78~~ | D | 3.6~~49~~ | D |
| Diablo Rd/ Blackhawk Rd | Avenida Nueva | Diablo Creek Pl | EB | **4.66~~76~~** | **E** | **4.67~~82~~** | **E** | **4.64~~73~~** | **E** | **4.6~~29~~** | **E** |
| | | | WB | **4.8~~24~~** | **E** | **4.81~~3~~** | **E** | **4.81~~2~~** | **E** | **4.77~~6~~** | **E** |
| Blackhawk Rd | Diablo Creek Pl | Magee Ranch Rd/ Hidden Oak Dr | EB | 3.77~~80~~ | D | 3.81~~8~~ | D | 3.78~~82~~ | D | 3.75~~7~~ | D |
| | | | WB | 3.41~~2~~ | C | 3.40 | C | 3.40~~1~~ | C | 3.37~~6~~ | C |

Source: Stantec, June 2018, revised May 2019.

**Page 4.3-27, Table 4.3-11 is revised as shown below.**

**Revised Table 4.3-11**
**Weekday Peak Hour Roadway Segment**
**Bicycle Level of Service – Existing plus Project Conditions**

| Roadway | From | To | Direction | AM Peak | | | School PM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLOS Score | BLOS | %Diff. | BLOS Score | BLOS | %Diff. | BLOS Score | BLOS | %Diff. |
| Diablo Rd | McCauley Rd/ Green Valley Rd | Calle Arroyo | EB | 3.7569 | D | 0.0027% | 3.773 | D | 0.0027% | 3.7366 | D | 0.0027% |
| | | | WB | 4.033.50 | DC | 0.7500% | 3.9748 | DC | 0.2500% | 3.9548 | DC | 0.259% |
| Diablo Rd | Calle Arroyo | Alameda Diablo | EB | 3.3762 | CD | 0.3028% | 3.3870 | CD | 0.0054% | 3.3458 | CD | 0.3028% |
| | | | WB | 3.3070 | CD | 0.3054% | 3.2865 | CD | 0.0027% | 3.2864 | CD | 0.3100% |
| Diablo Rd | Alameda Diablo | Avenida Nueva | EB | 3.5974 | D | 0.0027% | 3.6282 | D | 0.286% | 3.5770 | D | 0.0054% |
| | | | WB | 3.7082 | D | 0.276% | 3.6879 | D | 0.0026% | 3.6879 | D | 0.0026% |
| Diablo Rd/ Blackhawk Rd | Avenida Nueva | Diablo Creek Pl | EB | **4.6677** | **E** | 0.0021% | **4.6883** | **E** | 0.21% | **4.6474** | **E** | 0.0021% |
| | | | WB | **4.835** | **E** | 0.21% | **4.824** | **E** | 0.21% | **4.812** | **E** | 0.00% |
| Blackhawk Rd[1] | Diablo Creek Pl | Magee Ranch Rd/ Hidden Oak Dr | EB | 3.7781 | D | 0.0026% | 3.818 | D | 0.00% | 3.7882 | D | 0.00% |
| | | | WB | 3.412 | C | 0.00% | 3.40 | C | 0.00% | 3.401 | C | 0.00% |

Notes: BLOS = Bicycle Level of Service EB = Eastbound; WB = Westbound
**Bold** indicates unacceptable operations.
Underline indicates unacceptable operations.
%Diff. represents difference in BLOS Score between "no Project" and "plus Project" Conditions.
[1]Analysis performed prior to installation of bicycle lanes along study segment; however BLOS will not deteriorate with new bicycle facilities.
Source: Stantec, June 2018, revised May 2019.

**Page 4.3-28, Table 4.3-12 is revised as shown below.**

**Revised Table 4.3-12**
**Weekend Peak Hour Roadway Segment BLOS – Existing and Existing plus Project Condition**

| Roadway | From | To | Direction | Existing Conditions | | Existing plus Project Conditions | | %Diff. |
|---|---|---|---|---|---|---|---|---|
| | | | | BLOS Score | BLOS | BLOS Score | BLOS | |
| Diablo Rd | McCauley Rd/ Green Valley Rd | Calle Arroyo | EB | 3.7163 | D | 3.7163 | D | 0.00% |
| | | | WB | 3.8345 | DC | 3.8345 | DC | 0.00% |
| Diablo Rd | Calle Arroyo | Alameda Diablo | EB | 3.3153 | CD | 3.3153 | CD | 0.00% |
| | | | WB | 3.2353 | CD | 3.2453 | CD | 0.3100% |
| Diablo Rd | Alameda Diablo | Avenida Nueva | EB | 3.5564 | D | 3.5565 | D | 0.0027% |
| | | | WB | 3.649 | D | 3.6470 | D | 0.0027% |
| Diablo Rd/ Blackhawk Rd | Avenida Nueva | Diablo Creek Pl | EB | **4.629** | **E** | **4.629** | **E** | 0.00% |
| | | | WB | **4.776** | **E** | **4.776** | **E** | 0.00% |
| Blackhawk Rd | Diablo Creek Pl | Magee Ranch Rd/ Hidden Oak Dr | EB | 3.757 | D | 3.757 | D | 0.00% |
| | | | WB | 3.376 | C | 3.387 | C | 0.30% |

Notes: BLOS= Bicycle Level of Service; EB = Eastbound; WB = Westbound
**Bold** indicates unacceptable operations.
%Diff. represents difference in BLOS Score between "no Project" and "plus Project" Conditions.
[1]Analysis performed prior to installation of bicycle lanes along study segment; however, BLOS will not deteriorate with new bicycle facilities.
Source: Stantec, June 2018, revised May 2019.

**Page 4.3-36, Table 4.3-14 is revised as shown below.**

**Revised Table 4.3-14**
**Peak Hour Roadway Segment Bicycle Level of Service – Cumulative Conditions**

| Roadway | From | To | Direction | AM Peak | | School PM Peak | | PM Peak | | Weekend Peak | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLOS Score | BLOS | BLOS Score | BLOS | BLOS Score | BLOS | BLOS Score | BLOS |
| Diablo Rd | McCauley Rd/ Green Valley Rd | Calle Arroyo | EB | 3.760 | D | 3.774 | D | 3.7366 | D | 3.7163 | D |
| | | | WB | 4.033.50 | D | 3.9948 | D | 3.9748 | D | 3.8446 | DC |
| Diablo Rd | Calle Arroyo | Alameda Diablo | EB | 3.3763 | CD | 3.3871 | CD | 3.3458 | CD | 3.3254 | CD |
| | | | WB | 3.3070 | CD | 3.2866 | CD | 3.2866 | CD | 3.2454 | CD |
| Diablo Rd | Alameda Diablo | Avenida Nueva | EB | 3.6075 | D | 3.6283 | D | 3.5870 | D | 3.5665 | D |
| | | | WB | 3.7083 | D | 3.6980 | D | 3.6879 | D | 3.6470 | D |
| Diablo Rd/ Blackhawk Rd | Avenida Nueva | Diablo Creek Pl | EB | **4.6678** | **E** | **4.6884** | **E** | **4.6474** | **E** | **4.6270** | **E** |
| | | | WB | **4.835** | **E** | **4.824** | **E** | **4.813** | **E** | **4.77** | **E** |
| Blackhawk Rd[1] | Diablo Creek Pl | Magee Ranch Rd/ Hidden Oak Dr | EB | 3.7881 | D | 3.829 | D | 3.7983 | D | 3.757 | D |
| | | | WB | 3.423 | C | 3.401 | C | 3.459 | C | 3.387 | C |

Notes: BLOS = Bicycle Level of Service; EB = Eastbound; WB = Westbound
**Bold** indicates unacceptable operations
[1]Analysis performed prior to installation of bicycle lanes along study segment; however, BLOS will not deteriorate with new bicycle facilities.
Source: Stantec, June 2018, revised May 2019.

**Page 4.3-40, Table 4.3-17 is revised as shown below.**

**Revised Table 4.3-17**
**Peak Hour Roadway Segment Bicycle Level of Service – Cumulative plus Project Conditions**

| Roadway | From | To | Direction | AM Peak | | | School PM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLOS Score | BLOS | %Diff. | BLOS Score | BLOS | %Diff. | BLOS Score | BLOS | %Diff. |
| Diablo Rd | McCauley Rd/ Green Valley Rd | Calle Arroyo | EB | 3.760 | D | 0.00% | 3.775 | D | 0.0027% | 3.7367 | D | 0.0027% |
| | | | WB | 4.063.51 | D | 0.7429% | 4.003.49 | DC | 0.259% | 3.9848 | DC | 0.2500% |
| Diablo Rd | Calle Arroyo | Alameda Diablo | EB | 3.3764 | CD | 0.0028% | 3.3872 | CD | 0.0027% | 3.3460 | CD | 0.0056% |
| | | | WB | 3.3072 | CD | 0.0054% | 3.2968 | CD | 0.3054% | 3.2867 | CD | 0.0027% |
| Diablo Rd | Alameda Diablo | Avenida Nueva | EB | 3.6076 | D | 0.0027% | 3.6285 | D | 0.0052% | 3.5871 | D | 0.0027% |
| | | | WB | 3.7184 | D | 0.276% | 3.6980 | D | 0.00% | 3.6980 | D | 0.276% |
| Diablo Rd/ Blackhawk Rd | Avenida Nueva | Diablo Creek Pl | EB | **4.6679** | **E** | 0.0021% | **4.6885** | **E** | 0.0021% | **4.6575** | **E** | 0.221% |
| | | | WB | **4.8386** | **E** | 0.0021% | **4.825** | **E** | 0.0021% | **4.824** | **E** | 0.21% |
| Blackhawk Rd | Diablo Creek Pl | Magee Ranch Rd/ Hidden Oak Dr | EB | 3.7882 | D | 0.0026% | 3.8290 | D | 0.0026% | 3.7983 | D | 0.00% |
| | | | WB | 3.423 | C | 0.00% | 3.41 | C | 0.2900% | 3.459 | C | 0.0053% |

Notes: BLOS = Bicycle Level of Service; EB = Eastbound; WB = Westbound
**Bold** indicates unacceptable operations
Underline indicates one LOS letter-grade deterioration from "no Project" to "plus Project" Conditions.
%Diff. represents difference in BLOS Score between "no Project" and "plus Project" Conditions.
[1]Analysis performed prior to installation of bicycle lanes along study segment; however, BLOS will not deteriorate with new bicycle facilities.
Source: Stantec, June 2018, revised May 2019.

**Page 4.3-41, Table 4.3-18 is revised as shown below.**

**Revised Table 4.3-18**
**Weekend Peak Hour Roadway Segment BLOS – Cumulative and Cumulative plus Project Condition**

| Roadway | From | To | Direction | Cumulative Conditions | | Cumulative plus Project Conditions | | %Diff. |
|---|---|---|---|---|---|---|---|---|
| | | | | BLOS Score | BLOS | BLOS Score | BLOS | |
| Diablo Rd | McCauley Rd/ Green Valley Rd | Calle Arroyo | EB | 3.7163 | D | 3.7164 | D | 0.0028% |
| | | | WB | 3.8446 | CD | 3.8546 | CD | 0.2600% |
| Diablo Rd | Calle Arroyo | Alameda Diablo | EB | 3.3254 | CD | 3.3254 | DC | 0.00% |
| | | | WB | 3.2454 | CD | 3.2455 | DC | 0.0028% |
| Diablo Rd | Alameda Diablo | Avenida Nueva | EB | 3.5665 | D | 3.5666 | D | 0.0027% |
| | | | WB | 3.6470 | D | 3.6471 | D | 0.0027% |
| Diablo Rd/ Blackhawk Rd | Avenida Nueva | Diablo Creek Pl | EB | **4.6270** | **E** | **4.6270** | **E** | 0.00% |
| | | | WB | **4.77** | **E** | **4.787** | **E** | 0.2100% |
| Blackhawk Rd | Diablo Creek Pl | Magee Ranch Rd/ Hidden Oak Dr | EB | 3.757 | D | 3.758 | D | 0.0026% |
| | | | WB | 3.387 | C | 3.38 | C | 0.0030% |

Notes: BLOS= Bicycle Level of Service; EB = Eastbound; WB = Westbound
**Bold** indicates unacceptable operations.
%Diff. represents difference in BLOS Score between "no Project" and "plus Project" Conditions.
[1]Analysis performed prior to installation of bicycle lanes along study segment; however, BLOS will not deteriorate with new bicycle facilities.
Source: Stantec, June 2018, revised May 2019.