Midpeninsula Regional
Open Space District

R-24-53
Meeting 24-11
April 24, 2024

## AGENDA ITEM 8

## AGENDA ITEM

Informational Report on the La Honda Creek Parking and Trailhead Access Feasibility Study Feasibility Study Report and Conceptual Designs
GENERAL MANAGER'S RECOMMENDATION


Receive an informational report on the final deliverables and Feasibility Study Report, and provide feedback on the Conceptual Designs for the La Honda Creek Parking and Trailhead Access Feasibility Study. No formal Board action is required.

## SUMMARY

The La Honda Creek Parking and Trailhead Access (Project) Feasibility Study is analyzing three potential sites for expanded parking and trailhead access to La Honda Creek Open Space Preserve (Preserve). The goal is to provide public access to the currently closed central portion of the Preserve and connect the existing trails in the northern and southern areas. All the evaluated sites appear feasible for parking area and trailhead improvements and if all are implemented, they would in combination fully achieve the Board-approved project goals. The La Honda Creek Parking and Trailhead Access Feasibility Study Report (Feasibility Study) Attachment 1 is the final deliverable for this phase of the Project and is built off the Existing Conditions/Site Opportunity and Constraints Analysis Report Attachment 2, describing each site's conceptual design, cost estimate and overall feasibility. The presentation for this agenda item will provide an overview of the Feasibility Study and provide the Board an opportunity to ask clarifying questions, receive public comments, and provide feedback on the conceptual designs. The Board will select which sites to move forward to the environmental review phase at a future Board meeting.

## FEASIBILITY STUDY BACKGROUND

The sites evaluated within the Feasibility Study were recommended by the La Honda Public Access Working Group (PAWG) and approved by the Board of Directors (Board) on October 21, 2020. RHAA Landscape Architects (RHAA) was hired to provide technical analysis, site planning, and design services for the Project. RHAA conducted site analysis and technical studies to evaluate existing conditions, circulation patterns, and environmental resources at each site, which are summarized in the Existing Conditions/Site Opportunities and Constraints Analysis Report (ECOC) and were presented to the Planning and Natural Resources Committee (Committee) at the December 13, 2022 meeting. The Committee advanced three of four sites (Site B2, Site D and Site E3) forward to conceptual design. Site B3 was not recommended to advance due to wetland impacts.

The purpose of the Feasibility Study is to determine if the proposed sites can support and accommodate a parking area, trailhead, and associated infrastructure. In the Feasibility Study, the consultant team analyzed each site and developed conceptual designs, cost estimates, and a traffic study. RHAA determined all three sites are feasible to build, but each have their own benefits and challenges to be considered. Key takeaways for each site are described below; more detail can be found within the Feasibility Study.

## DISCUSSION

## Parking Area Design Alternatives and Key Takeaways for Sites B2, D, and E3

## Site B2 (Sears Ranch Road)

Site B2 is located west of the existing Preserve parking lot at the end of Sears Ranch Road about 0.7 miles from Highway 84. See site maps, figure 1-B2-1 and 1-B2-2 on page 7 of the Feasibility Study. The PAWG preferred this site for equestrian parking due to its access from Sears Ranch Road rather than directly off Highway 84.

Site Design:

- 54 spaces for the proposed lower gravel parking lot as follows.
- Four (4) parking spaces for equestrian (2-horse) trailers for up to eight horses.
- Fifty (50) overflow standard parking spaces.
- 21 reconfigured parking spaces at the existing upper paved parking lot as follows:
- Four (4) restriped ADA parking spaces.
- Seventeen (17) standard parking spaces.
- 75 total parking spaces for both parking lots.

Key Takeaways:

- To allow for equestrian access, the Sears Ranch Road entranceway requires widening the road to 20 feet from La Honda Elementary School to the Sears Ranch Road parking lot.
- The PAWG preferred a gravel parking lot to protect the scenic view of the barn and pond, though District gravel lots typically require more maintenance than paved lots.
- Site B2 achieves equestrian parking further north in the Preserve.

Conceptual Cost Considerations:

- Site B2 Parking Lot \$1,606,000
- Sears Ranch Road Entranceway Improvements
\$1,185,000


## Site D (Gate LH07)

Site D is located adjacent to Highway 84, a little over two miles north of the highway's intersection with Sears Ranch Road. See site map, figure 2-D-1 on page 19 of the Feasibility Study. The PAWG proposed this site for public access to the central area of the Preserve and preferred the site for its screening from SR-84.

Site Design:

- 28 spaces for the proposed paved parking lot, including two (2) ADA spaces.
- Vault Toilet
- New trailhead access
- Bridge replacement (allows for a future trail connection to Harrington Creek Trail)

Key Takeaways:

- Tree removal, grading and retaining walls are required for the parking lot.
- To maximize sight lines for drivers waiting in the driveway, the traffic engineer proposes moving the driveway and adding a right-turn pocket to improve sight distance.
- Stopping sight distance is met at the proposed driveway location. Intersection sight distance for drivers in the driveway to the southbound lanes is also met, but not to the northbound lanes. Therefore, the traffic engineer proposes additional warning beacons to caution vehicles on the highway to slow down when a vehicle is in the driveway.
- The existing interior ranch road is partially on the adjoining neighbor's property. A new trail is proposed to keep trail users on District lands. The new trail is feasible, but a potential deep landslide and areas of significant instability could increase the level of maintenance. Conditions such as this are not uncommon for District trails.
- Site D is located within a currently closed portion of the Preserve and will provide new public access to the central area.

Conceptual Cost Considerations:

- Site D Parking Lot
- Site D Bridge Replacement \$1,070,000


## Site E3 (Red Barn)

Site E3 is located about 1.2 miles north of Site D on Highway 84 and is situated behind a stand of existing trees north of the Red Barn. The site has two access points, a north driveway at Preserve Gate LH06, and a south driveway at Preserve Gate RED01. See site map, figure 3-E3-1 on page 38 of the Feasibility Study. A separate entry driveway (via Gate LH06) and exit driveway (via Gate RED01) are proposed.

Site Design:

- 18 spaces within a proposed gravel parking lot, including one (1) ADA space.
- Access is limited via a permit reservation system and docent-led hikes to limit daily traffic movements to and from SR-84. The timed entry and exits will limit traffic accessing Site E3.
- Trail access is possible from the proposed parking lot to the Red Barn.

Key Takeaways:

- Partial widening of the ingress and egress roads connecting to the Site E3 parking area, with pullouts, is needed for fire access.
- To maximize traffic safety, the traffic engineer proposes warning beacons to caution vehicles on the highway to slow down when a vehicle is in the driveway and median barriers to dissuade passing, which has been observed.
- A portion of the existing ranch road along the highway lies within the Caltrans right of way and may require an encroachment permit for continued use.
- The long gravel driveway to the site will require more maintenance than a paved driveway/lot.
- Site E3 is located within a currently closed portion of the Preserve and will provide new public access to the central area.

Cost Considerations:

- Site E3 Parking Lot


## Goal Summary Table

Each site meets different project goals, and the Board can consider moving forward multiple sites to achieve all project goals, including access to the central area of the Preserve.

| Legend |  |  |  |
| :---: | :---: | :---: | :---: |
| High <br> performance/score | Medium <br> performance/score | Low <br> performance/score <br> applicable | NA |


| Goals | Ranking |  |  |
| :--- | :--- | :--- | :--- |
| FEASIBILITY STUDY SITES | Site B2 <br> Sears Ranch | Site D <br> Gate LH07 | Site E3 <br> Red Barn |
| Goal 1: Establish new public access in the central <br> portion of the Preserve |  |  |  |
| Goal 2: Design elements to reflect the rural character <br> of the site and the Red Barn |  |  |  |
| Goal 3: Provide safe public access |  |  |  |
| Goal 4: Balance public access with grazing activities <br> and other uses |  |  |  |
| Goal 5: Include amenities that facilitate <br> environmental education |  |  |  |
| Goal 6: Protect scenic views of and from the site |  |  |  |
| Goal 7: Protect natural resources to the extent |  |  |  |
| possible |  |  |  |

Board input received for Sites B2, D and E3 will be incorporated into the scope of work for further design development, a future phase of work that will follow environmental review. At that time, design work will incorporate the parking area design guidelines currently being developed for Board consideration. At a future Board meeting in summer 2024, the Board will be asked to select sites to advance into environmental review, at which point the feasibility phase of the project will be concluded.

## FISCAL IMPACT

The recommended action has no immediate fiscal impact. After the full board has made a decision on which sites move forward, funding for environmental review of the selected sites will be recommended in future fiscal year budgets during the annual Budget and Action Plan process.

## PRIOR BOARD AND COMMITTEE REVIEW

- December 13, 2022: PNR review of the Existing Conditions/Site Opportunity and Constraints Analysis Report
- Board Report
- Minutes
- September 22, 2021: The Board approved RHAA's award of contract.
- Board Report
- Minutes
- March 10, 2021: The Board received a presentation on best practices from the La Honda PAWG pilot process.
- Board Report
- Minutes
- October 21, 2020: The Board approved the La Honda PAWG recommendations.
- Board Report
- Minutes
- July 28, 2020: PNR forwarded the La Honda PAWG recommendations to the full Board.
- PNR Report
- Minutes


## PUBLIC NOTICE

Public notice was provided as required by the Brown Act. In addition, public notices were provided to adjoining neighbors, parties interested in La Honda Creek Preserve, natural resource management, horseback access, agricultural land use and the coast side protection area. Notifications were posted at the Preserve's three trailheads (Event Center, Sears Ranch Road, and Allen Road).

## CEQA COMPLIANCE

This item is not a project subject to the California Environmental Quality Act. Environmental review is anticipated to occur in a future fiscal year, pending the Board's selection of the alternative(s) as the CEQA project description.

## NEXT STEPS

A Board meeting will be scheduled in the Summer of 2024 to follow up on any Board questions on the La Honda Creek Parking and Trailhead Access Feasibility Study Report and for the Board to provide direction on which sites to move forward to environmental review.

## Attachments

1. La Honda Creek Parking and Trailhead Access Feasibility Study Report
a. Appendices
2. Revised Existing Conditions/Site Opportunity and Constraints Analysis Report

Responsible Department Head:
Jane Mark, AICP, Planning Department
Prepared by:
Melissa Borgesi, Planner II, Planning Department
Contact person:
Melissa Borgesi, Planner II, Planning Department

# rhaa <br>  

La Honda Creek Preserve Parking and Trailhead

## Feasibility Study and <br> Existing Conditions / Opportunities and Constraints

April 2024


## FEASIBILITY REPORT

## Executive Summary

Midpeninsula Regional Open Space District (Midpen) is undertaking a process to evaluate potential sites for parking and trailhead locations to access the central area of the La Honda Creek Open Space Preserve that is currently closed to the public (Project). This analysis reviews three sites (Sites B2, D, and E3) as well as a bridge associated with Site D (Bridge at D), as recommended by the La Honda Public Access Working Group (PAWG).

An Existing Conditions / Opportunities and Constraints (ECOC) Report was completed in November 2022 (revised March 2024). The report compiled site observations and technical studies data, generated and collected for this project by RHAA and their subconsultant team, into a comprehensive analysis of existing site conditions and each site's distinct opportunities and constraints. To avoid duplication, certain report elements pertaining to project introduction, proposed parking/trailhead sites and their program elements, the summary of opportunities and constraints, and recommendations for each site are not included within this Feasibility Report and should be referenced in the attached ECOC Report.

The purpose of this Feasibility Report is to review how project goals, opportunities, and constraints were incorporated into the conceptual plans and to determine if the proposed sites can support and accommodate a parking area, trailhead, and associated infrastructure. For this study, the consultant team analyzed each site and developed conceptual renditions that support the Board-approved project goals with the understanding that more than one of these sites will be needed to achieve all the goals. The report will cover feasibility considerations for maintenance and management, costs, site impacts, and permitting implications. Finally, the evaluations address the overall feasibility of each site. A highperformance score signifies less complication in achieving a category, less site impact, ease of acquiring a permit, or greater affordability.

All sites-B2, D, and E3-appear feasible for parking area and trailhead improvements and in combination, achieve the Board-approved project goals. In summary, key findings from the evaluations show that Site B2 ranks high in several categories: access, geotechnical, grading, property negotiations, utilities, County Planning Permit, and County Tree Ordinance Permit. Site B2 has a medium performance score in other categories: maintenance, costs, tree removal, Environmental Permitting, and County Grading Permit. Site D ranks high in access, grading, utilities, Environmental Permitting, County Planning Permit, County Tree Ordinance Permit, and County Grading Permit. Site D has a medium performance score in maintenance, costs, geotechnical, tree removal, property negotiations, and Caltrans Permitting. Site E3 ranks high in maintenance, costs, access, geotechnical, grading, utilities, County Planning Permit, County Tree Ordinance Permit, and County Grading Permit. Site E3 has a medium performance score in tree removal, Environmental Permitting, and Caltrans Permitting.


La Honda Creek Parking Area Feasibility Study
(1) - $=$

Figure 0-1 Locations of the three sites: B2, D and bridge (Br), and E3. Site B3 was removed from the Feasibility Study by the Planning and Natural Resources Committee at the December 2022 Committee meeting.

## Table of Contents

1.0 SITE B2.71.1 SUMMARY OF DESIGN CHARACTERISTICS - SITE B2 ..... 8
1.2 SUMMARY OF GOALS - SITE B2 ..... 9
1.3 CONCEPT PLAN - SITE B2 ..... 11
1.4 CONCEPT PLAN - SEARS RANCH ROAD. ..... 12
1.5 FEASIBILITY CONSIDERATIONS - SITE B2 ..... 13
1.5.1 MAINTENANCE AND MANAGEMENT CONSIDERATIONS ..... 13
1.5.2 COST CONSIDERATIONS ..... 13
1.5.3 SITE IMPACTS CONSIDERATIONS ..... 13
1.5.4 PERMITTING IMPLICATIONS CONSIDERATIONS ..... 15
1.6 EVALUATION - SITE B2. ..... 17
2.0 SITE D ..... 19
2.1 SUMMARY OF DESIGN CHARACTERISTICS ..... 19
2.2 SUMMARY OF GOALS - SITE D. ..... 23
2.3 CONCEPT PLAN - SITE D ..... 26
2.4 CONCEPT PLAN - SITE D BRIDGE ..... 27
2.5 FEASIBILITY CONSIDERATIONS - SITE D. ..... 28
2.5.1 MAINTENANCE AND MANAGEMENT CONSIDERATIONS ..... 28
2.5.2 COST CONSIDERATIONS ..... 28
2.5.3 SITE IMPACTS CONSIDERATIONS ..... 29
2.5.4 PERMITTING IMPLICATIONS CONSIDERATIONS ..... 31
2.6 EVALUATION - SITE D ..... 36
3.0 SITE E3 ..... 38
3.1 SUMMARY OF DESIGN CHARACTERISTICS ..... 38
3.2 SUMMARY OF GOALS - SITE E3 ..... 40
3.3 CONCEPT PLAN - SITE E3 ..... 42
3.4 FEASIBILITY CONSIDERATIONS - SITE E3 ..... 43
3.4.1 MAINTENANCE AND MANAGEMENT CONSIDERATIONS ..... 43
3.4.2 COST CONSIDERATIONS ..... 43
3.4.3 SITE IMPACTS CONSIDERATIONS ..... 43
3.4.4 PERMITTING IMPLICATIONS CONSIDERATIONS ..... 45
3.5 EVALUATION - SITE E3 ..... 48
La Honda Creek Parking Area and Trailhead Feasibility Study
Feasibility Report17 April 2024
4.0 SUMMARY OF COSTS - ALL SITES ..... 50
5.0 SUMMARY OF GOALS - ALL SITES ..... 51
6.0 SUMMARY OF EVALUATION - ALL SITES ..... 53
7.0 NEXT STEPS ..... 54

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

## APPENDICES

A. RHAA, Concept Design Plans, dated March 2024
B. RHAA, Concept Plan Graphics, dated March 2024
C. R. Borinstein Company, Budget Estimate Report—Rough Order of Magnitude Budget, dated March 2024
D. RHAA, Existing Conditions / Opportunities and Constraints (ECOC) Report, dated November 2022 (revised March 2024)*
a. BKF Engineers, Boundary and Topographic Survey, dated September 2022
b. Cal Engineering \& Geology, Preliminary Geologic and Geotechnical Assessment Report, dated March 2022
c. LSA, Access (Traffic) Study, dated October 2022 (revised March 2024)*
d. LSA, Biological Resource Evaluation Study, dated October 2022
e. LSA, Cultural Landscape Report (Site E3), dated April 2022
f. LSA, Cultural Resources Survey Study, dated March 2022
g. LSA, Tree Inventory Table, dated January 2022
h. Vollmar, Botanical Resource Survey Report, dated November 2021
i. Vollmar, Delineation of Potential Jurisdictional Waters (Site B2, B3, D), dated May 2022
j. Vollmar, Delineation of Potential Jurisdictional Waters (Site E3), dated May 2022
*Document updated since being presented at the December 2022 Planning and Natural Resource Committee meeting

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

## LIST OF ABBREVIATIONS AND ACRONYMS

| APN | Assessor's parcel number |
| :--- | :--- |
| ADA | Americans with Disabilities Act |
| C.3 | Provision C.3 stormwater management |
| Caltrans | California Department of Transportation |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| County | San Mateo County |
| CRLF | California red-legged frog |
| DSDD | Design Standard Decision Document |
| ECOC | Existing Conditions, Opportunities and Constraints report |
| ITE | Institute of Transportation Engineers |
| LID | Low Impact Development |
| MA | Maintenance Agreement |
| Midpen | Midpeninsula Regional Open Space District |
| MRP | Municipal Regional Stormwater Permit |
| MUTCD | California Manual on Uniform Traffic Control Devices |
| NA | Not Applicable |
| OHWM | Ordinary High-Water Mark |
| PAWG | Public Access Working Group |
| Preserve | La Honda Creek Open Space Preserve |
| Project | La Honda Creek Feasibility Project |
| ROW | Right-of-way |
| RMPs | Resource Management Policies |
| RWQCB | Regional Water Quality Control Board |
| SR-84 | State Route 84 |
| TMP | Transportation Management Plan |
| USACE | U.S. Army Corps of Engineers |
| USFWS | U.S. Fish and Wildlife Service |

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 1.0 SITE B2



Site B2
$\dot{4}$ 든
Figure 1-B2-1 Site B2 aerial map - located immediately west of the existing Sears Ranch Roach parking area at the end of the publicly drivable Sears Ranch Road entrance to the Preserve.


Site B2 - Sears Ranch Road Widening
$\oplus \stackrel{\square}{\square}$ Figure 1-B2-2 Site B2 Sears Ranch Road entrance aerial map. Site B2 (not marked) is located in the upper left corner of the picture.

### 1.1 SUMMARY OF DESIGN CHARACTERISTICS - SITE B2

After considering the relative flatness at the bottom of the hill at B2, the design locates equestrian and standard vehicle overflow parking spaces within this area, using topography to hide them from numerous views and to protect the scenic viewshed as seen from higher elevations that look down into the site.

As part of the circulation, the design utilizes the existing grazing tenant gravel roads. Because additional vehicles and users are anticipated to access B2, Sears Ranch Road will require improvements such as road widening to accommodate increased capacity as well as the width of horse trailers, which will be new uses of the site. The LSA Access (Traffic) Study recommends no modifications for the intersection of State Route 84 (SR-84) and Sears Ranch Road. The proposed circulation within the Preserve ensures the separate ingress/egress to the existing staff residence located south of B2 is maintained.

To provide equitable access, the design calls for parking space reconfiguration within the existing footprint of the upper Sears Ranch Road lot to accommodate an expanded number of ADA spaces, as well as a trail from the new lot to the existing restroom, trailhead, and trailhead information. Equestrian hitching posts and mounting blocks would be provided at the lower and upper lot to allow equestrians to use the upper restroom.

At the junction of the new gravel access drive, new gates would accommodate fire access, as well as the current needs of the grazing operation. The plans call for efficiently locating fencing around the parking area to minimize loss of pasture. To connection from the lower to the upper lot and restroom, pedestrian and equestrian users would use a new access trail that provides a separation from vehicles. If the need arises, Midpen may consider providing a 20 -minute parking spot in front of the restroom at the existing lot for restroom use before driving down to the lower lot.

The limit of work for the B2 lower parking lot covers about a 1.96-acre area, and the Sears Ranch Road limit of work is a 1.09-acre footprint. Within the limit of work, the design allows for 50 additional parking spaces and 4 new equestrian parking spaces.

## Designed Program Elements for Site B2

- A grand total of 75 parking spaces as follows:
- A total of 54 spaces for the proposed lower gravel parking lot
- Four (4) new equestrian trailer parking spaces (as each parking space can accommodate a 2-horse trailer, four spaces allow for up to eight horses)
- Fifty (50) new overflow vehicular parking spaces
- A total of 21 spaces for the reconfigured existing upper paved parking lot
- Four (4) restriped ADA parking spaces
- Seventeen (17) paved parking spaces
- Trail access from the lower parking lot to the upper parking lot and trail system
- Widening Sears Ranch Road to 20 feet with improvements for the section of road from La Honda Elementary School to the existing Sears Ranch Road parking lot
- New vehicular and pedestrian gates to prevent public vehicular access to grazing areas
- New hitching posts and mounting blocks for equestrian use at the lower lot and the upper lot near the restroom

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 1.2 SUMMARY OF GOALS - SITE B2

The consultant team analyzed how well B2 met the following Board-approved project goals with the understanding that more than one of the sites would be needed to achieve all the goals.

Symbols of moons represent a performance score of high, medium, or low as a quick form of evaluation.

| Legend |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| High performance/score | Medium performance/score | Low performance/score | Not applicable |  |
|  |  |  |  |  |
| NA |  |  |  |  |


| Goals - Site B2 and Sears Ranch Road | Ranking |
| :--- | :---: |
| Goal 1: Establish new public access in the central portion of the Preserve: Site B2 is |  |
| located in the upper southern area of the Preserve and will require visitors to travel |  |
| approximately 1.3 miles to reach the southernmost edge of the central area of the |  |
| Preserve. Site B2 is in an area currently open to the public and is the only site able to |  |
| offer equestrian parking and access closer to the central portion of the Preserve. |  |
| Hikers currently have access to parking at the existing Sears Ranch Road parking lot |  |
| and equestrians currently access the Harrington Creek Trail from the Event Center in |  |
| the southernmost area of the Preserve. |  |

Goal 2: Design elements to reflect the rural character of the site and the Red Barn:
Although this site is not near the Red Barn, the rural character of the overall Preserve has been considered. The parking area has been carefully situated to respect the grassland setting and conform to the existing topography. The standard parking area and the equestrian parking area are separated to minimize visual impact. The District's parking area design guidelines are currently being developed, which will be applied to this project when they are finalized and approved by the Board. Design elements reflecting the rural character of the site, such as parking area surfacing, parking space delineation, and wheel stops, can be considered in the detailed design phase consistent with the Parking Area Design Guidelines.
Goal 3: Provide safe public access: By widening Sears Ranch Road, 20-foot-wide twolane access is provided for fire and public safety. The PAWG preferred this location for equestrian parking because it allows equestrians to access the parking lot from Sears Ranch Road rather than SR-84. The site is easily patrolled by rangers, as they are already patrolling the existing parking lot.
Goal 4: Balance public access with grazing activities and other uses: Site B2 is situated at the boundary edge of the existing grazing operation and co-located adjacent to the existing Sears Ranch Road parking area to prevent impacts to interior grazing pastures. The total parking expansion footprint within the new fencing is approximately 1.7 acres.
Goal 5: Include amenities that facilitate environmental education: Midpen is not considering interpretive signage at Site B2. However, visitors to B2 will have the

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

## opportunity to see an interpretive sign at the existing parking lot and a new sign a mile north into the Preserve.

Goal 6: Protect scenic views of and from the site: The lower lot is hidden behind the natural slope down, protecting numerous scenic views from higher elevations, including the scenic view of the barn and pond from the existing Sears Ranch Road parking lot. The PAWG preferred a gravel parking lot for the site to limit the visual impact but materials and surface treatments will be further refined in a future phase of this project. At some higher elevation sites, the parking lot may be able to be seen.
Goal 7: Protect natural resources to the extent possible: The eastern edge of Sears Ranch Road will remain in its original location; therefore, it will not affect the adjacent wetland to the east. Grading has been designed to work with the existing contours of the land to reduce grading impact.
Goal 8: Incorporate climate change adaptation where appropriate: The parking lot layout and circulation within the footprint was optimized in consideration of drainage, infiltration, and treatment all within the context of topography and parking count goals. A future phase of this project would contemplate appropriate parking area surface materials and tree replacement along Sears Ranch Road that may further climate adaptation goals.
Goal 9: Provide equitable access opportunities to accommodate the diverse community Midpen serves: Two additional ADA parking spaces (in the paved upper lot), as well as accessible routes to the existing restroom, trailhead and trailhead information will enhance accessibility for people with mobility disabilities. The site is also a short distance from the easy access Grasshopper Loop Trail.

Parking to support hiking uses is enhanced with the expansion of standard vehicular parking spaces. Equestrian access to the central area of the Preserve is also improved by adding a new general use equestrian trailer parking area. Pending future trail implementation and use designation, bikes could access amenities and the central area of the Preserve from Site B2 and the existing Sears Ranch Road parking lot.
Figure 1-B2-3 Site B2 Summary of Goals

### 1.3 CONCEPT PLAN - SITE B2



Figure 1-B2-4 Site B2 Concept Plan

### 1.4 CONCEPT PLAN - SEARS RANCH ROAD



La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 1.5 FEASIBILITY CONSIDERATIONS - SITE B2

### 1.5.1 MAINTENANCE AND MANAGEMENT CONSIDERATIONS

Maintenance considerations: The site and road are easily accessible for maintenance. Final design should strive to balance cut and fill. By avoiding off-site soil fill, this will help prevent soil-borne disease and introduction of invasive species at the site. A gravel parking lot was studied and deemed feasible at Site B2. The PAWG preferred gravel given equestrian parking at the site and to maintain the visual aesthetic of the landscape. Gravel parking lots and roads, however, tend to require more maintenance than asphalt or other paved material. Alternative paving materials could be considered at a future design phase of work to avoid the additional maintenance of gravel parking lots while still retaining the aesthetic quality of a gravel-like surface.

Management considerations: The design reconfigures the existing gates to control access to the lower parking lot as needed. Automatic solar gates for the parking lot would be timed to open and close with preserve hours.

### 1.5.2 COST CONSIDERATIONS

Soft costs, planning fees, permit fees, performance bonds, payment bonds, CEQA, and project course of construction contingency are excluded.

| Site B2 | 2024 Net Costs |  |
| ---: | ---: | ---: |
| A. Site Mobilization | $\$$ | 354,488 |
| B. Demolition, Tree Removal, \& Clearing | $\$$ | 91,013 |
| C. Grading \& Drainage | $\$$ | 596,631 |
| D. Paving \& Code Signage | $\$$ | 393,638 |
| E. Gates, Fencing, \& Site Accessories | $\$ \mathbf{8 9 , 3 9 7}$ |  |
| F. Landscape Repair \& Revegetation | $\$$ | 80,383 |
| Total | $\mathbf{\$ 1 , 6 0 5 , 5 5 0}$ |  |

Figure 1-B2-6 See Appendix C: Budget Estimate Report. Note general mobilization for all sites is not shown.

| Sears Ranch Road Improvements | 2024 Net Costs |  |
| :---: | ---: | ---: |
| A. Site Mobilization | $\$$ | 354,153 |
| B. Demolition, Tree Removal, \& Clearing | $\$$ | 121,400 |
| C. Grading \& Drainage | $\$$ | 458,059 |
| D. Paving, Striping, \& Code Signage | $\$$ | 201,358 |
| E. Gates \& Fencing | $\$$ | - |
| F. Landscape Repair \& Revegetation | $\$$ | 50,175 |
| Total | $\mathbf{\$ 1 , 1 8 5 , 1 4 5}$ |  |

Figure 1-B2-7 See Appendix C: Budget Estimate Report. Note general mobilization for all sites is not shown.

### 1.5.3 SITE IMPACTS CONSIDERATIONS

Access considerations: The site is already open to the public, and Sears Ranch Road is easy to access from SR-84.

Geotechnical considerations: Borings are recommended to characterize subsurface conditions for areas of development to identify if remediation or avoidance is necessary. Obtain a San Mateo County

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024
(County) permit for 3 borings to an estimated depth of 15 to 30 feet to characterize subsurface materials for the proposed parking lot area. The LANGAN report identified areas of artificial fill that may require remediation via earthwork or the development of retention structures. The final layout of the Sears Ranch Road widening, informed by the geotechnical investigation results, should avoid or mitigate numerous shallow slumps on the uphill side of the road. To avoid destabilizing soils on the downhill side of Sears Ranch Road, the widening is proposed as cut into the hillside rather than fill.

Grading considerations: Grading has been designed to work with the existing contours of the land to reduce grading impact. In addition, the grading design takes into account existing drainage patterns and earthwork.

Tree removal considerations: No trees are located within the proposed B2 lower parking lot site. A total of 18 trees, 2 of which are Significant/Heritage trees, will be removed on the uphill side of the Sears Ranch Road widening. Additional tree removal could be considered in accordance with Midpen's Resource Management Policies during a future phase of work. There is an opportunity for new site screening that would need to be coordinated with Midpen staff.

## Potential species list for screening:

- Arctostaphylos glandulos
- Ceanothus thyrsiflorus
- Cercocarpus betuloides
- Chrysolepis chrysophylla
- Frangula californica
- Garrya elliptica
- Heteromeles arbutifolia
- Holodiscus discolor
- Quercus agrifolia
- Quercus chrysolepis
- Quercus wislizeni
- Ribes californicum
- Ribes sanguineum
- Torreya californica
- Vaccinium ovatum

Property negotiation considerations: To avoid having to negotiate access for road improvements with adjacent property owners, the Sears Ranch Road widening improvements limit of work has been designed to stay within the County right-of-way or lands of Midpen.

Utility considerations: There is an opportunity to explore the feasibility of removing/undergrounding utility lines that extend from this existing parking lot toward the interior of the Preserve, completing Objective PA-7.2 Remove obstructions to important viewshed within the Master Plan. Consultation with PG\&E and San Mateo County Planning would be required. This would need to be fully evaluated in a future phase of work due to the anticipated high costs and lengthy timelines, as the powerlines visible from the existing Sears Ranch parking lot are major regional lines that serve the Town of La Honda.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 1.5.4 PERMITTING IMPLICATIONS CONSIDERATIONS

Permitting Overview: This permitting overview is preliminary only. As the project and designs are refined, more permits may be required, and a more formal review and agency consultation will occur. The following permits reflect the preliminary level of agency engagement conducted to date.

Environmental Permits—Wetlands and Waters and Riparian Setbacks: Site B2 parking lot area has no state or federal permitting jurisdictions near the project location.

Potential jurisdictional waters at Sears Ranch Road include a seep wetland. Midpen's La Honda Creek Master Plan Environmental Protection Guidelines state setbacks from wetlands and jurisdictional waters shall be a minimum of 50 feet from roads, where feasible. If the road widening and improvements need to shift eastward, this work may fall within the 50 -foot setback. Encroaching into the setback does not require a permit with the California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), or U.S. Army Corps of Engineers (USACE), but Midpen would need to make an exception to allow the road to encroach into the Master Plan's established setbacks.

If the seep wetland is impacted, the project would undergo permitting with RWQCB and USACE. However, no work is proposed in the seep wetland, and it would be avoided during project planning and construction, eliminating the need for other agency permits at this site.

Potential jurisdictional waters at Sears Ranch Road also include a non-wetland swale. The swale will be relocated west as the road widens west. Potential permits required for the impacts to the non-wetland swale include a permit from the RWQCB, and possibly the USACE, if they take jurisdiction over the swale. The extents of the swale will match that of the existing swale.

Environmental Permits—Critical Habitat: Sensitive natural communities observed near Site B2 include Creeping Rye Grass, which is considered sensitive by the CDFW and under CEQA.

This site is designated as critical habitat for California red-legged frog (CRLF) by the U.S. Fish and Wildlife Service (USFWS). Critical habitat is a protection that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities with the USACE or other lead federal agencies that would provide a federal nexus for the project. For a project site to be considered critical habitat, the habitat also needs to meet the primary constituent element for CRLF critical habitat, which include suitable aquatic breeding, aquatic non-breeding, dispersal, and/or upland habitat for CRLF. Site B2 provides suitable dispersal and upland habitat for CRLF, and suitable breeding and non-breeding aquatic habitat occurs in the vicinity. Potential Agency Consultations include USACE and USFWS.

Midpen has a recovery permit for CRLF that may be amended for the western pond turtle, if this species becomes federally listed. Currently, the western pond turtle is a proposed federally listed species. Site B2 is situated near a pond that is known to be inhabited by western pond turtles, and this species could occur in the pond and nest in the adjacent grasslands. Potential nesting habitat is often considered to occur within 300 feet of the ponds. For Site B2, the ponds are located over 1,000 feet to the west.

San Mateo County—Planning Permit: Site B2 improvements require a Resource Management Permit from the San Mateo County's Planning Department. The County's zoning regulations under RM Chapters 20A and 20A. 2 will need to be addressed.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

Work in the Sears Ranch Road right-of-way will require review from the Planning Department and San Mateo County Fire. The B2 lower parking lot and access roads meet the San Mateo County Fire minimum widths, maximum length, turning radius, and turn around specifications.

Obtain a County permit for 3 borings to an estimated depth of 15 to 30 feet to characterize geotechnical subsurface materials for proposed parking lot area.

San Mateo County-Tree Ordinance: Standard tree removal will need to adhere to the Significant and Heritage Tree Ordinances of San Mateo County. Two (2) significant trees are anticipated to be removed from the site. Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements. Per the County's Significant Tree and Heritage Tree Ordinances, tree replacement would be required depending on the size and species of trees removed. A Permit Exception exists for removal of hazardous trees. Midpen may submit an overall request for a variance to the replanting mitigation required, which could be provided in memo form as part of a tree removal application and would be at the discretion of the County Arborist's review.

San Mateo County—Grading Ordinance: The site can accommodate an additional row of 25 parking spaces; however, the added impervious surface (whether gravel or paved) would trigger a more in depth Municipal Regional Stormwater Permit (MRP) Provision C. 3 (C.3) for stormwater management. To avoid triggering the more onerous C. 3 stormwater requirements of hydromodification, the impermeable surfaces of the parking lot and the Sears Ranch Road resurfacing were kept under an acre.

For the Sears Ranch Road widening, there is no obvious location for stormwater treatment, so alternative compliance may need to be pursued in the form of Low Impact Development (LID) treatment at an offsite location or payment of in-lieu fees.

Caltrans Permit: No Caltrans permit is needed for Site B2.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 1.6 EVALUATION - SITE B2

As a summary of the narratives above, the below evaluation table recaps the status of Site B2. The descriptions above are more detailed and should take precedence over the overall ranking in the table.

Symbols of moons represent a performance score of high, medium, or low as a quick form of evaluation. A high score signifies less complication in achieving a category, less site impact, ease of acquiring a permit, or greater affordability.

| Legend |  |  |  |
| :---: | :---: | :---: | :---: |
| High performance/score | Medium performance/score | Low performance/score | Not applicable |
| NA |  |  |  |



La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

| PERMITTING IMPLICATIONS CONSIDERATIONS |  |
| :--- | :--- |
| Environmental |  |
| San Mateo County Planning |  |
| San Mateo County Tree Ordinance |  |
| San Mateo Grading Ordinance | NA |
| Caltrans |  |

Figure 1-B2-8 Site B2 Evaluation

### 2.0 SITE D



Site D \& Bridge Site
(1) $\underset{0}{\square} \varlimsup_{200}$

Figure 2-D-1 Site D and the Bridge Site aerial map - both located to west of Highway 84, south of the Red Barn

### 2.1 SUMMARY OF DESIGN CHARACTERISTICS

The site is a moderately flat area suitable for a full public access parking lot with room to treat stormwater while also avoiding the adjacent steep grades of the nearby wetland channel. This is the only parking lot that includes a restroom as part of the new proposed infrastructure. There is enough room for a fire truck turnaround, which pump trucks can also use to clean out the vault toilet restroom.

By utilizing some retaining walls, the impacted grading area footprint can be reduced to 0.67 acres. The walls also help partially hide the parking lot from SR-84, improving the design aesthetics.

Speeds over the posted speed limit occur at this location. It is a challenge to provide access from SR-84, but by moving an existing single access driveway north from its current location, sight distance for vehicles exiting the driveway at Site D is improved. Warning beacons on both sides of the driveway would warn vehicles on SR-84 of a vehicle waiting to exit the driveway. A right-turn pocket is also recommended to be added to increase sight distance for oncoming vehicles.

The circulation within the parking lot is a hammerhead, dead-end design with a turnaround space at the end of the parking lot. A new interior dirt road on the south end of the parking lot would connect the existing ranch road and allow the existing LHO7 gate to be decommissioned.

A new trailhead and access trail that connects to the interior trail network would be needed for Site D. Since the short, upper section of the existing ranch road is not owned by Midpen, the design proposes a

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024
new trail segment starting near the new restroom and connecting to the ranch road and bridge below. There are potential deep landslides and areas of significant instability where this trail is proposed, which may require mitigation measures for the planned development. A more extensive geotechnical study is needed to evaluate any necessary landslide mitigation measures.

Many larger, densely packed trees that would need to be removed for site development are invasive or fire hazard trees. Removing them would provide a fire management benefit. Perimeter trees are proposed to be retained for shade, and new native vegetation could be planted to assist with screening along this section of SR-84. Eucalyptus trees along this section of Highway 84 were removed in January 2024 by FIRE SAFE San Mateo County as part of grant funding from CALFIRE to conduct hazardous fuel reduction along SR-84.

Due to nearby active grazing activities, the parking area may need cattle guards, gates, and fencing to keep livestock out. This will be confirmed at a later phase of the project.


Figure 2-Br-1 Site D Bridge over La Honda Creek that connects Site D to the Preserve trail/ranch road network.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024


Figure 2-Br-2 Site D Bridge over La Honda Creek facing west

## Site D Bridge

The bridge replacement appears viable based on preliminary data; however, the crib wall (horizontally laid redwood logs stacked to stabilize the banks of the existing bridge) condition is unknown until a geotechnical report is prepared. Replacing the existing rail car bridge at Site $D$ appears to be feasible if the abutments of the new bridge are outside the Ordinary High-Water Mark (OHWM) and above the top-of-bank of La Honda Creek. The OHWM is approximately at elevation 81.50 but should be verified in the field. The banks of the stream are approximately 20 feet tall (near vertical at greater than 1:1) and 50 feet wide but these should also be verified in the field.

The new bridge is intended to accommodate pedestrians, bikes, equestrians, and light-weight maintenance vehicles with a width of 9 feet. Pending the integrity of the embankments, the bridge design may need to increase in span if the geotechnical report requires the abutment locations to be further back from the bank. The current span is shown at 58 feet. During the existing conditions phase, Midpen staff expressed the potential for a second bridge with a trail connection northward to the Red Barn site, which would be a long-range consideration for a future separate project.

## Designed Program Elements for Site D

- A paved parking lot with a total of 28 spaces
- Two (2) ADA space on a concrete pad
- A vault restroom facility is located adjacent to the parking lot
- Vehicular access to and from SR-84
- A new automatic solar gate helps prevent public vehicular access to the parking lot outside normal operating hours
- Traffic safety enhancements, such as warning beacons
- A new trailhead and trail access via the bridge over La Honda Creek

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

- Bridge replacement


Figure 2-D-2 Warning beacons inform vehicles on the highway to slow down to meet the intersection sight distance

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 2.2 SUMMARY OF GOALS - SITE D

The consultant team analyzed how well D met the following Board-approved project goals with the understanding that more than one of the sites would be needed to achieve all the goals.

Symbols of moons represent a performance score of high, medium, or low as a quick form of evaluation.

| Legend |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| High performance/score | Medium performance/score | Low performance/score | Not applicable |  |
|  |  |  |  |  |
| NA |  |  |  |  |


| Goals - Site D | Ranking |
| :--- | :---: |
| Goal 1: Establish new public access in the central portion of the Preserve: This site is |  |
| located within the central area of the Preserve in a currently closed area; therefore, |  |
| establishing this parking area and trailhead for public use would meet this goal. |  |
| Site D Bridge |  |
| The bridge is currently closed to general public access. By replacing the bridge, public |  |
| access would be provided to existing trails on the west side of the bridge. |  |

Goal 2: Design elements to reflect the rural character of the site and the Red Barn:
Although this site is not near the Red Barn, the rural character of the overall Preserve has been considered. The conceptual design respects and complements the surrounding forest setting by minimizing the footprint of the parking area to preserve and protect trees. The parking area design guidelines are currently being developed, which will be applied to this project when they are finalized and approved by the Board. Design elements reflecting the rural character of the site, such as parking area surfacing, parking space delineation, and wheel stops, can be considered in the detailed design phase consistent with the Parking Area Design Guidelines.

## Site D Bridge

Parking area design guidelines are currently being developed, which will be applied to this project when they are finalized and approved by the Board. The bridge design will respect and complement the surrounding forest setting and incorporate appropriate design elements reflecting the rural character of the site consistent with the Parking Area Design Guidelines.

Goal 3: Provide safe public access: The design proposes to address traffic safety by moving the driveway, adding a right-turn pocket to improve sight distance, and providing warning beacons to caution vehicles on the highway to slow down. The proposed parking lot allows for fire access and is easily patrolled by rangers.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

| Site D Bridge <br> The replacement of the bridge will provide safe access across the creek and connect to <br> the trail system to the west. |  |
| :--- | :--- |
| Goal 4: Balance public access with grazing activities and other uses: NA | NA |
| Site D Bridge |  |
| The bridge is not intended for grazing access. |  |
| Goal 5: Include amenities that facilitate environmental education: Midpen is not <br> considering interpretive signage at this site. | NA |
| Site D Bridge |  |
| Midpen is not considering interpretive signage at this site. It is possible to include |  |
| interpretive signage if appropriate. |  |
| Goal 6: Protect scenic views of and from the site: Views from SR-84 Scenic Corridor <br> are open towards Site D on the west. By hiding the parking below a retaining wall <br> placed in front of the parking spaces facing the road and adding new vegetative <br> screening, the parking lot can be obscured from highway views. |  |
| Site D Bridge |  |
| The bridge is minimally visible from the trail due to the thick tree canopy and will be <br> aesthetically designed to fit within the scenic area of the creek. |  |
| Goal 7: Protect natural resources to the extent possible: The wetland channel to the <br> north of the parking area is avoided. Although trees (non-native and native) will be <br> removed in the location of the parking lot, the conceptual design minimizes the <br> footprint of the parking area to preserve and protect as many trees as possible. A <br> future phase of this project would determine the replacement ratio of removed trees <br> to meet permitting requirements. |  |
| Site D Bridge |  |
| The creek embankments and surrounding trees are proposed to be protected during |  |
| this improvement project to the greatest extent feasible. |  |

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

Goal 9: Provide equitable access opportunities to accommodate the diverse community Midpen serves: The parking area includes two ADA parking stalls and an accessible route to the restroom and trailhead. The site cannot accommodate equestrian access. Pending future trail implementation and use designation, bikes could access the Preserve from Site D.

## Site D Bridge

During design development, Midpen will aim for the bridge design to meet accessible standards. For example, design details such as of direction of planks and gap between planks is beneficial for someone using a specialized mobility device that can handle the slope down from the parking lot. Accommodating a 1:8 slope ( $8.33 \%$ over 200 feet maximum) to achieve wheelchair accessible trail standards is infeasible due to the site's extreme slopes and elevation difference from the parking lot to the bridge (over 150 feet). Pending future trail implementation and use designation, bikes and equestrians could access the bridge and surrounding trails.
Figure 2-D-3 Site D Summary of Goals

### 2.3 CONCEPT PLAN - SITE D



LA HONDA CREEK PARKING AND TRAILHEAD FEASIBILITY STUDY SITE D - CONCEPT DESIGN GRAPHIC

### 2.4 CONCEPT PLAN - SITE D BRIDGE



### 2.5 FEASIBILITY CONSIDERATIONS - SITE D

### 2.5.1 MAINTENANCE AND MANAGEMENT CONSIDERATIONS

Maintenance considerations: Site $D$ is accessible and can be easily maintained. Final design should strive to balance cut and fill. By avoiding off-site soil fill, this will help prevent soil-borne disease and introduction of invasive species at the site.

The development of a trail from the proposed parking area to the ranch road and bridge is feasible, but a potential deep landslide and areas of significant instability could increase the level of maintenance needed.

Site D Bridge: The site is accessible from both sides of the creek for maintenance. Final design should strive to balance cut and fill. By avoiding off-site soil fill, this will help prevent soil-borne disease and introduction of invasive species at the site.

Management considerations: A new automatic solar powered gate would be timed to open and close within preserve hours.

The fire truck turnaround doubles as access for pump trucks to service the vault restroom. Because this parking lot is a dead-end, a "no parking" turnaround space is provided at the end of the parking lot for vehicles who do not find a parking spot. Rangers would need to monitor parking in the turnaround areas of this lot as well as vehicles parking within the Caltrans right-of-way. If overflow parking occurs on SR84 and is problematic, Midpen would work with Caltrans and the County to designate a "no parking" zone to the extent necessary and install "no parking" signs to allow rangers to enforce the California Vehicle Code section for illegal parking on a state highway.

Site D Bridge: A new automatic gate is proposed at Site D, that has a lock to control public access to the parking lot and trail that leads to the bridge. The bridge allows Midpen staff access for maintenance and safety needs. During a future phase of work, Midpen staff can consider moving the existing LH07 gate (proposed to be replaced by the new automatic gate) to the ranch road to prohibit public vehicular access to the road and bridge.

### 2.5.2 COST CONSIDERATIONS

Soft costs, planning fees, permit fees, performance bonds, payment bonds, CEQA, and project course of construction contingency are excluded.

| Site D | 2024 Net Costs |  |
| ---: | ---: | ---: |
| A. Site Mobilization \& Preparation | $\$$ | 399,898 |
| B. Demolition, Tree Removal, \& Clearing | $\$$ | 171,072 |
| C. Grading, Retaining Walls, \& Drainage | $\$$ | 391,754 |
| D. Paving, Striping, \& Code Signage | $\$$ | 309,853 |
| E. Gates \& Fencing | $\$$ | 87,512 |
| F. Landscape Repair \& Revegetation | $\$$ | 43,128 |
| G. Roadway Advance Warning System | $\$$ | 83,744 |
| H. Vault Restroom | $\$$ | 133,655 |
| Total | $\mathbf{1 , 6 2 0 , 6 1 7}$ |  |

Figure 2-D-5 See Appendix C: Budget Estimate Report. Note general mobilization for all sites is not shown.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

| Site D-Bridge | 2024 | Net Costs |
| ---: | ---: | ---: |
| A. Site Mobilization \& Preparation | $\$$ | 111,379 |
| B. Demolition | $\$$ | 71,601 |
| C. Abutments | $\$$ | 222,089 |
| D. Span Structure | $\$$ | 527,168 |
| E. Decking \& Rails | $\mathbf{1 1 1 , 9 4 9}$ |  |
| F. Grading \& Surfacing - Landings | $\$$ | 15,074 |
| G. Landscape Repair \& Revegetation | $\$$ | 10,887 |
| Total | $\mathbf{1 , 0 7 0 , 1 4 7}$ |  |

Figure 2-Br-4 See Appendix C: Budget Estimate Report. Note general mobilization for all sites is not shown.

### 2.5.3 SITE IMPACTS CONSIDERATIONS

Access considerations: The average travel speed on SR-84 is higher than the 40 mph posted speed limit, with the $85^{\text {th }}$ percentile speed of vehicles near Site $D$ at 50 mph . By incorporating the design features listed below, roadway safety can be maximized while fulfilling the La Honda Creek Master Plan goal to provide public access to the central area of the Preserve.

From a traffic safety standpoint, the site can maximize sight lines for drivers waiting in the driveway by moving the driveway 50 feet north of Preserve Gate LHO7 and by adding a stop bar in the driveway recessed to accommodate a right-turn pocket. At the resulting position for the driveway, stopping sight distance is provided for both southbound and northbound vehicles traveling 50 mph on SR-84. This driveway position also meets the recommended intersection sight distance for a right-turn but not a left-turn. Therefore, implementing additional traffic devices and warnings focused on reducing the travel speed of vehicles on the highway are recommended to address safety concerns caused by excessive vehicle speed. With these devices and warnings to slow highway traffic, northbound vehicles on the highway would have sufficient time to prepare for a vehicle exiting the driveway to make a left turn onto the highway.

- The Level of Service of SR-84 at the proposed driveway would be within Caltrans standards. On weekdays, SR-84 carries approximately 2,000 vehicles per day and 2,300 vehicles per day on weekends. Traffic volumes into and out of the existing driveways at Sites D is nominal, and trips during the peak hours would be infrequent.
- The driveway is recommended to be placed 50 feet north of Preserve Gate LHO7 to improve sight distance to the southbound lanes.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology and a left-turn pocket is not warranted.
- A short right-turn pocket ( 25 feet) with an abbreviated ( 60 feet) transition into and out of the driveway would maximize sight distance from the driveway to SR-84.
- A full deceleration and acceleration lane is not recommended because it could be used as a passing lane, reducing road safety.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound approaches and interconnecting warning beacon to the loop detector at the exit lane in the driveway.
- Midpen can consider working with Caltrans to determine whether features can be added to the state highway to prevent passing at this location as part of the project.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

- Highway shoulder parking may need to be prohibited to dissuade visitors from unsafe parking on the roadway to enter the Preserve when the site is open to the public.

Site D Bridge: The shortest route to access the existing bridge is from Gate LH07 at Site D. Both sides of the creek have access roads, allowing the bridge to be removed in segments. The existing access road on the east provides the main access. It may be challenging to find level ground and maneuvering room for a large crane. The crane required would likely only need to be a relatively medium-duty truck boom crane based on the assumption the new bridge will not be a pre-assembled system. The crane could be used to remove the existing bridge in segments. The access roads on the east and west accommodate a mid-size truck, dozer, or excavator, which would allow for excavation and supply materials needed for new abutments. The east side has a turnaround hammerhead. The assumptions about the type of equipment needs are preliminary only. The next step will be to refine the recommendations with a geotechnical report, a structural assessment of existing bridge materials (weight), and a new structural design.

Geotechnical considerations: At Site D, borings are recommended to characterize subsurface conditions for areas of development to identify if remediation or avoidance is necessary. The initial interpretation is that retaining walls should suffice to support the parking area upslope. Avoid areas of significant instability. The colluvium / landslide deposit needs further exploration. Remediation measures to address the identified instabilities may include segmental block or cast-in-place concrete walls supported with pier and grade and buried stabilization piles. The selection of remedial or stabilization measures will depend on the planned improvements configuration and findings from the subsurface exploration and engineering analysis.

It is recommended to obtain 3 borings to an estimated depth of 20 to 30 feet to characterize subsurface materials for proposed parking lot area, restroom foundation, and potential retaining walls.

Site D Bridge: The local geotechnical mapping reconnaissance was hindered by heavy vegetation cover and thus the initial assessment cannot exclude the potential for landslides and other site conditions that may have an impact on the proposed new and improved facilities.

With the unknown condition of the crib walls, the next step is to access and prepare a geotechnical report. The preference is to keep the crib walls in their current location, if the geotechnical report indicates they are structurally viable.

Borings are recommended to characterize subsurface conditions at the abutment locations. Obtain 2 borings to an estimated depth of 30 to 45 feet to characterize bridge abutments.

Grading considerations: Designs should consider slope inclinations of 3:1 (horizontal: vertical) or shallower unless they are supported by retaining wall structures or use geogrid reinforced engineered fill.

Site D Bridge: The design of the abutment should be above the top-of-bank of La Honda Creek. There is always a chance constructing the new abutments may compromise the existing crib walls and unknown integrity of the soils at the embankment.

Tree removal considerations: Within the Site D new parking lot improvements, a total of 52 trees will be removed, 5 of which are Significant Trees. Additional tree removal could be considered in accordance

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024
with Midpen's Resource Management Policies during a future phase of work. There is an opportunity for new site screening that would need to be coordinated with Midpen staff.

Site D Bridge: The intent of the design is to avoid disturbing tree roots with demolition, grading, excavation, or the new bridge itself. Should there be significant impact to tree roots, tree removal may be needed, and a permit and possibly mitigation may be required by the County of San Mateo. The root zones typically occur below the canopy dripline of the trees but can extend beyond the dripline. A certified arborist should be present to monitor work within the root zone of adjacent trees. In addition to the County tree removal permit, impacts to riparian trees (such as trees near the bridge over La Honda Creek) could also require a permit and mitigation from CDFW.

## Potential species list for screening:

- Arctostaphylos glandulos
- Ceanothus thyrsiflorus
- Cercocarpus betuloides
- Chrysolepis chrysophylla
- Frangula californica
- Garrya elliptica
- Heteromeles arbutifolia
- Holodiscus discolor
- Quercus agrifolia
- Quercus chrysolepis
- Quercus wislizeni
- Ribes californicum
- Ribes sanguineum
- Torreya californica
- Vaccinium ovatum

Property negotiation considerations: The existing ranch road passes through a portion of the adjacent property to the south, and Midpen currently has a Patrol Easement with the landowner at APN 078190 210. If this road is used by the public, a new easement would be needed.

Site D Bridge: NA
Utility considerations: Any improvements that require connecting to existing utility poles for electrical service, such as potentially the traffic beacons, will require consultation with PG\&E and San Mateo County Planning.

Site D Bridge: NA

### 2.5.4 PERMITTING IMPLICATIONS CONSIDERATIONS

Permitting Overview: This permitting overview is preliminary only. As the project and designs are refined, more permits may be required, and a more formal review and agency consultation will occur. The following permits reflect the preliminary level of agency engagement conducted to date.

Environmental Permits—Wetlands and Waters and Riparian Setbacks: Potential jurisdictional waters that require state/federal permitting (USACE, CDFW, RWQCB) near this project location include those

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024
for the wetland channel to the north. However, no work is proposed in the wetland channel, and any development should be set back 100 feet from the channel during project planning and construction, eliminating the need for regulatory agency permits at this site.

Site D Bridge: The replacement bridge over La Honda Creek should fully span the creek and avoid installing abutments within and along the bank of the creek. Abutments of the new bridge should be constructed outside of the OHWM and above the top-of-bank of La Honda Creek. This design would avoid the need to obtain permits from the USACE and RWQCB. North of the bridge is a jurisdictional non-wetland swale, which should also be avoided.

Impacts to riparian vegetation, including coast redwood trees and riparian understory plants, should be avoided where possible, since impacted riparian vegetation would require mitigation by CDFW. CDFW may still require a 1602 Streambed Alteration Agreement for crossing over La Honda Creek even if riparian vegetation is avoided. The CDFW permit could possibly be satisfied using permit coverage under the Open Space Maintenance and Restoration Program if bridge replacements are considered permissible under expanded coverage that Midpen is currently pursuing with CDFW. If federal jurisdiction cannot be avoided, it is recommended that this bridge become a standalone project and not combined with the parking area, which does not have a federal jurisdiction.

Concrete footings for the bridge are outside the stream channel to avoid mitigation or use of an alternative material by CDFW.

Environmental Permits—Critical Habitat: Sensitive natural communities include the Redwood Forest and Cismontane Woodland. These plant communities are considered sensitive by CDFW and under CEQA. This site is designated as critical habitat for CRLF by the USFWS. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities USACE. Potential Agency Consultations include USACE and USFWS.

Tree and vegetation removal should occur outside of the nesting bird season (typically February 1 to September 1) when feasible to avoid potential impacts to nesting birds. If tree and vegetation removal need to occur during the nesting bird season, pre-construction surveys for nesting birds would need to be conducted. Active bird nests, if present, would need to be protected by an established exclusion zone buffer. Where possible, trees with active acorn granary will be removed during a time when acorn woodpeckers are not using them to store acorns. Typically acorns grow on native oaks in the late summer.

Site D Bridge: Sensitive natural communities include riparian habitat and the Redwood Forest and Cismontane Woodland. These plant communities are considered sensitive by CDFW and under CEQA. This site is designated as critical habitat for CRLF. La Honda Creek is critical habitat for steelhead and coho Salmon. Critical habitat is a protection that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

Development of the bridge would not impact any special-status plants. Directly outside the site are Scouler's willow and California bottle-brush grass (CRPR 4.3). These plants should be avoided. Potential impact of riparian habitat may occur at the bridge.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

Work above and adjacent to the creek must avoid and minimize impacts to general wildlife movement and their habitat.

Suitable habitat for bat roosting and nesting birds under the bridge, hibernating, and foraging habitat may be present on site and should be monitored.

San Mateo County—Planning Permit: Site D improvements require a Resource Management Permit from the San Mateo County's Planning Department. The County's zoning regulations under RM Chapters 20A and 20A. 2 will need to be addressed.

Any new parking or driveways will need to meet San Mateo County Fire minimum width, maximum length, turning radius, and turn around specifications. Any new gates will need to have San Mateo County Fire access.

Obtain a County and Caltrans (if in ROW) permit for 3 borings to an estimated depth of 20 to 30 feet to characterize subsurface materials for proposed parking lot area, restroom foundation, and potential retaining walls.

Site D Bridge: The bridge is not intended to provide fire access, but the new bridge and standard truck access can be discussed with San Mateo County Fire.

Obtain a County permit for 2 borings to an estimated depth of 30 to 45 feet to characterize bridge abutments.

San Mateo County-Tree Ordinance: Standard tree removal will need to adhere to the Significant and Heritage Tree Ordinances of San Mateo County. Five (5) significant trees are anticipated to be removed from the site. Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements. Per the County's Significant Tree and Heritage Tree Ordinances, tree replacement would be required depending on the size and species of trees removed. A Permit Exception exists for removal of hazardous trees. Midpen may submit an overall request for a variance to the replanting mitigation required, which could be provided in memo form as part of a tree removal application and would be at the discretion of the County Arborist's review.

Site D Bridge: No trees are proposed to be impacted. Should any damage of the roots occur, standard tree removal will need to adhere to the Significant and Heritage Tree Ordinances of San Mateo County. Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements. Per the County's Significant Tree and Heritage Tree Ordinances, tree replacement would be required depending on the size and species of trees removed. A Permit Exception exists for removal of hazardous trees. Midpen may submit an overall request for a variance to the replanting mitigation required, which could be provided in memo form as part of a tree removal application and would be at the discretion of the County Arborist's review.

San Mateo County-Grading Ordinance: Provision C. 3 stormwater treatment is required for the impermeable surface of the paved parking lot and restroom.

During the Grading Permit application, projects within a scenic corridor may require a public hearing by the County Planning Commission, depending on the amount of grading.

Site D Bridge: A grading permit will be required for the bridge.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

Caltrans Permit-General: Consultation with Caltrans would be needed to implement a combination of elements from the California Manual on Uniform Traffic Control Devices (MUTCD). Specifically, a combination of roadway signage, W2-2, W16-13P "When Flashing," and a warning beacon are recommended to be placed at the northbound and southbound approaches to Site D driveway. Coordination with Caltrans would also be needed to pursue relocation of the driveway north and the right turn-pocket to improve sight distance.

Site D Bridge: NA
Caltrans Permit—Highway Operations: As standard conditions, Caltrans requires project sponsors to document the impacts and relevant mitigation(s) associated with the project on the State Highway System. State ROW such as facility highway/freeway mainlines, on-ramps, off-ramps and connectors should be considered for evaluation. Specifically, Midpen would need to demonstrate that the increase in traffic demands expected, according to the Institute of Transportation Engineers (ITE) Trip Generation Manual, does not adversely impact safety nor operations of intersections in immediate proximity to SR84 (as stated in summary of finding E3). The Caltrans Complete Streets policy and Equity goals should be taken into consideration. Specifically, ensuring safe access and use by all users. Any modifications to the State ROW that are proposed as part of the project and/or involved in mitigations must be done according to Caltrans permit process and Intersection Control Evaluation compliance.

Some of these standard conditions, such as those related to freeway on- and off-ramps, are not relevant to the proposed project. The Access (Traffic) Study showed that the increased traffic demands as a result of the project are not expected to impact safety or operations on the State Highway System.

If problematic overflow parking is observed, Midpen can work with Caltrans and the County to establish California Vehicle Code parking regulations along the highway as needed (No Parking or No Parking After Hours).

Caltrans Permit-Construction-Related Impacts: As a standard condition, potential impacts to the State ROW from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified. Project work that requires movement of oversized or excessive load vehicles on state roadways requires a transportation permit that is issued by Caltrans. Prior to construction, coordination is required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Highway System.

Temporary access points will likely utilize the same location as existing access points or final proposed access points. During later stages of the project planning and design, mitigation for construction and noise impacts will be identified and the transportation permit and TMP would be developed as needed.

Caltrans Permit-Equitable Access: As a standard condition, if any Caltrans facilities are impacted by the project, those facilities must meet the Americans with Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Per the existing conditions analyzed in the ECOC, there are no Caltrans owned bicycle or pedestrian facilities that will be impacted by the project. The Access (Traffic) Study determined that sufficient sight distance is provided at the proposed driveway for bicycles traveling at typical bicycle speed.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

Caltrans Permit-Encroachment Permit: If any non-standard design elements are proposed, then the Design Standard Decision Document (DSDD) and Maintenance Agreement (MA) must be completed before submitting an encroachment permit application package.

Roadway signage and striping consistent with the MUTCD are proposed; therefore, no non-standard design elements are proposed. However, Caltrans may still request preparation of a DSDD related to the proposed combination of W2-2, W16-13P "When Flashing" signage, and a warning beacon.

Improvements within Caltrans ROW will require an encroachment permit.
For geotechnical related items, obtain a Caltrans Encroachment Permit for borings (if needed in the ROW) to an estimated depth of 20 to 30 feet to characterize subsurface materials for proposed driveway and potential retaining walls.

Midpen will need to consult with Caltrans on tree removal within their right-of-way.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 2.6 EVALUATION - SITE D

As a summary of the narratives above, the below evaluation table recaps the status of Site D. The descriptions above are more detailed and should take precedence over the overall ranking in the table.

Symbols of moons represent a performance score of high, medium, or low as a quick form of evaluation. A high score signifies less complication in achieving a category, less site impact, ease of acquiring a permit, or greater affordability.

| Legend |  |  |  |
| :---: | :---: | :---: | :---: |
| High performance/score | Medium performance/score | Low performance/score | Not applicable |
| NA |  |  |  |



La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

| PERMITTING IMPLICATIONS CONSIDERATIONS |  |
| :--- | :--- |
| Environmental |  |
| San Mateo County Planning |  |
| San Mateo County Tree Ordinance |  |
| San Mateo Grading Ordinance |  |
| Caltrans |  |

Figure 2-D-6 Site D Evaluation

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 3.0 SITE E3



Figure 3-E3-1 Site E3 aerial map, located west of Highway 84 and just north of the Red Barn, tucked behind existing trees.

### 3.1 SUMMARY OF DESIGN CHARACTERISTICS

Site E3 is proposed to be a limited access only parking area with 18 parking spaces. Through reservation permits or docent-led access-only to this parking lot, limited public access to the Red Barn would be provided. Entries would be timed using a one-way in entrance at Gate LH06 that is separate from a oneway out exit at Gate REDO1. The design utilizes existing drive aisles with improvements to meet fire code. The limit of work impact is about 1.36 acres.

Speeds over the posted speed limit and illegal passing occur along this segment of SR-84. Traffic calming and speed reduction enhancements can enhance traffic safety. To address safe public access from SR-84 to the driveways, warning beacons are proposed to help reduce traffic speeds. A median barrier is also proposed on the section of road in front of Site E3, where illegal passing has been observed.

The parking lot is hidden behind an existing row of trees. While some non-native trees will need to be removed, supporting the growth of existing young oak trees can help maintain this visual barrier to reduce views of the parking area from the highway and allow the scenic view to remain focused on the Red Barn.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

## Designed Program Elements for Site E3

- Gravel parking lot with 18 spaces
- One (1) ADA space on a concrete pad
- New public vehicular access to and from SR-84 via a permit reservation and docent-led access only approach to limit daily traffic movements to and from SR-84. Timed entry and exits can limit traffic accessing Site E3.
- Traffic safety enhancements, such as median barriers and warning beacons
- Trail access from the proposed parking lot at Site E3 to the Red Barn


Figure 3-E3-2 Example of a median barrier at an intersection


Figure 3-E3-3 Warning beacons inform vehicles on the highway to slow down to meet the intersection sight distance

La Honda Creek Parking Area and Trailhead Feasibility Study
Feasibility Report
17 April 2024

### 3.2 SUMMARY OF GOALS - SITE E3

The consultant team analyzed how well E3 met the following Board-approved project goals with the understanding that more than one of the sites would be needed to achieve all the goals.

Symbols of moons represent a performance score of high, medium, or low as a quick form of evaluation.

| Legend |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| High performance/score | Medium performance/score | Low performance/score | Not applicable |  |
|  |  |  |  |  |
| NA |  |  |  |  |


| Goals - Site E3 | Ranking |
| :--- | :--- |
| Goal 1: Establish new public access in the central portion of the Preserve: This site is <br> located within the central area of the Preserve. Of all the proposed parking areas, Site <br> E3 is the most centrally located to the central Preserve trail and ranch road network. <br> Compared to Site D, access to Site E3 is proposed to be limited to by-permit use, <br> docent-led tours, or other similar controlled use. |  |
| Goal 2: Design elements to reflect the rural character of the site and the Red Barn: <br> The design works with the existing landscape and layout of circulation. The parking area <br> is situated behind vegetative screening to reduce views from SR-84 and will incorporate <br> gravel roads as is typical of the larger site. Fencing along the access road will match the <br> white cattle board fencing. Moreover, parking area design guidelines are currently <br> being developed, which will be applied to this project when they are finalized and <br> approved by the Board. Design elements reflecting the surrounding rural and <br> agricultural character of the site, such as parking area surfacing, parking space <br> delineation, and wheel stops, can be considered in the detailed design phase consistent <br> with the Parking Area Design Guidelines. |  |
| Goal 3: Provide safe public access: The design proposes to improve access by providing <br> warning beacons to caution vehicles to slow down and by adding a median barrier to <br> prevent illegal passing. The proposed controlled access also serves to limit the number <br> of trips generated. The proposed parking lot allows for fire access and is easily patrolled <br> by rangers. |  |
| Goal 4: Balance public access with grazing activities and other uses: The existing <br> driveways will be modestly widened and remain accessible to the grazing tenant <br> operations and the staff residence. |  |
| Goal 5: Include amenities that facilitate environmental education: The PAWG <br> recommended interpretive signage at the SR-84 pull out in front of the Red Barn as a <br> short-term measure. As an alternative solution, Midpen staff are considering installing <br> interpretive signage in the interior at Site E3, to avoid increased informal access of the <br> turnout that may pose traffic safety concerns for SR-84. |  |

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

| Goal 6: Protect scenic views of and from the site: The lot is hidden behind an existing <br> row of trees. |  |
| :--- | :--- |
| Goal 7: Protect natural resources to the extent possible: Waters and trees are <br> protected to the extent possible. Most tree removal includes non-native trees, which <br> will help to also support wildland fire resiliency goals. Specific granary trees will be <br> retained where possible. |  |
| Goal 8: Incorporate climate change adaptation where appropriate: The parking lot <br> footprint is minimized to the extent possible. A future phase of this project would <br> contemplate including tree replacement and other paving materials that may further <br> climate adaptation goals. |  |
| Goal 9: Provide equitable access opportunities to accommodate the diverse <br> community Midpen serves: The parking area would provide one ADA parking stall and <br> ADA access to the trailhead. ADA trail access from the parking lot to the Red Barn area <br> can be explored for feasibility in a future phase of work. The parking area would not <br> accommodate equestrian trailer access. Pending future trail implementation and use <br> designation, bikes could access the central area of the Preserve from Site E3 and <br> equestrians could access E3 from within the Preserve. |  |

Figure 3-E3-4 Site E3 Summary of Goals
3.3 CONCEPT PLAN - SITE E3


### 3.4 FEASIBILITY CONSIDERATIONS - SITE E3

### 3.4.1 MAINTENANCE AND MANAGEMENT CONSIDERATIONS

Maintenance considerations: Final design should strive to balance cut and fill. By avoiding off-site soil fill, this will help prevent soil-borne disease and introduction of invasive species at the site. With a long gravel driveway and gravel parking lot, there will be more maintenance needed than if both were asphalt or other paving material.

Management considerations: The gate will need to have a lock with a code given to permit holders and control access to the parking lot.

### 3.4.2 COST CONSIDERATIONS

Soft costs, planning fees, permit fees, performance bonds, payment bonds, CEQA, and project course of construction contingency are excluded.

| Site E3 | 2024 Net Costs |
| :---: | :---: |
| A. Site Mobilization \& Preparation | \$ 402,205 |
| B. Demolition, Tree Removal, \& Clearing | \$ 191,858 |
| C. Grading \& Drainage | \$ 574,652 |
| D. Paving, Striping, \& Code Signage | \$ 257,282 |
| E. Gates \& Fencing | \$ 281,254 |
| F. Landscape Repair \& Revegetation | \$ 65,652 |
| G. Roadway Advance Warning System | \$ 176,700 |
| Total | \$ 1,949,603 |

Figure 3-E3-6 See Appendix C: Budget Estimate Report. Note general mobilization for all sites is not shown.

### 3.4.3 SITE IMPACTS CONSIDERATIONS

Access considerations: From a traffic safety standpoint, the one-way entrance/exit system and limited access are both expected to maintain traffic volumes low enough that no queue would form on SR-84 of vehicles trying to enter the site. In addition, a new Preserve gate will be located further into the Preserve to allow any stacking that may occur to stay within the Preserve rather than on SR-84. The Access (Traffic) Study does not recommend either driveway include left- and right-turn restrictions, as no feasible location within a reasonable distance from Site E3 along SR-84 could be found that would accommodate u-turns. Instructions on how to utilize the entrance and exit system would need to be included as part of the permit reservation system. Traffic devices and warning improvements to slow traffic on SR-84 and prevent speeding and illegal passing could address safety concerns. Restricting the number of visitors at any given time with permit/docent-led event reservations also helps manage capacity and trip generation.

The average travel speed on SR-84 is higher than the posted 40 mph speed limit, with the $85^{\text {th }}$ percentile speed of vehicles near Site E3 at 49 mph . By incorporating the design features listed below, roadway safety can be maximized while fulfilling the La Honda Creek Master Plan goal to provide public access to the central area of the Preserve.

Loop detectors at the exiting lanes would be interconnected with the warning beacon to alert vehicles on SR-84 to the presence of exiting vehicles. This would have a twofold effect. First, the warning beacon would have the effect of extending the sight distance from the roadway to the driveway. Second,

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024
knowledge of the presence of vehicles entering the roadway should cause vehicles on SR-84 to exercise caution and slow to the speed limit. This would reduce the necessary sight distance from SR-84 to the driveway, which cannot be provided for vehicles traveling at the excessive speeds occasionally observed.

- Assuming restricted programming, the Level of Service of SR-84 at the proposed driveways would be within Caltrans standards.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology, and a left-turn pocket is not warranted.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound approaches to the exit driveway and interconnecting warning beacon to the loop detector at the exit lanes.
- On-site observation shows that some vehicles are attempting to pass over a solid yellow line at this location. A barrier can be explored to accommodate left-turns out of the exiting driveway. Midpen can consider working with Caltrans to determine whether features would be added to the state highway to prevent passing at this location as part of the project.
- Highway shoulder parking may need to be prohibited to dissuade visitors from parking on the roadway to enter the Preserve when the site is open to the public.

San Mateo County Fire has an emergency landing zone that needs to be coordinated and relocated or avoided during final design.

Geotechnical considerations: Borings are recommended to characterize subsurface conditions for areas of development to identify if remediation or avoidance is necessary. Obtain 3 borings to an estimated depth of 10 to 30 feet to characterize subsurface materials for proposed parking lot area and access driveway.

Site E3 is feasible to build from a geotechnical standpoint. No slides exist in the flat area proposed for parking. There is a small slide, which is more of a maintenance issue, on the uphill side of the dirt access road near an existing white shed. Shallow slumps were identified along the edges of the proposed development.

Grading considerations: Avoid extensive grading that could visually impact the aesthetic view of the Red Barn.

Tree removal considerations: The site is hidden by existing trees, but some of the trees in this vegetative screen are recommended to be removed in part due to wildland fire resiliency and declining tree health. A total of 27 will be removed, 13 of which are Significant Trees. Additional tree removal could be considered in accordance with Midpen's Resource Management Policies during a future phase of work. Encouraging the growth of young existing oak trees could maintain the screening as viewed from the highway.

Property negotiation considerations: The design would ensure continued access to the staff residence and adjacent property north of the parcel. The existing driveways are modestly enhanced in width and will remain open to the grazing tenant operations.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

Utility considerations: Any improvements would need to work with the existing joint poles for electrical service, to potentially serve the traffic beacons, and storm drainpipes on site. Consult PG\&E and San Mateo County Planning.

### 3.4.4 PERMITTING IMPLICATIONS CONSIDERATIONS

Permitting Overview: This permitting overview is preliminary only. As the project and designs are refined, more permits may be required, and a more formal review and comment response will occur. The following permits reflect the preliminary level of agency engagement conducted to date.

Potential Environmental Permits—Wetlands and Waters and Riparian Setbacks: Potential jurisdictional waters near the project site include a non-wetland drainage swale. A culvert may need to be connected to this swale to formalize the road. The culvert will need RWQCB permitting and possibly USACE and CDFW permitting, if these two agencies take jurisdiction over the drainage swale. Alternatively, Midpen may be able to install a new culvert as part of the Final Lake or Streambed Alteration Agreement (Notification No. EPIMS SMO-22941-R3) for their Open Space Maintenance and Restoration Program. The USACE has not verified any of the delineated jurisdictional features; therefore, USACE permitting may not be required for some of the impacted features.

Environmental Permits - Critical Habitat: This site is designated as critical habitat for CRLF by the USFWS. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

Tree removal would have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

Suitable habitat for bat roosting, hibernating, and foraging habitat may be present on site and should be monitored. Special-status bats have been observed roosting in the Red Barn. Construction restrictions and buffers would apply.

San Mateo County-Planning Permit: Site E3 improvements require a Resource Management Permit from the San Mateo County's Planning Department. The County's zoning regulations under RM Chapters 20A and 20A. 2 will need to be addressed.

Any new parking or driveways will need to meet San Mateo County Fire minimum width, maximum length, turning radius, and turn around specifications. Any new gates will need to have San Mateo County Fire access.

Obtain a County permit for 3 borings to an estimated depth of 10 to 30 feet to characterize subsurface materials for proposed parking lot area and access driveway.

San Mateo County-Tree Ordinance: Standard tree removal will need to adhere to the Significant and Heritage Tree Ordinances of San Mateo County. Thirteen (13) Significant Trees are anticipated to be removed from the site. Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements. Per the County's Significant Tree and Heritage Tree Ordinances, tree replacement would be required depending on the size and species of trees removed. A Permit Exception exists for removal of hazardous trees. Midpen may submit an overall request for a variance to the replanting

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024
mitigation required, which could be provided in memo form as part of a tree removal application and would be at the discretion of the County Arborist's review.

San Mateo County-Grading Ordinance: Provision C. 3 stormwater treatment is required for the impermeable surface of the gravel roads and parking lot.

During the Grading Permit application, projects within a scenic corridor may require a public hearing by the County Planning Commission, depending on the amount of grading.

Caltrans Permit-General: Consultation with Caltrans would be needed to implement a combination of elements from the California Manual on Uniform Traffic Control Devices (MUTCD). Specifically, a combination of roadway signage, W2-2, W16-13P "When Flashing," and a warning beacon are recommended to be placed at the northbound and southbound approaches to Site E3 driveways. Coordination with Caltrans would also be needed to explore a median barrier to help prevent illegal passing.

Caltrans Permit-Right-of-Way (ROW): A portion of the existing circulation road meanders into Caltrans' Operating Right of Way. Midpen should coordinate with the Office of Encroachment Permit to confirm how to address this existing condition.

Caltrans Permit—Highway Operations: As standard conditions, Caltrans requires project sponsors to document the impacts and relevant mitigation(s) associated with the project on the State Highway System. State ROW improvements should be considered for evaluation. Specifically, Midpen would need to demonstrate that the increase in traffic demands expected according to the Institute of Transportation Engineers (ITE) Trip Generation Manual does not adversely impact safety nor operations of intersections in immediate proximity to State facilities (as stated in summary of finding E3). The Caltrans Complete Streets policy and Equity goals should be taken into consideration. Specifically, ensuring safe access and use by all users. Any modifications to the State ROW that are proposed as part of the project and/or involved in mitigations must be done according to Caltrans permit process and Intersection Control Evaluation compliance.

Some of these standard conditions, such as those related to freeway on- and off-ramps, are not relevant to the proposed project. The Access (Traffic) Study showed that increased traffic demands as a result of the project are not expected to impact safety or operations on the State Highway System.

If problematic parking is observed along the highway, Midpen can work with Caltrans and the County to establish California Vehicle Code parking regulations along the highway as needed (No Parking or No Parking After Hours).

Caltrans Permit-Construction-Related Impacts: Potential impacts to the State ROW from projectrelated temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified. Project work that requires movement of oversized or excessive load vehicles on state roadways requires a transportation permit that is issued by Caltrans. Prior to construction, coordination is required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Highway System.

Temporary access points will likely utilize the same location as existing access points or final proposed access points. During later stages of project planning and design, mitigation for construction and noise

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024
impacts will be identified and the transportation permit and TMP would be developed at a later project stage if needed.

Caltrans Permit—Equitable Access: As a standard condition, if any Caltrans facilities are impacted by the project, those facilities must meet the Americans with Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Per the existing conditions analyzed in the ECOC, there are no Caltrans owned bicycle or pedestrian facilities that will be impacted by the project. The Access (Traffic) Study determined that sufficient sight distance is provided at the proposed driveway for bicycles traveling at typical bicycle speed.

Caltrans Permit—Encroachment Permit: If any non-standard design elements are proposed, then the Design Standard Decision Document (DSDD) and Maintenance Agreement (MA) must be completed before submitting an encroachment permit application package.

Roadway signage and striping consistent with the MUTCD are proposed; therefore, no non-standard design elements are proposed. However, Caltrans may still request preparation of a DSDD related to the proposed combination of W2-2, W16-13P "When Flashing" signage, and a warning beacon, or if a median barrier is included in final design.

Improvements within Caltrans ROW will require an encroachment permit.
For geotechnical related items, obtain a Caltrans Encroachment Permit for borings (if needed in the ROW) to an estimated depth of 10 to 30 feet to characterize subsurface materials for the access driveway.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 3.5 EVALUATION - SITE E3

As a summary of the narratives above, the below evaluation table recaps the status of Site E3. The descriptions above are more detailed and should take precedence over the overall ranking in the table.

Symbols of moons represent a performance score of high, medium, or low as a quick form of evaluation. A high score signifies less complication in achieving a category, less site impact, ease of acquiring a permit, or greater affordability.

| Legend |  |  |  |
| :---: | :---: | :---: | :---: |
| High performance/score | Medium performance/score | Low performance/score | Not applicable |
| NA |  |  |  |


| Evaluation - Site E3 | Ranking |
| :--- | :--- |
| MAINTENANCE/MANAGEMENT AND COST CONSIDERATIONS |  |
| Maintenance and Management |  |
| Cost is similar to adjacent sites |  |
| SITE IMPACTS CONSIDERATIONS |  |
| Greotechnical |  |
| Tree Removal |  |

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

| PERMITTING IMPLICATIONS CONSIDERATIONS |  |
| :--- | :--- |
| Environmental |  |
| San Mateo County Planning |  |
| San Mateo County Tree Ordinance |  |
| San Mateo Grading Ordinance |  |
| Caltrans |  |

Figure 3-E3-7 Site E3 Evaluation

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 4.0 SUMMARY OF COSTS - ALL SITES

The Budget Estimate Report is a Rough Order of Magnitude based on the initial concept design at the earliest stages of project planning. It is not a guarantee of final project cost, which is dependent upon the development of details for the final design as well as the methodology of bid solicitation and the bidding climate at the time of award.

The estimate below has been prepared assuming a single-phase mobilization for the full scope of all sites (3 sites: B2/Sears Ranch Road, D/Bridge, and E3). If implementation of each site is initiated at different times, this total aggregate cost will likely be higher.

Inflation escalation has not been applied to the estimate. Soft costs, planning fees, permit fees, performance bonds, payment bonds, CEQA, and project course of construction contingency are excluded. More notes, qualifications, and exclusions can be found in Appendix C: Budget Estimate Report.

| Base Scope | $\mathbf{2 0 2 4 ~ N e t ~ C o s t s ~}$ |
| ---: | ---: |
| 1. General Mobilization | $\$ 100,493$ |
| 2. Site B2 Trailhead Facility | $\$ 1,605,550$ |
| 3. Sears Ranch Road Improvements | $\$ 1,185,145$ |
| 4. Site D Trailhead Facility | $\$ 1,620,617$ |
| 5. Site D Bridge Replacement | $\$ 1,070,147$ |
| 6. Site E3 Trailhead Facility | $\$ 1,949,603$ |
| Total Estimated Cost of Hard Construction | $\mathbf{7 , 5 3 1 , 5 5 5}$ |

Figure 4-1 Summary of Costs. See Appendix C: Budget Estimate Report.

| Rounded Estimate per Site (including required road or bridge improvements) | 2024 Net Costs |
| :---: | ---: |
| 1. Site B2 | $\$ 2.8 \mathrm{M}$ |
| 2. Site D | $\$ 2.7 \mathrm{M}$ |
| 3. Site E3 | $\$ 2.0 \mathrm{M}$ |
| Total Estimated Cost of Hard Construction | $\$ 7.5 \mathrm{M}$ |

Figure 4-2 Summary of Rounded Estimate per Site.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

### 5.0 SUMMARY OF GOALS - ALL SITES

As described individually above, the consultant team analyzed each site and developed conceptual renditions that support the following Board-approved project goals with the understanding that more than one of these sites will be needed to achieve all the goals.

Symbols of moons represent a performance score of high, medium, or low as a quick form of evaluation. The table below aggregates the evaluations from the individual sections above.

| Legend |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| High performance/score | Medium performance/score | Low performance/score | Not applicable |  |
|  |  |  |  |  |
| NA |  |  |  |  |


| Goals | Ranking |  |  |
| :--- | :--- | :--- | :--- |
| FEASIBILITY STUDY SITES | Site B2 | Site D | Site E3 |
| Goal 1: Establish new public access in the central <br> portion of the Preserve |  |  |  |
| Goal 2: Design elements to reflect the rural character of <br> the site and the Red Barn |  |  |  |
| Goal 3: Provide safe public access |  |  |  |
| Goal 4: Balance public access with grazing activities and <br> other uses |  |  |  |
| Goal 5: Include amenities that facilitate environmental <br> education |  |  |  |
| Goal 6: Protect scenic views of and from the site |  |  |  |

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

| Goal 8: Incorporate climate change adaptation where <br> appropriate |  |  |
| :--- | :--- | :--- |
| Goal 9: Provide equitable access opportunities to <br> accommodate the diverse community Midpen serves |  |  |

Figure 5-1 Summary of Goals

La Honda Creek Parking Area and Trailhead Feasibility Study

## Feasibility Report

17 April 2024

### 6.0 SUMMARY OF EVALUATION - ALL SITES

As a summary of the narratives above, the evaluation table recaps the status of each site. The descriptions above are more detailed and should take precedence over the overall ranking.

Symbols of moons represent a performance score of high, medium, or low as a quick form of evaluation. A high score signifies less complication in achieving a category, less site impact, ease of acquiring a permit, or greater affordability. The table below aggregates the evaluations from the individual sections above.

| Legend |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| High performance/score | Medium performance/score | Low performance/score | Not applicable |  |
|  |  |  |  |  |
| NA |  |  |  |  |


| Evaluation - All Sites | Ranking |  |  |
| :---: | :---: | :---: | :---: |
| MAINTENANCE/MANAGEMENT AND COST CONSIDERATIONS | Site B2 | Site D | Site E3 |
| Maintenance and Management <br> Cost is similar to adjacent sites |  |  |  |
| SITE IMPACTS CONSIDERATIONS | Site B2 | Site D | Site E3 |
| Access |  |  |  |
| Geotechnical |  | ) |  |
| Grading |  |  |  |
| Tree Removal | $)$ | $\bigcirc$ |  |
| Property negotiations |  | $\sum$ | NA |
| Utilities |  |  |  |

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

| PERMITTING IMPLICATIONS CONSIDERATIONS | Site B2 | Site D | Site E3 |
| :--- | :--- | :--- | :--- |
| Environmental |  |  |  |
| San Mateo County Planning |  |  |  |
| San Mateo County Tree Ordinance |  |  |  |

Figure 6-1 Summary of Evaluation

### 7.0 NEXT STEPS

Once feasibility is confirmed and sites are selected by the Board to move forward, an environmental review will need to be conducted.

La Honda Creek Parking Area and Trailhead Feasibility Study Feasibility Report
17 April 2024

## APPENDICES

A. RHAA, Concept Design Plans, dated March 2024
B. RHAA, Concept Plan Graphics, dated March 2024
C. R. Borinstein Company, Budget Estimate Report—Rough Order of Magnitude Budget, dated March 2024
D. RHAA, Existing Conditions / Opportunities and Constraints (ECOC) Report, dated November 2022 (revised March 2024)
a. BKF Engineers, Boundary and Topographic Survey, dated September 2022
b. Cal Engineering \& Geology, Preliminary Geologic and Geotechnical Assessment Report, dated March 2022
c. LSA, Access (Traffic) Study, dated October 2022 (revised March 2024)
d. LSA, Biological Resource Evaluation Study, dated October 2022
e. LSA, Cultural Landscape Report (Site E3), dated April 2022
f. LSA, Cultural Resources Survey Study, dated March 2022
g. LSA, Tree Inventory Table, dated January 2022
h. Vollmar, Botanical Resource Survey Report, dated November 2021
i. Vollmar, Delineation of Potential Jurisdictional Waters (Site B2, B3, D), dated May 2022
j. Vollmar, Delineation of Potential Jurisdictional Waters (Site E3), dated May 2022

## LA HONDA CREEK PARKING AREA AND TRAILHEAD

rhaa

## 


FEASIBILITY STUDY
MIDPENINSULA REGIONAL OPEN SPACE DISTRICT
STATE-ROUTE 84


Site D \& Bridge Site


Site B2
LOCATION MAPS


Midpen La Honda Creek Parking and Trailheads

| Midpeninsula Open Space 330 |
| :--- |
| Distel Cicicle |
| Los Altos, CA 94022 |
| PROJECT NUMBER |
| 21022A |
| consultant |

## submittal

Concept Design
date
March 2024
revisions
Doscripion

registration and signature

NOT FOR CONSTRUCTION

sheet tite
COVER PAGE
drawn by: mo, oh Checked by: md, nl
G-000















LA HONDA CREEK PARKING AND TRAILHEAD FEASIBILITY STUDY
SITE B2 - CONCEPT DESIGN GRAPHIC


LA HONDA CREEK PARKING AND TRAILHEAD FEASIBILITY STUDY
SITE SEARS RANCH ROAD - CONCEPT DESIGN GRAPHIC




# Budget Estimate Report <br> Feasibility Study - Concept Design <br> Rough Order of Magnitude Budget 

La Honda Creek<br>Parking Area \& Trailhead

La Honda Creek Open Space Preserve
San Mateo County, CA

## Report Date:

Updated
3/11/24

Prepared for:
RHAA

Prepared by:
Robert Borinstein
R. Borinstein Company

## TABLE OF CONTENTS

Pages
A. Estimate Summary Reports
Executive Summary ..... 3
Intermediate Summary Matrix ..... 4
B. Estimate Notes and Qualifications ..... 6
C. Detail Estimate Report
Base Scope
I. General Project Mobilization ..... 10
II. Site D Trailhead Facility ..... 11
III. Site E3 Trailhead Facility ..... 15
IV. Site B2 Trailhead Facility ..... 19
V. Sears Ranch Road Improvements ..... 22
VI. Site D Bridge Replacement ..... 24
D. Quantity Survey Graphics
Site D - Site Prep, Demo, \& Clearing ..... 27
Site D - Finish Plan ..... 28
Site E3 (Existing Entry) - Site Prep, Demo, \& Clearing ..... 29
Site E3 (New Parking) - Site Prep, Demo, \& Clearing ..... 30
Site E3 (New Egress Rd) - Site Prep, Demo, \& Clearing ..... 31
Site E3 (New Egress Rd Exit) - Site Prep, Demo, \& Clearing ..... 32
Site E3 - Finish Plan ..... 33
Site B2 (Partial Sears Ranch Rd) - Site Prep, Demo, \& Clearing ..... 34
Sears Ranch Rd (Southern End) - Site Prep, Demo, \& Clearing ..... 35
Site B2 (Partial Sears Ranch Rd) - Finish Plan ..... 36
Sears Ranch Rd (Southern End) - Finish Plan ..... 37Site D Bridge - No Graphics Provided


## ESTIMATE SUMMARY EXCLUSIONS

1 Costs associated with phasing or mulitple mobilizations
2 Inflation escalation. The estimate is based on present day understanding of cost. Suggest the District apply an annual escalation factor of $5 \%$ compounded annually to anticipated date of construction.
3 Costs for trail construction at Site D trailhead or the Site E3 trailhead
4 Striping of Sears Ranch Road after widening and repaving.
5 Budgets for Park ID monument signs, wayfinding signage, or interpretive program
6 Planning or permit fees.
7 The cost of performance and payment bonds
8 The cost to remove hazardous materials as well as the cost to work in the presence of hazardous materials
9 Project soft costs (A\&E Fees, Owner's Management Expenses, Builder's Risk Insurance, Capital Campaign Costs, etc)
10 Project course of construction contingency. (This is not to be confused with the pre-construction design contingency included in the estimate)

Refer to attached estimate detail

# ATTACHMENT 1a 

R.Borinstein Company


## SUMMARY MATRIX <br> CONCEPT DESIGN PHASE ESTIMATE - ROUGH ORDER OF MAGNITUDE

## Project: La Honda Creek Parking Area \& Trailhead

Date: $3 / 11 / 24 \quad$ Concept Estimate Update Submission


1. Direct Construction Costs represent the anticipated cost of the general contractor's hard construction trade costs prior to mark-up and the addition of gen requirements costs. 2. NET Construction Costs represent the anticipated cost of hard construction as reflected in the general contractors contract at the time of award.

$$
\text { 3. The "Base Year" for project construction is assumed to be 2024. Present day values of construction are based on } 2024 \text { understanding of cost. }
$$

Notes
------------- - -



## ATTACHMENT 1a

R.Borinstein Company



## ESTIMATE MARK-UP STRUCTURE - COMPOUNDED

| Subtotal Direct Cost | 100.00 effective \% of direct |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Expenses \& Compliance | 15.00\% | \$ | 15.00 |  |  |  |
| Contractor's Fee (OH \& Profit) | 20.00\% | \$ | 23.00 |  |  |  |
| Contractor Insurance | 1.00\% | \$ | 1.57 | 1.140\% |  |  |
| Building Permit(s) |  | \$ | - |  |  |  |
| Contingency | 20.00\% | \$ | 27.91 |  |  |  |
| Subtotal w/out Escalation |  | \$ | 167.49 | 67.49\% |  |  |
|  |  |  |  |  | escalate to | annual \% |
| Cost Escalation |  | \$ | - |  | 2024 | 5.00\% |

## ESTIMATE NOTES, QUALIFICATIONS, AND ASSUMPTIONS

Project: La Honda Creek Parking Area and Trailhead<br>Visitor Access Improvements - Concept Design<br>Location: LA Honda Creek Opens Space Preserve<br>San Mateo County, CA<br>Report Date: 3/11/24-Updated Submission

The following is meant to clarify select assumptions used in this concept design phase budget estimate and serves as a supplement to the design documents upon which this estimate is based. It does not necessarily constitute a complete narrative of all assumptions included in the estimate.

## PROJECT DOCUMENTS

This estimate report is based on the following documents:

- Drawings - Concept Design, La Honda Creek Parking Area and Trailhead, Feasibility Study dated December, 2023 as prepared by RHAA.
- Reference: Existing Conditions / Opportunities and Constraints Report, La Honda Creek Parking Area and Trailhead Feasibility Study dated November 18, 2022 as prepared by RHAA.


## ESTIMATE BASIS

1. This budget estimate report represents the probable cost of "hard construction" as understood at the concept design phase and is assembled using empirical market data and input from industry professionals. It is also to be understood as a rough order of magnitude estimate based on the initial concept designs at the earliest stages of project planning. It is not a guarantee of final project cost, which is dependent upon the development of details for the final design as well as upon the methodology of bid solicitation and the bidding climate at the time of award.
2. Mobilization. The estimate has been prepared assuming a single-phase mobilization for the full scope of the proposed project at this time.
3. Inflation Escalation. Inflation escalation has not been applied to the estimate. It is not clear at this point when construction may be performed so the estimate is based on an understanding of present-day costs. As an exercise to understand the impact of inflation escalation on the project estimate, it is recommended that a rate of 5\% compounded annually be applied to the estimate total for each year between now and the anticipated year of construction.
4. Mark-up Factors. Mark-up factors are added to direct costs for labor, material, and equipment calculated in the estimate detail to capture the general or prime contractor's overhead and profit and general field expenses necessary to manage subcontractors and the site. A design/estimating contingency is also captured in this mark-up structure, which is structured and described as listed below. These factors are progressively applied meaning each factor is applied to the sum of the direct costs and the preceding mark-up factors:

| General Expenses: | $15.00 \%$ |
| :--- | ---: |
| Contractor's Fee (OH \& PR) | $20.00 \%$ |
| Contractor's Insurance: | $1.00 \%$ |
| Design/Estimating Contingency: | $20.00 \%$ |
| Escalation: | Not Applied |

a. Contractor's General Expenses. A budget has been applied for the general contractor's field expenses and temporary construction required to manage and supervise subcontractors, vendors, and on-site construction activities. This budget is presently factored as a percentage of the cost of construction. The applied rate of $15 \%$ is meant to also account for the added compliance requirements for performing construction in environmentally sensitive habitats.
b. General Contractor's Fee. General contractor's overhead and profit has been included as a combined fee factored as a percentage of cost including the general contractor's expenses.
c. General Contractor's Insurance. A budget for contractor's insurance is applied as a percentage of cost plus fees.
d. Contingency. A design and estimating contingency has been factored as a percentage of cost plus fees and insurance and has been applied to reflect the phase of design documents. As noted in the Exclusions section below, this does not include the owner's course of construction contingency, which is assumed to be carried in a separate owner's budget.
e. Inflation Escalation. Not applied at this time as noted above.

## PROJECT NOTES \& QUALIFICATIONS

1. Soil Import \& Export. Cut/fill modeling was not performed for the purposes of this estimate. Quantities of soil to be cut and/or filled were projected based on rough assumptions derived from datum provided in the civil drawings. It is assumed that cut/fill quantities are to be balanced in the construction of the Site D parking area, the Site E3 parking area and associated roads, and the Site B2 parking area and new access road.

Hillside cuts required to widen Sears Ranch Road will result in the off-haul of excavation spoils. The estimate assumes the off-haul of approximately 1,350 loose cubic yards of soil from the Sears Ranch Road site.
2. Retaining Walls Site D: The retaining walls at Site D are assumed to be cast in place concrete approximately 12 " thick with spread footings.
3. Vault Restroom Site D: The vault restroom at Site D is priced based on a CXT Double Cascadian precast building.
4. Paving Sections: The estimate assumes the following section designs for new paving indicated on the drawings. These assumptions do not represent an engineered design but are noted only to clarify the scope upon which the estimate is based.
a. New Vehicular Asphalt Pavement: 4" of AC over 9" of Class II AB baserock.
b. Reconditioned Vehicular Asphalt Pavement (Sites E3 and Sears Ranch Road): Mill and replace a 2 " section of existing asphalt with new. The widened portions of Sears Ranch Road will be 4 " over 9 " as noted for new asphalt paving.
c. Concrete Vehicular Pavement (Accessible Parking Stalls): 5" of concrete over 6" of Class II AB baserock.
d. Concrete Pedestrian Paving: 4" of concrete over 4" of Class II AB baserock.
e. Gravel Road or Parking. 3" of crushed gravel tread over 6" of Class II AB baserock.
f. Gravel Horse \& Pedestrian Hitching Area \& Trail (Site B2): 6" of Class II AB baserock.
5. Treatment of Graded Landscape: The estimate provides budgets for treatment of graded landscape areas. The budgets include spreading stockpiled organics removed during the grading operations, installation of erosion control mats and wattles according to best practices, and a modest budget for "light native planting". It is assumed planting will be performed in alignment with the rainy season to preclude the requirement for temporary watering to establish plants.
6. Mitigation Budgets for Tree Removal. Modest budgets for tree planting have been provided as mitigation for the planned removal of trees. Those budgets are as follows:
a. Site D: \$10,000 (direct cost)
b. Site E3: \$5,000 (direct cost)
c. Site B2: \$0. (direct cost)
d. Sears Ranch Road: $\$ 5,000$ (direct cost)

Site D Bridge Construction: The following assumptions do not represent an engineered design but are noted only to clarify the scope upon which the estimate is based. The final engineered design may likely be significantly different from what is assumed in the estimate.

The estimate assumes the construction of the Site D bridge will require access to heavy equipment to both sides of the creek. The estimate includes budgets to construct a temporary platform spanning across the creek just above the dry season high waterline. The platform is meant to provide a base for supporting access scaffolding as well as provide protection to the creek bed below. It is assumed the existing bridge span is an old flat bed train car that will need to be cut apart with torches to allow it's four (4) girders to be picked from the span individually and placed on a truck for off-haul.

The new bridge span is assumed to be constructed from three (3) weathering steel girders interconnected by an assembly of cross beams and diagonal braces. The span is to sit on cast in place concrete abutments supported on deep pier foundations presently assumed to be six (6) heavy helical screws ( 3 vertical \& 3 battered) at each abutment. It is not clear if the access roads will accommodate the transport of 58' long girders to the bridge site so the estimate anticipates the girders may have to be transported in two sections and assembled on site.

The bridge decking is assumed to 4 x redwood plank supported on 4 x nailers attached to the top of the girders. A budget is provided for code compliant guardrails.
7. Phylophthora Control: The estimate includes budgets at each trailhead site to provide water and labor required to wash down equipment entering and leaving the sites as part of an effort to control the spread of Phylophthora.
8. Hazardous Materials Allowance. The estimate includes allowances for possible encounter of buried hazardous materials. Those allowances are included as follows:
a. Site D: $\$ 20,000$ (direct cost)
b. Site E3: $\$ 20,000$ (direct cost)
c. Site B2: $\$ 20,000$ (direct cost)
9. Standby Allowance. The estimate includes allowances for the standby costs due to the possibility of work stoppage in the event a sensitive resource issue is encountered requiring the District to develop a procedure for work to proceed. Those allowances are included as follows:
d. Site D: $\$ 20,000$ (direct cost)
e. Site E3: $\$ 20,000$ (direct cost)
f. Site B2: \$35,000 (direct cost)
10. Early Warning Detection System: The early warning detection systems assumed in this estimate are each comprised of three components. One stop sign mounted presence detector at the
driveway exit to the highway, in lieu of an embedded detector loop, and two flashing warning signs located along the highway an appropriate distance from the driveway to warn traffic. The system is assumed to be powered by a new utility power drop in the vicinity. The three components at each site are to be interconnected via underground power and communication cables. Underground cable crossings of the highway are assumed to be accomplished via horizontal directional drilling.
11. Automatic Vehicular Gates: The estimate includes budgets to install a new automatic vehicular gate at Site D and two (2) new automatic vehicular gates at Site E3. An existing automatic vehicular gate at Site B2 is to remain. Each gate is assumed to be powered by a new utility power drop in the vicinity.

## 12. Specific Exclusions.

a. Signage: Excludes signage other than that required by code such as Open Space District monument or identification signage, wayfinding signage, or interpretive program signage or graphics.
b. New Pedestrian Trails: Excludes new pedestrian trails connected to the new parking lots at Site D or at Site E3. The estimate does include the new pedestrian trail at Site B2 that runs adjacent to the new access road between the new parking lot and the top of the new access road.
c. Striping Sears Ranch Road: Excludes striping Sears Ranch Road following widening and repaving. The existing road is not presently striped.
d. Bonds \& Permits. Excludes the cost of bonds, if required, and the cost of building or planning permits are assumed to be carried in a separate owner's budget.
e. Owner Soft and Direct Costs. Excludes anticipated "owner soft and direct project costs" meant to represent all costs and expenses, additional to the net cost of hard construction, the project owner will likely incur throughout the entire duration of project planning and delivery. This category of costs is comprised of, but not necessarily limited to, architectural and engineering design fees, miscellaneous professional consultant fees, special inspections and testing during both pre-construction and construction phases, industrial hygienist investigations and inspections, hazardous materials abatement, planning \& building permit fees, utility service connection and meter fees, project owner legal fees, builder's risk insurance or other project owner insurance expenses, legal fees, finance costs, capital campaign expenses, project owner project management and administration expenditures, etc.
f. Course of Construction Contingency. Excludes the cost of course of construction contingency. The owner should carry a separate course of construction contingency in anticipation of construction phase change orders resulting from discovery of unknown site conditions, design conflicts, and owner generated discretionary changes. Typically, this contingency is meant to cover not only claims from the contractor but add service claims by the design team. It is recommended that a factor of $2 \%$ to $5 \%$ of the total project cost (hard plus soft costs) be carried by the owner. The course of construction contingency is separate from the design and estimating contingency carried in the estimate to account for the conceptual nature of the design documents.
g. Abatement of Hazardous Materials. Excludes the cost to remove hazardous materials as well as the cost to work in the presence of hazardous materials has been excluded from this estimate. There is no evidence that hazardous materials are present on the site.

| CONCEPT DESIGN PHASE ESTIMATE - ROUGH ORDER OF MAGNITUDE |  |  |  |  |  |  | TIMATE DETAIL REPORT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Project | La Honda Creek Parking Area \& Trailhead Visitor Access Improvements |  |  |  |  | Concept | Est by: RMB <br> st Date: 3/11/24 <br> timate Update Submission |
| Design Docs: Concept Design <br> Document Date: December 2023 |  |  |  |  |  |  |  |
| BASE SCOPE |  |  |  |  |  |  |  |
| I. GENERAL PROJECT MOBILIZATION |  |  |  |  |  |  |  |
| Estimate Detail code item description |  | quantity | unit cost | ext | $\begin{gathered} \hline \text { trade } \\ \text { subtotals } \end{gathered}$ | assembly totals | quals \& assumptions |
| A. General Project Mobilization |  |  |  |  |  |  |  |
| Z1050 Temporary Facilities and Controls |  |  |  |  |  |  |  |
| Project mobilization/demobilization |  | 1.00 bgt | 40,000.00 | 40,000 |  |  |  |
| Set-up central temp facilities - office, storage, yard fencing, ett |  | 1.00 bgt | 7,500.00 | 7,500 |  |  |  |
| Temporary utilities |  | 1.00 bgt | 2,500.00 | 2,500 |  |  |  |
| Site specific mobilizations and facilities - see Site sections |  |  | 0.00 | - |  |  |  |
| Prepare SWPPP |  | 1.00 bgt | 10,000.00 | 10,000 |  |  |  |
|  | Subtotal |  |  |  | 60,000 |  |  |
| TOTAL: A. General Project Mobilization |  |  |  |  |  | 60,000 |  |
| Net Total Incl Mark-up |  |  |  |  |  |  | 100,493 |
| Raw Cost of Work |  |  |  |  |  | 60,000 |  |
| General Expenses \& Compliance |  |  | 15.00\% | 9,000 |  |  |  |
| Contractor's Fee (OH \& Profit) |  |  | 20.00\% | 13,800 |  |  |  |
| Contractor Insurance |  |  | 1.00\% | 944 |  |  |  |
| Building Permit(s) |  |  | 0.00\% | - |  |  | exclude - owner budget |
| Contingency |  |  | 20.00\% | 16,749 |  |  |  |
| Cost Escalation |  |  | 0.00\% | - |  |  | Based on 2024 Pricing |
| Total Budget Estimate - Hard Construction |  |  |  | 40,493 |  | 100,493 |  |

# ATTACHMENT 1a <br> R. Borinstein Company 

project management services
construction management \& estimating


| A. Site Mobilization \& Preparation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Z1050 Temporary Facilities and Controls |  |  |  |  |  |  |
| Site mobilization (additional to general proj mobilization) | 1.00 bgt | 5,000.00 | 5,000 |  |  |  |
| Construction fencing - site perimeter (visitor control) | 450.00 If | 8.00 | 3,600 |  |  |  |
| Erosion control \& BMP measures - perim silt fence/wattles | 475.00 If | 3.50 | 1,663 |  |  |  |
| Tree protection - budget to protect significant perim trees | 1.00 bgt | 500.00 | 500 |  |  |  |
| Temp site entry rock surfacing w/wash down station | 1.00 bgt | 5,000.00 | 5,000 |  |  |  |
| add Daily equip wash down procedures - phytophthora control | 120.00 day | 300.00 | 36,000 |  |  |  |
| Water truck on site for wash down - phytophthora \& dust add control | 120.00 day | 350.00 | 42,000 |  |  |  |
| Prepare SWPPP - see General Project Mobilization |  | 0.00 | - |  |  |  |
| Layout \& stake | 1.00 bgt | 5,000.00 | 5,000 |  |  |  |
| Traffic control - periodic flagging each day for shoulder work |  |  |  |  |  |  |
| add \& equipment entry and exit to site | 120 day | 1,000.00 | 120,000 |  |  |  |
| Stand by allowance in the event of work stoppage due to add encounter with resource issue requiring resolution | 1 alw | 20,000.00 | 20,000 |  |  |  |
| Temporary utilies - N/A |  | 0.00 | - |  |  |  |
| Subtotal |  |  |  | 238,763 |  |  |
| TOTAL: A. Site Mobilization \& Preparation |  |  |  |  | 238,763 | \$8.32 /sf total footprint |
| Net Total Incl Mark-up |  |  |  |  |  | 399,898 |
| B. Demolition, Tree Removal, \& Clearing |  |  |  |  |  |  |
| G1010 Site Clearing |  |  |  |  |  |  |
| Tree removal incl stump removal \& off-haul -75" and above | 2.00 ea | 8,500.00 | 17,000 |  |  |  |
| Tree removal incl stump removal \& off-haul - 48" to $75^{\prime \prime}$ | 3.00 ea | 5,000.00 | 15,000 |  |  |  |
| Tree removal incl stump removal\& off-haul - 24 " to 48" | 5.00 ea | 1,500.00 | 7,500 |  |  |  |
| Tree removal incl stump removal \& off-haul - up to 24" | 41.00 ea | 750.00 | 30,750 |  |  |  |
| rev Clear \& grub graded footprint (use 4") | 23,850.00 sf | 0.50 | 11,925 |  |  |  |
| Scrape gravel surfacing at existing entrance - stockpile (use 4 | 4,800.00 sf | 0.20 | 960 |  |  |  |
| Stock pile select quantity of organics for mulch to be spread | 100.00 lcy | 15.00 | 1,500 |  |  |  |
| rev Off-haul \& dispose organics (not incl trees) - location TBA | 250.00 lcy | 65.00 | 16,250 |  |  |  |
| Subtotal |  |  |  | 100,885 |  |  |
| G1020 Site Elements Demolition and Relocations |  |  |  |  |  |  |
| Remove ranch gate and posts | 1.00 ea | 300.00 | 300 |  |  |  |
| Remove barbed wire fence | 230.00 If | 3.50 | 805 |  |  |  |
| Off-haul \& dispose | 1.00 bgt | 150.00 | 150 |  |  |  |
| Subtotal |  |  |  | 1,255 |  |  |
| TOTAL: B. Demolition, Tree Removal, \& Clearing |  |  |  |  | 102,140 | \$3.56 /sf fotal footprint |
| Net Total Incl Mark-up |  |  |  |  |  | 171,072 |

C. Grading, Retaining, \& Drainage

## G1030 Site Earthwork

| rev | $G e n e r a l ~ g r a d i n g ~ s i t e ~ p r o f i l e ~(a s s u m e ~ b a l a n c e ~ c u t ~ \& ~ f i l l) ~$ | $28,700.00$ | sf | 1.50 | 43,050 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

# ATTACHMENT 1a <br> RoBorimstein Company 

project management services
construction management \& estimating
II. SITE D TRAILHEAD FACILITY


# ATTACHMENT 1a <br> R. Borpinstein Company 

project management services
construction management \& estimating
II. SITE D TRAILHEAD FACILITY

| Estimate Detail |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| code | trade | assembly |  |  |  |


| E. Gates \& Fencing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G2040 Site Development |  |  |  |  |  |  |
| Fence - barb wire - new fence tied to existing | 150 If | 15.00 | 2,250 |  |  |  |
| Gate - vehicular entry - double swing 30' w- tube style w/ automatic operator. Incl cost for power tie-in from new utility |  |  |  |  |  |  |
| Subtotal |  |  |  | 52,250 |  |  |
| TOTAL: E. Gates \& Fencing |  |  |  |  | 52,250 | \$1.82 /sf total footprint |
| Net Total Incl Mark-up |  |  |  |  |  | 87,512 |
| F. Landscape Repair \& Revegetation 9,700 sf Landscape Footprint |  |  |  |  |  |  |
| G2050 Landscaping |  |  |  |  |  |  |
| Tree planting - mitigation allowance for tree removal | 1 alw | 10,000.00 | 10,000 |  |  |  |
| Shrubs - planter screening from road (assume 6'0 on center) | 28 ea | 75.00 | 2,100 |  |  | Assume planting in wet season |
| Planter soil amendment | 1,050 sf | 1.00 | 1,050 |  |  | so temp watering not req |
| Planter small native planting | 1,050 sf | 3.00 | 3,150 |  |  |  |
| Misc light native planting in impacted landscape | $5,800 \mathrm{sf}$ | 1.50 | 8,700 |  |  |  |
| Spread stockpile organics for mulch | 100 Icy | 7.50 | 750 |  |  |  |
| Subtotal |  |  |  | 25,750 |  |  |
| TOTAL: F. Landscape Repair \& Revegetation |  |  |  |  | 25,750 | \$2.65 sflandscape |
|  |  |  |  |  |  | \$0.90 /sf total footprint |
| Net Total Incl Mark-up |  |  |  |  |  | 43,128 |
| G. Roadway Advance Warning System |  |  |  |  |  |  |
| G2010 Roadways |  |  |  |  |  |  |
| Advanced warning system including proximity sensor at drive |  |  |  |  |  |  |
| system to be powered by a new utility power drop in the |  |  |  |  |  |  |
| vicinity and the three components are interconnected by underground power and com cabling. Assume horizontal rev directional drilling for underground crossing of the highway. | 1 bgt | 50,000.00 | 50,000 |  |  |  |
| Subtotal |  |  |  | 50,000 |  |  |
| TOTAL: G. Roadway Advance Warning System |  |  |  |  | 50,000 | \$1.74 /sf total footprint |
| Net Total Incl Mark-up |  |  |  |  |  | 83,744 |
| H. Vault Restroom |  |  |  |  |  |  |
| F1020 Integrated Construction |  |  |  |  |  |  |
| Pre-cast double vault RR - use CXT Double Cascadian - <br> installed in place complete $\quad 1.00$ Is $75,000.00 \quad 75,000$ |  |  |  |  |  |  |
| Subtotal |  |  |  | 75,000 |  |  |
| G1030 Site Earthwork |  |  |  |  |  |  |
| Pad prep - see Section C above |  | 0.00 | - |  |  |  |
| Excavate pit for vaults | 40.00 bcy | 50.00 | 2,000 |  |  |  |
| Assume spoils used on site | 40.00 bcy | 15.00 | 600 |  |  |  |
| Base rock \& sand - vault bedding (6" - 200 sf) | 7.00 tons | 100.00 | 700 |  |  |  |
| Backfill around vaults | 1.00 bgt | 1,500.00 | 1,500 |  |  |  |
| Subtotal |  |  |  | 4,800 |  |  |
| TOTAL: H. Vault Restroom |  |  |  |  | 79,800 | \$2.78 /sf total footprint |
| Net Total Incl Mark-up |  |  |  |  |  | 133,655 |

ATTACHMENT 1a
R.Borrinstein Company
project management services
construction management \& estimating
II. SITE D TRAILHEAD FACILITY

| Estimate Detail code | item description | quantity | unit cost | ext | trade subtotals | assembly totals | quals \& assumptions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Raw Cost of Work |  | 967,603 |  |
| :--- | ---: | ---: | ---: |
| General Expenses \& Compliance | $\$ 33.71$ /sftotal footprint |  |  |
| Contractor's Fee (OH \& Profit) | $15.00 \%$ | 145,140 |  |
| Contractor Insurance | $20.00 \%$ | 222,549 |  |
| Building Permit(s) | $1.00 \%$ | 15,222 |  |
| Contingency | $0.00 \%$ | - |  |
| Cost Escalation | $20.00 \%$ | 270,103 | exclude - owner budget |
| Total Budget Estimate - Hard Construction | $0.00 \%$ | - | Based on 2024 Pricing |


| Project $\quad$ La Honda Creek Parking Area \& Trailhead |  |
| :--- | :--- |
|  | Visitor Access Improvements |

Est by: RMB
Est Date: 3/11/24
Concept Estimate Update Submission
Design Docs: Concept Design
Document Date: December 2023
Hardscape Footprint - Base Scope
Landscape Footprint - Base Scope
Total Project Footprint - Base Scope

29,650 sf pave
25,350 sf LS $\quad 0.58$ acres

55,000 sf site $\quad 1.26$ acres

BASE SCOPE
III. SITE E3 TRAILHEAD FACILITY

| Estimate Detail |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| code | item description | quantity | unit cost | ext | trade | assembly |


| A. Site Mobilization \& Preparation |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Z1050 Temporary Facilities and Controls |  |  |  |  |  |  |  |
|  | Site mobilization (additional to general proj mobilization) | 1.00 bgt | 5,000.00 | 5,000 |  |  |  |
|  | Construction fencing - site perimeter (visitor control) | 130.00 If | 8.00 | 1,040 |  |  |  |
|  | Erosion control \& BMP measures - perim silt fence/wattles | 1,600.00 If | 3.50 | 5,600 |  |  |  |
|  | Tree protection - budget to protect significant perim trees | 1.00 bgt | 1,000.00 | 1,000 |  |  |  |
|  | Temp site entry rock surfacing w/wash down station | 1.00 bgt | 5,000.00 | 5,000 |  |  |  |
| add | Daily equip wash down procedures - phytophthora control Water truck on site for wash down - phytophthora \& dust | 150.00 day | 300.00 | 45,000 |  |  |  |
| add | control | 150.00 day | 350.00 | 52,500 |  |  |  |
|  | Prepare SWPPP - see General Project Mobilization |  | 0.00 | - |  |  |  |
|  | Layout \& stake | 1.00 bgt | 15,000.00 | 15,000 |  |  |  |
| add | Traffic control - periodic flagging each day for equipment entry and exit to site | 150 day | 600.00 | 90,000 |  |  |  |
|  | Stand by allowance in the event of work stoppage due to encounter with resource issue requiring resolution | 1 alw | 20,000.00 | 20,000 |  |  |  |
|  | Temporary utilties - N/A |  | 0.00 | - |  |  |  |
|  | Subtotal |  |  |  | 240,140 |  |  |
|  | TOTAL: A. Site Mobilization \& Preparation |  |  |  |  | 240,140 | \$4.37 /sf total footprint |
|  | Net Total Incl Mark-up |  |  |  |  |  | 402,205 |
| B. Demolition, Tree Removal, \& Clearing |  |  |  |  |  |  |  |
| G1010 Site Clearing |  |  |  |  |  |  |  |
|  | Tree removal incl stump removal \& off-haul - 48" to 75" | 6.00 ea | 5,000.00 | 30,000 |  |  |  |
|  | Tree removal incl stump removal\& off-haul - 24" to 48" | 16.00 ea | 1,500.00 | 24,000 |  |  |  |
|  | Tree removal incl stump removal \& off-haul - up to $24{ }^{\prime \prime}$ | 6.00 ea | 750.00 | 4,500 |  |  |  |
|  | Clear \& grub graded footprint (use 4") - mix of minor and medium steep grades | 46,900.00 sf | 0.50 | 23,450 |  |  |  |
|  | Stock pile select quantity of organics for mulch to be spread | 200.00 lcy | 15.00 | 3,000 |  |  |  |
|  | Off-haul \& dispose organics (not incl trees) - location TBA | 390.00 Icy | 50.00 | 19,500 |  |  |  |
|  | Subtotal |  |  |  | 104,450 |  |  |
| G1020 Site Elements Demolition and Relocations |  |  |  |  |  |  |  |
|  | Mobilize milling machine (pro-rate with Sears Ranch Rd) | 0.20 \% | 7,500.00 | 1,500 |  |  |  |
|  | Mill top 2" off asphalt entry road | $5,100.00 \mathrm{sf}$ | 0.15 | 765 |  |  |  |
|  | Off-haul \& dispose gridings | 63.00 tons | 45.00 | 2,835 |  |  |  |
|  | Remove fence - cattle board | 970.00 If | 5.00 | 4,850 |  |  |  |
|  | Off-haul \& dispose | 1.00 bgt | 150.00 | 150 |  |  |  |
|  | Subtotal |  |  |  | 10,100 |  |  |
|  | TOTAL: B. Demolition, Tree Removal, \& Clearing |  |  |  |  | 114,550 | \$2.08 /sf total footprint |
|  | Net Total Incl Mark-up |  |  |  |  |  | 191,858 |

# ATTACHMENT 1a <br> R. Borinstein Company 

project management services
construction management \& estimating
III. SITE E3 TRAILHEAD FACILITY

| Estimate Detail code | item description | quantity | unit cost | ext | trade subtotals | assembly totals | quals \& assumptions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |



# ATTACHMENT 1a <br> R.Boroinstein Company 

project management services
construction management \& estimating
III. SITE E3 TRAILHEAD FACILITY


ATTACHMENT 1a
R.Boroinstein Company
project management services
construction management \& estimating
III. SITE E3 TRAILHEAD FACILITY

| Estimate Detail |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| trade | assembly |  |  |  |  |
| code | item description | quantity | unit cost | ext | subtotals |
| totals | quals \& assumptions |  |  |  |  |

G. Roadway Advance Warning System

## G2010 Roadways

Two (2) advanced warning systems including proximity sensor at each drive exit \& two flashing warning signs along the highway for each exit. The systems are to be powered by new utility power drops in the vicinity and each set of three components are interconnected by underground power and com cabling. Assume horizontal directional drilling for underground crossings of the highway.

|  | 2 | bgt | $50,000.00$ | 100,000 |
| :--- | ---: | :---: | ---: | ---: |
| Restripe double center line for delineators (100 If) | 200 | If | 5.00 | 1,000 |
| Install flexible delineators in highway center line (use 10'0 oc) | 10 | ea | 100.00 | 1,000 |
| Traffic control for centerline \& delineator work | 1 day | $3,500.00$ | 3,500 |  |


| 105,500 |  |
| :--- | ---: |
|  |  |
|  |  |
|  |  |
| $105,500,92$ |  | /sf total footprint


| Raw Cost of Work |  |  | 1,164,027 | \$21.16 /sf total footprint |
| :---: | :---: | :---: | :---: | :---: |
| General Expenses \& Compliance | 15.00\% | 174,604 |  |  |
| Contractor's Fee (OH \& Profit) | 20.00\% | 267,726 |  |  |
| Contractor Insurance | 1.00\% | 18,312 |  |  |
| Building Permit(s) | 0.00\% | - |  | exclude - owner budget |
| Contingency | 20.00\% | 324,934 |  |  |
| Cost Escalation | 0.00\% | - |  | Based on 2024 Pricing |
| Total Budget Estimate - Hard Construction |  | 785,576 | 1,949,603 | \$35.45 /sf total footprint |

# ATTACHMENT 1a <br> R. Borpinstein Company 

project management services
construction management \& estimating

| Project | La Honda Creek Parking Area \& Trailhead Visitor Access Improvements |  |  |  | Est by: RMB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Est Date: 3/11/24 |  |  |
|  |  |  |  |  | Concept Estimate Update Submission |  |  |
| Design Docs: | Concept Design | Hardscape Footprint - Base Scope |  |  | 47,300 sf pave |  |  |
|  | Document Date: December 2023 | Lands | Footprint | Scope | 35,700 sf LS |  | 0.82 acres |
|  |  | Total Project Footprint - Base Scope |  |  | 83,000 sf site |  | 1.91 acres |
| BASE SCOPE |  |  |  |  |  |  |  |
| IV. SITE B2 TRAILHEAD FACILITY |  |  |  |  |  |  |  |
| Estimate Detail code | item description |  |  |  | quantity | unit cost | ext | $\begin{gathered} \text { trade } \\ \text { subtotals } \end{gathered}$ | $\begin{gathered} \text { assemt } \\ \text { totals } \end{gathered}$ | quals \& assumptions |


C. Grading \& Drainage

| G1030 | Site Earthwork |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| rev | Cut/fill grading - full site (assume sitewide balance ) | $83,000.00$ | sf | 1.50 | 124,500 |

# ATTACHMENT 1a <br> R.Borinstein Company 

project management services
construction management \& estimating
IV. SITE B2 TRAILHEAD FACILITY

E. Gates, Fencing, \& Site Accessories

G2040 Site Development

| Fence - barb wire - new fence tied to existing <br> Gate - vehicular entry - double swing 24' $w$ - tube style $w /$ | 1,965 | lf | 15.00 | 29,475 |
| :--- | ---: | :--- | ---: | :--- |
| locking mech - entry to new access road | 1 | ea | $5,000.00$ | 5,000 |
| Gate - vehicular entry - double swing 14' $w$ - tube style w/ <br> locking mech - entrance to ranch road | 1 ea | $3,500.00$ | 3,500 |  |

IV. SITE B2 TRAILHEAD FACILITY

| Estimate Detail code item description | quantity | unit cost | ext | trade subtotals | $\begin{aligned} & \text { assembly } \\ & \text { totals } \end{aligned}$ | quals \& assumptions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gate - vehicular entry - single swing 16 ' w-tube style w/ |  |  |  |  |  |  |
| Gate - pedestrian/horse - single swing 5' w - self closing | 2 ea | 1,500.00 | 3,000 |  |  |  |
| Hitching rails at new hitching area | 4 ea | 1,500.00 | 6,000 |  |  |  |
| Mounting block at new hitching area | 1 ea | 750.00 | 750 |  |  |  |
| Hitching rail at existing parking (shorter than rails at new | 1 ea | 1,400.00 | 1,400 |  |  |  |
| Mounting block at existing parking lot hitching area | 1 ea | 750.00 | 750 |  |  |  |
| Subtotal |  |  |  | 53,375 |  |  |
| TOTAL: E. Gates, Fencing, \& Site Accessories |  |  |  |  | 53,375 | \$0.64 /sf total footprint |
| Net Total Incl Mark-up |  |  |  |  |  | 89,397 |
| F. Landscape Repair \& Revegetation | 35,700 sf L | ndscape Fo | tprint |  |  |  |
| G2050 Landscaping |  |  |  |  |  |  |
| Tree planting - mitigation allowance for tree removal - N/A | N/A | 0.00 | - |  |  |  |
| Misc light native planting in impacted landscape - shoulders new access road | 10,800.00 sf | 1.50 | 16, |  |  | Assume planting in wet season so temp watering not req |
| Misc light native planting in impacted landscape - parking lot perimeter | $9,480.00 \mathrm{sf}$ | 1.50 | 14,220 |  |  |  |
| Misc light native planting in impacted landscape - parking lot island | 10,300.00 sf | 1.50 | 15,450 |  |  |  |
| Spread stockpile organics for mulch - shoulder new access road | 100 Icy | 7.50 | 750 |  |  |  |
| Spread stockpile organics for mulch - parking lot perimeter | 88 Icy | 7.50 | 658 |  |  |  |
| Spread stockpile organics for mulch - parking lot island | 95 Icy | 7.50 | 715 |  |  |  |
| Subtotal |  |  |  | 47,994 |  |  |
| TOTAL: F. Landscape Repair \& Revegetation |  |  |  |  | 47,994 | \$1.34 sf landscape |
|  |  |  |  |  |  | \$0.58 /sf total footprint |
| Net Total Incl Mark-up |  |  |  |  |  | 80,383 |
| Raw Cost of Work |  |  |  |  | 958,607 | \$11.55 /sftotal footprint |
| General Expenses \& Compliance |  | 15.00\% | 143,791 |  |  |  |
| Contractor's Fee (OH \& Profit) |  | 20.00\% | 220,480 |  |  |  |
| Contractor Insurance |  | 1.00\% | 15,081 |  |  |  |
| Building Permit(s) |  | 0.00\% | - |  |  | exclude - owner budget |
| Contingency |  | 20.00\% | 267,592 |  |  |  |
| Cost Escalation |  | 0.00\% | - |  |  | Based on 2024 Pricing |
| Total Budget Estimate - Hard Construction |  |  | 646,943 |  | 1,605,550 | \$19.34 Isf total footprint |

# ATTACHMENT 1a <br> R. Borinstein Company 

project management services
construction management \& estimating

$\frac{\text { A. Site Mobilization \& Preparation }}{\text { Z1050 Temporary Facilities and Controls }}$

|  | Site mobilization (additional to general proj mobilization) | 1.00 bgt | 5,000.00 | 5,000 |
| :---: | :---: | :---: | :---: | :---: |
|  | Construction fencing - none |  | 0.00 |  |
|  | Erosion control \& BMP measures - perim silt fence/wattles | 700.00 | 3.50 | 2,450 |
|  | Tree protection - budget to protect significant perim trees | 1.00 bgt | 500.00 | 500 |
|  | Temp site entry rock surfacing w/wash down station | 1.00 bgt | 5,000.00 | 5,000 |
| add | Daily equip wash down procedures - phytophthora control | 90.00 day | 300.00 | 27,000 |
| add | Water truck on site for wash down - phytophthora \& dust control | 90.00 day | 350.00 | 31,500 |
|  | Prepare SWPPP - see General Project Mobilization |  | 0.00 |  |
|  | Layout \& stake | 1.00 bgt | 5,000.00 | 5,000 |
| rev | Traffic control - light traffic | 90.00 days | 1,500.00 | 135,000 |
|  | Temporary utilies - N/A |  | 0.00 |  |

## Subtotal

TOTAL: A. Site Mobilization \& Preparation
Net Total Incl Mark-up
B. Demolition, Tree Removal, \& Clearing

## G1010 Site Clearing

| Tree removal incl stump removal \& off-haul - 75" and above | 2.00 | ea | $8,500.00$ | 17,000 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Tree removal incl stump removal\& off-haul - 24" to 48" | 5.00 | ea | $1,500.00$ | 7,500 |  |
| Tree removal incl stump removal \& off-haul - up to 24 " | 12.00 | ea | 750.00 | 9,000 |  |
| Clear \& grub graded footprint (use 4") - steep slope | $13,300.00$ | sf | 1.00 | 13,300 |  |
| Clear \& grub graded footprint (use 2") - minor grade road |  |  |  |  |  |
| shoulder | $5,000.00$ | sf | 0.20 | 1,000 |  |
| Stock pile select quantity of organics for mulch to be spread | 142.41 | lcy | 15.00 | 2,136 |  |
| Off-haul \& dispose organics (not incl trees) - location TBA | 55.94 | lcy | 50.00 | 2,797 |  |
| $\quad$ Subtotal |  |  |  |  | 52,733 |
| G1020 $\quad$ Site Elements Demolition and Relocations |  |  |  |  |  |
| Mobilize milling machine (pro-rate with Site E3) | 0.80 | $\%$ | $7,500.00$ | 6,000 |  |
| Mill top 2" off asphalt surface | $19,500.00$ | sf | 0.15 | 2,925 |  |
| Off-haul \& dispose gridings | 240.55 tons | 45.00 | 10,825 |  |  |

TOTAL

## Subtotal

Net Total Incl Mark-up

| 19,750 |
| :--- |


| C. Grading \& Drainage |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| G1030 Site Earthwork |  |  |  |  |
| $\quad$ Cut slope - alllow for rock encounter - (assume 1,235 bcy) | $16,650.00$ | sf | 2.25 | 37,463 |
| Off-haul spoils | $1,350.00$ | lcy | 80.00 | 108,000 |
| Cutfill grading -moderate grade road shoulder | $6,200.00$ | sf | 0.60 | 3,720 |
| Subgrade prep - widened section of road - scarify \& compact | $4,435.00$ | sf | 0.35 | 1,552 |
| Misc finish grading - steep slope | $11,800.00$ | sf | 0.75 | 8,850 |

# ATTACHMENT 1a <br> R.Borinstein Company 

project management services
construction management \& estimating
V. SEARS RANCH ROAD IMPROVEMENTS


# ATTACHMENT 1a <br> R.Boroinstein Company 

project management services

| Project | La Honda Creek Parking Area \& Trailhead Visitor Access Improvements |  | Est by: RMB |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Est Date: 3/11/24 |  |  |  |  |
|  |  |  | Concept Estimate Update Submission |  |  |  |  |
| Design Docs: | Concept Design |  | Bridge Length Bridge Width |  | 11.00 If |  |  |
|  | Document Date: December 2023 |  |  |  | 58.00 |  |  |
|  |  |  | Bridge Footprint |  | 638 sf bridge |  |  |
| BASE SCOPE |  |  |  |  |  |  |  |
| VI. SITE D BRIDGE REPLACEMENT |  |  |  |  |  |  |  |
| Estimate Detail code | item description | quantity | unit cost | ext | $\begin{gathered} \text { trade } \\ \text { subtotals } \end{gathered}$ | assembly totals | quals \& assumptions |


| A. Site Mobilization \& Preparation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Z1050 Temporary Facilities and Controls |  |  |  |  |
|  | Site mobilization (additional to general proj mobilization) - not incl crane mobilization | 1.00 bgt | 5,000.00 | 5,000 |
|  | Construction fencing - none |  | 0.00 |  |
|  | Erosion control \& BMP measures - perim silt fence/wattles | 1.00 bgt | 2,500.00 | 2,500 |
|  | Tree protection - budget to protect significant perim trees | 1.00 bgt | 500.00 | 500 |
| add | Temp site entry rock surfacing w/wash down station - add for 2nd apporach to southern bank | 1.00 loc | 5,000.00 | 5,000 |
|  | at southern approach in addition wash down station for Site |  |  |  |
| add | D | 90.00 day | 150.00 | 13,500 |
|  | control - for southern apporach in addition to station for Site |  |  |  |
| add | D | 90.00 day | 200.00 | 18,000 |
|  | Temporary bridging beams \& scaffolding platform - install to span lower bank above summer water level - provide temp access under span \& protect creak bed | 100 bgt | 1500000 | 15000 |
|  |  |  |  |  |
|  | Scaffolding - temp platform to underside of bridge | 1.00 bgt | 5,000.00 | 5,000 |
|  | Prepare SWPPP - see General Project Mobilization |  | 0.00 |  |
|  | Layout \& stake | 1.00 bgt | 2,000.00 | 2,000 |
|  | Temporary utilies - N/A |  | 0.00 |  |

## Subtotal

TOTAL: A. Site Mobilization \& Preparation
Net Total Incl Mark-up
B. Demolition

G1020 Site Elements Demolition and Relocations
Remove existing rails
Remove wood decking
Torch cut apart lateral plates connecting span girders (old
train flat bed chassis) - prep span girders for removal - incl
fire watch - crew days
Crane mobilization \& rental for demolition
Crane beams to landing - assume need to cut in two to loud
out
Off-haul transport of steel (partial offset by scrap value)
Excavate abutments as far as necessary to accommodate
new bridge components - two moves to separate banks
Off-haul \& dispose abutment debris - two moves to separate
banks $\quad$ Subtotal
TOTAL: B. Demolition

66,500
66,500 \$104.23 /sf bridge 111,379
100.00 lf $5.00 \quad 500$
600.00 sf $\quad 1.25 \quad 750$

| 3.00 cday | 4,500.00 | 13,500 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1.00 bgt | 10,000.00 | 10,000 |  |  |
| 4.00 ea | 2,500.00 | 10,000 |  |  |
| 1.00 bgt | 3,000.00 | 3,000 |  |  |
| 2.00 ea | 2,000.00 | 4,000 |  |  |
| 2.00 ea | 500.00 | 1,000 |  |  |
|  |  |  |  |  |
|  |  |  | 42,750 | $\$ 67.01$ /sfnew bridge 71,601 |

# ATTACHMENT 1a <br> R.Boroinstein Company 

project management services
construction management \& estimating
VI. SITE D BRIDGE REPLACEMENT

| Estimate Detail |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| code | item description | quantity | unit cost | ext | substotals | totals |



ATTACHMENT 1a
R.Boroinstein Company
project management services
construction management \& estimating
VI. SITE D BRIDGE REPLACEMENT

| Estimate Detail <br> code | item description |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| trade | assembly |  |  |  |  |
| quantity | unit cost | ext | subtotals | totals | quals \& assumptions |



"rhada

## 


projecticlent name
Midpen La Honda
Creek Parking and
Trailheads
Midpeninsula Open Space 330
Mopeninsula Open
Diste Circle
Los Atos, CA 94022
PROJECT NUMEER
21022A
consultant
submittal
Concept Design
date
December 2023
REVIIION
Wo Date Daxititen
$\square$
$\square$
registration and signature

NOT FOR CONSTRUCTION
$\stackrel{\text { SCALE }}{=0}$
SHEETTILE
TREE PRES PLAN SITE D
DRAWN BY: MD, oH CHECKED BY: MD,
L-201A











# EXISTING CONDITIONS / OPPORTUNITIES AND CONSTRAINTS REPORT 

Date: $\quad$ November 18, 2022
(revised March 29, 2024)

Prepared for: Melissa Borgesi, Planner
Midpeninsula Regional Open Space District
5050 El Camino Real
Los Altos, CA 94022
mborgesi@openspace.org
Prepared by: Douglas Nelson and Megan Dale
RHAA Landscape Architecture \& Planning
225 Miller Avenue
Mill Valley, CA 94941
megan.dale@rhaa.com

RE: La Honda Creek Parking Area and Trailhead - Existing Conditions/Opportunity and Constraints Report

## Executive Summary

Midpeninsula Regional Open Space District (Midpen) is undertaking a review to evaluate potential sites for parking and trailhead locations to access the central area of the La Honda Creek Open Space Preserve that is currently closed to the public. The La Honda Creek Parking and Trailhead Access Feasibility Study was driven by the 2020 La Honda Public Access Working Group (PAWG) process during which a group of representatives from La Honda and throughout Midpen looked for sites with the potential to offer access into the Preserve. The PAWG's final recommendation included a suite of six sites across which a variety of uses, amenities, and parking and trailhead access facilities would be distributed. The PAWG also recommended several short-term measures to consider while the longerterm Feasibility Study was underway.

This analysis will review four of those sites (Sites B2, B3, D, and E3) as well as a bridge associated with Site D (Bridge at D), which warrants its own section in the report. The two remaining sites (the C sites or Sites C1 and C2) recommended by the PAWG propose amenities for an area one mile north of the existing Sears Ranch Road parking lot. The C sites are outside of RHAA's scope of work due to the minimal nature of contemplated site improvements. Midpen staff will separately study these improvements and the feasibility of short term measures the PAWG recommended.

The purpose of this report is to compile site observations and technical report data generated and collected for this project by RHAA and our consultant team into a comprehensive analysis of existing site conditions and each site's distinct opportunities and constraints. The conceptual program of each site

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
will be adjusted based on guidance from Midpen's Planning and Natural Resources Committee and community input.

## Existing Conditions

RHAA's and Midpen's consultant teams prepared the following technical studies for Sites B2, B3, D, Bridge at D, and E3 between October 2021 - October 2022 (see Appendices):

- BKF Engineers, Boundary and Topographic Survey, dated September 2022
- CG\&E, Cal Engineering \& Geology, Preliminary Geologic and Geotechnical Assessment Report, dated March 2022
- LSA, Access (Traffic) Study, dated October 2022 (revised March 2024)
- LSA, Biological Resource Evaluation Study, dated October 2022
- LSA, Cultural Landscape Report (Site E3), dated April 2022
- LSA, Cultural Resources Survey Study, dated March 2022
- LSA, Tree Inventory Table, dated January 2022
- Vollmar, Botanical Resource Survey Report, dated November 2021
- Vollmar, Delineation of Potential Jurisdictional Waters (Site B2, B3, D), dated May 2022
- Vollmar, Delineation of Potential Jurisdictional Waters (Site E3), dated May 2022


## Site Analysis/Opportunities and Constraints

Each site was analyzed based on three categories of existing conditions: Site Characteristics, Site Circulation, and Environmental Resources. A list of opportunities and constraints, applicable agency consultations, and recommendations associated with each site has been included to help evaluate whether the site is a viable option for development as a parking area and trailhead. This information will be reviewed at a public meeting of the Planning and Natural Resources Committee, and input will inform the path forward and the basis of the program for those sites advancing into the feasibility study phase and conceptual site planning.

We look forward to collaborating with you in developing and implementing a shared vision for the La Honda Creek Open Space Preserve.

Sincerely,


Douglas Nelson
Principal Emeritus
doug@rhaa.com
(415) 360-2853

## megandan

Megan Dale
Senior Associate
megan.dale@rhaa.com
(415) 360-2849

## Table of Contents

1.0 INTRODUCTION ..... 6
1.1 GENERAL ..... 6
1.2 PROJECT DESCRIPTION ..... 10
1.3 PURPOSE, SCOPE OF WORK, AND GOALS ..... 10
2.0 PROPOSED SITES AND PROGRAM ..... 12
2.1 SITE B2 ..... 13
2.2 SITE B3 ..... 15
2.3 SITE D ..... 16
2.4 SITE D - BRIDGE ..... 17
2.5 SITE E3 - RED BARN ..... 18
3.0 SUMMARY OF OPPORTUNITY AND CONSTRAINTS AND RECOMMENDATIONS BY SITE ..... 19
3.1 SITE B2 ..... 19
3.2 SITE D ..... 24
3.3 SITE D BRIDGE ..... 28
3.4 SITE E3 ..... 31
3.5 SITE B3 ..... 40
4.0 NEXT STEPS ..... 42
5.0 EXHIBIT A - DETAILED EXISTING CONDITIONS BY SITE ..... 43
5.1 SITE B2 ..... 43
5.1.1 SITE B2 - SITE CHARACTERISTICS. ..... 43
5.1.2 SITE B2 - SITE CIRCULATION ..... 47
5.1.3 SITE B2 - ENVIRONMENTAL RESOURCES. ..... 49
5.2 SITE B3 ..... 55
5.2.1 SITE B3 - SITE CHARACTERISTICS ..... 55
5.2.2 SITE B3 - SITE CIRCULATION ..... 55
5.2.3 SITE B3 - ENVIRONMENTAL RESOURCES ..... 55
5.3 SITE D ..... 56
5.3.1 SITE D - SITE CHARACTERISTICS ..... 56
5.3.2 SITE D - SITE CIRCULATION ..... 59
5.3.3 SITE D - ENVIRONMENTAL RESOURCES ..... 62
5.4 SITE D - BRIDGE ..... 68
5.4.1 SITE D BRIDGE - SITE CHARACTERISTICS ..... 68
5.4.2 SITE D BRIDGE - SITE CIRCULATION ..... 70
5.4.3 SITE D BRIDGE - ENVIRONMENTAL RESOURCES. ..... 71
5.5 SITE E3 - RED BARN ..... 76
5.5.1 SITE E3 - SITE CHARACTERISTICS ..... 76
5.5.2 SITE E3 - SITE CIRCULATION ..... 80
5.5.3 SITE E3 - ENVIRONMENTAL RESOURCES ..... 83
6.0 EXHIBIT B - RECORDS REVIEW ..... 90

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## APPENDICES

A. BKF Engineers, Boundary and Topographic Survey, dated September 2022
B. Cal Engineering \& Geology, Preliminary Geologic and Geotechnical Assessment Report, dated March 2022
C. LSA, Access (Traffic) Study, dated October 2022 (revised March 2024)
D. LSA, Biological Resource Evaluation Study, dated October 2022
E. LSA, Cultural Landscape Report (Site E3), dated April 2022
F. LSA, Cultural Resources Survey Study, dated March 2022
G. LSA, Tree Inventory Table, dated January 2022
H. Vollmar, Botanical Resource Survey Report, dated November 2021
I. Vollmar, Delineation of Potential Jurisdictional Waters (Site B2, B3, D), dated May 2022
J. Vollmar, Delineation of Potential Jurisdictional Waters (Site E3), dated May 2022

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

## LIST OF ABBREVIATIONS AND ACRONYMS

| APN | Assessor's parcel number |
| :--- | :--- |
| BMPs | Best Management Practices |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CNPS | California Native Plant Society |
| CRLF | California red-legged frog |
| CRPR | California Rare Plant Rank |
| Midpen | Midpeninsula Regional Open Space District |
| EIR | Environmental Impact Report |
| GIS | Geographic Information System |
| IPM | Midpen's Integrated Pest Management Program |
| IS/MND | Initial Study/Mitigated Negative Declaration |
| Master Plan | La Honda Creek Open Space Preserve Master Plan |
| OHWM | Public Access Working Group High-Water Mark |
| PAWG | La Honda Creek Open Space Preserve |
| Preserve | La Honda Creek Feasibility Project |
| project | Right-of-way |
| ROW | Resource Management Policies |
| RMPs | Regional Water Quality Control Board |
| RWQCB | San Francisco dusky-footed woodrat |
| SFDFW | San Mateo County |
| SMCo | State Route 35 |
| SR-35 | U.S. |

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 1.0 INTRODUCTION

### 1.1 GENERAL

Midpeninsula Regional Open Space District (Midpen) manages the 6,142-acre La Honda Creek Open Space Preserve (Preserve), which is located within unincorporated San Mateo County in the northern Santa Cruz Mountains. The Preserve is comprised of coastal scrub, redwood and hardwood forest, and rolling grassy hills with views to the Pacific Ocean. The Preserve is used by hikers, equestrians, and dog walkers.


Figure 1-1 Midpen's Jurisdictional Boundary and La Honda Creek Open Space Preserve

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

In 2012, Midpen's Board approved the La Honda Creek Master Plan (Master Plan) and at the same time, adopted the Master Plan's Initial Study/Mitigated Negative Declaration (IS/MND). The Master Plan includes Environmental Protection Guidelines, which are the measures from Midpen's 2003 San Mateo Coastal Annexation Draft and Final Environmental Impact Report that apply to area of La Honda Creek Preserve that lie within the Coastside Protection Area. The Master Plan is a 30 -year plan to guide stewardship efforts and recreational access and includes an expanded trail system for hiking and equestrian use with specific trails identified for dogs on leash and bicycle use. The land has historically been used for ranching, and conservation grazing operations continue to be a part of the land use.

In 2017, Midpen studied adding a new parking area near the Red Barn off State Route 84 (also known as La Honda Road or SR-84) in La Honda. After hearing concerns from the La Honda community about traffic and visual impacts, Midpen paused the project to create a working group made up of La Honda residents and Midpen's District ward representatives to help the project team explore other options to provide access to the currently closed middle section of the Preserve.

For the purposes of this report, the traffic discussions note SR-84 as officially designated as an east-west state highway but in the section of the Preserve where these sites are located, the travel lanes are oriented north-south, which leads to confusion. Therefore, this document refers to the eastbound direction of SR-84 as northbound and the westbound direction of SR-84 to southbound to match the physical orientation of the highway in this location.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 1-2 2012 La Honda Creek Open Space Preserve Master Plan

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 1-3 Public Access Sites studied in the 2020 La Honda PAWG Report

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 1.2 PROJECT DESCRIPTION

The project sites evaluated under this report are located along SR-84 and are intended to provide access to the central areas of the Preserve. Sites B2 and B3 are located off Sears Ranch Road in La Honda, California. North of these sites, on SR-84, is Site D. And further north on SR-84 is Site E3 at the Red Barn site. The public access improvements contemplated across these sites include public trailhead access, paved and gravel parking lots, restrooms, and a replacement bridge (bridge at Site $D$ ) at an existing trail.

### 1.3 PURPOSE, SCOPE OF WORK, AND GOALS

The purpose of the Feasibility Study is to determine if the proposed sites can support and accommodate a parking area, trailhead, and associated infrastructure. For this study, the consultant team analyzed each site and will develop conceptual renditions that support the following Board-approved project goals with the understanding that more than one of these sites will be needed to achieve all the goals.

## Board-approved project goals

- Establish new public access in the central portion of the Preserve.
- Design elements to reflect the rural character of the site and the Red Barn.
- Provide safe public access.
- Balance public access with grazing activities and other uses.
- Include amenities that facilitate environmental education.
- Protect scenic views of and from the site.
- Protect natural resources to the extent possible.
- Incorporate climate change adaption where appropriate.
- Provide equitable access opportunities to accommodate the diverse community Midpen serves.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 1-4 Existing parking lot at Sears Ranch Road at Preserve Gate LH11


Figure 1-5 Existing entry sign at Sears Ranch Road parking lot at Preserve Gate LH11

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 2.0 PROPOSED SITES AND PROGRAM

After consideration of each site's specific characteristics, the PAWG recommended distributing the types of access (permit/docent or full public access), trail uses (equestrian), and infrastructure (restroom and hitching posts) throughout multiple sites.

As a starting point, the Existing Conditions/Opportunities and Constraints Report evaluates the maximum parking capacity feasible at each site to cover the broadest limits of potential parking development, understanding that a full build-out may not be ultimately implemented. In addition, where equestrian parking is considered, at least four equestrian trailer spaces are assumed.
La Honda Creek Parking Area Feasibility Study

Figure 2-1 Locations of four sites and bridge studied in this report

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 2.1 SITE B2

Site B2 is located approximately 0.5 miles northwest of the intersection of SR-84 and Sears Ranch Road and downhill and west of the Preserve's existing paved parking lot with a west aspect slope. The site is primarily covered in grasses with minimal trees except those along the private access road to the south that leads through Preserve Gate LH14 to an existing staff residence located further west of the site.

## Program Elements for Site B2

- Equestrian trailer gravel parking area (approximately four equestrian trailer spaces for up to eight horses).
- Overflow vehicular parking from the existing Sears Ranch Road parking lot (approximately 40 to 80 overflow standard parking spaces).
- Trail access to the existing Sears Ranch Road parking lot and trail system.
- Potential Sears Ranch Road improvements for the section of road from La Honda Elementary School to the existing Sears Ranch Road parking lot (see Site B3).


Figure 2-2 Site B2

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Site B2 - Sears Ranch Road Widening
$\ddot{\oplus} \stackrel{\square}{\square}$
Figure 2-3 Site B2 Sears Ranch Road Widening

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 2.2 SITE B3

Site B3 is located at the end of Sears Ranch Road and north of La Honda Elementary School at Preserve Gate LH15. This site is bounded on the west by approximately 1,000 feet of Sears Ranch Road that would need to be improved from the school's driveway to the existing paved Sears Ranch Road parking lot. Trees line both sides of Sears Ranch Road up to this site. The potential parking area at Site B3 is a level area that is down a steep slope east of Sears Ranch Road. The site is framed by trees along the southern fence but is primarily covered in grasses with wetland plant species located along the southern coterminous border with the school.

## Program Elements for Site B3

- Equestrian trailer gravel parking area (approximately four equestrian trailer spaces for up to eight horses).
- Overflow vehicular parking from the existing Sears Ranch Road parking lot (approximately 20 to 30 overflow parking standard spaces).
- Trail access to the existing Sears Ranch Road parking lot and trail system.
- Potential Sears Ranch Road improvements for the section of road from the school to the existing Preserve Sears Ranch Road parking lot.


Site B3
(1) $\varlimsup_{0<\infty}^{\rightleftharpoons}$

Figure 2-4 Site B3

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 2.3 SITE D

Site $D$ is centrally located within the Preserve approximately 4 miles south of the State Route 35 (SR-35) and SR-84 intersection. The site is west of SR-84 at Preserve Gate LH07 between SR-84 post mile markers 10.8 and 11. Approximately 400 feet of SR-84 fronts this property, and a wide shoulder is adjacent to the highway. The site is relatively flat and is heavily shaded with tree canopy.

## Program Elements for Site D

- Paved parking area with a new trailhead (approximately 20 to 40 vehicles).
- Potential vault restroom facility.
- Vehicular access to and from SR-84.
- Traffic safety enhancements.
- Trail access via the bridge over La Honda Creek connecting to the existing trail system.
- Bridge replacement (see 2.4 Site D - Bridge)


Bridge Site, Site D, \& Site E3

Figure 2-5 Site D in relation to Site E3

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 2.4 SITE D - BRIDGE

The bridge is approximately 0.2 miles down an existing ranch road from Site D . Due to the abutment conditions, the bridge has been deemed structurally unusable for public access. The bridge requires replacement or structural repairs to support pedestrian loads and possibly vehicle loads (vehicle use for Midpen patrol and maintenance). Upgrades to the existing unpaved road leading to the bridge from Preserve Gate LH07 are not part of the scope of this study.

## Program Element for Site D-Bridge

- Replacement bridge over La Honda Creek.


Site D \& Bridge Site

Figure 2-6 Site D and the Bridge Site

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 2.5 SITE E3 - RED BARN

Site E3 is located 1 mile north of Site D on the west side of SR-84 between post mile markers 12 and 12.35. The site has approximately 800 feet of SR- 84 frontage. The Red Barn is located on this property, and the picturesque view of the barn and grasses within the corral can be seen by north-bound and south-bound travelers along SR-84. The land is sloped down from the highway and contains existing entry and egress roads used primarily by the staff residence and grazing tenants. The site is a level area located behind existing trees and near an existing white shed that sits downslope from the staff residence.

## Program Elements for Site E3

- Gravel parking area (approximately 10 to 15 vehicles).
- Permit and docent-led access only to limit daily traffic movements to and from SR-84.
- Vehicular access to and from SR-84.
- Traffic safety enhancements.
- Trail access to the Red Barn.


Site E3

Figure 2-7 Site E3

### 3.0 SUMMARY OF OPPORTUNITY AND CONSTRAINTS AND RECOMMENDATIONS BY SITE

Over the past year, RHAA completed a wide range of technical studies, analyzed the existing conditions, and found three sites that are recommended to advance further into design and evaluation as potential locations that can offer access to the central area of the Preserve. RHAA found one site that is recommended to be removed from consideration. The following is a site-by-site summary of opportunities and constraints, starting with the sites being recommended for further evaluation (Site B2, D, and E3) and concluding with the site not being recommended (Site B3). For more detail on existing conditions, refer to the Existing Conditions/Opportunities and Constraints (5.0 Exhibit A), Existing Conditions Plans (Figures 1.1 - 5.3b), and Appendices for additional information.

## Potential sites to further evaluate:

### 3.1 SITE B2

Site B2 appears to be the best site for equestrian parking as well as for overflow parking for the existing Sears Ranch Parking area. Site B2 raises minimal to no concerns regarding potential impacts to sensitive environmental resources. This site has a large, relatively flat area suitable for equestrian and standard parking. Waters or natural resources would be minimally affected. This site has no state or federal permitting jurisdictions near the project location.


Site B2
$\ddot{\square} \underset{\square}{\rightleftarrows}$
Figure 3-B2-1 Site B2. Also see Figures: 1.1, 1.2, and 1.3

## ATTACHMENT 1a

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-B2-2 Site B2 facing north


Figure 3-B2-3 Site B2 facing northeast up the steep bank

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-B2-4 Site B2 facing north towards grazing road and barn


Figure 3-B2-5 SR-84 at Sears Ranch Road facing north

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-B2-6 SR-84 at Sears Ranch Road facing south


Figure 3-B2-7 Sears Ranch Road facing south at existing turnout


Figure 3-B2-8 Sears Ranch Road facing north at narrow section of road near school

## Opportunities

- The site has a large, relatively flat area suitable for equestrian and standard parking.
- Waters or natural resources would be minimally affected.
- This site has no state or federal permitting jurisdictions near the project location.


## Constraints/Challenges

- Providing traffic safety for equestrian trailers entering and exiting SR-84 at Sears Ranch Road.
- Widening Sears Ranch Road from the school to the parking lot to accommodate equestrian trailers; identifying property ownership and, if necessary, negotiating access for road improvements.
- Ensuring ingress/egress to the existing staff residence is maintained.
- Protecting the scenic views of lower elevations (barn and pond) and higher elevations that look down into the site.
- Minimizing the impact to conservation grazing pastures and ensuring that the grazing operation is considered when site planning; efficiently locating fencing around the parking to minimize loss of pasture.
- Avoiding or mitigating numerous shallow slumps, as well as shallow slumps and landslides along Sears Ranch Road, since these limit the area of development.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

- The proposed widening of Sears Ranch Road will need to remain outside the 50-foot setback of the wetland seep (located at B3) to avoid jurisdictional waters and undergo permitting.
- If Site B2 is the only feasible site for a future well to provide water for the grazing tenant's operation, parking and trailhead improvements to the site would need to be coordinated with this work to accommodate the approximately three feet by four feet footprint of the well.


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.
- Borings are recommended to characterize subsurface conditions for areas of development to identify remediation or avoidance. Obtain a County permit for 3 borings estimated depth of 15 to 30 feet to characterize subsurface materials for proposed parking lot area.
- The LANGAN report identified areas of artificial fill that may require remediation via earthwork or the development of retention structures.
- If needed, use of steel beam and walls are recommended but will be dependent on the final design configuration and the results of the geotechnical investigation and analysis.
- Designing a new parking area with a minimal footprint is recommended to reduce the loss of active grazing land.
- The LSA Access (Traffic) Study recommends no modifications for the intersection of SR-84/Sears Ranch Road.
- The LSA Access (Traffic) Study recommends widening Sears Ranch Road to 20 feet between the La Honda Elementary School and the existing parking lot.
- San Mateo County's Active Transportation Plan evaluated pedestrian safety in downtown La Honda and included recommendations for addressing the disconnected/inaccessible walking network along SR-84/Sears Ranch Road and the safety of pedestrians crossing SR-84 at Sears Ranch Road. Midpen can consider working with Caltrans to identify potential improvements for pedestrian access.
- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.
- Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements.


### 3.2 SITE D

Site D appears to be feasible to continue studying for development potential. From a traffic safety standpoint, the site can maximize sight lines (for drivers waiting in the driveway) for the SR-84 traffic speeds if the driveway is moved 50 feet north of Preserve Gate LH07 and the stop bar in the driveway is recessed to accommodate a right-turn pocket. Moving the driveway north 50 feet meets sight distance for drivers in the driveway to the southbound lanes but not for the northbound lanes; therefore, additional traffic devices and warnings focused on the travel speed of vehicles on the highway could also be implemented to address safety concerns. With these devices and warnings, northbound vehicles on the highway would have the stopping sight distance and time to see the driveway and to stop and slow if someone is making a left in front of them from the driveway.

This site has a moderately flat area suitable for a paved parking lot with room to treat stormwater while also avoiding the adjacent wetland channel. Many larger, densely packed trees that would need to be

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)
removed for development are invasive or fire hazard trees. Removing them would provide a fire management benefit through CALFIRE's program. Perimeter trees could be retained for shade, and new native vegetation could be planted to assist with screening.


Site D \& Bridge Site
(4) $\sqrt{6 \times 10}$

Figure 3-D-1 Site D and the Bridge Site. Also see Figures: 3.1, 3.2, and 3.3


Figure 3-D-2 Site D facing south under existing canopy

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-D-3 Site D facing west at Preserve Gate LHO7


Figure 3-D-4 Site D facing north at SR-84

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 3-D-5 Site D facing south at $S R-84$

## Opportunities

- The site is centrally located within the Preserve.
- An existing flat area with a wide highway shoulder is ideal for a parking lot, which would be the only one of the four sites able to support a restroom.
- The area is shaded with existing tree canopy.
- The proposed parking area can avoid jurisdictional waters.


## Constraints/Challenges

- Safe access to SR-84.
- Since the short, upper section of the existing ranch road is not owned by Midpen, plan for a new trail connection from the future parking lot to a Midpen-owned portion of the existing ranch road or investigate additional property rights for public access over the ranch road if a new trail connection is not feasible.
- Protection of the nearby creek.
- Potential deep landslides and areas of significant instability may require mitigation measures for the planned development. Conduct a more extensive geotechnical study and prepare design of mitigation measures.


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.
- Borings are recommended to characterize subsurface conditions for areas of development to identify remediation or avoidance. Obtain a County and Caltrans (if in ROW) permit for 3 borings estimated depth of 20 to 30 feet to characterize subsurface materials for proposed parking lot area, restroom foundation, and potential retaining walls.
- Designs should consider slope inclinations of 3:1 (horizontal: vertical) or shallower unless supported by retention structures or using geogrid reinforced engineered fill.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Avoid areas of significant instability.
- The colluvium / landslide deposit needs further exploration.
- Remediation measures to address the identified instabilities may include segmental block or cast-in-place concrete wall supported with pier and grade and buried stabilization piles. The selection of remedial or stabilization measures will depend on the planned improvements configuration and findings from the subsurface exploration and engineering analysis.
- The development of a trail is feasible, but a potential deep landslide and areas of significant instability could increase the level of maintenance needed.
- Access easements or agreements may be required.
- The Level of Service at the proposed driveway would be within Caltrans standards.
- The driveway is recommended to be placed 50 feet north of Preserve Gate LHO7 to improve sight distance to the southbound lanes.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology and a left-turn pocket is not warranted.
- A short right-turn pocket ( 25 feet) with an abbreviated ( 60 feet) transition into and out of the driveway would maximize sight distance from the driveway to SR-84.
- A full deceleration and acceleration lane is not recommended because it could be used as a passing lane, reducing road safety.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound approaches and interconnecting warning beacon to the loop detector at the exit lane in the driveway.
- Midpen can consider working with Caltrans to determine whether features would be added to the state highway to prevent passing at this location as part of the project.
- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.
- Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements.


### 3.3 SITE D BRIDGE

The rail car bridge at Site D appears to be feasible to replace if the abutments of the new bridge are outside the Ordinary High-Water Mark (OHWM) and above the top-of-bank of La Honda Creek. The existing bridge could be removed in segments, and access to the site is reasonable. Both a pedestrian and vehicular bridge will be studied.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-Br-1 Bridge over La Honda Creek at Site D. Also see Figures: 4.1, 4.2, and 4.3


Figure 3-Br-2 Bridge over La Honda Creek at Site D facing west

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-Br-3 Bridge over La Honda Creek at Site D facing east

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

## Opportunities

- Replacing the bridge can allow for vehicle and/or pedestrian access.
- The existing, wide access road provides access for a crane to remove the bridge in segments.


## Constraints/Challenges

- The bridge was assessed previously and is currently zero-rated by a structural engineer and needs to be replaced before it can be used for public access.
- Any abutments would need to be outside the Ordinary High-Water Mark (OHWM) and above the top-of-bank of the creek to avoid potential impacts to state and federal Waters and associated permitting with the USACE and RWQCB. A CDFW permit would likely still be required. The CDFW permit could possibly be done using existing permit coverage under the Open Space Maintenance and Restoration Program Manual. If federal jurisdiction cannot be avoided, it is recommended that this bridge become a standalone project and not combined with the parking area, which does not have a federal jurisdiction.
- The local geotechnical mapping reconnaissance was hindered by heavy vegetation cover and thus the initial assessment cannot exclude the potential for landslides and other site conditions that may have an impact on the development of the area.
- The existing rail car cannot be reused due to the need for a longer span. Removal of the rail car will likely require lead abatement.


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.
- Borings are recommended to characterize subsurface conditions for areas of development at abutment locations. Obtain a County permit for 2 borings estimated depth of 30 to 45 feet to characterize bridge abutments.
- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.
- The bridge design should avoid working in the OHWM and be above the top-of-bank of La Honda Creek. North of the bridge is a jurisdictional non-wetland swale, which should also be avoided.
- Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements.


### 3.4 SITE E3

Site E3 appears to be feasible to continue studying for development potential for limited access only. From a traffic safety standpoint, traffic volumes are expected to be low enough that no queue would form on SR-84 of vehicles trying to enter the site if using a one-way entrance and one-way exit system. The Access (Traffic) Study does not recommend either driveway include left- and right-turn restrictions, as no feasible location within a reasonable distance from Site E3 along SR-84 could be found that would accommodate u-turns. Similar to Site D, traffic devices and warning improvements to slow traffic on SR84 and prevent speeding and illegal passing could address safety concerns. Restricting the number of

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
visitors at any given time with permit/docent-led event reservations also helps manage capacity and trip generation.

The site has a small area hidden by vegetation that would be ideal for a small parking area. Since many of the trees providing existing screening are recommended to be removed in part due to fire safety, new native vegetation could be planted to maintain the screening as viewed from the highway.


Site E3

Figure 3-E3-1 Site E3. Also see Figures: 5.1a, 5.1b, 5.2a, 5.2b, 5.3a, and 5.3b

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-2 Site E3 access drive at Preserve Gate LH06 facing southwest


Figure 3-E3-3 Site E3 behind trees from top of dirt access drive facing southeast

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-4 Site E3 existing dirt access drive at midway point facing north


Figure 3-E3-5 Site E3 existing dirt access drive to level area facing north

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 3-E3-6 Site E3 level area of proposed parking and white shed facing west


Figure 3-E3-7 Site E3 level area of proposed parking and existing trees facing east

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 3-E3-8 Site E3 Red Barn from level area of proposed parking facing southeast


Figure 3-E3-9 Site E3 existing gravel exit drive to Preserve Gate RED01 facing southeast

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-10 Site E3 existing entry drive at Preserve Gate LH06 facing northbound on SR-84


Figure 3-E3-11 Site E3 existing entry drive at Preserve Gate LH06 facing southbound on SR-84

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-12 Site E3 existing exit drive at Preserve Gate RED01 facing northbound on SR-84


Figure 3-E3-13 Site E3 existing exit drive at Preserve Gate RED01 facing southbound on SR-84

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Opportunities

- Provide access to view the Red Barn structure.
- Potential site to access a future connection to the Bay Area Ridge Trail corridor.
- New native plantings can address loss of screening due to CALFIRE tree removal that is part of their ongoing fuel reduction efforts; otherwise, existing vegetation can serve to screen the proposed parking area.
- Driveway improvements can enhance sight lines at SR-84 and improve access to the proposed parking area.
- Traffic calming and speed reduction enhancements can enhance traffic safety.


## Constraints/Challenges

- The La Honda community raised concerns about traffic safety and aesthetics during the planning process for the 2018 Red Barn Public Access Project and during the 2019/2020 PAWG process.
- Excessive speed and illegal passing occur at this location.
- Avoid extensive grading that could visually impact the aesthetic view of the Red Barn.
- Ensure the existing staff residence will not be affected by the new public access.
- Ensure existing grazing tenant operations are considered when site planning.
- Avoid or mitigate shallow slumps, since these limit the area of development.
- When the internal area is open to the public, highway shoulder parking would need to be prohibited to dissuade visitors from parking on the roadway to enter the Preserve.


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.
- Borings are recommended to characterize subsurface conditions for areas of development to identify remediation or avoidance. Obtain a County and Caltrans (if in ROW) permit for 3 borings estimated depth of 10 to 30 feet to characterize subsurface materials for proposed parking lot area and access driveway. Obtain a County and Caltrans (if in ROW) permit for 2 borings estimated depth of 45 feet to characterize area of Bay Area Ridge Trail crossing.
- For either type of programming, the Level of Service at the proposed driveways would be within Caltrans standards.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology, and a left-turn pocket is not warranted.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound approaches to the exit driveway and interconnecting warning beacon to the loop detector at the exit lanes.
- On-site observation shows that some vehicles are attempting to pass over a solid yellow line at this location. A barrier would need to be designed to accommodate left-turns out of the exiting driveway. Midpen can consider working with Caltrans to determine whether features would be added to the state highway to prevent passing at this location as part of the project.
- Highway shoulder parking would need to be prohibited to dissuade visitors from parking on the roadway to enter the Preserve when the internal area is open to the public.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

- Storm drainage patterns should match existing conditions and any new outfalls include conveyance and dissipation to reduce potential for erosion.
- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.
- Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements.
- Midpen's IPM and Wildland Fire Resiliency Program Plan recommend fuel reduction of the trees.


## Site not recommended to move forward to evaluate:

### 3.5 SITE B3

Site B3 should be avoided for development of a parking area and is not recommended to move forward in the next feasibility study phase due to the jurisdictional seep wetland.


Site B3

Figure 3-B3-1 Site B3. Also see Figures: 2.1, 2.2, and 2.3

## ATTACHMENT 1a

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 3-B3-2 Site B3 facing north at Sears Ranch Road and Preserve Gate LH15


Figure 3-B3-3 Site B3 facing south at Sears Ranch Road with school behind

## Constraints/Challenges

- Site B3 should be avoided due to the jurisdictional seep wetland affecting the buildability of any parking area improvements at this location; therefore, limited analysis is included for this site.
- Road widening of the Sears Ranch Road entryway to accommodate equestrian trailer access; identifying property ownership and, if necessary, negotiating access for road improvements.
- Providing safe access for equestrian trailers entering and existing SR-84 at Sears Ranch Road.
- Potential impacts (visual, traffic, circulation) to the school due to its close proximity.
- Avoiding or mitigating numerous shallow slumps and shallow landslides along Sears Ranch Road, since these limit the area of development.
- Site B3 may be the site of a future well to provide water for the grazing tenant's operation.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 4.0 NEXT STEPS

Pending the PNR Committee's concurrence with the three sites recommended in this report to continue studying for development potential, RHAA will advance into design and evaluation and develop conceptual design plan alternatives. Input received from the PNR Committee and members of the public on this report's findings will be considered and incorporated into this design and evaluation phase of work.

Conceptual design plan alternatives will be brought back to the PNR Committee for additional Committee and public feedback with the goal of assessing site feasibility of the three recommended sites and selecting a preferred alternative for each to forward to the Board for consideration. Once feasibility and a preferred alternative for each feasible site is affirmed by the Board, environmental review would be conducted.


Figure 4-1 Existing trailhead at Sears Ranch Road

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.0 EXHIBIT A - DETAILED EXISTING CONDITIONS BY SITE

The following is a site-by-site synthesis of existing conditions based on the most current and past technical studies. The analysis of existing conditions is separated into three categories (site characteristics, site circulation, and environmental resources) to cover specific information regarding site characteristics and land use, traffic and access organization, and the waters and habitats that require special permitting, agency consultation, and policy considerations with each of these categories. A list of applicable policies, agency consultations, or recommendations are also included as applicable for each site. Refer to the Existing Conditions/Opportunities and Constraints Plans (Figures 1.1-5.3b) and Appendices for additional information.

### 5.1 SITE B2

Site B2 appears to be the best site for equestrian parking as well as overflow parking for the existing Sears Ranch Road parking area. The site poses minimal to no concerns regarding potential impacts to sensitive environmental resources.

### 5.1.1 SITE B2 - SITE CHARACTERISTICS

### 5.1.1(1) Site B2 - Land Ownership

The seven-acre site is located within La Honda Creek Open Space Preserve APN 078290060 at the end of Sears Ranch Road, fully within Midpen lands. No parcel adjustments are needed for a parking lot.

The Access (Traffic) Study indicates that the entryway from Sears Ranch Road would need to be widened to 20 feet minimum to meet San Mateo County Fire standards and to accommodate two-way traffic, which would be necessary based on the number of trips generated. Access easements or agreements may be needed. Widening Sears Ranch Road may affect APN 078290 050, APN 078290 060, and APN 083361 110, which are owned by Midpen, and APN 083361 070, which is owned by an adjoining neighbor. Entryway improvements would potentially affect existing fencing and involve some grading or retaining walls on the east side.

Applicable Policies

- Access easements or agreements, if needed


## Agency Consultations

- San Mateo County Planning and Building Permitting (work in right-of-way)


## Recommendations

- None


### 5.1.1(2) Site B2 - Site Access

Site B2 is accessed from Sears Ranch Road, which in turn is accessed from SR-84. The intersection of SR84/Sears Ranch Road is a two-way stop-controlled intersection where the west leg (Sears Ranch Road) and the eastern leg (Entrada Way) of the intersection have stop signs and SR-84 is free-flowing. The PAWG selected the B sites for equestrian parking because vehicles with trailers would be pulling out of the driveway onto Sears Ranch Road rather than SR-84.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- None

Agency Consultations

- San Mateo County Planning and Building Permitting (work in right-of-way)
- San Mateo County Fire

Recommendations

- None


### 5.1.1(3) Site B2 - Natural Boundaries

The site has a large slope on the east side and two roads along the eastern and southern perimeter. The eastern road at the end of Sears Ranch Road is the main access point. The southern road is a private drive to the staff residence, which is tree-lined along its border.

## Applicable Policies

- None

Recommendations

- None


### 5.1.1(4) Site B2 - Site Topography

The top of the Sears Ranch Road entryway has a level high point. The flatter portion of the site ( $2-7 \%$ slope) sits below a large 250 -foot-wide slope ( $20-30 \%$ slope) west of that high point. The existing grazing access road on the north has a $5-10 \%$ slope, and the portion of the slope to get down to the flat area is $12-16 \%$. Water drains down the eastern slope and accumulates on the southern portion of the site. Development of this southern area should be avoided. Slopes west of the site drop away into an ephemeral tributary of Harrington Creek.

## Applicable Policies

- Resource Management Policies, SA-1 (minimize evidence of human impacts within preserves)
- Resource Management Policies, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- Resource Management Policies, WR-2, (manage human activities to control erosion)


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.


### 5.1.1(5) Site B2 - Viewsheds and Scenic Corridors

From an adjacent peak to the west, a parking lot at Site B2 would be visible. The parking lot would also be visible from the existing barn and trail from within the site. Screening a parking lot would help reduce views of the parking lots from these sites.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- San Mateo County General Plan, Visual Quality Policies, Scenic Corridor
- Resource Management Policies, Scenic Aesthetic Resources


## Recommendations

- None


### 5.1.1(6) Site B2 - Site Screening

To maintain viewsheds of natural elements from the nearby peaks to the west, a potential parking lot should be screened on the west and north. However, the PAWG suggests keeping unobstructed views of the barn and pond from the existing parking lot, so those trees may block this view. A balance of screening will need to be determined. Existing trees on the south should be retained unless such time that they are incorporated into future fire resiliency or integrated pest management work. The east slope between the site and the existing parking lot creates a natural site screen.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-3 (screening of staging areas)
- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- Resource Management Policies, SA-1 (minimize the evidence of human impacts within preserves)
- Resource Management Policies, FM-1 (fire and fuel management to protect the public)
- Integrated Pest Management Guidance Manual, IPM-1 - Manage pests in fuel management areas to reduce risk to human life and property, while also protecting natural resources.

Recommendations

- None


### 5.1.1(7) Site B2 - Exposure and Shading

The site has a west facing exposure, mild climate, and limited tree cover. When the existing parking lot was built, no additional tree canopy/shade was required or added.

## Applicable Policies

- None


## Recommendations

- None


### 5.1.1(8) Site B2 - Geological Conditions

Site B2 has documented shallow slump failures and shallow landslides within the planned areas of improvement from the reconnaissance research. However, most of the slope instabilities and other hazards identified can be avoided or maintained with retaining walls. In 2016, LANGAN noted moderately to highly expansive clay loam. Pavement profiles were provided. This report notes the potential of expansive soils to impact structures and pavements and long-term impacts, including maintenance due to soil creep. Additional information is available in the appendix, Preliminary Geologic and Geotechnical Assessment Report, Cal Engineering \& Geology, March 2022.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- Resource Management Policies GS-1, Measure 1 (minimize construction of major improvements to avoid high risk areas)
- Resource Management Policies, GS-2 (minimize soil erosion and sedimentation)


## Recommendations

- Borings are recommended to characterize subsurface conditions to identify remediation or avoidance.
- The LANGAN report identified that areas of artificial fill may require remediation via earthwork or the development of retention structures.
- If needed, use of steel beam and walls may be considered depending on the final design configuration and the results of the geotechnical investigation and analysis.


### 5.1.1(9) Site B2 - Land Use

Grazing Operations: Grazing tenants currently use the site. Any improvements would need cattle guards, gates, and fencing to keep the livestock out of the parking area.

Existing structures: The existing barn and grazing access road will need to remain open and accessible to the tenants.

Staff Residence: The staff residence and driveway southwest of the site will need to remain private access only.

Existing Parking Lot: The existing Sears Ranch Road parking lot should remain open during any improvements. If needed, the lot may be closed for specific construction activities, with any closures kept to a minimum.

Proximity to La Honda Elementary School: Any improvements will need to avoid and minimize traffic and circulation impacts to the school.

Trail users: Trails are currently open to hikers and equestrians, with seasonal dog access on the Grasshopper Loop Trail. In the future, when mountain bikes are introduced as a new use, preserve visitation and trip generation are anticipated to increase.

## Applicable Policies

- San Mateo County General Plan, 6.12 (minimize agricultural land use conflicts)
- Resource Management Policies, GM-7 (public access to minimize impacts on grazing operations)


## Recommendations

- Designing a new parking area with a minimal footprint is recommended to reduce the loss of active grazing land.


### 5.1.1(10) Site B2 - Utilities

Any improvements will need to work with the existing storm drainage and utility poles on the site. Sears Ranch Road has a drainage ditch on the west side that would need to be reinstated should the road be widened. Consideration of a parking area at this location opens the opportunity to remove/underground

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)
utility lines that extend from this area toward the interior of the Preserve, completing Objective PA-7.2 Remove obstructions to important viewshed within the Master Plan.

Site B2 may be the site of a future well to provide water for the grazing tenant's operation. Well infrastructure would need to be coordinated with any planned parking and trailhead improvements.

Agency Consultations

- San Mateo County Planning and Building
- Pacific Gas \& Electric (PG\&E)


## Recommendations

- None


### 5.1.2 SITE B2 - SITE CIRCULATION

### 5.1.2(1) Site B2 - Roadway Safety and Sight Distance

Road safety due to speed and illegal passing on SR-84 is a PAWG and La Honda community concern that was carefully considered in LSA's 2022 Access (Traffic) Study. Collision data between 2017 and 2021 was examined. Within that period, two sideswipe collisions occurred at the intersection of SR-84/Sears Ranch Road when a vehicle was attempting to pass in the intersection. Traffic speeds appear to be more moderate along Sears Ranch Road. On Sears Ranch Road, the travel speed was observed to be 22 mph when surveyed in November 2021. Based on the observed traffic volumes on SR-84 and the anticipated inbound and outbound traffic at the site, delays and the level of service at the intersection of SR$84 /$ Sears Ranch Road are anticipated to be within Caltrans standards. Queues for all movements at the intersection are anticipated to be less than one vehicle according to Highway Capacity Manual methodology. This means that the project is not expected to result in an operational traffic impact to the intersection, and no physical improvements would be required.

The Access (Traffic) Study concluded that additional traffic generated by a new parking lot to SR-84 from Sears Ranch Road would not degrade the intersection performance, even considering school traffic and highest volumes on Saturdays. No additional turn lane is recommended on Sears Ranch Road.

Currently, vehicles making a left-turn from Sears Ranch Road onto northbound SR-84 find sight distance to the south to be limited. Drivers stopped at the intersection first look left to confirm no vehicles are approaching southbound on the highway, then roll into the southbound lane and look right to confirm no vehicles are approaching northbound before completing their left-turn. Because the collision data shows two collisions from illegal passing in the intersection, and adding a center turn median on SR-84 would potentially encourage more people to illegally pass at the intersection, no modifications are recommended. There is sufficient line of sight once entering the southbound lane to check for northbound traffic.

The Sears Ranch Road entryway to Site B2 between the elementary school and the existing parking lot narrows from 32 feet to a range of 12 feet to 20 feet. The existing Sears Ranch Road parking lot received an exemption from San Mateo County from their requirement to widen the road by installing a turnout instead. The B2 lot trip generation estimates show 52 inbound and 46 outbound trips during the busiest hour, which would occur on weekends. At this volume of traffic, simultaneous inbound and outbound

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
trips on Sears Ranch Road are likely to occur and the single lane sections of Sears Ranch Road would not be adequate. Therefore, the Access (Traffic) Study recommends widening to 20 feet between the school and existing parking lot. This will meet San Mateo County Fire standards and provide one travel lane in each direction to accommodate horse trailer access on the portion of road.

## Applicable Policies

- Caltrans Highway Design Manual, Chapter 4, Policy 405.1 (sight distance)
- San Mateo County, Active Transportation (pedestrian safety improvements)
- San Mateo County Public Works/Office of Education, Safe Route to School (Sears Ranch Road is a designated route)


## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- The Access (Traffic) Study recommends no modifications for the intersection of SR-84/Sears Ranch Road.
- The Access (Traffic) Study recommends widening Sears Ranch Road to 20 feet between the La Honda Elementary School and the existing Sears Ranch Road parking lot if an additional parking area is constructed.
- San Mateo County's Active Transportation Plan evaluated pedestrian safety in downtown La Honda and included recommendations for addressing the disconnected/inaccessible walking network along SR-84/Sears Ranch Road and the safety of pedestrians crossing SR-84 at Sears Ranch Road. Midpen can consider working with Caltrans to identify potential improvements for pedestrian access.


### 5.1.2(2) Site B2 - Entry/Exit Access Patterns

Access to the site would be from the Preserve Gate LH11 at the end of Sears Ranch Road. After the elementary school, Sears Ranch Road narrows from 32 feet to a range of 12 feet to 20 feet. A parking area at Site B2 would require San Mateo County Fire and Planning review and a determination on widening the stretch of Sears Ranch Road that lies beyond the school.

## Agency Consultations

- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.1.2(3) Site B2 - Emergency Access

Any new roads would need to meet San Mateo County Fire minimum width, maximum length, turning radius, and turn around specifications. Any new gates would need to provide San Mateo County Fire access.

## Applicable Policies

- Resource Management Policies, FM-1 (fire and fuel management to protect the public)


## Agency Consultations

- San Mateo County Fire
- La Honda Fire Brigade

Recommendations

- None


### 5.1.3 SITE B2 - ENVIRONMENTAL RESOURCES

### 5.1.3(1) Site B2 - Wetlands and Waters and Riparian Setbacks

No jurisdictional waters lie within Site B2. Potential jurisdictional waters exist along the west side of Sears Ranch Road and include a non-wetland swale. If the road is widened, modification of this drainage feature may require permit approvals.

Widening of the Sears Ranch Road entryway may impact the 50-foot and 100-foot setbacks for a wetland seep that is located along a coterminous border with the nearby school. If the road is widened along the west, it will need to remain outside the 50-foot setback and undergo permitting.

## Applicable Policies

- Resource Management Policies, WR-1, Measure 1 (inventory features that can affect water resources)
- Resource Management Policies, WR-7 (preserve wetland and ponds)
- Resource Management Policies, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- IS/MND, Mitigation Measure BIO-6

Agency Consultations

- San Mateo County Planning and Building
- Regional Water Quality Control Board (RWQCB)
- US Army Corps of Engineers (USACE)

Recommendations

- None


### 5.1.3(2) Site B2 - Site Drainage

Water on the site drains east to west by sheet flow.
Applicable Policies

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Resource Management Plan, WR-2 (restore hydrologic processes altered by human activity)


## Recommendations

- Storm drainage patterns should match existing conditions and any new outfalls should include conveyance and dissipation to reduce potential for erosion.


### 5.1.3(3) Site B2 - Water Quality

Any impervious surface would meet stormwater runoff treatment and detention requirements.

## Applicable Policies

- San Mateo Countywide, C. 3 Regulated Projects Guide

Recommendations

- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.


### 5.1.3(4) Site B2 - Plant Communities and Critical Habitat

Site B2 is comprised of Valley and Foothill Grassland (sloped and flat area) and Closed Cone Pine Forest (trees along staff residence access road). Sears Ranch Road has Valley Foothill Grassland (along the road edge) and Coastal Scrub and Cismontane Woodland (along the western side of the road). The area is being grazed by cattle.

Sensitive natural communities observed near Site B2 include Creeping Rye Grass, which is considered sensitive by California Department of Fish and Wildlife (CDFW) and under CEQA.

This site is designated as critical habitat for California red-legged frog (CRLF) by the USFWS. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

## Applicable Policies

- Resource Management Plan, VM-1 (maintain the diversity of native plant communities)
- Resource Management Plan, WM-2 (protect, maintain, and enhance habitat features)
- Resource Management Plan, HC-2 (identify and protect existing habitat networks to prevent further compromise of ecosystem integrity)
- Integrated Pest Management Guidance Manual policies (retaining dead trees / snags, and size restrictions / evaluations to avoid the removal of large trees)


## Agency Consultations

- US Army Corps of Engineers (USACE)
- US Fish and Wildlife Service

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.1.3(5) Site B2 - Heritage/Significant Trees

Significant Trees (>38" DBH) and Heritage Trees (DBH varies per species) impacted by removal or proposed development would need to be mitigated.

Site B2 has two Significant Trees that can be avoided. Both trees are Pinus radiata. CNPS considers P. radiata a rare species ranked 1B.1 (G1/S1) within native stands at Ano Nuevo, Cambria, and the Monterey Peninsula. Outside of these three native stands, the species is considered an invasive. Due to potential genetic integrity issues, Midpen biologists recommends that $P$. radiata be removed.

The Sears Ranch Road right-of-way has two Heritage Trees that could potentially be affected by road widening. One of the Heritage Trees is a Coast Live Oak. The other one of the Heritage Trees is a Bay tree, which is a primary vector for Sudden Oak Death. Given its location and high exposure to Sudden Oak Death, it is recommended to be removed by Midpen biologists.

## Applicable Policies

- San Mateo County Planning, Heritage Tree Ordinance
- San Mateo County Planning, Significant Tree Ordinance
- Resource Management Plan, IPM-2 (prevent introduction of new pest species)
- Resource Management Plan, M-1 (review and consider all applicable District Policies, programmatic permits, and CEQA documents to develop the project scope, incorporating the following practices (listed in order of priority): avoidance, minimization and/or mitigation of potential impacts)
- Resource Management Plan, M-4 (develop a compensatory mitigation strategy as a measure of last resort)


## Agency Consultations

- San Mateo County Planning


## Recommendations

- Minimize impacts.
- Mitigation should follow San Mateo County requirements.


### 5.1.3(6) Site B2 - Special Status Plants

Development of Site B2 would not impact special-status plants, since none were found during the protocol-level plant surveys completed in 2021.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, VM-3 (identify location and condition of special status plants and their habitats)


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.1.3(7) Site B2 - Invasive Plant Species

No representative invasive weeds are within the project site; however, there are invasive species found within the site that have a distinct boundary and are wide-spread and unmappable, such as poison hemlock, bull thistle, Avena spp, Torilis, Centaurea spp, and Helminthotheca.

Applicable Policies

- Resource Management Plan, IPM-2 (prevent introduction of new pest species)

Recommendations

- None


### 5.1.3(8) Site B2 - Wildlife Corridor

No designated wildlife corridors for specific species have been identified; however, allowing general wildlife movement should be considered when designing fencing, culverts, underpasses, and other measures. Frogs and turtles found in the surrounding ponds are presumed to move across the landscape to and from other ponds, creeks, and upland features.

## Applicable Policies

- Resource Management Plan, HC-2 (prevent existing habitat networks)
- Resource Management Plan, WM-1 (maintain the diversity of native wildlife)

Recommendations

- None


### 5.1.3(9) Site B2 - Special Status Animals

The Biological Resources Habitat Assessment evaluated 35 special status wildlife species, most of which could migrate through, forage, and breed at the site. These should continue to be monitored.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, WM-4 (protect and enhance habitats and populations of specialstatus animal species)


## Recommendations

- None


### 5.1.3(10) Site B2 - Sensitive Bird Resources

Any tree removal would have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

Recommendations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- None


### 5.1.3(11) Site B2 - Roosting Bats

Suitable habitat for roosting, hibernating, and foraging habitat may be present on site and should be monitored.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

Recommendations

- None


### 5.1.3(12) Site B2 - Roadway Noise

No roadway noise from SR-84 would affect Site B2.
Applicable Policies

- Resource Management Plan, SA-3 (minimize unnatural noise)
- San Mateo County Noise Ordinance

Recommendations

- None


### 5.1.3(13) Site B2 - Cultural Resources

No cultural resource constraints were identified. The Cultural Resources Survey Study does not recommend monitoring. If archaeological deposits or Native American human remains are identified during project construction, Midpen would implement Master Plan Environmental Protection Guidelines.

Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, CUL-1 (protocol for unexpected discovery of archaeological and paleontological cultural materials)
- La Honda Creek Open Space Preserve Master Plan, CUL-2 (Native American burial plan)
- La Honda Creek Open Space Preserve Master Plan, CUL-4 (manage potential impacts of shortterm construction activities on historic resources)
- District-Wide Resource Management Policies, CR-3 (protect cultural resources from disturbance)
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration
- La Honda Creek Open Space Preserve Master Plan, Environmental Protection Guidelines for Cultural Resources


## Recommendations

- None


### 5.1.3(14) Site B2 - State and Federal Environmental Permitting

There are no state/federal permitting jurisdictions near Site B2. Because there is no federal and State nexus associated with CDFW or USFWS permits, which would require a take permit and provide Midpen

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
with take coverage, biomonitoring is likely needed to avoid take of federally and State listed specialstatus species that may be potentially encountered in the Preserve.

State/federal permitting jurisdictions that apply to the widening of Sears Ranch Road include those for the non-wetland swale (RWQCB) and seep wetland (USACE, CDFW, RWQCB). If the road widening affects the non-wetland swale, it would trigger the need for a RWQCB permit. No work is proposed in the seep wetland, and it would be avoided during project planning and construction, eliminating the need for other agency permits at this site.

## Applicable Policies

- State Clean Water Act
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration, Mitigation Measure BIO-5

Agency Consultations

- Regional Water Quality Control Board (RWQCB)

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.2 SITE B3

Site B3 should be avoided for development and is not recommended to move forward in the next feasibility study phase due to a jurisdictional seep wetland.

### 5.2.1 SITE B3 - SITE CHARACTERISTICS

### 5.2.1(1) Site B3 - Land Ownership

The 2.6-acre site is located within La Honda Creek Open Space Preserve APN 078290060 on Sears Ranch Road just north of the La Honda Elementary School. The Sears Ranch Road entryway beyond the school is recommended by the Access (Traffic) Study to be widened to 20 feet minimum, and this site forms part of the eastern boundary of the road. Gate access to Site B3 is within the County right-of-way. Along with existing fencing, this gate may be affected by possible road improvements triggered by development of Site B2.

Agency Consultations

- San Mateo County Planning and Building Permit (work in right-of-way)


### 5.2.1(2) Site B3 - Site Access

Site B3 is currently accessed from Sears Ranch Road at Preserve Gate LH15.

## Applicable Policies

- None


### 5.2.1(3) Site B3 - Utilities

Site B3 may be the site of a future well to provide water for the grazing tenant's operation.

### 5.2.2 SITE B3 - SITE CIRCULATION

### 5.2.2(1) Site B3 - Roadway Safety and Sight Distance

The Sears Ranch Road entryway is recommended to be widened. Given the similarities to Site B2, See Site B2 recommendations.

### 5.2.3 SITE B3 - ENVIRONMENTAL RESOURCES

### 5.2.3(1) Site B3 - Wetlands and Waters Riparian Setbacks

Jurisdictional waters prohibit the development of a parking lot. Widening of the Sears Ranch Road entryway would need to avoid, minimize, or mitigate impacts to the seep wetland.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.3 SITE D

Site D appears to be feasible to continue studying for development potential. From a traffic safety standpoint, the site has improved sight lines to southbound SR-84 if the driveway is moved 50 feet north. A short southbound right-turn pocket would improve sight distance from the driveway to SR-84. Additional traffic devices and warnings could also improve the access. This site has a moderately flat area suitable for a paved parking lot with room to treat any stormwater while also avoiding an adjacent wetland channel. Many of the larger trees that would need to be removed for development are invasive and CALFIRE's fuel reduction project includes removing eucalyptus trees from Midpen lands, so removing these trees would provide a fire management benefit. Perimeter trees could be retained for shade, and new vegetation could be planted to assist with screening.

### 5.3.1 SITE D - SITE CHARACTERISTICS

### 5.3.1(1) Site D - Land Ownership

The 1.4-acre study area is located within La Honda Creek Open Space Preserve APN 078280110 along SR-84. The site is accessed at Preserve Gate LHO7, and an existing access road extends westward to La Honda Creek and connects to the Preserve trail system via an existing bridge. The road passes through a portion of the adjacent property to the south, and Midpen currently has a Patrol Easement with the landowner at APN 078190 210. If this road is used by the public, a new easement would be needed.

## Recommendations

- Identify if any access easements or agreements are needed.


### 5.3.1(2) Site D - Site Access

Site D is currently accessed from SR-84 at an existing, unpaved driveway through Preserve Gate LH07.

## Applicable Policies

- None


## Recommendations

- None


### 5.3.1(3) Site D - Natural Boundaries

The site has a moderate slope with the highway on its eastern boundary and is defined by a moderate slope to the west and steep slopes on the northeast and northwest from the drainage channel.

## Applicable Policies

- None


## Recommendations

- None


### 5.3.1(4) Site D - Site Topography

The site slopes northeast to southwest following SR-84 at $6 \%-10 \%$. The grades naturally drop off at 3:1 to 1:1 towards La Honda Creek.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- Resource Management Plan, SA-1 (minimize evidence of human impacts within preserves)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- Resource Management Plan, WR-2, (manage human activities to control erosion)

Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.


### 5.3.1(5) Site D - View Sheds and Scenic Corridors

Views from SR-84 Scenic Corridor are open towards Site D on the west. With the extensive tree cover, there are no views beyond the site to the west.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- San Mateo County Scenic Corridor
- San Mateo County General Plan, Visual Quality Policies
- District-Wide Resource Management Plan, Scenic Aesthetic Resources


## Recommendations

- None


### 5.3.1(6) Site D - Site Screening

Maintain or add native vegetation along the perimeter of SR-84 to help obscure the potential parking lot. It should be noted that trees such as non-native Eucalyptus are planned to be removed as a separate project in coordination with CALFIRE and their ongoing fuel reduction efforts.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-3 (screening of staging areas)
- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- Resource Management Plan, SA-1 (minimize the evidence of human impacts within preserves)


## Recommendations

- None


### 5.3.1(7) Site D - Exposure and Shading

The site has a west facing exposure, mild climate, and heavy tree cover. Retaining and planting native trees in this parking lot will help mitigate any tree loss.

Applicable Policies

- None

Recommendations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- None


### 5.3.1(8) Site D - Geological Conditions

Site $D$ is feasible to build from a geotechnical standpoint. Borings are recommended to characterize subsurface conditions for areas of development to identify remediation or avoidance issues. The initial interpretation is that retaining walls should suffice to support the parking area upslope. Additional information is available in the appendix, Preliminary Geologic and Geotechnical Assessment Report, Cal Engineering \& Geology, March 2022.

## Applicable Policies

- Resource Management Plan, GS-1, Measure 1 (minimize construction of major improvements to avoid high risk areas)
- Resource Management Plan, GS-2 (minimize soil erosion and sedimentation)

Agency Consultations

- Caltrans Encroachment Permit


## Recommendations

- Borings are recommended to characterize subsurface conditions to identify remediation or avoidance.
- Designs should consider slope inclinations of 3:1 (horizontal: vertical) or shallower unless supported by retention structures or using geogrid reinforced engineered fill.
- Avoid areas of significant instability.
- The colluvium / landslide deposit needs further exploration.
- Remediation measures to address the identified instabilities may include segmental block or cast-in-place concrete wall supported with pier and grade and buried stabilization piles. The selection of remedial or stabilization measures will depend on the planned improvements configuration and findings from the subsurface exploration and engineering analysis.
- The development of a trailhead is feasible, but a potential deep landslide and areas of significant instability could increase the level of maintenance needed. A more extensive geotechnical study is needed to confirm the design.


### 5.3.1(9) Site D - Land Use

Grazing Operations: Grazing tenants do not typically use the site for access. Since there are two grazing tenants nearby, there could be a potential for cattle to travel onto the site. Due to active grazing activities, a parking area would need cattle guard, gates, and fencing to keep livestock out.

Proximity to Neighbor: Part of the access road that leads into the property lies on the adjacent property owner's property. Any public access or use of the road would need an easement. Alternatively, a new trail can be created that would not require access over the portion of road not owned by Midpen.

Trail users: The access road that leads into the preserve is currently closed for public access, except for Midpen staff and Midpen-authorized consultants, contractors, grazing tenants, etc. Opening new areas and additional trail mileage within the preserve to public use is anticipated to increase the level of preserve visitation and trip generation.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- San Mateo County General Plan, 6.12 (minimize agricultural land use conflicts)
- Resource Management Plan, GM-7 (public access to minimize impacts on grazing operations)


## Recommendations

- Access easements or agreements needed.


### 5.3.1(10) Site D - Utilities

Any improvements will need to work with the existing utility poles and call box on site.

## Agency Consultations

- San Mateo County Planning and Building
- PG\&E


## Recommendations

- None


### 5.3.2 SITE D - SITE CIRCULATION

### 5.3.2(1) Site D - Roadway Safety and Sight Distance

Road safety is a PAWG and La Honda community concern that was seriously considered in the Access (Traffic) Study because the historic number of collisions on SR-84 is higher than statewide average (although lower than nearby SR-35). This may be due in part to the average travel speed. Although the posted speed limit is 40 mph , the 85th percentile speed of vehicles near Site D was 50 mph .

The initial traffic count was completed in the non-summer month of November 2021. After the first Planning and Natural Resources Committee Meeting in December 2022, this District Board Committee requested collecting additional traffic volumes in the summer to determine whether summer conditions differ substantially. The additional traffic volume was collected in July 2023, but there was a malfunction with the data collection at Site D. This data was discarded.

However, another traffic count was collected in December 2023 (at Site E3 and D) to use as a comparison to the valid July 2023 data near Site E3, which allows some conclusions to be reached regarding summer roadway conditions near Site D. Traffic volumes at Site E3 and D are nearly identical. Lower traffic volume was observed during summer weekdays. Summer volumes are 73 percent higher on Saturdays than weekdays. Non-summer volumes are 15 to 25 percent higher on Saturdays than weekdays. On average, SR-84 carries approximately 1,800 (summer) to 2,000 (non-summer) vehicles per day within the study area on a weekday, and approximately 3,200 (summer) or 2,000 to 2,500 (nonsummer) vehicles per day on Saturdays.

Using the comparison of speeds at Site E3 and D, the conditions near Site D during summer can be inferred. Had the data collection instrument functioned properly, the $85^{\text {th }}$ percentile speed near Site $D$ would likely have been between 45 mph and 50 mph with a most common speed between 41 mph and 45 mph . Vehicles traveling over 60 mph are likely to have been 1 percent or less of the total volume, and vehicles traveling over 70 mph are likely to have been no more than observed in non-summer months.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

Overall, at both sites and during all seasons, the predominant speed of vehicles is approximately 50 mph , or about 10 mph over the posted speed limit.

The District Board Committee also requested more data on bicycles. Bicycle volumes varied from approximately 30 per weekday to 200 bicycles on a summer Saturday. Bicycles travel at a lower speed than vehicles; therefore, the required stopping sight distance and intersection sight distance is sufficient for vehicles to observe and avoid bicycles at exit driveways. Collisions involving bicycles were either outside the study area or occurred before 2017, and none of the collisions in Figure 7 of the Access Study involved bicycles.

Peak usage (on a weekend) is estimated to result in an increase of 20 inbound and 18 outbound vehicle trips during the busiest hour.

Based on the observed traffic volumes on SR-84, the anticipated inbound and outbound traffic at the site, and Highway Capacity Manual methodology, the delay and level of service for the proposed paved driveway is anticipated to be within Caltrans standards. Queues for inbound and outbound movements at the project driveway would be less than one vehicle according to Highway Capacity Manual methodology. This means that the traffic consultant does not anticipate the necessity for vehicles to stop on SR-84 waiting to turn into the site. On SR-84, no additional turn lanes or widening would be necessary to maintain traffic flow or level of service. A separate left-turn pocket is not warranted according to National Cooperative Highway Research Program (NCHRP) Report 279. The addition of a left-turn pocket on SR-84 would potentially encourage people to use the lane to pass illegally, so it is not recommended.

If public access to Site $D$ is provided at the existing access point (Preserve Gate LHO7), which is currently used by Midpen vehicles and grazing tenants, sight distance at the Site D driveway would not be sufficient for the current roadway speeds. Vehicles traveling south on SR-84 affect vehicles turning both left and right from Site D. Therefore, the driveway is recommended to be placed 50 feet north of Preserve Gate LHO7 to improve sight distance to the southbound lanes. However, sight distance for northbound lanes is not met at the current prevailing speed, so advanced warning devices are recommended. With this modification, sufficient sight distance to the driveway would be provided so that vehicles on SR-84 would be able to stop if an obstruction is present (this is referred to as stopping sight distance). Sufficient sight distance to southbound traffic would be provided so that vehicles exiting the driveway and turning right would be able to choose a gap in traffic that would not cause a vehicle on SR-84 to alter velocity. However, vehicles exiting the driveway to turn left would not be able to see far enough to select a similar gap in northbound traffic. While northbound vehicles would have enough distance to slow, it is possible that slowing would be necessary if a vehicle exiting the driveway turns left in front of them.

Sight distance from the driveway is improved if vehicles stop short of the roadway. A short turn pocket ( 25 feet) with an abbreviated ( 60 feet) transition into and out of the driveway would place the stop bar farther back from SR-84 and maximize sight distance from the driveway to SR-84. A full deceleration and acceleration lane is not recommended because it could be used illegally as a passing lane, reducing road safety.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

In order to provide the sight distance to the south to meet the intersection sight distance standard at the current prevailing speed, vegetation and earthwork would need to be removed from the hillside south of the project. It is likely that a retaining wall would need to be constructed to preserve the line of sight. However, the proposal to place the paved driveway 50 feet north of Gate LH07 and recess the stop bar would result in sufficient stopping sight distance, which is the minimum required to avoid a collision.

At this driveway, the Access (Traffic) Study recommends implementing a combination of elements from the California Manual on Uniform Traffic Control Devices (MUTCD). Specifically, a combination of roadway signage W2-2, W16-13P "When Flashing," and a warning beacon are recommended to be placed at the northbound and southbound approaches to Site D driveway. Loop detectors at the exiting lane would be interconnected with the warning beacon to alert vehicles on SR-84 to the presence of exiting vehicles. This would have a twofold effect. First, the warning beacon would have the effect of extending the sight distance from the roadway to the driveway. Second, knowledge of the presence of vehicles entering the roadway should cause vehicles on SR-84 to exercise caution and slow to the speed limit. This would reduce the necessary sight distance from the driveway to SR-84. By incorporating these design features, roadway safety can be maximized while fulfilling the La Honda Creek Master Plan goal to provide public access to the central area of the Preserve.

## Applicable Policies

- Caltrans Highway Design Manual, Chapter 4, Policy 405.1 (sight distance)

Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- The Level of Service at the proposed driveway would be within Caltrans standards.
- The driveway is recommended to be placed 50 feet north of Preserve Gate LHO7 to improve sight distance to the southbound lanes.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology and a left-turn pocket is not warranted.
- A short turn pocket ( 25 feet) with an abbreviated ( 60 feet) transition into and out of the driveway would place the stop bar farther back, maximizing sight distance from the driveway to SR-84.
- A full deceleration and acceleration lane is not recommended because it could be used as a passing lane, reducing road safety.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound approaches and interconnecting warning beacon to the loop detector at the exit lane.


### 5.3.2(2) Site D - Entry/Exit Access Patterns

Shifting the driveway 50 feet to the north improves sight lines.

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building

Recommendations

- None


### 5.3.2(3) Site D - Emergency Access

Any new roads will need to meet San Mateo County Fire minimum width, maximum length, turning radius, and turn around specifications. Any new gates will need to have San Mateo County Fire access.

## Applicable Policies

- Resource Management Plan, FM-1 (fire and fuel management to protect the public)

Agency Consultations

- San Mateo County Fire
- La Honda Fire Brigade

Recommendations

- None


### 5.3.2(4) Site D - Pump Truck Access

A new vault restroom would require pump truck access and a turnaround.
Applicable Policies

- None

Recommendations

- None


### 5.3.3 SITE D - ENVIRONMENTAL RESOURCES

### 5.3.3(1) Site D - Wetlands and Waters and Riparian Setbacks

Potential jurisdictional waters near the site include a wetland channel to the north. The channel, however, is outside Site D. Any development should be setback 100 feet from the channel.

## Applicable Policies

- Resource Management Plan, WR-1, Measure 1 (inventory features that can affect water resources)
- Resource Management Plan, WR-7 (preserve wetland and ponds)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)


## Recommendations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- None


### 5.3.3(2) Site D - Site Drainage

Water drains across the site to the west, eventually reaching La Honda Creek.

## Applicable Policies

- Resource Management Plan, WR-2 (restore hydrologic processes altered by human activity)


## Recommendations

- Storm drainage patterns should match existing conditions and any new outfalls should include conveyance and dissipation to reduce the potential for erosion.


### 5.3.3(3) Site D - Water Quality

Any impervious surface would likely require stormwater runoff treatment and detention.
Applicable Policies

- San Mateo Countywide, C. 3 Regulated Projects Guide


## Recommendations

- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.


### 5.3.3(4) Site D - Plant Communities and Critical Habitat

Site D is comprised of Cismontane Woodland (adjacent to the road at SR-84) and backed by North Coast Coniferous Forest / Redwood Forest (downhill towards La Honda Creek).

Sensitive natural communities include the Redwood Forest and Woodland. These plant communities are considered sensitive by CDFW and under CEQA.

This site is designated as critical habitat for California red-legged frog (CRLF) by the USFWS. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

## Applicable Policies

- Resource Management Policies, VM-1 (maintain the diversity of native plant communities)
- Resource Management Policies, WM-2 (protect, maintain, and enhance habitat features)
- Resource Management Policies, HC-2 (identify and protect existing habitat networks to prevent further compromise of ecosystem integrity)
- Integrated Pest Management Guidance Manual policies (retaining dead trees / snags, and size restrictions / evaluations to avoid the removal of large trees)

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.3.3(5) Site D-Heritage/Significant Trees

Significant Trees (>38" DBH) and Heritage Trees (DBH varies per species) impacted by removal or proposed development would need to be mitigated. It should be noted trees such as non-native eucalyptus will be removed as a separate project in coordination with CALFIRE and their ongoing fuel reduction efforts.

Site D has four Significant Trees that could potentially be affected by the parking area within the Preserve boundary.

Site $D$ has two Significant Trees that could potentially be affected by the parking area within the Caltrans right-of-way.

## Applicable Policies

- San Mateo County Planning, Heritage Tree Ordinance
- San Mateo County Planning, Significant Tree Ordinance
- Caltrans, Encroachment Permits Manual, Chapter 500 (tree removal)
- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Agency Consultations

- San Mateo County Planning
- Caltrans


## Recommendations

- Impacts should be minimized.
- Any mitigation would follow County or Caltrans requirements depending on whether the trees are located within Caltrans' right-of-way or not.
- Resource Management Plan, M-1 (review and consider all applicable District Policies, programmatic permits, and CEQA documents to develop the project scope, incorporating the following practices (listed in order of priority): avoidance, minimization and/or mitigation of potential impacts)
- Resource Management Plan, M-4 (develop a compensatory mitigation strategy as a measure of last resort)


### 5.3.3(6) Site D - Special Status Plants

Development at Site D would not impact any special-status plants. California Bottle-brush Grass (CRPR 4.3) and Western Leatherwood (CRPR 1B.2) are directly outside Site D. Impacts to these plants should be avoided. The site contains several locally rare species, including Red Baneberry, Scouler's Willow, and Foamflower.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, VM-3 (identify location and condition of special status plants and their habitats)

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.3.3(7) Site D - Invasive Plant Species

Invasive weeds within the project site include Monterey Cypress, Acacia, and French Broom.
Applicable Policies

- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Recommendations

- None


### 5.3.3(8) Site D - Wildlife Corridor

No documented wildlife corridors for specific species have been identified; however, allowing general wildlife movement across the site should be considered when designing fencing, culverts, underpasses, and other measures. Frogs and turtles found in the surrounding ponds are presumed to move across the landscape to and from other ponds, creeks, and upland features.

Applicable Policies

- Resource Management Plan, HC-2 (prevent existing habitat networks)
- Resource Management Plan, WM-1 (maintain the diversity of native wildlife)


## Recommendations

- None


### 5.3.3(9) Site D - Special Status Animals

The Biological Resources Habitat Assessment evaluated 35 special status wildlife species, most of which could migrate through, forage, and breed at the site. These should continue to be monitored.

The only special-status species detected during the Biological Resources Habitat Assessment was San Francisco dusky-footed woodrat (SFDFW), which is a California Species of Special Concern. District protocol should be implemented to minimize impacts and relocate houses if they are within the development footprint.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, WM-4 (protect and enhance habitats and populations of specialstatus animal species)


## Recommendations

- None


### 5.3.3(10) Site D - Sensitive Bird Resources

Any tree removal will have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

Recommendations

- None


### 5.3.3(11) Site D - Roosting Bats

Suitable habitat for roosting, hibernating, and foraging habitat may be present on site and should be monitored.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

Recommendations

- None


### 5.3.3(12) Site D - Roadway Noise

Mitigating roadway noise with berms from SR-84 would be an opportunity for Site D.

## Applicable Policies

- Resource Management Plan, SA-3 (minimize unnatural noise)
- San Mateo County Noise Ordinance

Recommendations

- None


### 5.3.3(13) Site D - Cultural Resources

No cultural resource constraints were identified. The Cultural Resources Survey Study does not recommend monitoring. In the event that archaeological deposits or Native American human remains are identified during project construction, Midpen would implement Master Plan Environmental Protection Guidelines and mitigation measures from the Initial Study/Mitigated Negative Declaration.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, CUL-1 (protocol for unexpected discovery of archaeological and paleontological cultural materials)
- La Honda Creek Open Space Preserve Master Plan, CUL-2 (Native American burial plan)
- La Honda Creek Open Space Preserve Master Plan, CUL-4 (manage potential impacts of shortterm construction activities on historic resources)
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration
- Resource Management Policies, CR-3 (protect cultural resources from disturbance)
- La Honda Creek Open Space Preserve Master Plan, Environmental Protection Guidelines for Cultural Resources


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.3.3(14) Site D - State and Federal Environmental Permitting

State/federal permitting jurisdictions near this project location include those for the wetland channel (USACE, CDFW, RWQCB). No work is proposed in the wetland channel, and it would be avoided during project planning and construction, eliminating the need for regulatory agency permits at this site.

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.4 SITE D - BRIDGE

The bridge is part of Site $D$ in that it connects Site $D$ to the Preserve and is evaluated separately from Site $D$ in this report due to its specific site conditions. Site D Bridge appears to be feasible to replace if the abutments of the new bridge are outside the Ordinary High-Water Mark (OHWM) and above the top-of-bank of La Honda Creek. The existing bridge could be removed in segments, and access to the site is reasonable. Both a pedestrian and vehicular bridge should be studied.

### 5.4.1 SITE D BRIDGE - SITE CHARACTERISTICS

### 5.4.1(1) Site D Bridge - Land Ownership

The 0.25-acre study area is located within La Honda Creek Open Space Preserve APN 078280110 along SR-84. The access road to the bridge is accessed at Preserve Gate LHO7.

## Applicable Policies

- None


## Recommendations

- None


### 5.4.1(2) Site D Bridge - Site Access

The site is reached from an existing access road starting at Preserve Gate LH07.

## Applicable Policies

- None


## Recommendations

- None


### 5.4.1(3) Site D Bridge - Natural Boundaries

The bridge is located at a low point over La Honda Creek. The banks of the stream are 20 feet tall and 50 feet wide.

## Applicable Policies

- None


## Recommendations

- None


### 5.4.1(4) Site D Bridge - Site Topography

The stream banks are nearly vertical, greater than 1:1, on both sides of the bridge.

## Applicable Policies

- Resource Management Plan, SA-1 (minimize evidence of human impacts within preserves)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- Resource Management Plan, WR-2, (manage human activities to control erosion)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site. Conceptual designs should strive to balance cut and fill.


### 5.4.1(5) Site D Bridge - Exposure and Shading

The site has a mild climate, and it is in a valley at a stream crossing with heavy tree cover.

## Applicable Policies

- None

Recommendations

- None


### 5.4.1(6) Site D Bridge - Existing Bridge

The existing steel framed (rail car) bridge is 50 feet long and 12 feet wide ( 6 feet wide clear travel), and it is supported by rotted logs. The logs are approximately 26 feet long on the southern abutment, and approximately 34 feet long on the northern abutment.

A Structural Investigation Report completed in 2013 provided a visual assessment of the bridge and concluded "while the bridge itself is in good condition, the abutments and log retaining wall banks are in dangerously bad condition. We recommend that this bridge not be used until the abutment and banks are repaired or replaced." Prior to design, geotechnical drilling on both sides of the bridge will be needed to provide structural information regarding footings.

## Applicable Policies

- Open Space Maintenance and Restoration Program (OSMRP) Permitting (if non-vehicular)

Agency Consultations

- San Mateo County Planning and Building

Recommendations

- None


### 5.4.1(7) Site D Bridge - Geological Conditions

The bridge at Site $D$ is feasible to rebuild. There is 3 feet of scour at the base in the stream, but the southern abutment was partly washed away from the other logs. Any new abutments are recommended to be placed beyond the top-of-bank. The bridge site is outside of the San Mateo County Hazard Mapping tool's area of evaluation as noted in the geotechnical report. Landslides or embankment instabilities in the vicinity of the existing bridge were not observed during the January 2022 site reconnaissance. Additional information is available in the appendix, Preliminary Geologic and Geotechnical Assessment Report, Cal Engineering \& Geology, March 2022.

Applicable Policies

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Resource Management Plan, GS-1, Measure 1 (minimize construction of major improvements to avoid high risk areas)
- Resource Management Plan, GS-2 (minimize soil erosion and sedimentation)


## Recommendations

- Borings are recommended to characterize subsurface conditions for areas of development at abutment locations.


### 5.4.1(8) Site D Bridge - Land Use

Grazing Operations: Grazing tenants currently use the surrounding area. Any improvements would need to be coordinated with tenants.

Trail users: The access road leading to the bridge crossing is currently closed for public access except for Midpen staff and Midpen-authorized consultants, contractors, grazing tenants, etc. Opening the area and additional trails to public access will likely increase preserve visitation and trip generation.

Applicable Policies

- San Mateo County General Plan, 6.12 (minimize agricultural land use conflicts)
- Resource Management Plan, GM-7 (public access to minimize impacts on grazing operations)

Recommendations

- None


### 5.4.2 SITE D BRIDGE - SITE CIRCULATION

### 5.4.2(1) Site D Bridge - Entry/Exit Access Patterns

The site is reached from an existing access road starting at Preserve Gate LH07. The road proceeds down a steep slope and ends at a pedestrian bridge that crosses La Honda Creek. There is an existing hammerhead turnaround east of the bridge.

Agency Consultations

- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building

Recommendations

- None


### 5.4.2(2) Site D Bridge - Emergency Access

The new bridge is programmed to be rated for a Ranger pickup truck for emergency access, but an option to limit this to a pedestrian bridge will also be explored.

## Applicable Policies

- Resource Management Plan, FM-1 (fire and fuel management to protect the public)

Agency Consultations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- San Mateo County Fire
- La Honda Fire Brigade

Recommendations

- None


### 5.4.3 SITE D BRIDGE - ENVIRONMENTAL RESOURCES

### 5.4.3(1) Site D Bridge - Wetlands and Waters and Riparian Setbacks

Potential jurisdictional waters at the bridge site include a non-wetland stream channel with the OHWM, a non-wetland stream above the OHWM, and riparian habitat.

## Applicable Policies

- Resource Management Plan, WR-1, Measure 1 (inventory features that can affect water resources)
- Resource Management Plan, WR-7 (preserve wetland and ponds)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)


## Recommendations

- The bridge design should avoid working in the OHWM and be above the top-of-bank of La Honda Creek.
- North of the bridge is a jurisdictional non-wetland swale, which should also be avoided.


### 5.4.3(2) Site D Bridge - Site Drainage

La Honda Creek and its surrounding watershed flow through the site. The confluence of Weeks Creek and La Honda Creek is just upstream from the bridge.

Applicable Policies

- Resource Management Plan, WR-2 (restore hydrologic processes altered by human activity)

Recommendations

- None


### 5.4.3(3) Site D Bridge - Water Quality

If bridge concrete footings create a new impermeable surface, then permitting may be required.

## Applicable Policies

- San Mateo Countywide, C. 3 Regulated Projects Guide


## Recommendations

- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.4.3(4) Site D Bridge - Plant Communities and Critical Habitat

The bridge at Site D is dominated by North Coast Coniferous Forest / Redwood Forest. Sensitive natural communities include riparian habitat and the Redwood Forest and Woodland. These plant communities are considered sensitive by CDFW and under CEQA.

This site is designated as critical habitat for California red-legged frog (CRLF). La Honda Creek is critical habitat for steelhead and coho Salmon. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

## Applicable Policies

- Resource Management Plan, VM-1 (maintain the diversity of native plant communities)
- Resource Management Plan, WM-2 (protect, maintain, and enhance habitat features)
- Resource Management Plan, HC-2 (identify and protect existing habitat networks to prevent further compromise of ecosystem integrity)
- Integrated Pest Management Guidance Manual policies (retaining dead trees / snags, and size restrictions / evaluations to avoid the removal of large trees)

Recommendations

- None


### 5.4.3(5) Site D Bridge - Heritage/Significant Trees

Significant Trees (>38" DBH) and Heritage Trees (DBH varies per species) impacted by removal or proposed development would need to be mitigated.

Site $D$ has two Heritage and five Significant Trees that could potentially be affected by the bridge project.

## Applicable Policies

- San Mateo County Planning, Heritage Tree Ordinance
- San Mateo County Planning, Significant Tree Ordinance


## Agency Consultations

- San Mateo County Planning


## Recommendations

- Impacts should be minimized.
- Any mitigation should follow San Mateo County requirements.
- Resource Management Plan, M-1 (review and consider all applicable District Policies, programmatic permits, and CEQA documents to develop the project scope, incorporating the following practices (listed in order of priority): avoidance, minimization and/or mitigation of potential impacts)
- Resource Management Plan, M-4 (develop a compensatory mitigation strategy as a measure of last resort)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.4.3(6) Site D Bridge - Special Status Plants

Development of the bridge at Site D would not impact any special-status plants. Directly outside the site are Scouler's Willow and California Bottle-brush Grass (CRPR 4.3). These plants should be avoided.

Potential impact of riparian habitat may occur at the bridge.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, VM-3 (identify location and condition of special status plants and their habitats)
- IS/MND, Mitigation Measure BIO-5


## Recommendations

- None


### 5.4.3(7) Site D Bridge - Invasive Plant Species

Invasive weeds near the project site include Upright Veldt Grass and French Broom.

## Applicable Policies

- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Recommendations

- None


### 5.4.3(8) Site D Bridge - Wildlife Corridor

No documented wildlife corridors for specific species have been identified; however, allowing general wildlife movement across the site should be considered when designing fencing, culverts, underpasses, and other measures. Frogs and turtles found in the surrounding ponds are presumed to move across the landscape to and from other ponds, creeks, and upland features. La Honda Creek is a travel corridor for steelhead and coho salmon. Work above and adjacent to the creek must avoid and minimize impacts to these species and their habitat.

## Applicable Policies

- Resource Management Plan, HC-2 (prevent existing habitat networks)
- Resource Management Plan, WM-1 (maintain the diversity of native wildlife)


## Recommendations

- None


### 5.4.3(9) Site D Bridge - Special Status Animals

The Biological Resources Habitat Assessment evaluated 35 special status wildlife species, most of which could migrate through, forage, and breed at the site. These should continue to be monitored.

The only special-status species detected during the Biological Resources Habitat Assessment was San Francisco dusky-footed woodrat (SFDFW), which is a California Species of Special Concern. District

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
protocol should be implemented to minimize impacts and relocate woodrat houses if they are within the development footprint.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, WM-4 (protect and enhance habitats and populations of specialstatus animal species)


## Recommendations

- None


### 5.4.3(10) Site D Bridge - Sensitive Bird Resources

Any tree removal would have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

Recommendations

- None


### 5.4.3(11) Site D Bridge - Roosting Bats

Suitable habitat for roosting under the bridge, hibernating, and foraging habitat may be present on site and should be monitored.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

Recommendations

- None


### 5.4.3(12) Site D Bridge - Cultural Resources

No cultural resource constraints were identified. The Cultural Resources Survey Study does not recommend monitoring. In the event that archaeological deposits or Native American human remains are identified during project construction, Midpen would implement Master Plan Environmental Protection Guidelines and mitigation measures from the Initial Study/Mitigated Negative Declaration.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, CUL-1 (protocol for unexpected discovery of archaeological and paleontological cultural materials)
- La Honda Creek Open Space Preserve Master Plan, CUL-2 (Native American burial plan)
- La Honda Creek Open Space Preserve Master Plan, CUL-4 (manage potential impacts of shortterm construction activities on historic resources)
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration
- Resource Management Policies, CR-3 (protect cultural resources from disturbance)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- La Honda Creek Open Space Preserve Master Plan, Environmental Protection Guidelines for Cultural Resources

Recommendations

- None


### 5.4.3(13) Site D Bridge - State and Federal Environmental Permitting

State/federal permitting jurisdictions near this project location include those for the non-wetland stream channel with OHWM (USACE/USFWS, CDFW, RWQCB), non-wetland stream above OHWM (CDFW, RWQCB), and riparian habitat (CDFW).

Applicable Policies

- State and Federal Clean Water Acts, Section 401 and 404
- State and Federal Endangered Species Acts
- California Department of Fish and Game Code, Section 1602
- IS/MND, Mitigation Measure BIO-5


## Agency Consultations

- Regional Water Quality Control Board (RWQCB)
- US Army Corps of Engineers (USACE)
- California Department of Fish and Wildlife (CDFW)
- US Fish and Wildlife Service (USFWS)

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.5 SITE E3 - RED BARN

Site E3 appears to be feasible to continue studying for limited access only. From a traffic safety standpoint, the site can maximize sight lines by limiting access at the Preserve Gate LH06 driveway to entrance-only and providing a second driveway for vehicles to make left or right turns exiting the site at the Preserve Gate RED01 driveway. Similar to Site D, traffic devices and warning improvements could slow traffic on SR-84 and prevent speeding and illegal passing to maximize sight lines. Restricting the number of visitors at any given time with permit/docent-led event reservations also helps manage capacity and trip generation. The site has a small area screened by vegetation that would be ideal for parking. Since many of the trees providing existing screening are recommended to be removed in part due to Integrated Pest Management (IPM) and Wildland Fire Resiliency programs, new native vegetation could be planted to maintain the screening.

### 5.5.1 SITE E3 - SITE CHARACTERISTICS

### 5.5.1(1) Site E3 - Land Ownership

The six-acre study area is located within La Honda Creek Open Space Preserve APN 078280110 along SR-84 at the Red Barn. The north gate (Preserve Gate LH06) to the Preserve overlaps APN 078260030. This gate will need to maintain access to the northern neighboring property.

## Applicable Policies

- None


## Recommendations

- None


### 5.5.1(2) Site E3 - Site Access

The site currently has two access points, a north driveway at Preserve Gate LH06 and a south driveway at Preserve Gate REDO1.

## Applicable Policies

- None

Recommendations

- None


### 5.5.1(3) Site E3 - Natural Boundaries

The site has a moderate slope with the highway on its eastern boundary and gradually slopes down to the Red Barn and corral low point. The remaining area slopes downhill to the west and south.

## Applicable Policies

- None

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.5.1(4) Site E3 - Site Topography

The site slopes northeast to southwest following SR-84 at 6\%. The grades down to the corral are 3:1, which is not in the project study area. Site E3 is approximately 10 feet higher than the corral. The grades down to the Red Barn slope at $5 \%$. The grades at the entry road are $5 \%$ downhill, and the grades at the exit road are 9\% uphill.

Applicable Policies

- Resource Management Plan, SA-1 (minimize evidence of human impacts within preserves)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- Resource Management Plan, WR-2, (manage human activities to control erosion)


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.


### 5.5.1(5) Site E3 - View Sheds and Scenic Corridors

The Red Barn is in clear view from the SR-84, a San Mateo County Scenic Corridor. The barn sits in an open field framed by surrounding woodland. SR-84 has a sweeping turn north of the site marked by a steep embankment on the east. An existing turnout with views along SR-84 exists for southbound traffic.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- San Mateo County General Plan, Visual Quality Policies, Scenic Corridor
- Resource Management Plan, Scenic Aesthetic Resources


## Recommendations

- None


### 5.5.1(6) Site E3 - Site Screening

Maintaining or adding vegetation in front of a parking area will help obscure the site from SR-84. Any new grading should not hide or detract from the Red Barn. Per the CALFIRE Wildland Fire Resiliency Program Plan, the eucalyptus would need to be removed for fire safety. The Monterey Pines should also be removed because they are non-native to encourage the growth of existing oak saplings. A phased approach for removal and the option to plant more screening should be considered.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-3 (screening of staging areas)
- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- Resource Management Plan, SA-1 (minimize the evidence of human impacts within preserves)


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.5.1(7) Site E3 - Exposure and Shading

The site has a mild climate, and it is southwest facing exposure with a wind row of trees on the east side of the potential parking area.

## Applicable Policies

- None


## Recommendations

- None


### 5.5.1(8) Site E3-Geological Conditions

Site E3 is feasible to build from a geotechnical standpoint. No slides exist in the flat area proposed for parking. There is a small slide, which is more of a maintenance issue, on the uphill side of the dirt access road near an existing white shed. Shallow slumps were identified along the edges of the proposed development. A shallow slump near the Red Barn suggests increased moisture in the area. Additional information is available in the appendix, Preliminary Geologic and Geotechnical Assessment Report, Cal Engineering \& Geology, March 2022.

## Applicable Policies

- Resource Management Plan, GS-1, Measure 1 (minimize construction of major improvements to avoid high risk areas)
- Resource Management Plan, GS-2 (minimize soil erosion and sedimentation)


## Agency Consultations

- Caltrans Encroachment Permit


## Recommendations

- None


### 5.5.1(9) Site E3 - Land Use

Grazing Operations: Grazing tenants currently use the site for grazing, and they enter and exit the site using the existing access. In addition, they use an existing ranch road that passes partially through the northern neighboring property to reach northern areas of the Preserve. Any improvements would need fencing, cattle guard, and/or gates to keep the livestock out of the parking area.

Existing structures: The existing white shed and Red Barn will need to remain accessible to Midpen and the tenants. The northern gate, Preserve Gate LH06, would remain in place and kept open as a decorative element while a new metal gate would be in installed farther down the driveway to allow for additional stacking room.

Staff Residence: The staff residence north of the site will need to remain private access only.
Proximity to Neighbor: An adjacent private property to the north will need to retain access to the existing access road that turns north from the gate area into the private property.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

Trail users / Permit only / Docent-led events: The area is currently closed to public access, except for Midpen staff and Midpen-authorized consultants, contractors, grazing tenants, etc. The number of vehicles allowed would be determined by site constraints. Given the size of the site, Midpen assumed there would be approximately 10-15 parking spaces, and that further study and conceptual designs would refine the number of spaces. All recent studies were under the assumption 10-15 vehicles would be allowed with restricted daily trips or consolidated arrival times for limited use via permit-only and docent-led events.

## Applicable Policies

- San Mateo County General Plan, 6.12 (minimize agricultural land use conflicts)
- Resource Management Plan, GM-7 (public access to minimize impacts on grazing operations)


## Recommendations

- None


### 5.5.1(10) Site E3 - Utilities

Any improvements would need to work with the existing joint poles and storm drainpipes on site.
Agency Consultations

- San Mateo County Planning and Building
- PG\&E

Recommendations

- None


### 5.5.1(11) Site E3 - Interpretation and Education

The PAWG recommended interpretive signage at the SR-84 pull out in front of the Red Barn as part of their short-term measures. Vehicles would be slowing to pull into the turnout and then would have to check that it is clear behind them before pulling back into the roadway. This short-term measure is likely infeasible and not recommended. Instead, as an alternative solution, interpretive signage could be installed in the interior at Site E3.

## Applicable Policies

- Resource Management Plan, GM-6 (rural agricultural heritage)
- Resource Management Plan, PI-1 (provide interpretive programming, facilities, and materials)
- Resource Management Plan, PI-3 (provide public outreach to encourage public knowledge and appreciation of resources)


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.5.2 SITE E3 - SITE CIRCULATION

### 5.5.2(1) Site E3 - Roadway Safety and Sight Distance

Road safety is a PAWG and La Honda community concern that was seriously considered in the Access (Traffic) Study. Although the posted speed limit is 40 mph , vehicles near Site E3 were observed to have an 85th percentile speed between 48 to 49 mph .

The initial traffic count was completed in the non-summer month of November 2021. After the first Planning and Natural Resources Committee Meeting in December 2022, this District Board Committee requested collecting additional traffic volumes in the summer to determine whether summer conditions differ substantially. The additional traffic volume was collected in July 2023 and again in December 2023.

Traffic volumes at Site E3 and D are nearly identical. Lower traffic volume was observed during summer weekdays. Summer volumes are 73 percent higher on Saturdays than weekdays. Non-summer volumes are 15 to 25 percent higher on Saturdays than weekdays. On average, SR-84 carries approximately 1,800 (summer) to 2,000 (non-summer) vehicles per day within the study area on a weekday, and approximately 3,200 (summer) or 2,000 to 2,500 (non-summer) vehicles per day on Saturdays.

The $85^{\text {th }}$ percentile speed near Site E3 was 49 mph for non-summer traffic and 48 for summer traffic. Speeds were about 5 to 10 mph over the posted speed limit and slightly higher in the southbound (downhill) direction than the northbound (uphill) direction. Speeds during the summer were slightly lower northbound and slightly higher southbound than observed in the non-summer data. It should be noted that vehicle speeds on Saturday were no higher than average. Near Site E3, the most common speed in the southbound (downhill) direction is between 41 mph and 45 mph (for both the non-summer and summer traffic). In the northbound direction (uphill), the most common speed is between 36 mph and 40 mph . Vehicles traveling over $60 \mathrm{mph}(20 \mathrm{mph}$ over the speed limit) are 1 to 2 percent of the total volume, with 6 percent observed on a non-summer Saturday. Vehicles traveling over $70 \mathrm{mph}(30 \mathrm{mph}$ over the speed limit) are 1 percent or less of traffic volume, and no more than observed in non-summer months. Overall, at E3 during all seasons, the predominant speed of vehicles is approximately 50 mph , or about 10 mph over the posted speed limit.

The District Board Committee also requested more data on bicycles. Bicycle volumes varied from approximately 30 per weekday to 200 bicycles on a summer Saturday. Bicycles travel at a lower speed than vehicles; therefore, the required stopping sight distance and intersection sight distance is sufficient for vehicles to observe and avoid bicycles at exit driveways. Collisions involving bicycles were either outside the study area or occurred before 2017, and none of the collisions in Figure 7 of the Access Study involved bicycles.

Based on the observed traffic volumes on SR-84, the anticipated inbound and outbound traffic at the site, and Highway Capacity Manual methodology, the delay and level of service are anticipated to be within Caltrans standards. Queues for inbound and outbound movements at the project driveway would be less than one vehicle according to Highway Capacity Manual methodology. This means that the traffic consultant does not anticipate the necessity for vehicles to stop in SR-84 waiting to turn into the site. On SR-84, no additional turn lanes or widening would be recommended.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

Public access to Site E3 would be provided at existing access points currently used by Midpen vehicles and grazing tenants. Inbound vehicles would use the existing paved access. As mentioned above, northbound left-turn vehicles are not expected to queue on SR-84 at the existing driveway. A separate left-turn pocket for inbound vehicles is not warranted according to National Cooperative Highway Research Program (NCHRP) Report 279. Therefore, the operation of the existing paved access would be the same as existing conditions with the exception of additional stacking distance being available when a new gate is installed farther in on the driveway.

Outbound vehicles would use a new paved driveway where an unpaved driveway currently exists. Sight distance at the driveway is not sufficient for the current roadway speeds. Similar to Site $D$, the Access (Traffic) Study is recommending implementing a combination of elements from the California Manual on Uniform Traffic Control Devices (MUTCD). Specifically, a combination of roadway signage W2-2, W1613 P "When Flashing," and a warning beacon are recommended to be placed at the northbound and southbound approaches to Site E3 exit driveway. Loop detectors at the exiting lanes would be interconnected with the warning beacon to alert vehicles on SR-84 to the presence of exiting vehicles. This would have a twofold effect. First, the warning beacon would have the effect of extending the sight distance from the roadway to the driveway. Second, knowledge of the presence of vehicles entering the roadway should cause vehicles on SR-84 to exercise caution and slow to the speed limit. This would reduce the necessary sight distance from the driveway to SR-84. By incorporating these design features, roadway safety can be maximized while fulfilling the La Honda Creek Master Plan goal to provide public access to the central area of the Preserve.

This lot will be constrained and limited, given its small size (10-15 cars) and its carefully managed frequency (through reservations/permits only) - this too will assist with reducing potential traffic/circulation impacts. Peak usage (on a weekend) is estimated to result in 12 inbound and 11 outbound trips during the busiest hour if visits are reserved and self-led. Docent led visits could result in 18 inbound or 18 outbound trips in an hour.

## Applicable Policies

- Caltrans Highway Design Manual, Chapter 4, Policy 405.1 (sight distance)


## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- For either type of programming, the Level of Service at the proposed driveways would be within Caltrans standards.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology and a left-turn pocket is not warranted.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
approaches to the exit driveway and interconnecting warning beacon to the loop detector at the exit lanes.

- On-site observation shows that some vehicles are attempting to pass over a solid yellow line at this location. A barrier would need to be designed to accommodate left-turns out of the exiting driveway. Midpen can consider working with Caltrans to determine whether features would be added to the state highway to prevent passing at this location as part of the project.
- Highway shoulder parking would need to be prohibited to dissuade visitors from parking on the roadway and entering the Preserve when the internal area is open to the public.


### 5.5.2(2) Site E3 -Entry/Exit Access Patterns

Access to the site is currently through the north driveway and south driveway. The Access (Traffic) Study recommends entry only at the north driveway and exit only at the south driveway and limiting daily trips at this site via a permit parking or docent-led event program.

## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- None


### 5.5.2(3) Site E3 - Emergency Access

Any new roads would need to meet San Mateo County Fire requirements regarding minimum width, maximum length, turning radius, and turn around specifications. Any new gates would need to have San Mateo County Fire access.

## Applicable Policies

- Resource Management Plan, FM-1 (fire and fuel management to protect the public)


## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- None


### 5.5.2(4) Site E3 - Emergency Landing Zone

An emergency landing zone exists on Midpen owned land on the west side of SR-84.
Agency Consultations

- San Mateo County Fire

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Recommendations

- None


### 5.5.2(5) Site E3-Regional Trail Connections

A future Bay Area Ridge Trail crossing has not been planned for crossing SR-84. Although there is no Bay Area Ridge Trail connection planned east of SR-84, Midpen would like to take this opportunity to explore the idea in concept with Caltrans. The initial analysis shows this crossing feasible from a site characteristic, site circulation, and environmental resources standpoint.

A representative from the Bay Area Ridge Trail Council presented to the PAWG at the 12/12/2019 PAWG meeting to share the organization's vision of a continuous, regional multi-use trail that circles the Bay Area ridgelines. The Bay Area Ridge Trail also provided a memo supporting the PAWG in their effort to find the most feasible option for future staging and public access that will eventually close this high priority gap in the Ridge Trail.

The Master Plan includes a goal to close a critical gap on the Bay Area Ridge Trail, connecting the regional trail to the Preserve. A crossing was previously considered during the 2017 Red Barn parking project. Once the 2017 project was placed on hold, the PAWG was made aware of the regional connection need while exploring recommendations. A high-level review of a crossing at site E3 has been included in the Feasibility Study. Further study would be needed if the crossing is moved forward. A wildlife crossing, if contemplated, would be a separate effort and project.

The site north of SR-84 has thick colluvial deposits, but a Bay Area Ridge Trail crossing over SR-84 is technically feasible-both tunnel and bridge are options. An elevated abutment should be outside the Caltrans right-of-way. Any drilling within the Caltrans right-of-way will need an encroachment permit.

## Applicable Policies

- San Mateo Countywide Trails Plan policies


## Agency Consultations

- Caltrans


## Recommendations

- None


### 5.5.3 SITE E3 - ENVIRONMENTAL RESOURCES

### 5.5.3(1) Site E3 - Wetlands and Waters and Riparian Setbacks

Potential jurisdictional waters near the study area include a non-wetland drainage swale. A culvert may need to be added to the road and would need RWQCB permitting.

If in the future, there is an opportunity to pursue a Bay Area Ridge Trail crossing of SR-84, then permitting for the incised non-wetland channel (USACE, CDFW, RWQCB) and riparian corridor habitat along Weeks Creek (CDFW) would be needed.

## Applicable Policies

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Resource Management Plan, WR-1, Measure 1 (inventory features that can affect water resources)
- Resource Management Plan, WR-7 (preserve wetland and ponds)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)


## Agency Consultations

- RWQCB

Recommendations

- None


### 5.5.3(2) Site E3 - Site Drainage

Water drains east to west on the site toward a low point in the corral. South of the site drains to Weeks Creek.

## Applicable Policies

- Resource Management Plan, WR-2 (restore hydrologic processes altered by human activity)


## Recommendations

- Storm drainage patterns should match existing conditions and any new outfalls include conveyance and dissipation to reduce potential for erosion.


### 5.5.3(3) Site E3 - Water Quality

Any impervious surface would likely require stormwater runoff treatment and detention.
Applicable Policies

- San Mateo Countywide, C. 3 Regulated Projects Guide


## Recommendations

- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.


### 5.5.3(4) Site E3 - Plant Communities and Critical Habitat

Site E3 is comprised of Valley and Foothill Grassland (corral and back area near the Red Barn), Closed Cone Pine Forest (tree row in front of potential parking area), and Cismontane Woodland (northwest perimeter).

This site is designated as critical habitat for California red-legged frog (CRLF) by the USFWS. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

## Applicable Policies

- Resource Management Plan, VM-1 (maintain the diversity of native plant communities)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Resource Management Plan, WM-2 (protect, maintain, and enhance habitat features)
- Resource Management Plan, HC-2 (identify and protect existing habitat networks to prevent further compromise of ecosystem integrity)
- Integrated Pest Management Guidance Manual policies (retaining dead trees / snags, and size restrictions / evaluations to avoid the removal of large trees)


## Agency Consultations

- US Fish and Wildlife Service


## Recommendations

- None


### 5.5.3(5) Site E3-Cultural Landscape

The Cultural Landscape Report evaluated the 10-acre Red Barn area and determined that the site is not a cultural landscape because the site no longer retains sufficient integrity to convey the historic significance, except for the Red Barn. The Red Barn is individually eligible for listing under both the National Register of Historic Places and California Register of Historic Resources. For this reason, the Red Barn is a historical resource for the purpose of CEQA.

## Applicable Policies

- None


## Recommendations

- None


### 5.5.3(6) Site E3 - Heritage/Significant Trees

Significant Trees (>38" DBH) and Heritage Trees (DBH varies per species) impacted by removal or proposed development would need to be mitigated.

Site E3 has 21 Significant Trees that could potentially be affected by the parking area within the Preserve boundary. Per the CALFIRE Wildland Fire Resiliency Program Plan, the eucalyptus would need to be removed for fire safety. The Monterey Pines should be removed because they are non-native to encourage the growth of existing oak saplings. A phased approach for removal and the option to plant more screening should be considered.

Several trees are Pinus radiata. CNPS considers P. radiata a rare species ranked 1B. (G1/S1) but only three native stands exist in California, at Ano Nuevo, Cambria, and the Monterey Peninsula. Outside of these three native stands, the species is considered an invasive species. Due to potential genetic integrity issues, Midpen ecologists and arborists recommend that they be removed.

## Applicable Policies

- San Mateo County Planning, Heritage Tree Ordinance
- San Mateo County Planning, Significant Tree Ordinance
- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Agency Consultations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- San Mateo County Planning


## Recommendations

- Impacts should be minimized.
- Any mitigation should follow San Mateo County requirements.
- IPM and Wildland Fire Resiliency Program Plan recommend fuel reduction of the trees.
- Resource Management Plan, M-1 (review and consider all applicable District Policies, programmatic permits, and CEQA documents to develop the project scope, incorporating the following practices (listed in order of priority): avoidance, minimization and/or mitigation of potential impacts)
- Resource Management Plan, M-4 (develop a compensatory mitigation strategy as a measure of last resort)
- Removal of granary trees is evaluated on a case-by-case basis and would need to occur over time to minimize impacts, and replanting would be done to ensure screening.


### 5.5.3(7) Site E3 - Special Status Plants

Development of E3 would not impact special-status plants.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, VM-3 (identify location and condition of special status plants and their habitats)

Recommendations

- None


### 5.5.3(8) Site E3 - Invasive Plant Species

Invasive weeds within and near the project site include Blue Gum Eucalyptus, Monterey Pine, Harding Grass, and English Ivy.

## Applicable Policies

- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Recommendations

- None


### 5.5.3(9) Site E3 - Wildlife Corridor

No documented wildlife corridors for specific species have been identified; however, allowing general wildlife movement across each site should be considered when designing fencing, culverts, underpasses, and other measures. Frogs and turtles found in the surrounding ponds are presumed to move across the landscape to and from other ponds, creeks, and upland features.

## Applicable Policies

- Resource Management Plan, HC-2 (prevent existing habitat networks)
- Resource Management Plan, WM-1 (maintain the diversity of native wildlife)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

Recommendations

- None


### 5.5.3(10) Site E3 - Special Status Animals

The Biological Resources Habitat Assessment evaluated 35 special status wildlife species, most of which could migrate through, forage, and breed at the site. These should continue to be monitored.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, WM-4 (protect and enhance habitats and populations of specialstatus animal species)

Recommendations

- None


### 5.5.3(11) Site E3 - Sensitive Bird Resources

Tree removal would have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)


## Recommendations

- None


### 5.5.3(12) Site E3 - Roosting Bats

Suitable habitat for roosting, hibernating, and foraging habitat may be present on site and should be monitored. Special-status bats have been observed roosting in the Red Barn. Construction restrictions and buffers would apply.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)


## Recommendations

- Construction Measures: Public access and ranch improvements adjacent to the Red Barn (e.g., construction of the parking lot, trails, retaining walls, cattle corral) should be conducted outside the bat maternity season (generally April 15 - September 1). If work is conducted during the maternity season, low noise-producing activities (e.g., moving construction vehicles, handwork, fence building, pedestrian traffic, etc.) should stay at least 120 feet from the barn, and high noise-producing activities (e.g., grading, excavation, drilling, trenching, scraping, etc.) should stay at least 150 feet from the barn. Idling trucks or operating generators should be 150 feet from the barn to avoid impacts from exhaust fumes.
- Because adult and sub-adult pallid bats remain in the barn well into September and possibly October, maintain reduced buffers of 60 feet for low noise-producing activities and 75 feet for

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
high-noise producing activities, as noted above, until colony individuals disperse for the winter (from mid-October through the end of November).

- If these work buffer distances are infeasible due to the need for access or construction adjacent to the barn, then the project team should consult with the bat biologists to determine alternate mitigation measures, such as pre-construction surveys or noise level and equipment restrictions.
- Work can proceed without disturbance buffers between November 30 and February 28.


### 5.5.3(13) Site E3 - Roadway Noise

Mitigating roadway noise from SR-84 would be an opportunity for Site E3 to improve user and wildlife experience.

Applicable Policies

- Resource Management Plan, SA-3 (minimize unnatural noise)
- San Mateo County Noise Ordinance

Recommendations

- None


### 5.5.3(14) Site E3 - Cultural Resources

No cultural resource constraints were identified. The Cultural Resources Survey Study does not recommend monitoring. In the event that archaeological deposits or Native American human remains are identified during project construction, Midpen would implement Master Plan Environmental Protection Guidelines and mitigation measures in the La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, CUL-1 (protocol for unexpected discovery of archaeological and paleontological cultural materials)
- La Honda Creek Open Space Preserve Master Plan, CUL-2 (Native American burial plan)
- La Honda Creek Open Space Preserve Master Plan, CUL-4 (manage potential impacts of shortterm construction activities on historic resources)
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration
- Resource Management Policies, CR-3 (protect cultural resources from disturbance)
- La Honda Creek Open Space Preserve Master Plan, Environmental Protection Guidelines for Cultural Resources


## Recommendations

- None


### 5.5.3(15) Site E3 - State and Federal Environmental Permitting

State/federal permitting jurisdictions near this project location include those for the non-wetland drainage (RWQCB). Should Midpen pursue the Bay Area Ridge Trail crossing at SR-84, then permitting for the incised non-wetland channel (USACE/USFWS, CDFW, RWQCB) and riparian corridor habitat along Weeks Creek (CDFW) would be needed.

## Applicable Policies

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- State and Federal Clean Water Acts, Section 401 and 404
- State and Federal Endangered Species Acts
- California Department of Fish and Game Code, Section 1602
- IS/MND, Mitigation Measure BIO-5

Regulatory Agency Consultations

- Regional Water Quality Control Board (RWQCB)
- US Army Corps of Engineers (USACE), Clean Water Act
- California Department of Fish and Wildlife (CDFW)
- US Fish and Wildlife Service

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 6.0 EXHIBIT B - RECORDS REVIEW

Midpeninsula Open Space District provided RHAA with the following documents pertaining to the sites. These records were reviewed and synthesized in this analysis report.

## Project Team Reports

- BKF Engineers, Boundary and Topographic Survey, dated September 2022
- CG\&E, Cal Engineering \& Geology, Preliminary Geologic and Geotechnical Assessment Report, dated March 2022
- LSA, Access (Traffic) Study, dated October 2022
- LSA, Biological Resource Evaluation Study, dated October 2022
- LSA, Cultural Landscape Report (Site E3), dated April 2022
- LSA, Cultural Resources Survey Study, dated March 2022
- LSA, Tree Inventory Table, dated January 2022
- Vollmar, Botanical Resource Survey Report, dated November 2021
- Vollmar, Delineation of Potential Jurisdictional Waters (Site B2, B3, D), dated May 2022
- Vollmar, Delineation of Potential Jurisdictional Waters (Site E3), dated May 2022


## Previous Records Review

- AECOM, 2016, Memorandum-Sears Ranch Parking Area Biotic Study, dated 28 October 2016
- ALTA Owners Policy, 1991, Form No. 1402-87, Schedule A, dated 03 April 1991
- ASCENT Environmental, 2012, La Honda Creek Open Space Master Plan, Draft Initial Study/Mitigated Negative Declaration, dated 2 July 2012
- Birds Observed at the La Honda Creek Open Space Preserve, 2013, table
- BKF Engineers, 2017, Red Barn- Cut and Fill Exhibit Alternative 3-Phase 1, dated 01 December 2017
- BKF Engineers, 2016, La Honda Creek Open Space Preserve, Red Barn Public Access Area, Tree Survey, San Mateo County, dated 23 November 2016
- BKF Engineers, 2021, Topographic Survey of the Lands of the Mid-Peninsula Regional Open Space District, County of San Mateo, dated 23 November 2021
- BKF Engineers, 2021, Topographic Survey of the Lands of the Mid-Peninsula Regional Open Space District, County of San Mateo, dated 30 November 2021
- California Highway Patrol, 2019, \#190913 2009 AV. 2017/2018 Collisions on SR-84 Between SR 35 and SR 1, San Mateo County, dated 31 July 2019
- California Highway Patrol, 2021, \#211264AC 2019-AV.2020/2021 Crashes on RT 84
- (La Honda RD/Woodside RD) Between RT 35 (Skyline BL) and RT 1 (Cabrillo HWY), San Mateo CO., dated 20 October 2021
- Conservation by Design, Inc., 2011, District-Wide Interpretive Plan, dated December 2011
- Conservation Metrics, 2020, Automated Acoustic Surveys for Marbled Murrelet, Steller’s Jay, and Northern Spotted Owl in the Santa Cruz Mountains

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

- Fall Creek Engineering, Inc., 2017, Revised Stormwater Drainage Report, La Honda Creek Open Space Preserve, San Mateo County, California, dated 26 April 2017
- Fall Creek Engineering, Inc., 2017, Sears Ranch Road, Sears Ranch Improvements and Parking Lot Installation, La Honda Creek Open Space Preserve, San Mateo County, California, April 2017
- Hexagon Transportation Consultants, Inc., 2016, Memorandum, La Honda Creek Open Space Preserve-Red Barn Access Study, dated 10 August 2016
- H.T. Harvey \& Associates-Ecological Consultants, 2017 LA Honda Space Preserve-Bat Surveys for the Red Barn Public Access Project (HTH 4009-01), dated 12 October 2017
- H.T. Harvey \& Associates-Ecological Consultants, 2021, Memorandum: Analysis of E-bike Noise and Recommendations for Buffer Distances between Bike Trails and Bat Roosts/Nesting Birds, dated 17 September 2021
- H.T. Harvey \& Associates-Ecological Consultants, 2017, Winter Bat Survey for the Red Barn Public Access Project (HTH 4009-01), dated 30 March 2017
- LANGAN, 2016, Geotechnical Investigation, Sears Ranch Road Interim Staging Area, La Honda, California, dated 22 April 2016
- LANGAN, 2016, Memorandum, Additional Geotechnical Recommendations - Sears Ranch Road Sears Ranch Road Interim Staging Area, dated 01 November 2016
- LSA, 2016, Historic Resource Evaluation, Red Barn Staging Area, La Honda Creek Open Space Preserve, Unincorporated San Mateo County, California, dated August 2016
- Midpeninsula Regional Open Space District, 2012, Meeting 12-29, Agenda Item 7, dated 22 August 2012
- Midpeninsula Regional Open Space District, 2020, Meeting R-20-81, Agenda Item 2, dated 28 July 2020
- Midpeninsula Regional Open Space District, 2012, La Honda Creek Open Space Master Plan, dated August 2012
- Midpeninsula Regional Open Space District, 2012, La Honda Creek Open Space Master Plan, Mitigation Monitoring Program, dated 22 August 2012
- Midpeninsula Regional Open Space District, 2014, McDonald Ranch Premise Map, dated October 2014
- Midpeninsula Regional Open Space District data accessed December 2021 available through the California Natural Diversity Database https://wildlife.ca.gov/Data/CNDDB.
- Midpeninsula Regional Open Space District, 2021, Memorandum: Update on the Electric Bicycle (e-bike) Noise Study, dated 10 November 2021
- Midpeninsula Regional Open Space District, 2021, Project Limits-Site B2, dated 21 June 2021
- Midpeninsula Regional Open Space District, 2021, Project Limits-Site B3, dated 21 June 2021
- Midpeninsula Regional Open Space District, 2021, Project Limits-Site D and Hwy 84, dated 21 June 2021
- Midpeninsula Regional Open Space District, 2021, Project Limits-Site E3, dated 21 June 2021
- Pathways for Wildlife, date unknown, American Badger Habitat Suitability Assessment: Cost Surface Layer with Draft Linkage Design and Badger Records

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Paul A. Heady and Winifred F. Frick Central Coast Bat Research Group, 2000, Impact Assessment and Mitigation/ Action Recommendations for the Pallid Bat Colony in the La Honda Big Red Basin
- Paul A. Heady and Winifred F. Frick Central Coast Bat Research Group, 2002, Post-Construction Assessment for the Pallid Bat Colony in the La Honda Big Red Basin
- SAGE ASSOCIATES, Agricultural and Environmental Consultants, 2007, La Honda Creek Open Space Preserve, Grazing Management Plan for Former McDonald \& Dyer Sites, dated November 2007
- San Mateo County, 2020, Active Transportation Plan - Draft Final, dated 13 August, 2019.
- Sean E. McAllister, 2019, La Honda Open Space Preserve, Marbled Murrelet Surveys, 2018 \& 2019, dated 17 October 2017
- Timothy C. Best, CEG Engineering Geology and Hydrology, 2007, Driscoll Ranch Road Erosion Inventory, dated September 2007
- TRA Environmental Sciences, 2017, La Honda Creek Open Space Preserve, Red Barn Public Access Area, Jurisdictional Waters and Wetland Delineation, dated January 2017
- Tim Garrison, P.E. Consulting Engineer, 2013, Structural Investigation-LH07, La Honda Creek Bridge, dated 9 April 2013
- Vaughan Forestry, 2016, Draft- Red Barn Public Access Area Project, dated 12 December 2016
- Vollmar Natural Lands Consulting, 2021, LA Honda Creek, El Corte De Madera Creek, Thornewood, and Windy Hill Open Space Preserves, San Mateo County, California, dated November 2021
- W-Trans, 2017, Memorandum, Interim Transportation Circulation Technical Memorandum for the Red Barn Public Access Area in the La Honda Creek Open Space Preserve, dated 03 February 2017
- W-Trans, 2020, La Honda Creek Open Space Access Analysis, dated 17 January 2020


## ACCESS STUDY

# LA HONDA CREEK OPEN SPACE PRESERVE 12444 LA HONDA ROAD SAN MATEO COUNTY, CALIFORNIA 

## ACCESS STUDY

# LA HONDA CREEK OPEN SPACE PRESERVE 12444 LA HONDA ROAD SAN MATEO COUNTY, CALIFORNIA 

Submitted to:<br>Midpeninsula Regional Open Space District<br>330 Distel Circle<br>Los Altos, California 94022

Prepared by:

LSA
20 Executive Park, Suite 200
Irvine, California 92614
949.553.0666

Project No. RAA2102

## LSA

## TABLE OF CONTENTS

TABLE OF CONTENTS ..... i
FIGURES AND TABLES ..... iii
LIST OF ABBREVIATIONS AND ACRONYMS ..... iv
INTRODUCTION ..... 1
PROJECT DESCRIPTION ..... 3
Site E3 (Red Barn) ..... 3
Site D ..... 7
Site B. ..... 7
VEHICLE LEVEL OF SERVICE. ..... 7
Existing Traffic Volumes and LOS Analysis ..... 8
Trip Generation ..... 14
Trip Distribution and Assignment ..... 15
Existing Plus Project LOS Analysis ..... 15
Left-Turn Lanes ..... 20
Level of Service Summary ..... 20
ROADWAY SPEED ..... 21
COLLISION HISTORY ..... 24
Site E3 (Red Barn) ..... 26
Site D ..... 26
Site B. ..... 27
SIGHT DISTANCE ..... 27
Site E3 ..... 28
Site D ..... 29
RECOMMENDATIONS ..... 32
Operational Considerations ..... 32
Turn Restrictions ..... 32
Roadway Widening ..... 32
Advanced Warning Sign ..... 33
Summary of Recommendations by Site ..... 33
Site E3 ..... 33
Site D ..... 34
Site B ..... 35
CONCLUSION ..... 35
REFERENCES ..... 37

## APPENDICES

A: TRAFFIC VOLUME DATA
B: EXISTING LEVEL OF SERVICE WORKSHEETS
C: EXISTING PLUS PROJECT LEVEL OF SERVICE WORKSHEETS
D: COLLISION DATA

## FIGURES AND TABLES

## FIGURES

Figure 1: Project Location ..... 2
Figure 2a: Conceptual Plan - E3 ..... 4
Figure 2b: Conceptual Plan - D ..... 5
Figure 2c: Conceptual Plan - B ..... 6
Figure 3: Study Intersections ..... 9
Figure 4a: Existing Weekday Peak-Hour Traffic Volume ..... 12
Figure 4b: Existing Saturday Midday Peak-Hour Traffic Volume ..... 13
Figure 5a: Project Trip Assignment - Weekday Peak Hours ..... 16
Figure 5b: Project Trip Assignment - Weekend Peak Hour ..... 17
Figure 6a: Existing Plus Project Weekday Peak Hour Traffic Volume ..... 18
Figure 6b: Existing Plus Project Saturday Midday Peak-Hour Traffic Volume ..... 19
Figure 7: Collision Locations on State Route 84 (2017-2021) ..... 25
Figure 8: Site D Sight Distance ..... 31
TABLES
Table A: State Route 84 Daily Traffic Volume ..... 10
Table B: SR-84/Site E3 Entrance Turning Volume ..... 11
Table C: Existing Intersection LOS Summary ..... 14
Table D: Project Trip Generation ..... 15
Table E: Existing Plus Project Intersection LOS Summary ..... 20
Table F: Summary of Vehicle Speed Surveys ( $85^{\text {th }}$ Percentile) ..... 21
Table G: Highest Observed Vehicle Speed (mph) ..... 22
Table H: Number of Vehicles Traveling Greater than 60 mph ..... 23
Table I: Number of Vehicles Traveling 70 mph or Greater ..... 23
Table J: State Route 84 Collision Summary - Skyline Boulevard to Sears Ranch Road (2017- 2021) ..... 26
Table K: Recommended Sight Distance ..... 28
Table L: Site E3 Exit Driveway Sight Distance ..... 29
Table M: Site D Driveway Sight Distance ..... 30

## LIST OF ABBREVIATIONS AND ACRONYMS

| AASHTO | American Association of State Highway and Transportation Officials |
| :---: | :---: |
| CAL FIRE | California Department of Forestry and Fire Protection |
| Caltrans | California Department of Transportation |
| CMP | San Mateo County Congestion Management Program, Final Report |
| District | Midpeninsula Regional Open Space District |
| HCM | Highway Capacity Manual |
| ITE | Institute of Transportation Engineers |
| LOS | level of service |
| mph | miles per hour |
| MUTCD | Manual on Uniform Traffic Control Devices |
| NCHRP | National Cooperative Highway Research Program |
| RRFB | Rectangular Rapid Flashing Beacon |
| SR-1 | State Route 1 |
| SR-84 | State Route 84 |
| SWITRS | Statewide Integrated Traffic Records System |
| vpd | vehicles per day |

## ACCESS STUDY LA HONDA CREEK OPEN SPACE PRESERVE

## INTRODUCTION

The Midpeninsula Regional Open Space District (District) manages 26 open space preserves in the Santa Cruz Mountains region of the San Francisco Bay area. In total, the District is responsible for the conservation, maintenance, and public accessibility of approximately 62,000 acres. In 2012, the District approved the La Honda Creek Preserve Master Plan establishing a 30 -year vision for one of these preserves: the La Honda Creek Open Space Preserve. Figure 1 displays the location of this preserve within the region. Among the goals established in the master plan was improving public access. The three sites under consideration are identified on Figure 1. As Figure 1 shows, all three sites could be accessed by vehicles traveling on La Honda Road, which is designated State Route 84 (SR-84).

SR-84 is owned and maintained by the California Department of Transportation (Caltrans). The District intends to coordinate with Caltrans on the potential impacts of the project and design of a proposed access from SR-84. SR-84 is a two-lane highway that is one of two highways in San Mateo County that connect San Francisco Bay to State Route 1 (SR-1) and the Pacific Ocean. Because SR-84 traverses the Santa Cruz Mountains, the roadway is characterized by frequent horizontal curves. Shoulders are provided where possible, but much of the roadway adjacent to the La Honda Creek Open Space Preserve lacks shoulders. Unsignalized intersections with local roadways and paved and unpaved driveways providing access to adjacent property occur along the roadway. The posted speed limit is 40 miles per hour (mph). Designated passing areas and pullouts are infrequent.

SR-84 is an east-west highway with the western terminus near San Gregorio and the eastern terminus near Redwood City. However, SR-84 primarily traverses the study area north-south. Where SR-84 intersects driveways and roadways within the study area, SR-84 represents the north and south legs of those intersections. Therefore, this document refers to the eastbound direction of SR-84 as northbound and the westbound direction of SR-84 as southbound.

The District has conducted a previous study of potential access to the La Honda Creek Open Space Preserve. The La Honda Creek Open Space Preserve - Red Barn Access Study (Hexagon 2016) analyzed the potential for a 50 -space parking lot at Site E3. This analysis identified a prevailing roadway speed of 57 mph in the southbound (i.e., westbound SR-84) direction. The analysis concluded that the traffic generated by the proposed public access would not impact vehicle level of service (LOS) but expressed concern about the adequacy of sight distance given the prevailing roadway speed.

The Interim Transportation Circulation Technical Memorandum for the Red Barn Public Access Area in the La Honda Creek Open Space Preserve (W-Trans 2017) also focused on public access at Site E3. This analysis also concluded that sight distance at the existing driveway would be inadequate for a design speed of 60 mph , but that a driveway placed 55 feet south of the existing driveway would have adequate sight distance.

## ATTACHMENT 1a



SOURCE: Google Maps (2022)
I:\RAA2102\G\Project_Location.ai (8/9/2022)

The La Honda Creek Open Space Access Analysis (W-Trans 2020) considered five potential access locations along SR-84. As part of this analysis new, limited speed surveys were conducted at with one location at the northern end of the study area and another at the southern end. At the northern end, speed surveys showed lower prevailing speeds than the 2016 study ( 51 mph ). This analysis again expressed concern about the adequacy of sight distance at Site E3 and at Site D but observed that reducing speeds could result in adequate sight distance.

In addition to these studies initiated by the District, the County of San Mateo commissioned the Unincorporated San Mateo County Active Transportation Plan (County of San Mateo 2021). This plan discusses a proposed bicycle route along SR-84 and pedestrian focus areas at community identified gaps.

This Access Study considers the three sites identified on Figure 1. From north to south these are Site E3 (also known as the Red Barn site), Site D, and Site B. The effect of the project on vehicle LOS is considered in this Access Study as roadway safety, including vehicle speed, collision history, sight distance, and project design features.

## PROJECT DESCRIPTION

This Access Study considers the three sites identified on Figure 1. From north to south these are Site E3 (also known as the Red Barn site), Site D, and Site B. Figures 2a through 2c, respectively, illustrate the conceptual plans for each of these.

## Site E3 (Red Barn)

This site is currently accessed from a private drive approximately 80 feet south of the intersection with Old La Honda Road. The drive is shared with a ranger residence and other agricultural and residential parcels. This drive is currently gated. An unpaved driveway located approximately 800 feet south of the intersection with Old La Honda Road (located just south of an unpaved pullout) is also gated and provides access for the District.

Public access to this area of the La Honda Creek Open Space could use both of the existing access points. The conceptual plan contemplates that the northern access would be used by visitors inbound to Site E3. The southern driveway would permit exiting vehicles only. A new gate is proposed providing 130 feet of stacking distance from SR-84. Between SR-84 and the road accessing the ranger residence, the inbound drive would be 20 feet wide, accommodating two directions of travel. Between the ranger residence roadway and the parking lot, a 12-foot drive can be maintained. Site E3 has space for a maximum of 18 parking spaces. Vehicles exiting the parking lot would use the 12 -foot drive and then a separate 12 -foot drive toward the exit. The intersection with SR-84 could be widened to provide separate left-turn and right-turn lanes.

ATTACHMENT 1a


## LSA

ATTACHMENT 1a


## LSA

SOURCE: RHAA Landscape Architecture and Planning (11/22/22)
La Honda Creek Open Space
Access Study
Conceptual Plan - Site D

[^0]ATTACHMENT 1a


## LSA

SOURCE: RHAA Landscape Architecture and Planning (11/22/22)
La Honda Creek Open Space Access Study
Conceptual Plan - Site B2
I:\RAA2102\G\Conceptual_Plan.ai (11/22/2022)

Parking constraints and the 12 -foot drive aisle limit the accessibility of Site E3. To ensure that enough parking spaces can be provided, Site E3 will be available by timed reservation only. Dependent on the program, visits to Site E3 may be docent led. Docents would be able to open the access gate and instruct visitors to exit prior to new vehicles arriving. If visits are not docent led, then reservation timing will need to ensure an appropriate gap between one group exiting and the next group arriving so that only one direction of vehicles is attempting to use the 12-foot drive at a time. If the constraints of the site prevent public access into the site, the District may consider placing an information plaque about the Red Barn in the existing pullout.

## Site D

This site is located near Gate LH07, approximately 6,280 feet south of the intersection with Old La Honda Road. A wide unpaved shoulder is present in this area that provides access to and from SR-84 for maintenance vehicles. A parking lot with a maximum of 30 spaces is possible for this site. A new vehicle gate would permit the District to close the parking lot at the end of the operating day. The driveway would be improved to provide paved entry/exit with one lane in each direction.

## Site B

This site is located along Sears Ranch Road, approximately 3,450 feet north of the intersection of SR-84 (La Honda Road)/Sears Ranch Road. An existing 21-space parking lot is located at the end of Sears Ranch Road. Portions of Sears Ranch Road between La Honda Elementary School and this parking lot are less than 20 feet in width. A pullout is provided to permit vehicles traveling in opposite directions to pass one another. This configuration was reviewed and approved by San Mateo County Fire/California Department of Forestry and Fire Protection (CAL FIRE) at the time the existing parking lot was constructed.

As part of the project, Sears Ranch Road could be widened north of La Honda Elementary School to provide at least 20 feet in width to permit two-way travel and to meet the standards of San Mateo County Fire. The conceptual plan shows a roadway extending from the gate at the terminus of Sears Ranch Road to an additional parking lot that could provide a maximum of 77 parking spaces, 4 of which would accommodate horse trailers. The gate would remain, allowing the District to close the parking lot at the end of the operating day.

A conceptual plan locating an additional parking lot on the east side of Sears Ranch Road just north of La Honda Elementary School (identified as Site B3) was also considered.

## VEHICLE LEVEL OF SERVICE

Synchro (Version 11) computer software was utilized to determine the vehicle LOS at project driveways and unsignalized intersections based on Highway Capacity Manual (HCM) methodology. For the HCM methodology, the LOS is presented in terms of total intersection delay (in seconds per vehicle). The relationship between LOS and the delay at unsignalized intersections is as follows:

| Level of <br> Service | Signalized Intersection Delay Per <br> Vehicle (sec) | Unsignalized Intersection Delay Per <br> Vehicle (sec) |
| :---: | :---: | :---: |
| A | $\leq 10.0$ | $\leq 10.0$ |
| B | $>10.0$ and $\leq 20.0$ | $>10.0$ and $\leq 15.0$ |
| C | $>20.0$ and $\leq 35.0$ | $>15.0$ and $\leq 25.0$ |
| D | $>35.0$ and $\leq 55.0$ | $>25.0$ and $\leq 35.0$ |
| E | $>55.0$ and $\leq 80.0$ | $>35.0$ and $\leq 50.0$ |
| F | $>80.0$ | $>50.0$ |
| sec $=$ seconds |  |  |

Figure 3 indicates the locations of the study intersections. Caltrans has traditionally had a goal of preserving State facilities at a vehicle LOS at the cusp between LOS C and LOS D (Guide for the Preparation of Traffic Impact Studies [Caltrans 2002]).

## Existing Traffic Volumes and LOS Analysis

LSA contracted with an independent data collection company to collect traffic volume data within the study area. Roadway traffic volume data were collected between Wednesday, November 3, 2021 and Saturday, November 6, 2021. These data were collected at two points along SR-84, one near Site E3 and one near Site D. Peak-hour intersection turn volumes were collected at the intersection of SR-84/Sears Ranch Road on Tuesday, March 1, 2022, which was a day that the La Honda Elementary School was in session. At the recommendation of the District Board of Directors, additional traffic volume was collected in summer 2023 (July) and fall 2023 (December) to confirm the original 2021 conclusions and to determine whether summer conditions differ substantially.

Cameras were placed at the intersection of SR-84/Site E3 Entrance Roadway. The west leg of this intersection is a gated roadway serving existing uses. The intersection is just south of Old La Honda Road. Using cameras allowed all the infrequent turn volumes to and from the side roads to be captured for 24 -hour periods from Thursday, July 13, 2023 to Saturday, July 15, 2023. These cameras were also used to count the number of bicycles using SR-84 because bicycles do not register on the pneumatic tubes used to collect vehicle volume and speed data.

Roadway traffic volume data were collected between Thursday, July 13, 2023 and Saturday, July 15, 2023 and between Thursday, December 7, 2023 and Saturday, December 9, 2023 at the same two points along SR-84 as originally collected in 2021. In reviewing the July 2023 data, however, a malfunction of one set of pneumatic tubes was identified. Discrepancies between the two roadway data points (spaced approximately 1 mile apart with no major intersecting roadways in between) could not be explained by bicycle volume, double counting of a set of vehicles, or another source of interference that could be adjusted within the dataset. Video captured at the intersection of SR84/Site E3 Entrance Roadway was used to verify which roadway dataset accurately reflected the traffic volume on SR-84. As a result, the summer traffic volume data collected near Site E3 is presented in this analysis while the inaccurate dataset near Site D has been discarded. Comparison with the December 2023 data, however, allows some conclusions to be reached regarding summer roadway conditions near Site D.

Table A displays the daily traffic volume on SR-84 identified in the empirical data.

## ATTACHMENT 1a



Table A: State Route 84 Daily Traffic Volume

| Day of the Week | Near Site E3 |  | Near Site D |  |
| :--- | :---: | :---: | :---: | :---: |
| Non-Summer | November 2021 | December 2023 | November 2021 | December 2023 |
| Wednesday | 2,041 | - | 2,065 | - |
| Thursday | 1,906 | 1,724 | 1,898 | 1,666 |
| Friday | 2,073 | 1,916 | 2,102 | 1,868 |
| Average Weekday | 2,007 | 1,820 | 2,022 | 1,767 |
| Saturday | 2,531 | 2,085 | 2,565 | 2,063 |
| Summer | July 2023 |  | July 2023 |  |
| Thursday | 1,840 | - |  |  |
| Friday | 1,811 | - |  |  |
| Average Weekday | 1,826 | - |  |  |
| Saturday | 3,165 | - |  |  |

Source: Counts Unlimited (2021, 2023), Counts Unlimited (2023).

As Table A shows, on weekdays SR-84 carries an average of approximately 2,000 vehicles per day (vpd) within the study area on a typical, non-summer weekday. A similar traffic volume was observed during the summer weekdays. Table A shows that non-summer traffic volumes are nearly identical near Site E3 and near Site D. It is therefore believed that the summer traffic volume near Site D would be very similar to the summer traffic volume collected near Site E3.

Non-summer traffic volumes are about 15-25 percent higher on Saturdays than on weekdays. This difference was even greater during the summer, when Saturday volumes were 73 percent higher than on weekdays. Summer 2023 Saturday traffic volumes were about 50 percent higher than nonsummer 2023 Saturday traffic volumes but only 25 percent higher than non-summer 2021 Saturday traffic volumes. The latest traffic volume estimates provided by Caltrans are from 2017 and indicate 2,300 vpd at Post Mile 8.849 near the study area, with peak-month volume increasing to 2,800 vpd (Caltrans n.d.). Even with pre-pandemic higher traffic volume, SR-84 carries far fewer vehicles than the typical $12,000 \mathrm{vpd}$ capacity of a two-lane highway.

LSA also collected roadway traffic volume data on Sears Ranch Road north of La Honda Elementary School as part of the original 2021 traffic volume collection. Intersection turn-volume data at SR84/Sears Ranch Road were collected during the morning (7:00 a.m. to 9:00 a.m.) and afternoon (4:00 p.m. to 6:00 p.m.) peak periods. The highest four 15-minute intervals during these periods are used to identify the a.m. and p.m. peak-hour traffic volume. Surveys of intersection turn volume included the collection of pedestrian and bicycle volumes. A small number of bicycles were observed traveling to and from Entrada Way.

This was a small volume with 1 bicycle exiting Entrada Way during the 2 hours surveyed in the morning, 2 bicycles exiting Entrada Way during the 2 hours surveyed in the afternoon, and 3 bicycles entering Entrada Way during the 2 hours surveyed in the afternoon. This data at the intersection of SR-84/Sears Ranch Road suggest low bicycle volume on SR-84 during non-summer months.

Pedestrian volume at the intersection was also nominal. Between 7:00 a.m. and 9:00 a.m., a total of 9 pedestrians crossed the intersection, 4 of which crossed in the marked crosswalk on the north leg
of the intersection. Between 4:00 p.m. and 6:00 p.m., 20 pedestrians crossed the intersection, 15 of which crossed in the marked crosswalk.

Intersection turn-volume data at SR-84/Site E3 Entrance Roadway were collected for 24 hours a day. Table B displays turning movement volumes. As Table B shows, turning movements to and from SR-84 are not frequent at this location (i.e., total of 26 for all of Thursday, 17 on Friday, and 29 on Saturday). The highest four 15-minute intervals were used to identify the busiest hour of the day, which is also shown in Table B. Similarly, the highest four 15-minute intervals were used to identify the morning (7:00 a.m. to 9:00 a.m.) and afternoon (4:00 p.m. to 6:00 p.m.) peak-hour traffic volumes.

Table B: SR-84/Site E3 Entrance Turning Volume

| Time Period | SR-84 Northbound |  | SR-84 Southbound |  | Old La Honda Road |  | Site E3 Roadway |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Right | Left | Right | Left | Right | Left | Right |  |
| Thursday (7/13) |  |  |  |  |  |  |  |  |  |
| All Day | 2 | 5 | 4 | 3 | 3 | 1 | 4 | 4 | 26 |
| Busiest Hour (1-2 PM) | 1 | 0 | 2 | 2 | 2 | 0 | 0 | 1 | 8 |
| AM Peak Hour | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| PM Peak Hour | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 3 |
| Friday (7/14) |  |  |  |  |  |  |  |  |  |
| All Day | 0 | 4 | 4 | 1 | 1 | 1 | 3 | 3 | 17 |
| Busiest Hour (7-8 AM) | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 3 |
| AM Peak Hour | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| PM Peak Hour | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Saturday (7/15) |  |  |  |  |  |  |  |  |  |
| All Day | 1 | 10 | 5 | 1 | 2 | 0 | 4 | 6 | 29 |
| Busiest Hour (10:30-11:30 AM) | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 1 | 6 |
| AM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM Peak Hour | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 4 |

Source: Compiled by LSA (2023).
SR-84 = State Route 84 (La Honda Road)

Weekday bicycle volume during the summer was not much higher than the non-summer observations. On Thursday, 13 bicycles were observed in the morning peak hour and 3 bicycles in the afternoon peak hour. On Friday, 8 bicycles were observed in the morning peak hour and 1 bicycle in the afternoon peak hour. Bicycle volumes during a summer Saturday, however, were observed to be much higher. A total of 203 bicycles were observed traveling southbound on Saturday ( 38 of which came from Old La Honda Road and continued south on SR-84) and 28 traveling northbound (14 of which turned to continue north on Old La Honda Road). During the busiest hour (9:30 a.m. to 10:30 a.m. on Saturday), 94 bicycles were observed on SR-84, all of which were traveling southbound.

Traffic volume data collected for SR-84 were noted for each hour of the day and also separately for northbound (i.e., eastbound SR-84) and southbound (i.e., westbound SR-84) directions. This permits the identification of peak-hour traffic volumes on SR-84 at the proposed parking lot access points. Figures 4 a and 4 b respectively display the existing traffic volume in the weekday a.m. and p.m. peak hours and the Saturday midday peak-hour traffic volume using the highest observed traffic volume. Appendix A provides the traffic volume data.


Legend
XXX/YYY AM/PM Volumes
La Honda Creek Open Space Access Study
Existing Weekday Traffic Volume



Existing traffic volumes were analyzed using HCM methodology to determine the existing LOS at the study intersections. LOS worksheets for the Existing condition are provided in Appendix B. Table C displays the analysis results. At the intersection of SR-84/Sears Ranch Road in Table C, average delay and LOS are identified for the intersection, and additional detail is provided for each movement. Traffic volumes into and out of the existing driveways at Sites E3 and D are nominal, and trips during the peak hours would be infrequent. Without conflicting traffic volume, no delay would be experienced by vehicles on SR-84 at these intersections. As Table C shows, the existing intersection of SR-84/Sears Ranch Road operates at a satisfactory LOS.

Table C: Existing Intersection LOS Summary

| Intersection | AM Peak Hour |  | PM Peak Hour |  | Midday Saturday |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Delay (sec) | LOS | Delay (sec) | LOS | Delay (sec) | LOS |
| 1. SR-84/Site E3 Entrance Road | - | - | - | - | 10.1 | B |
| 2. SR-84/Site E3 Exit Driveway | - | - | - | - | - | - |
| 3. SR-84/Site D Driveway | - | - | - | - | - | - |
| 4. SR-84/Sears Ranch Road-Entrada Road | 5.8 | A | 3.9 | A | 4.1 | A |
| Northbound Left | 7.3 | A | 7.4 | A | 7.5 | A |
| Southbound Left | 7.4 | A | 7.5 | A | 7.6 | A |
| Eastbound Left/Through | 10.6 | B | 11.1 | B | 12.4 | B |
| Eastbound Right | 9.0 | A | 9.8 | A | 10.1 | B |
| Westbound | 9.8 | A | 10.0 | B | 10.8 | B |

Source: Compiled by LSA (2024).
LOS = level of service
sec $=$ seconds
SR-84 = State Route 84 (La Honda Road)

## Trip Generation

Expanding public access to the La Honda Creek Open Space Preserve would be expected to attract more people, which would result in more trips on SR-84. LSA reviewed the Institute of Transportation Engineers (ITE) Trip Generation Manual, $11^{\text {th }}$ Edition, which provides trip generation surveys for public parks, and determined that these rates were likely not appropriate for the proposed project. Many of the surveyed parks were located in urban environments where a high number of non-vehicle trips would be possible. The trip generation of open space areas can vary widely due to variables such as distance to urban areas, population of those urban areas, and uniqueness of the open space.

Earlier studies conducted of open space areas within the District included surveys of the Russian Ridge Preserve, which is located on Alpine Road west of Skyline Boulevard within the District. These surveys were used to calculate a trip generation rate per parking stall of District open space areas. LSA also collected data that permitted the calculation of the current trip-generating characteristics of the La Honda Creek at Sears Ranch Parking Area at Site B. Roadway volume data collected north of the La Honda Elementary School were used for this calculation of average weekday and Saturday trip rates. LSA compared the current daily trip generation of the La Honda Creek Open Space Preserve to the earlier calculation of the Russian Ridge Preserve. Average weekday trip generation was comparable between the two, but weekend trip generation was much higher in the pre-pandemic Russian Ridge Preserve surveys. To present a conservative analysis, LSA applied the higher, pre-pandemic rates to
the proposed project. LSA used the current survey data of the La Honda Creek Open Space Preserve to determine the percentage of daily traffic occurring in the peak hours. Table $D$ displays the resulting trip rates and the calculated trip generation for the project.

Table D: Project Trip Generation

| Land Use | Size | Unit | ADT | AM Peak Hour |  |  | PM Peak Hour |  |  | Weekend Peak Hour |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | In | Out | Total | In | Out | Total | In | Out | Total |
| Trip Rates |  |  |  |  |  |  |  |  |  |  |  |  |
| District Open Space ${ }^{1}$ |  | Stall | 2.91 | 0.19 | 0.13 | 0.32 | 0.32 | 0.23 | 0.55 | 0.67 | 0.60 | 1.27 |
| Project Trip Generation |  |  |  |  |  |  |  |  |  |  |  |  |
| Site B | 78 | Stall | 234 | 15 | 10 | 25 | 25 | 18 | 43 | 52 | 46 | 98 |
| Site D | 30 | Stall | 87 | 6 | 4 | 10 | 10 | 7 | 17 | 20 | 18 | 38 |
| Site E3 | 18 | Stall | 52 | 3 | 3 | 6 | 6 | 4 | 10 | 12 | 11 | 23 |
| Net New External Trips |  |  | 363 | 24 | 17 | 41 | 41 | 29 | 70 | 84 | 75 | 159 |

Source: Compiled by LSA (2022).
1 Trip rates calculated from 2 weeks of surveys at the Russian Ridge Preserve in July 2016.
ADT = average daily traffic (measured in trips)

## Trip Distribution and Assignment

Trip distribution defines the regional percentage origins/destinations for a project. To determine trip distribution for the proposed project, LSA considered existing travel patterns. The existing percentages of traffic traveling to the north or south were used to estimate the number of project trips arriving from and leaving to the north or south. These were assigned to turn volumes into and out of site access locations and to the intersection of SR-84/Sears Ranch Road. Project traffic volume into or out of a driveway that would pass through an adjacent study intersection was taken into consideration. Figures 5a and 5b display the resulting project trip assignment.

## Existing Plus Project LOS Analysis

The project trips were added to the existing traffic volumes at the study intersections. Figures 6a and $6 b$ show the resulting Existing Plus Project peak-hour traffic volumes. Table E summarizes the results of the Existing Plus Project LOS analysis for the study intersections. LOS worksheets for the Existing Plus Project condition are provided in Appendix C.

As Table E indicates, all study intersections are anticipated to operate at an acceptable LOS in the weekday a.m. peak-hour, weekday p.m. peak-hour, and Saturday midday peak-hour scenarios. This conclusion is consistent with the findings of the San Mateo County Congestion Management Program, Final Report (CMP), which stated that this stretch of roadway operates at LOS C.

The LOS worksheets report queueing for each of the movements listed in Table E. For all of the movements in the weekday a.m. peak hour, weekday p.m. peak hour, and Saturday peak hour, the calculated queues according to HCM methodology is less than one vehicle. This means that as vehicles approach the project access points, it is not anticipated that they will have to stop to wait for another vehicle before making their turn from SR-84.


Legend
XXX/YYY AM/PM Volumes
La Honda Creek Open Space Access Study



LSA
Legend
XXX/YYY AM/PM Volumes
La Honda Creek Open Space Access Study
Existing Plus Project Weekday Traffic Volume


Table E: Existing Plus Project Intersection LOS Summary

| Intersection | AM Peak Hour |  | PM Peak Hour |  | Saturday Midday |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Delay (sec) | LOS | Delay (sec) | LOS | Delay (sec) | LOS |
| 1. SR-84/Site E3 Entrance Road | 0.1 | A | 0.1 | A | 0.1 | A |
| Northbound Left | 7.3 | A | 7.5 | A | 7.9 | A |
| 2. SR-84/Site E3 Exit Driveway | 0.1 | A | 0.2 | A | 0.3 | A |
| Eastbound Left | 9.3 | A | 9.7 | A | 11.6 | B |
| Eastbound Right | 0.0 | A | 9.0 | A | 9.9 | A |
| 3. SR-84/Site D Driveway | 0.5 | A | 0.4 | A | 0.6 | A |
| Northbound Left | 7.3 | A | 7.5 | A | 7.9 | A |
| Eastbound Left/Right | 9.1 | A | 9.3 | A | 11.3 | B |
| 4. SR-84/Sears Ranch Road-Entrada Road | 6.0 | A | 4.1 | A | 4.8 | A |
| Northbound Left | 7.4 | A | 7.5 | A | 7.6 | A |
| Southbound Left | 7.4 | A | 7.5 | A | 7.6 | A |
| Eastbound Left/Through | 11.1 | B | 11.6 | B | 14.3 | B |
| Eastbound Right | 9.1 | A | 9.5 | A | 10.1 | B |
| Westbound | 10.1 | B | 10.4 | B | 11.6 | B |

Source: Compiled by LSA (2024).
sec = seconds
LOS = level of service
SR-84 = State Route 84 (La Honda Road)

## Left-Turn Lanes

In support of the queueing calculations, LSA examined whether left-turn pockets would be warranted on northbound SR-84 by applying the same methodology presented in Interim Transportation Circulation Technical Memorandum for the Red Barn Public Access Area in the La Honda Creek Open Space Preserve (W-Trans 2017). The methodology is identified in Intersection Channelization Design Guide, National Cooperative Highway Research Program (NCHRP) Report 279 (Transportation Research Board 1985). The methodology presents nomographs that take into account roadway speed, advancing volume, percentage of left turns in the advancing volume, and opposing volume. LSA used the figure for two-lane highways with a speed of 50 mph and plotted the traffic volume predicted with implementation of the projects during the busiest hour on the highest traffic volume day (Saturday). The intersection of SR-84/Sears Ranch Road had the highest percentage of left turns in the advancing volume (17 percent), but none of the three locations warranted left-turn pockets.

## Level of Service Summary

The conclusions regarding LOS and queueing result from the low traffic volume on SR-84. The CMP identifies that two-lane highways like SR-84 have a capacity of 2,800 vehicles per hour. As Table A shows, the daily traffic volume is approximately 2,000 vehicles per weekday and approximately 3,200 vehicles on the highest observed weekend day. The daily traffic volume being less than the hourly capacity demonstrates the low traffic volume of this roadway. Because of the low traffic volume, conflicting vehicle movements occur infrequently.

As a result of low traffic volume and infrequent conflicting vehicle movements, the analysis of vehicle LOS concluded that the access points for Sites E3 and D from SR-84 would operate at a
satisfactory LOS even with the additional trips generated by public access to these areas. The analysis also found that no queued vehicles are anticipated and that left-turn pockets would not be warranted. Regarding the intersection of SR-84/Sears Ranch Road, the analysis of vehicle LOS concluded that the intersection would continue to operate at a satisfactory LOS even with additional trips generated by improved public access. No queues are expected at the intersection according to HCM calculations, and a northbound left-turn pocket would not be warranted. In summary, providing public access to the La Honda Creek Open Space Preserve as proposed would not have a detrimental effect on the operation of SR-84.

## ROADWAY SPEED

Within the project area, SR-84 has a posted speed limit of 40 mph . Vehicle speeds were recorded concurrent with the collection of the roadway traffic volume data described above (these data are included in Appendix A). Historically, speed limits surveys consider the $85^{\text {th }}$ percentile speed, which is the speed at which 85 percent of vehicles are traveling at or slower than and only 15 percent of vehicles are exceeding. Recent changes to the California Vehicle Code may permit establishing speed limits based on actual roadway conditions rather than the surveyed speeds. The surveyed $85^{\text {th }}$ percentile speeds along Sears Ranch Road were less than 25 mph . Table F summarizes the $85^{\text {th }}$ percentile speeds on the surveyed days at the two locations along SR-84.

Table F: Summary of Vehicle Speed Surveys ( $85{ }^{\text {th }}$ Percentile)

|  |  | Thursday $(7 / 13 / 23)$ | $\begin{gathered} \text { Friday } \\ (7 / 14 / 23) \end{gathered}$ | Saturday (7/15/23) | Average |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Near Site E3: Summer |  |  |  |  |  |
| Northbound | - | 41 | 43 | 42 | 42 |
| Southbound | - | 51 | 52 | 49 | 51 |
| Both Directions | - | 48 | 49 | 48 | 48 |
|  | Wednesday | Thursday | Friday | Saturday | Average |
| Near Site E3: Non-Summer (November 2021/December 2023) |  |  |  |  |  |
| Northbound | 45 / - | 44/49 | 46/49 | 45 / 50 | 45 / 49 |
| Southbound | 46/- | 46/47 | $47 / 49$ | 46/52 | 46/49 |
| Both Directions | 46/- | $45 / 48$ | 46/49 | $46 / 51$ | 46 / 49 |
| Near Site D (November 2021/December 2023) |  |  |  |  |  |
| Northbound | 50 / - | 53/48 | $48 / 48$ | 47 / 49 | $50 / 48$ |
| Southbound | 49 / - | $55 / 46$ | $48 / 47$ | $48 / 49$ | $50 / 47$ |
| Both Directions | 49 / - | 54/47 | $48 / 47$ | 48/49 | $50 / 48$ |

As Table F shows, the surveyed $85^{\text {th }}$ percentile speeds on SR-84 were higher than the posted 40 mph speed limit on each day surveyed. Near Site E3, the speeds were about 5 to 10 mph above the speed limit and (on Saturday) slightly higher in the southbound (i.e., downhill) direction than the northbound (i.e., uphill) direction. Speeds during the summer were slightly lower northbound and slightly higher southbound than observed in the non-summer data. It should be noted that vehicle speeds on the summer Saturday were no higher than average. Vehicle speeds were higher near Site D than near Site E3 in fall 2021 but lower near Site D than near Site E3 in fall 2023. Near Site D, the speeds were about 10 mph above the speed limit and were no different when comparing
northbound and southbound vehicles. On Saturday, the vehicle speeds were generally the same as on weekdays when considering both survey periods.

As discussed above, the surveyed $85^{\text {th }}$ percentile speeds are higher than the posted speed limit. This does not tell the whole story. Near Site D (northbound and southbound), the most common vehicle speed was between 41 mph and 45 mph during both non-summer 2021 and non-summer 2023. Near Site E3, the most common vehicle speed in the southbound direction is also between 41 mph and 45 mph (for both the non-summer and summer data). In the northbound direction, however, the roadway has a warning sign indicating intersecting roadways and specifically naming Old La Honda Road. In the northbound direction near this sign, the most common vehicle speed was between 36 mph and 40 mph in non-summer 2021 and summer 2023. When additional speed surveys were conducted in fall 2023, the most common northbound speed was between 41 mph and 45 mph .

The $85^{\text {th }}$ percentile speed is higher than these most common vehicle speeds because both surveyed locations had outliers observed that were traveling much faster than the speed limit or the prevailing speed of most vehicles. Table G summarizes the highest observed vehicle speed for both surveyed locations. The highest vehicle speed near Site E3 tended to be higher than the highest vehicle speed near Site D, even in the northbound direction.

Table G: Highest Observed Vehicle Speed (mph)

|  |  | Thursday (7/13/23) | $\begin{gathered} \text { Friday } \\ (7 / 14 / 23) \\ \hline \end{gathered}$ | Saturday (7/15/23) | Trend |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Near Site E3: Summer |  |  |  |  |  |
| Northbound | - | 56-60 | 61-65 | 66-70 | 61-65 |
| Southbound | - | 66-70 | >76 | 71-75 | 71-75 |
| Both Directions | - | 66-70 | >76 | 71-75 | 71-75 |
|  | Wednesday | Thursday | Friday | Saturday | Trend |
| Near Site E3: Non-Summer (November 2021/December 2023) |  |  |  |  |  |
| Northbound | 71-75 / - | 71-75 / 71-75 | >76/ 71-75 | 71-75 / >76 | >76 |
| Southbound | 66-70 / - | >76 / 66-70 | 71-75 / 71-75 | >76/>76 | $>76$ |
| Both Directions | 71-75 / - | >76 / >76 | >76 / 71-75 | >76 / >76 | >76 |
| Near Site D (November 2021/December 2023) |  |  |  |  |  |
| Northbound | 66-70 / - | 71-75 / 66-70 | 66-70 / 66-70 | 66-70 / >76 | 71-75 |
| Southbound | 71-75 / - | >76/61-65 | 66-70 / 61-65 | $>76 / 66-70$ | 71-75 |
| Both Directions | 71-75 / - | >76 / 66-70 | 66-70 / 66-70 | >76 / >76 | 71-75 |

Source: Counts Unlimited (2021, 2023).
$\mathrm{mph}=$ miles per hour

Table H summarizes the number of vehicles observed traveling faster than 60 mph . Table I summarizes the number of vehicles observed traveling faster than 70 mph . Vehicles traveling over 60 mph are exceeding the speed limit by at least 20 mph and also exceeding the most common travel speed by at least 15 mph . Table H shows that these tend to be about 1-2 percent of the vehicles on SR-84. On Saturday, the exceptions were near Site E3, where 3-6 percent of the vehicles were exceeding 60 mph , and near Site D on an unusual Thursday, where 6 percent of vehicles were exceeding 60 mph . The surveyed Thursday had the lowest volume of traffic on any surveyed day,
but traffic volume isn't the only variable affecting travel speeds because Saturday had the highest volume and also a high number of excessive speed vehicles. It should be noted that the likelihood of vehicles travelling over 60 mph was no worse in summer than during non-summer.

## Table H: Number of Vehicles Traveling Greater than 60 mph



Source: Counts Unlimited $(2021,2023)$.
$\mathrm{mph}=$ miles per hour

Table I: Number of Vehicles Traveling 70 mph or Greater

|  |  | Thursday $(7 / 13 / 23)$ | $\begin{gathered} \text { Friday } \\ (7 / 14 / 23) \end{gathered}$ | Saturday $(7 / 15 / 23)$ | Average |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Near Site E3: Summer |  |  |  |  |  |
| Northbound | - | 0 | 0 | 0 | 0 |
| Southbound | - | 0 | 1 | 6 | 2 |
| Both Directions | - | 0 | 1 | 6 | 2 |
| Percentage of Traffic | - | 0\% | 0\% | 0\% | 0\% |
|  | Wednesday | Thursday | Friday | Saturday | Average |
| Near Site E3: Non-summer (November 2021/December 2023) |  |  |  |  |  |
| Northbound | 0/- | $1 / 1$ | $0 / 1$ | $0 / 17$ | $0 / 6$ |
| Southbound | 1 /- | $9 / 0$ | $0 / 2$ | $3 / 28$ | $3 / 10$ |
| Both Directions | 1/- | 10 / 1 | $0 / 3$ | $3 / 45$ | $4 / 16$ |
| Percentage of Traffic | 0\% | 1\% / 0\% | 0\% / 0\% | 0\% / 2\% | 0\% / 1\% |
| Near Site D (November 2021/December 2023) |  |  |  |  |  |
| Northbound | 1/- | $1 / 0$ | $3 / 0$ | $5 / 4$ | $3 / 1$ |
| Southbound | 0 / - | $1 / 0$ | $1 / 0$ | $8 / 0$ | $3 / 0$ |
| Both Directions | 1/- | $2 / 0$ | $4 / 0$ | $13 / 4$ | $5 / 1$ |
| Percentage of Traffic | 0\% | 0\% / 0\% | 0\% / 0\% | 1\% / 0\% | 0\% / 0\% |

Source: Counts Unlimited $(2021,2023)$.
$\mathrm{mph}=$ miles per hour

Vehicles traveling over 70 mph are exceeding the speed limit by at least 30 mph and the most common travel speed by at least 25 mph . Table I shows that these tend to be 1 percent or less of
traffic on SR-84. Again, the exceptions were near Site E3 on Saturday when 2 percent of vehicles were exceeding 70 mph . At both locations, high speeds could be more common southbound (i.e., downhill) than northbound (i.e., uphill). During the summer the number of vehicles exceeding 70 mph was not higher than during both non-summer periods.

Considering the comparison between the speeds of vehicles observed near Site E3 and Site D during both non-summer periods and the lower speeds near Site E3 during the summer of 2023 compared to the fall of 2023, the conditions near Site D during summer can be inferred. Had the data collection instruments functioned properly, the $85^{\text {th }}$ percentile speed near Site D would likely have been between 45 mph and 50 mph with a most common speed between 41 mph and 45 mph . Vehicles traveling over 60 mph are likely to have been 1 percent or less of the total volume and vehicles traveling over 70 mph are likely to have been no more than observed in non-summer months. Overall, at both sites and during all seasons, the predominant speed of vehicles is approximately 50 mph , or about 10 mph over the posted speed limit.

The outlier drivers traveling at speeds far exceeding typical traffic, and particularly where these drivers interact with drivers traveling at typical speed, contribute to the collision history of SR-84.

## COLLISION HISTORY

The District queried collision data along SR-84 from the Statewide Integrated Traffic Records System (SWITRS), which is administered by the California Highway Patrol but incorporates data from any agency taking a collision report. The report provided to the District is included in Appendix D. Figure 7 illustrates the locations and types of collisions for the most recent five years (i.e., from 2017 to 2021). Collisions involving bicycles are included in SWITRS data and are included in the reports in Appendix D. However, the bicycle collisions were either outside of the study area or occurred before 2017, and none of the collisions illustrated on Figure 7 involved bicycles. Table J summarizes the collision types and primary collision factors identified in the collision data. A review of these data showed that approximately 30 percent occurred during the months of June, July, and August. Because this is greater than the 25 percent that would occur if collisions were evenly spread throughout the year, it appears that collisions are slightly more likely to occur during the summer. Table J shows that the most common type of collision has been hitting an object, followed by overturned vehicles. Head-on and sideswipe collisions are more common than broadside or rearend collisions.

The most common primary collision factor is improper turning followed by unsafe speed. It should be noted, however, that a vehicle traveling too fast while turning can be noted as improper turning even when the speed is a factor in the crash. Table J shows that 15 percent of collisions occur with vehicles traveling on the wrong side of the road while another 3 percent occur due to improper passing or unsafe lane changes. As stated above, the study area does not have passing lanes, so no vehicles should be passing or on the opposite side of the road.
ATFACHMENT 1a

1::RAA2102\GIS\MXD\CollisionLocs_SR84_2017_2021.mxd (9/26/2022)

## Table J: State Route 84 Collision Summary - Skyline Boulevard to Sears Ranch Road (2017-2021)

| Collision Type | Number | Percent | Primary Collision Factor | Number | Percent |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Broadside | 4 | $4 \%$ | Driving Under the Influence | 4 | $4 \%$ |
| Head-On | 10 | $11 \%$ | Unsafe Speed | 27 | $28 \%$ |
| Hit Object | 41 | $43 \%$ | Wrong Side of the Road | 14 | $15 \%$ |
| Overturned | 26 | $27 \%$ | Improper Passing/Unsafe Lane Change | 3 | $3 \%$ |
| Rear End | 2 | $2 \%$ | Improper Turning | 39 | $41 \%$ |
| Sideswipe | 11 | $11 \%$ | Automobile Right of Way | 7 | $7 \%$ |
| Other | $\mathbf{2}$ | $\mathbf{2 \%}$ | Other Hazard/Not Driver | $\mathbf{7}$ | $\mathbf{2}$ |
| Total | $\mathbf{9 6}$ | $\mathbf{1 0 0 \%}$ |  | $\mathbf{T o t a l}$ | $\mathbf{9 6}$ |
| $\mathbf{l n}$ |  | $\mathbf{1 0 0 \%}$ |  |  |  |

Source: Compiled by LSA from data gathered from an SWITRS database generated on October 20, 2021.
SWITRS = Statewide Integrated Traffic Records System

The trends of collision types and primary collision factors make intuitive sense. Vehicles traveling at high speeds while turning are more likely to hit an object and/or overturn than vehicles traveling the speed limit. Vehicles passing over a solid line and traveling on the wrong side of the road are more likely to cause head-on and sideswipe collisions than vehicles staying on the right side of the road.

One of the trends that stands out from the collision data is the relative infrequency of vehicles entering SR-84 from a side street or driveway being cited as the primary collision factor (Automobile Right of Way, 7 percent) resulting in broadside or rear-end collisions (4 percent and 2 percent, respectively).

Figure 7 shows several clusters of collision locations. Not surprisingly, many of the clusters occur at bends in the roadway. The following takes a closer look at each of the proposed access locations.

## Site E3 (Red Barn)

Site E3 is along a curve in La Honda Road that has a cluster of eight collisions in the past 5 years. Five of the eight were attributed to improper turning or improper entering of the right-of-way. The remaining three were attributed to unsafe vehicle speed. In three of the eight collisions, a single vehicle hit an object. In another two cases, a single vehicle ran off the road and overturned. For two of the collisions, drivers entering or exiting the roadway were a factor in the collision.

It should be noted that during a site visit, illegal passing was observed at this location. A southbound vehicle exiting the turn accelerated and passed a slower vehicle at this brief straight stretch of roadway. This occurred despite insufficient knowledge of northbound vehicles and pavement striping not permissive of the maneuver.

## Site D

Site $D$ is located along a portion of La Honda Road with few reported collisions.

## Site B

Site B would be accessed from the La Honda Road/Sears Ranch Road intersection. During the site visit, it became apparent that sight distance to the south is a challenge for drivers approaching this intersection from the west (i.e., from the potential project site). Three collisions occurred near this intersection recently (in 2020 and 2021). However, the intersection design does not appear to have significantly contributed to those collisions. Two collisions were caused by vehicles attempting to pass, and one appears to have occurred when a vehicle was entering or exiting the adjacent commercial property.

These collision trends along SR-84 and at the specific proposed access locations were considered when developing the recommendations.

## SIGHT DISTANCE

Sight distance describes the limits of visibility either from a vehicle on a roadway to objects ahead of the vehicle on or near the roadway or from a vehicle preparing to enter a roadway to other vehicles on the roadway. Even though the proposed access locations for Site E3 and Site D currently have unpaved access locations, it is prudent to examine the sight distance for the proposed paved driveways. Two types of sight distance are relevant for this access study: (1) stopping sight distance refers to the distance required for a vehicle traveling on a roadway to come to a complete stop, and
(2) intersection sight distance presents the amount of space necessary for a vehicle to enter a roadway without causing other vehicles to alter their velocity. Stopping sight distance is the minimum that must be provided. Intersection sight distance is different for left-turning and rightturning vehicles because left-turning vehicles must cross an additional lane of traffic before accelerating to the roadway's predominant speed. This report references recommended sight distance published in A Policy on Geometric Design of Highways and Streets, $6^{\text {th }}$ Edition (AASHTO 2011). This publication is often referred to as the Green Book. It should be noted that Caltrans is a contributor to AASHTO.

Sight distance values published in the Green Book are for clear weather conditions. Fog can reduce sight distance and rain can increase the distance required to stop. California Vehicle Code Section 22350 states that no person shall drive a vehicle at a higher speed than is prudent with regard to weather and visibility. In other words, posted speed limits apply to clear weather conditions and drivers are responsible for reducing their speed when fog or rain impair safe driving conditions.

Sight distance is highly dependent on the predominant travel speed. As shown in Table F, the predominant speed near Site E3 is $46-49 \mathrm{mph}$ while the predominant speed near Site $D$ is 50 mph . This is higher than the posted speed limit of 40 mph . The appropriate speed to plan for both Site E3 and Site $D$ is 50 mph . Table $K$ lists sight distance for 25 mph (i.e., for bicycles), 40 mph (i.e., the speed limit), 45 mph , and 50 mph (i.e., the predominant speed), and higher speeds to show how speed in excess of the speed limit affects the necessary sight distance. As Table K shows, a predominant speed of 50 mph rather than the speed limit of 40 mph increases stopping sight distance by 120 feet ( 40 percent), increases left-turn intersection sight distance by 110 feet ( 25 percent), and increases right-turn intersection sight distance by 95 feet ( 25 percent). The outlying vehicles observed traveling at 70 mph more than double the necessary stopping sight distance.

Table K: Recommended Sight Distance

| Speed (mph) | Recommended Sight Distance (ft) |  |  |
| :---: | :---: | :---: | :---: |
|  | Stopping Sight Distance ${ }^{1}$ | Intersection Sight Distance |  |
|  |  | Left-Turn from Stop ${ }^{1}$ | Right-Turn from Stop ${ }^{2}$ |
| 25 | 155 | 280 | 240 |
| 40 | 305 | 445 | 385 |
| 45 | 360 | 500 | 430 |
| 50 | 425 | 555 | 480 |
| 60 | 570 | 665 | 575 |
| 70 | 730 | 775 | 670 |

Source: A Policy on Geometric Design of Highways and Streets, $6^{\text {th }}$ Edition (AASHTO 2011).
1 Table 9-6 (AASHTO 2011).
2 Table 9-8 (AASHTO 2011).
AASHTO = American Association of State Highway and Transportation Officials
$\mathrm{ft}=\mathrm{feet}$
$\mathrm{mph}=$ miles per hour

## Site E3

Previous traffic analyses measured and reported sight distances at the Site E3 exit driveway and at Site D. At the Site E3 exit driveway, 525 feet of sight distance was measured between the driveway and southbound traffic (i.e., to the left of the driveway), and 530 feet of sight distance was measured between the driveway and northbound traffic (i.e., to the right of the driveway) (Hexagon 2016). At the entrance driveway, a vehicle waiting to turn left into the driveway can see approximately 435 feet before the driver's view is obstructed by foliage and a horizontal curve in the roadway. The distance traveled by a vehicle at 50 mph during the 5.5 seconds ( 1.5 seconds decision time and 4 seconds acceleration time) required for a left-turning vehicle to fully exit the roadway is approximately 400 feet. Therefore, sufficient sight distance is provided for turning vehicles to accept an appropriate gap.

Table $L$ provides a comparison between the recommended and measured sight distance. The comparison shows that stopping sight distance is met, which means that vehicles traveling on SR-84 would be able to stop upon seeing a vehicle from the Site E3 driveway entering the roadway. Rightturn intersection sight distance ( 525 feet to southbound traffic) is greater than the 480 feet recommended. This means that vehicles turning right from the Site E3 driveway would be able to select a gap in traffic that would not result in interference with vehicles on SR-84 that are traveling 50 mph or less.

Left-turn intersection sight distance ( 530 feet to the northbound traffic) is less than the 555 feet recommended for vehicles traveling 50 mph . However, as mentioned above, the most common speed for northbound vehicles at this location was found to be between 36 mph and 40 mph . For these most common vehicles, sufficient left-turn intersection sight distance is provided. A vehicle exiting the Site E3 driveway, upon observing no vehicles within 525 feet to the left and 530 feet to the right, and deciding to initiate a left-turn onto SR-84, would not interfere with vehicles traveling 45 mph or less (i.e., the most common vehicles) but would not have sufficient sight distance for vehicles traveling 50 mph or more.

If a vehicle is approaching the Site E3 driveway traveling greatly in excess of the speed limit, a vehicle entering SR-84 would not have sufficient time to accelerate (and especially not time to accelerate to the excessive speed of the approaching vehicle). This would result in that vehicle on SR-84 needing to slow upon seeing a vehicle enter SR-84 to avoid a collision.

While the 203 bicycles observed on one Saturday indicate that bicycles can be common on SR-84, their presence does not change the above conclusions regarding sight distance. Bicycles are traveling at a lower speed than most vehicles. The sight distance is present for vehicles to observe and avoid bicycles when exiting Site E3.

## Table L: Site E3 Exit Driveway Sight Distance

| Speed (mph) | Recommended Sight Distance (ft) |  |  |
| :---: | :---: | :---: | :---: |
|  | Stopping Sight $^{\text {Distance }^{\mathbf{1}}}$ | Intersection Sight Distance |  |
|  | Left-Turn from Stop $^{\mathbf{1}}$ | Right-Turn from Stop $^{\mathbf{2}}$ |  |
| 25 | 155 | 280 | 240 |
| 40 | 305 | 445 | 385 |
| 45 | 360 | 500 | 430 |
| 50 | 425 | 555 | 480 |
| 60 | 570 | 665 | 575 |
| 70 | 730 | 775 | 670 |
| Measured Sight Distance |  |  |  |
| At E3 Exit Driveway | 525 | 530 | 525 |

Source 1: A Policy on Geometric Design of Highways and Streets, 6th Edition (AASHTO 2011).
Source 2: La Honda Creek Open Space Preserve - Red Barn Access Study (Hexagon 2016).
1 Table 9-6 (AASHTO 2011).
2 Table 9-8 (AASHTO 2011).
AASHTO = American Association of State Highway and Transportation Officials
$\mathrm{ft}=$ feet
$\mathrm{mph}=$ miles per hour

## Site D

In the La Honda Creek Open Space Access Analysis (W-Trans 2020), sight distance was measured at a point adjacent to Gate LH07. At the point on SR-84 nearest the LH07 gate, 350 feet of sight distance was measured between the driveway and southbound traffic (i.e., to the left of the driveway), and 350 feet of sight distance was measured between the driveway and northbound traffic (i.e., to the right of the driveway) (W-Trans 2020).

LSA considered whether a different point along the horizontal curve could improve sight distance. Moving the driveway to the north could improve sight distance to the north but would reduce sight distance to the south. Similarly, moving the driveway to the south could improve sight distance to the south but would reduce sight distance to the north. The southbound lanes must be entered by vehicles exiting the driveway, whether they are turning right or left. Therefore, LSA recommended considering placing the paved driveway not directly in line with Gate LH07 but rather approximately 50 feet to the north.

Table M provides a comparison between the recommended and estimated sight distance. LSA estimates that for vehicles waiting to enter SR-84 from a driveway 50 feet north of Gate LH07, the
sight distance to the north would be 400 feet and the sight distance to the south would be 300 feet. The conclusions of the previous traffic analyses would not change; the sight distance at the location of the proposed paved driveway would not be sufficient.

## Table M: Site D Driveway Sight Distance

| Speed (mph) | Recommended Sight Distance (ft) |  |  |
| :---: | :---: | :---: | :---: |
|  | Stopping Sight <br> Distance $^{\mathbf{1}}$ | Intersection Sight Distance $^{$$}$ |  |
|  | Left-Turn from Stop $^{\mathbf{1}}$ | Right-Turn from Stop $^{\mathbf{2}}$ |  |
| 25 | 155 | 280 | 240 |
| 40 | 305 | 445 | 385 |
| 45 | 360 | 500 | 430 |
| 50 | 425 | 555 | 480 |
| 60 | 570 | 665 | 575 |
| 70 | 730 | 775 | 670 |
| Estimated Sight Distance |  |  |  |
| At SR-84 | 300 | 300 | 400 |
| 20 ft in back of SR-84 | 425 | 425 | 480 |

Source 1: A Policy on Geometric Design of Highways and Streets, 6th Edition (AASHTO 2011).
Source 2: Compiled by LSA (2022).
1 Table 9-6 (AASHTO 2011).
2 Table 9-8 (AASHTO 2011).
AASHTO = American Association of State Highway and Transportation Officials
$\mathrm{ft}=$ feet
$\mathrm{mph}=$ miles per hour
SR-84 = State Route 84
LSA examined whether any further modifications would be possible that would improve sight distance. Because SR-84 bends away from the proposed driveway location, vehicles farther back from the roadway would have a shallower angle and would have greater sight distance. Specifically, as illustrated on Figure 8, LSA estimates that a vehicle recessed from the roadway by one vehicle length would be able to see 480 feet to the north and 425 feet to the south. This could be achieved by placing a southbound right-turn lane at the proposed driveway and placing the stop bar at the revised entrance.

The increased sight distance resulting from moving the stop bar would provide adequate stopping sight distance for vehicles traveling 50 mph . Similarly, a vehicle exiting Site D and turning right would have sufficient sight distance to select a gap in traffic that would not interfere with southbound traffic. However, while greatly improving the sight distance to northbound traffic, the sight distance would still be less than the recommended amount for vehicles entering the roadway and making a left-turn. This means that if a vehicle were approaching and traveling northbound at the same time a vehicle begins making a left-turn, the vehicle on SR-84 would have to slow to avoid a collision.

In order to provide the additional 130 feet of sight distance to the south to meet the intersection sight distance standard, vegetation and earthwork would need to be removed from the hillside south of the project. It is likely that a retaining wall would need to be constructed to preserve the line of sight. However, the proposal to place the paved driveway 50 feet north of Gate LHO7 and recess the stop bar would result in sufficient stopping sight distance, which is the minimum required to avoid a collision. It should be noted that sufficient sight distance to avoid bicycles is provided.


Design Option 1


Design Option 2

SOURCE: RHAA Landscape Architecture and Planning

## RECOMMENDATIONS

## Operational Considerations

The open space areas operated by the District are open from dawn until 30 minutes after sunset. Trails and open space areas can be closed due to rain and storms. Even when open space areas remain open, inclement weather greatly reduces the number of visitors to the open space areas. Because of these operational considerations, use of the proposed Site E3 and Site D driveways will be low during conditions that reduce visibility.

## Turn Restrictions

Turn restrictions into or out of proposed driveways or at the intersection of SR-84/Sears Ranch Road, where sight distance would be less than recommended, were considered. Drivers desiring to turn to travel in a particular direction but restricted by signage or engineering features would need to make a U-turn at a downstream location. If an alternate location with adequate sight distance or control is available (e.g., a signalized intersection), turn restrictions might be considered. However, no portion of SR-84 adjacent to the La Honda Creek Open Space provides a signalized intersection, a turnout with adequate sight distance, or other feature to facilitate U-turns. No location could be identified to provide safer turns than the proposed driveways and intersection; therefore, no turn restrictions are recommended.

## Roadway Widening

Analysis presented above determined that no queue of inbound vehicles on SR-84 is anticipated as a result of the project. The analysis further determined that left-turn pockets are not warranted based on accepted methodology. A review of the collision data shows a trend of drivers making ill-advised and illegal attempts to pass slower vehicles in areas not designated for passing. Widening SR-84 to provide left-turn pockets could present an opportunity for illegal passing to these drivers, which would have a detrimental effect on safety for SR-84. Therefore, LSA does not recommend placement of left-turn pockets at SR-84/Sears Ranch Road or the proposed access locations for Site E3 and Site D.

At the Site D driveway specifically, LSA is not recommending a full deceleration and acceleration lane for the same reason that left-turn lanes are not recommended. Recessing the stop bar from SR84 to accommodate a southbound right-turn lane would result in adequate sight distance for vehicles exiting the parking lot and making a right turn, which reduces the need for an acceleration lane. Even without an acceleration lane, a deceleration lane might appear to be an opportunity to pass slower vehicles. LSA believes that the potential benefits of a full deceleration lane would be negated by this potential for misuse. Therefore, at the Site D driveway, LSA is recommending a minimum 25 -foot turn pocket with a 60- or 90 -foot bay taper.

Site B is accessed by Sears Ranch Road. The trip generation estimates show 52 inbound and 46 outbound trips during the busiest hour, which would occur on weekends. At this volume of traffic, simultaneous inbound and outbound trips on Sears Ranch Road are likely to occur, and the singlelane sections of Sears Ranch Road would not be adequate. Therefore, widening Sears Ranch Road to 20 feet between the Elementary School and the proposed parking lot location is recommended. This
will meet San Mateo County Fire standards and provide one travel lane in each direction to accommodate horse trailer access on that portion of road.

## Advanced Warning Sign

The Sight Distance section of this Access Analysis concluded that the driveway at Site D would not provide adequate intersection sight distance for left-turning vehicles. Adequate stopping sight distance could be provided, but vehicles traveling northbound on SR-84 at the predominant speed would have to slow if they were present at the same time as a vehicle turning left from the driveway. The Sight Distance section concluded that intersection sight distance would be adequate at the proposed Site E3 exit driveway for vehicles traveling at the predominant speed. However, sight distance would not be sufficient for vehicles traveling on SR-84 at excessive speed, as has been observed.

The visibility at both locations could be supported through a combination of elements from the Manual on Uniform Traffic Control Devices (MUTCD) (Caltrans 2021). The primary sign would be a W2-2 sign indicating a driveway ahead. This could be enhanced with a warning beacon as described in Section 2C.49(13) and a W16-13P "When Flashing" plaque. The warning beacon could be connected to loop detectors at the exit lanes of the driveways so that the sign would indicate when a vehicle is present ahead and about to enter SR-84. This advanced warning of an actual vehicle would give approaching vehicles an opportunity to begin slowing in anticipation of the entering vehicle.

The MUTCD specifically states that "a warning beacon may be used with any Vehicular Traffic Warning sign to indicate specific periods when the condition or activity is present or is likely to be present, or to provide enhanced sign conspicuity." The recommendation to use a warning beacon with the W2-2 sign and interconnect the beacon with loop detectors at the exit lanes of the driveways is to indicate specific periods when the condition (i.e., vehicles about to enter SR-84) are present. While the California MUTCD departs from national standards by suggesting that a W16-13P "When Flashing" plaque not also be used, the reason provided is that it is not effective as a warning device for motorists approaching signalized intersections. Indicating the presence or absence of cross traffic at downstream signalized intersections would be contrary to safety because it could encourage vehicles to not stop at signalized intersections where they anticipate an absence of cross traffic. However, because vehicles on SR-84 would not be expected to stop at the unsignalized driveways, clear communication of the presence of vehicles about to enter the roadway from the proposed driveways would be beneficial. The recommended combination of MUTCD elements would effectively extend the sight distance from SR-84 to the driveways and would enhance safety.

## Summary of Recommendations by Site

Site E3
An existing paved access point is shared with a ranger residence and other agricultural and residential parcels. At the south end of the site, an unpaved driveway provides access to the District. The proposal to allow public access would use the existing northern access for inbound vehicles and would pave the southern access for use by exiting vehicles.

Both driveways are expected to operate at a satisfactory LOS based on HCM calculations. Queues are not anticipated to form at the entrance and left-turn pockets are not warranted based on available methodology.

Roadway speeds on SR-84 were observed to be above the posted 40 mph speed limit. While 85 percent of vehicles were observed traveling 46 mph or less, speeds greater than 76 mph were observed. Approximately 1 percent of vehicles were observed traveling over 60 mph .

An exiting driveway for Site E3 would be in an area with a cluster of recent collisions. For two of the eight collisions, drivers entering or exiting the roadway were a factor in the collision. Previous analyses of sight distance (Hexagon 2016, and W-Trans 2020) state that insufficient sight distance is provided. While the intersection sight distance for left-turning vehicles is less than recommended for the predominant speed, stopping sight distance is adequate for the predominant speed.

No turn restrictions are recommended because no alternative location is available for safely making a U-turn. No left-turn pockets are recommended because they could entice further illegal passing.

A combination of elements from the MUTCD is recommended to increase sight distance to the exiting driveway and reduce the necessary sight distance by alerting approaching vehicles to slow to the speed limit when vehicles are about to enter the roadway. This would be provided as a W2-2 sign indicating a driveway ahead that is enhanced with a warning beacon as described in Section 2C.49(13) and a W16-13P "When Flashing" plaque. The warning beacon could be connected to loop detectors at the exit lanes of the driveway.

In addition to addressing project-related traffic conditions, the District and Caltrans could also work together to identify possible improvements addressing an existing issue of illegal passing adjacent to Site E3. One potential improvement would be the installation of a median barrier along the straight portion of the roadway. A median barrier would have to be low enough to not obstruct sight distance from the exiting driveway. An opening in a median barrier to permit turning movements from the exiting driveway would also be necessary. In addition to preventing illegal passing at this location, a median barrier may also result in lower vehicle speeds as the perceived lane width would be reduced.

Site D
Access by maintenance vehicles currently occurs at unpaved access locations near Gate LH07. The project would pave a driveway that accesses a parking lot. The driveway is anticipated to operate at satisfactory LOS, and no queued vehicles are predicted by HCM calculations. Furthermore, a northbound left-turn pocket is not warranted according to available methodology.

The predominant roadway speed was observed to be slightly higher than that adjacent to Site E3, but the highest observed speed was slightly lower at between 71 mph and 75 mph . Approximately 2 percent of vehicles were observed traveling over 60 mph .

Site $D$ is located along a portion of La Honda Road, with few reported collisions. Previous analyses of sight distance (Hexagon 2016, and W-Trans 2020) state that sight distance adjacent to Gate LH07 is
not adequate for the roadway speeds. At the proposed location of the paved driveway, sight distance would be less than recommended for the predominant speed of the roadway. By placing the driveway 50 feet north of Gate LH07, adding a short southbound right-turn lane, and recessing the stop bar, sight distance could be increased so that the recommended stopping sight distance is provided. Intersection sight distance for right-turning vehicles would also match recommendations. However, sight-distance for left-turning vehicles would still be less than recommended.

No turn restrictions are recommended because no alternative location is available for safely making a U-turn. No left-turn pockets or lengthy deceleration and acceleration lanes are recommended because they could entice further illegal passing.

Similar to Site E3, a combination of elements from the MUTCD is recommended to increase sight distance to the exiting driveway and reduce the necessary sight distance by alerting approaching vehicles to slow to the speed limit when vehicles are about to enter the roadway.

## Site B

The project would expand parking at this location near where a parking lot is currently located at the terminus of Sears Ranch Road. Single-lane portions of Sears Ranch Road should be widened to 20 feet due to the likelihood of concurrent inbound and outbound traffic. The predominant speed of vehicles observed on Sears Ranch Road was less than 25 mph .

The additional trips are not anticipated to affect the performance of the SR-84/Sears Ranch Road intersection. Two collisions have been reported in the past 5 years as a result of illegal attempts to pass at this intersection. No left-turn pockets or medians are recommended because they could entice further illegal passing.

Although the project would not result in an operational impact at the intersection of SR-84/Sears Ranch Road, the District and Caltrans could work together to identify pedestrian improvements consistent with public input gathered for the Unincorporated San Mateo County Active Transportation Plan. Specifically, public input had recommended restriping the crosswalk across the north leg of the intersection to a high-visibility ladder style crosswalk and installing pedestrian activated Rectangular Rapid Flashing Beacon (RRFB) signals.

## CONCLUSION

The District is considering three sites for improved public access to the La Honda Creek Open Space Preserve. Two sites (Site E3 and Site D) would take access directly from SR-84, which is owned and maintained by Caltrans. The third site (Site B) is located at the terminus of Sears Ranch Road and is accessed from the intersection of SR-84/Sears Ranch Road. Traffic speeds exceed the posted 40 mph speed limit along this winding road. Traffic volume is below the capacity for a two-lane roadway.

This Access Study estimated the trip generation for each of the sites based on trip rates measured at other District sites and verified against traffic volume data collected at existing Site B. Vehicle LOS was calculated during the a.m. and p.m. peak hours and during the busiest Saturday midday hour. Increased public access to the three sites is not anticipated to degrade vehicle LOS.

This Access Study calculated queuing using Highway Capacity Manual methodology and examined warrants for left-turn pockets based on NCHRP Report 279 (Transportation Research Board 1985). None of the three sites is anticipated to result in a queue formation, and no left-turn pockets are warranted.

Roadway speed and collision history were considered. Based on the observed types of collisions (many of which involve illegal passing), this Access Study does not recommend any feature that could entice additional illegal passing.

Sight distance at the Site E3 and Site D driveways onto SR-84 was examined. At Site E3, adequate sight distance would be provided to allow vehicles approaching on SR-84 and traveling the predominant speed to stop and avoid a collision. Adequate sight distance would be provided for exiting vehicles to choose an appropriate gap in traffic to turn right without causing vehicles on SR-84 to alter their velocity. At Site D, if the driveway were placed 50 feet north of Gate LH07 and the stop bar were recessed from SR-84, adequate sight distance could be provided to allow vehicles approaching on SR-84 and traveling the predominant speed to stop and avoid a collision. Adequate sight distance would be provided for exiting vehicles to choose an appropriate gap in traffic to turn right without causing vehicles on SR-84 to alter their velocity. However, at Site E3 and Site D, sight distance would be less than recommended for exiting vehicles to turn left without causing vehicles on SR-84 to alter their velocity.

No turn restrictions are recommended because no alternative location is available for safely making a U-turn. This Access Study recommends using a combination of elements from the MUTCD to increase the effective sight distance to the Site E3 and Site D driveways and indicate specific periods when vehicles entering the roadway are present. By alerting vehicles on SR-84 to the presence of vehicles entering SR-84, vehicles traveling at excessive speed can slow to the speed limit, which would reduce the sight distance necessary.

No system with human interaction can be completely free from the risk posed by human error. Today SR-84 is a winding road with many driveways and intersections with challenging sight distances. Speed limit signs are posted and the roadway is striped for no passing. Yet speed surveys show many drivers choosing to travel at excessive speed, and collision data and observation show evidence of drivers choosing to illegally pass. The proposed project access to open space areas would not fundamentally change conditions on SR-84. Project traffic would not adversely impact roadway operation, and the roadway would continue to be winding with many driveways and intersections with challenging sight distances. At the project access points, site design could provide sufficient stopping sight distance for bicycles and vehicles traveling the speed limit, and recommended advanced warning signs could alert drivers on SR-84 of the presence of vehicles so that they can slow to the speed limit. By implementing the proposed measures, it is hoped that both the goal of improved public access and the goal of roadway safety could be addressed.

## REFERENCES

American Association of State Highway and Transportation Officials (AASHTO). 2011. A Policy on Geometric Design of Highways and Streets, $6^{\text {th }}$ Edition.

California Department of Transportation (Caltrans). 2002. Guide for the Preparation of Traffic Impact Studies.
$\qquad$ . 2021. California Manual on Uniform Traffic Control Devices 2014, Revision 6.
$\qquad$ . n.d. 2017 Traffic Volumes: Routes 82-86. Website: https://dot.ca.gov/programs/traffic-operations/census/traffic-volumes/2017/route-82-86 (accessed 4/4/22).

City/County Association of Governments. 2021. San Mateo County Congestion Management Program (CMP), Final Report. December.

Counts Unlimited. 2021. Traffic Volume Data.
$\qquad$ . 2023. Traffic Volume Data.

County of San Mateo. 2021. Unincorporated San Mateo County Active Transportation Plan.

Hexagon Transportation Consultants, Inc. 2016. La Honda Creek Open Space Preserve - Red Barn Access Study.

Institute of Transportation Engineers (ITE). 2021. Trip Generation Manual, $11^{\text {th }}$ Edition.

Transportation Research Board. 1985. Intersection Channelization Design Guide, National Cooperative Highway Research Program (NCHRP) Report 279.
$\qquad$ .2016. Highway Capacity Manual, $6^{\text {th }}$ Edition.

W-Trans. 2017. Interim Transportation Circulation Technical Memorandum for the Red Barn Public Access Area in the La Honda Creek Open Space Preserve.
$\qquad$ . 2020. La Honda Creek Open Space Access Analysis.

## APPENDIX A

## TRAFFIC VOLUME DATA

Counts Unlimited, Inc.

County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/03/21 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 01:00 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 02:00 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 03:00 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 9 |
| 05:00 | 0 | 0 | 0 | 1 | 1 | 3 | 4 | 6 | 1 | 2 | 1 | 0 | 0 | 0 | 19 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 5 | 17 | 19 | 13 | 4 | 1 | 0 | 0 | 0 | 59 |
| 07:00 | 3 | 0 | 1 | 2 | 2 | 10 | 49 | 46 | 12 | 4 | 0 | 0 | 0 | 0 | 129 |
| 08:00 | 2 | 0 | 0 | 0 | 3 | 9 | 32 | 26 | 9 | 1 | 0 | 0 | 0 | 0 | 82 |
| 09:00 | 2 | 0 | 1 | 0 | 3 | 8 | 24 | 11 | 5 | 1 | 0 | 0 | 0 | 0 | 55 |
| 10:00 | 9 | 0 | 0 | 1 | 3 | 9 | 24 | 13 | 6 | 2 | 0 | 0 | 0 | 0 | 67 |
| 11:00 | 3 | 0 | 0 | 2 | 2 | 9 | 17 | 10 | 4 | 2 | 0 | 0 | 0 | 0 | 49 |
| 12 PM | 2 | 0 | 0 | 0 | 6 | 13 | 28 | 11 | 2 | 1 | 0 | 0 | 0 | 0 | 63 |
| 13:00 | 7 | 0 | 1 | 1 | 4 | 5 | 17 | 16 | 4 | 4 | 0 | 1 | 0 | 0 | 60 |
| 14:00 | 5 | 0 | 0 | 1 | 1 | 10 | 16 | 16 | 12 | 6 | 2 | 0 | 0 | 0 | 69 |
| 15:00 | 6 | 0 | 0 | 4 | 5 | 11 | 22 | 32 | 14 | 1 | 0 | 0 | 0 | 0 | 95 |
| 16:00 | 2 | 0 | 0 | 1 | 1 | 10 | 16 | 22 | 9 | 1 | 2 | 0 | 0 | 0 | 64 |
| 17:00 | 0 | 2 | 0 | 1 | 3 | 7 | 13 | 18 | 9 | 6 | 0 | 0 | 0 | 0 | 59 |
| 18:00 | 1 | 0 | 0 | 2 | 2 | 16 | 15 | 16 | 5 | 0 | 0 | 0 | 0 | 0 | 57 |
| 19:00 | 2 | 0 | 0 | 0 | 0 | 3 | 9 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 22 |
| 20:00 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| 21:00 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 12 |
| 22:00 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 47 | 2 | 4 | 16 | 39 | 132 | 312 | 279 | 110 | 39 | 6 | 1 | 0 | 0 | 987 |



Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/04/21 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 1 | 0 | 0 | 1 | 1 | 3 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 14 |
| 05:00 | 3 | 0 | 0 | 0 | 1 | 4 | 3 | 11 | 2 | 4 | 0 | 0 | 0 | 0 | 28 |
| 06:00 | 1 | 0 | 0 | 0 | 1 | 5 | 15 | 15 | 13 | 5 | 4 | 3 | 0 | 0 | 62 |
| 07:00 | 0 | 1 | 0 | 0 | 1 | 14 | 38 | 28 | 16 | 1 | 0 | 0 | 0 | 0 | 99 |
| 08:00 | 0 | 1 | 0 | 1 | 2 | 10 | 28 | 21 | 14 | 2 | 0 | 0 | 0 | 0 | 79 |
| 09:00 | 3 | 1 | 1 | 1 | 3 | 14 | 24 | 15 | 9 | 2 | 0 | 0 | 0 | 0 | 73 |
| 10:00 | 2 | 0 | 1 | 0 | 1 | 1 | 1 | 10 | 18 | 15 | 4 | 0 | 0 | 0 | 53 |
| 11:00 | 5 | 0 | 0 | 0 | 3 | 2 | 13 | 13 | 17 | 6 | 3 | 0 | 0 | 0 | 62 |
| 12 PM | 3 | 1 | 1 | 0 | 0 | 2 | 12 | 7 | 16 | 10 | 1 | 1 | 0 | 0 | 54 |
| 13:00 | 3 | 2 | 1 | 0 | 0 | 0 | 14 | 16 | 12 | 14 | 3 | 4 | 0 | 0 | 69 |
| 14:00 | 4 | 1 | 1 | 2 | 4 | 7 | 14 | 7 | 4 | 3 | 6 | 1 | 1 | 0 | 55 |
| 15:00 | 2 | 1 | 0 | 4 | 7 | 19 | 25 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 70 |
| 16:00 | 1 | 0 | 0 | 1 | 8 | 29 | 27 | 10 | 4 | 1 | 1 | 0 | 0 | 0 | 82 |
| 17:00 | 0 | 0 | 1 | 1 | 7 | 7 | 19 | 7 | 3 | 2 | 0 | 0 | 0 | 0 | 47 |
| 18:00 | 1 | 0 | 0 | 1 | 5 | 15 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| 19:00 | 0 | 0 | 0 | 0 | 3 | 2 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 18 |
| 20:00 | 0 | 1 | 0 | 0 | 5 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 21:00 | 1 | 0 | 0 | 0 | 2 | 7 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 13 |
| 22:00 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 30 | 9 | 6 | 13 | 57 | 151 | 270 | 181 | 135 | 66 | 22 | 9 | 1 | 0 | 950 |


| Daily | 15th Percentile : | 35 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 43 MPH |
|  | 85th Percentile : | 53 MPH |
| Statistics | 95th Percentile : | 58 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 44 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 451 |
| Percent in Pace : | $47.5 \%$ |  |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 98 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $10.3 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/05/21 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 23 |
| 06:00 | 0 | 0 | 0 | 1 | 0 | 9 | 16 | 22 | 12 | 3 | 0 | 0 | 0 | 0 | 63 |
| 07:00 | 0 | 0 | 0 | 1 | 1 | 17 | 44 | 25 | 7 | 1 | 0 | 0 | 0 | 0 | 96 |
| 08:00 | 0 | 0 | 0 | 0 | 4 | 18 | 30 | 20 | 11 | 0 | 0 | 0 | 0 | 0 | 83 |
| 09:00 | 1 | 0 | 0 | 0 | 6 | 17 | 19 | 12 | 4 | 1 | 0 | 0 | 0 | 0 | 60 |
| 10:00 | 0 | 0 | 0 | 0 | 5 | 11 | 21 | 12 | 5 | 1 | 1 | 0 | 0 | 0 | 56 |
| 11:00 | 0 | 0 | 0 | 0 | 5 | 7 | 23 | 19 | 3 | 0 | 1 | 0 | 0 | 0 | 58 |
| 12 PM | 0 | 0 | 0 | 2 | 9 | 26 | 15 | 17 | 3 | 0 | 0 | 0 | 0 | 0 | 72 |
| 13:00 | 0 | 0 | 1 | 1 | 5 | 10 | 28 | 10 | 7 | 3 | 0 | 1 | 0 | 0 | 66 |
| 14:00 | 2 | 0 | 1 | 0 | 1 | 15 | 27 | 11 | 5 | 2 | 1 | 0 | 0 | 0 | 65 |
| 15:00 | 1 | 0 | 0 | 1 | 5 | 21 | 47 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 85 |
| 16:00 | 4 | 0 | 1 | 5 | 9 | 26 | 18 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 68 |
| 17:00 | 4 | 1 | 0 | 3 | 3 | 20 | 26 | 11 | 5 | 0 | 0 | 0 | 0 | 0 | 73 |
| 18:00 | 1 | 0 | 0 | 1 | 7 | 20 | 19 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| 19:00 | 0 | 0 | 0 | 1 | 2 | 7 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 13 |
| 21:00 | 0 | 0 | 0 | 1 | 0 | 5 | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 11 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 23:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 13 | 1 | 3 | 18 | 63 | 241 | 362 | 205 | 69 | 17 | 4 | 1 | 0 | 0 | 997 |


| Daily | 15th Percentile : | 36 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 48 MPH |
| Statistics | 95th Percentile : | 52 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 42 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 603 |
| Percent in Pace : | $60.5 \%$ |  |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 22 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $2.2 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound


Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/03/21 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 01:00 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 02:00 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 03:00 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 04:00 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 07:00 | 1 | 0 | 0 | 0 | 1 | 7 | 7 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 28 |
| 08:00 | 1 | 0 | 0 | 0 | 4 | 7 | 18 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 40 |
| 09:00 | 7 | 0 | 0 | 1 | 4 | 6 | 22 | 7 | 5 | 1 | 0 | 0 | 0 | 0 | 53 |
| 10:00 | 19 | 0 | 1 | 5 | 6 | 12 | 21 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 73 |
| 11:00 | 3 | 0 | 0 | 2 | 10 | 24 | 18 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 63 |
| 12 PM | 3 | 0 | 1 | 3 | 6 | 17 | 16 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 58 |
| 13:00 | 9 | 0 | 0 | 2 | 4 | 12 | 22 | 20 | 4 | 1 | 0 | 0 | 0 | 0 | 74 |
| 14:00 | 0 | 0 | 1 | 2 | 1 | 22 | 39 | 28 | 2 | 0 | 1 | 0 | 1 | 0 | 97 |
| 15:00 | 2 | 0 | 0 | 1 | 3 | 2 | 30 | 43 | 7 | 4 | 1 | 1 | 0 | 0 | 94 |
| 16:00 | 0 | 0 | 0 | 0 | 3 | 13 | 62 | 37 | 10 | 0 | 0 | 0 | 0 | 0 | 125 |
| 17:00 | 2 | 0 | 0 | 0 | 0 | 4 | 38 | 57 | 18 | 0 | 3 | 0 | 0 | 0 | 122 |
| 18:00 | 1 | 0 | 0 | 1 | 2 | 9 | 27 | 37 | 1 | 2 | 2 | 0 | 0 | 0 | 82 |
| 19:00 | 1 | 0 | 0 | 2 | 1 | 3 | 20 | 17 | 8 | 1 | 0 | 0 | 0 | 0 | 53 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 14 | 6 | 1 | 0 | 0 | 0 | 0 | 35 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 3 | 6 | 1 | 0 | 1 | 0 | 0 | 21 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 9 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total | 55 | 0 | 4 | 19 | 46 | 144 | 375 | 308 | 80 | 13 | 7 | 2 | 1 | 0 | 1054 |


| Daily | 15th Percentile : | 36 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 43 MPH |
|  | 85th Percentile : | 49 MPH |
| Statistics | 95th Percentile : | 53 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 42 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 683 |
| Percent in Pace : | $64.8 \%$ |  |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 23 |
| Percent of Vehicles $>55 \mathrm{MPH}:$ | $2.2 \%$ |  |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/04/21 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 8 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:00 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 06:00 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 11 |
| 07:00 | 0 | 0 | 0 | 0 | 1 | 5 | 9 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 08:00 | 4 | 0 | 0 | 0 | 1 | 6 | 17 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 39 |
| 09:00 | 2 | 0 | 0 | 1 | 0 | 3 | 10 | 9 | 3 | 6 | 0 | 1 | 0 | 0 | 35 |
| 10:00 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 9 | 6 | 9 | 10 | 4 | 0 | 0 | 45 |
| 11:00 | 2 | 0 | 0 | 0 | 1 | 0 | 2 | 4 | 7 | 7 | 8 | 6 | 0 | 0 | 37 |
| 12 PM | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 8 | 14 | 16 | 11 | 3 | 0 | 1 | 58 |
| 13:00 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 9 | 17 | 15 | 6 | 0 | 2 | 59 |
| 14:00 | 12 | 0 | 0 | 2 | 4 | 19 | 10 | 8 | 16 | 7 | 3 | 2 | 2 | 4 | 89 |
| 15:00 | 0 | 1 | 0 | 0 | 9 | 12 | 31 | 25 | 8 | 2 | 1 | 0 | 0 | 0 | 89 |
| 16:00 | 2 | 1 | 0 | 0 | 2 | 24 | 64 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 126 |
| 17:00 | 0 | 0 | 0 | 0 | 2 | 23 | 36 | 35 | 7 | 0 | 0 | 0 | 0 | 0 | 103 |
| 18:00 | 0 | 1 | 0 | 1 | 1 | 6 | 42 | 20 | 2 | 1 | 0 | 0 | 0 | 0 | 74 |
| 19:00 | 0 | 0 | 0 | 0 | 4 | 9 | 23 | 11 | 8 | 1 | 1 | 0 | 0 | 0 | 57 |
| 20:00 | 0 | 0 | 0 | 0 | 2 | 7 | 13 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 32 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 11 | 1 | 0 | 3 | 1 | 0 | 0 | 29 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 19 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 4 | 1 | 0 | 2 | 0 | 0 | 0 | 12 |
| Total | 25 | 3 | 0 | 4 | 27 | 130 | 298 | 225 | 90 | 68 | 54 | 23 | 2 | 7 | 956 |


| Daily | 15th Percentile : | 38 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 44 MPH |
|  | 85th Percentile : | 55 MPH |
| Statistics | 95th Percentile : | 62 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 46 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 523 |
|  | Percent in Pace : | $54.7 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 154 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $16.1 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/05/21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 4 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 11 |
| 07:00 | 0 | 0 | 1 | 0 | 2 | 3 | 10 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 23 |
| 08:00 | 1 | 0 | 0 | 0 | 2 | 5 | 19 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 37 |
| 09:00 | 2 | 0 | 0 | 0 | 3 | 5 | 10 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 35 |
| 10:00 | 0 | 0 | 0 | 2 | 4 | 16 | 24 | 14 | 3 | 0 | 2 | 0 | 0 | 0 | 65 |
| 11:00 | 0 | 0 | 0 | 0 | 2 | 14 | 26 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 57 |
| 12 PM | 1 | 0 | 0 | 1 | 2 | 11 | 36 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 63 |
| 13:00 | 2 | 1 | 0 | 1 | 2 | 19 | 34 | 18 | 4 | 0 | 0 | 1 | 0 | 0 | 82 |
| 14:00 | 4 | 0 | 1 | 0 | 1 | 28 | 26 | 17 | 8 | 0 | 0 | 0 | 0 | 0 | 85 |
| 15:00 | 0 | 0 | 0 | 0 | 3 | 24 | 28 | 31 | 8 | 0 | 0 | 0 | 0 | 0 | 94 |
| 16:00 | 2 | 0 | 0 | 2 | 0 | 20 | 58 | 27 | 5 | 0 | 0 | 0 | 0 | 0 | 114 |
| 17:00 | 2 | 0 | 0 | 0 | 3 | 8 | 69 | 30 | 9 | 0 | 0 | 0 | 0 | 0 | 121 |
| 18:00 | 1 | 0 | 0 | 0 | 0 | 14 | 30 | 31 | 3 | 0 | 0 | 0 | 0 | 0 | 79 |
| 19:00 | 2 | 0 | 0 | 0 | 3 | 23 | 25 | 12 | 7 | 1 | 1 | 1 | 0 | 0 | 75 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 7 | 17 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 38 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 8 | 14 | 9 | 2 | 1 | 2 | 0 | 0 | 0 | 36 |
| 22:00 | 1 | 0 | 0 | 0 | 1 | 5 | 12 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 28 |
| 23:00 | 3 | 0 | 0 | 0 | 1 | 2 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 16 |
| Total | 21 | 1 | 2 | 6 | 30 | 216 | 450 | 262 | 76 | 5 | 5 | 2 | 0 | 0 | 1076 |


| Daily | 15th Percentile : | 37 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 48 MPH |
| Statistics | 95th Percentile : | 52 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 43 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 712 |
| Percent in Pace : | $66.2 \%$ |  |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 12 |
| Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.1 \%$ |  |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/06/21 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:00 | 0 | 0 | 0 | 0 | 2 | 3 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 07:00 | 1 | 0 | 0 | 1 | 2 | 2 | 6 | 4 | 1 | 2 | 0 | 0 | 0 | 0 | 19 |
| 08:00 | 4 | 0 | 0 | 0 | 3 | 13 | 23 | 13 | 1 | 0 | 1 | 0 | 0 | 0 | 58 |
| 09:00 | 16 | 0 | 0 | 0 | 5 | 7 | 33 | 14 | 6 | 1 | 0 | 0 | 0 | 0 | 82 |
| 10:00 | 21 | 0 | 1 | 3 | 17 | 20 | 69 | 19 | 7 | 4 | 0 | 0 | 0 | 0 | 161 |
| 11:00 | 15 | 0 | 0 | 4 | 15 | 35 | 45 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 124 |
| 12 PM | 15 | 0 | 0 | 1 | 17 | 40 | 78 | 17 | 8 | 2 | 1 | 0 | 1 | 1 | 181 |
| 13:00 | 3 | 0 | 0 | 3 | 10 | 55 | 46 | 27 | 9 | 2 | 0 | 0 | 0 | 0 | 155 |
| 14:00 | 4 | 0 | 1 | 0 | 8 | 29 | 57 | 34 | 10 | 1 | 2 | 0 | 0 | 0 | 146 |
| 15:00 | 2 | 0 | 0 | 1 | 7 | 22 | 46 | 30 | 5 | 0 | 1 | 1 | 1 | 0 | 116 |
| 16:00 | 1 | 0 | 0 | 0 | 8 | 19 | 31 | 17 | 8 | 0 | 1 | 0 | 0 | 0 | 85 |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 8 | 20 | 21 | 8 | 0 | 1 | 0 | 0 | 0 | 58 |
| 18:00 | 0 | 0 | 1 | 0 | 0 | 5 | 14 | 18 | 12 | 4 | 2 | 0 | 0 | 0 | 56 |
| 19:00 | 0 | 0 | 0 | 0 | 0 | 10 | 13 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 36 |
| 20:00 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 8 | 1 | 3 | 0 | 0 | 0 | 0 | 21 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 16 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 6 | 8 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 22 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 9 |
| Total | 82 | 0 | 3 | 14 | 95 | 282 | 512 | 263 | 83 | 20 | 11 | 2 | 2 | 1 | 1370 |


| Daily | 15th Percentile : | 35 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 48 MPH |
| Statistics | 95th Percentile : | 52 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 41 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 794 |
|  | Percent in Pace : | $58.0 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 36 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $2.6 \%$ |

Counts Unlimited, Inc.

County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/03/21 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 01:00 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 02:00 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 03:00 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 04:00 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 10 |
| 05:00 | 0 | 0 | 0 | 1 | 2 | 3 | 6 | 7 | 1 | 2 | 1 | 0 | 0 | 0 | 23 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 6 | 24 | 21 | 13 | 4 | 1 | 0 | 0 | 0 | 69 |
| 07:00 | 4 | 0 | 1 | 2 | 3 | 17 | 56 | 55 | 15 | 4 | 0 | 0 | 0 | 0 | 157 |
| 08:00 | 3 | 0 | 0 | 0 | 7 | 16 | 50 | 34 | 11 | 1 | 0 | 0 | 0 | 0 | 122 |
| 09:00 | 9 | 0 | 1 | 1 | 7 | 14 | 46 | 18 | 10 | 2 | 0 | 0 | 0 | 0 | 108 |
| 10:00 | 28 | 0 | 1 | 6 | 9 | 21 | 45 | 19 | 8 | 3 | 0 | 0 | 0 | 0 | 140 |
| 11:00 | 6 | 0 | 0 | 4 | 12 | 33 | 35 | 16 | 4 | 2 | 0 | 0 | 0 | 0 | 112 |
| 12 PM | 5 | 0 | 1 | 3 | 12 | 30 | 44 | 21 | 4 | 1 | 0 | 0 | 0 | 0 | 121 |
| 13:00 | 16 | 0 | 1 | 3 | 8 | 17 | 39 | 36 | 8 | 5 | 0 | 1 | 0 | 0 | 134 |
| 14:00 | 5 | 0 | 1 | 3 | 2 | 32 | 55 | 44 | 14 | 6 | 3 | 0 | 1 | 0 | 166 |
| 15:00 | 8 | 0 | 0 | 5 | 8 | 13 | 52 | 75 | 21 | 5 | 1 | 1 | 0 | 0 | 189 |
| 16:00 | 2 | 0 | 0 | 1 | 4 | 23 | 78 | 59 | 19 | 1 | 2 | 0 | 0 | 0 | 189 |
| 17:00 | 2 | 2 | 0 | 1 | 3 | 11 | 51 | 75 | 27 | 6 | 3 | 0 | 0 | 0 | 181 |
| 18:00 | 2 | 0 | 0 | 3 | 4 | 25 | 42 | 53 | 6 | 2 | 2 | 0 | 0 | 0 | 139 |
| 19:00 | 3 | 0 | 0 | 2 | 1 | 6 | 29 | 23 | 9 | 2 | 0 | 0 | 0 | 0 | 75 |
| 20:00 | 0 | 0 | 1 | 0 | 0 | 2 | 13 | 17 | 7 | 1 | 0 | 0 | 0 | 0 | 41 |
| 21:00 | 0 | 0 | 0 | 0 | 2 | 4 | 10 | 6 | 8 | 2 | 0 | 1 | 0 | 0 | 33 |
| 22:00 | 0 | 0 | 0 | 0 | 1 | 1 | 8 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 16 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 7 |
| Total | 102 | 2 | 8 | 35 | 85 | 276 | 687 | 587 | 190 | 52 | 13 | 3 | 1 | 0 | 2041 |


| Daily | 15th Percentile : | 36 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 43 MPH |
|  | 85th Percentile : | 49 MPH |
| Statistics | 95th Percentile : | 54 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 43 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 1274 |
|  | Percent in Pace : | $62.4 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 69 |
| Percent of Vehicles $>55 \mathrm{MPH}:$ | $3.4 \%$ |  |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/04/21 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 14 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 1 | 0 | 0 | 1 | 1 | 3 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 14 |
| 05:00 | 4 | 0 | 0 | 0 | 1 | 4 | 6 | 11 | 2 | 4 | 0 | 0 | 0 | 0 | 32 |
| 06:00 | 2 | 0 | 0 | 0 | 1 | 7 | 18 | 19 | 14 | 5 | 4 | 3 | 0 | 0 | 73 |
| 07:00 | 0 | 1 | 0 | 0 | 2 | 19 | 47 | 40 | 16 | 1 | 0 | 0 | 0 | 0 | 126 |
| 08:00 | 4 | 1 | 0 | 1 | 3 | 16 | 45 | 31 | 14 | 3 | 0 | 0 | 0 | 0 | 118 |
| 09:00 | 5 | 1 | 1 | 2 | 3 | 17 | 34 | 24 | 12 | 8 | 0 | 1 | 0 | 0 | 108 |
| 10:00 | 2 | 0 | 1 | 0 | 1 | 3 | 6 | 19 | 24 | 24 | 14 | 4 | 0 | 0 | 98 |
| 11:00 | 7 | 0 | 0 | 0 | 4 | 2 | 15 | 17 | 24 | 13 | 11 | 6 | 0 | 0 | 99 |
| 12 PM | 3 | 1 | 1 | 0 | 0 | 4 | 15 | 15 | 30 | 26 | 12 | 4 | 0 | 1 | 112 |
| 13:00 | 4 | 2 | 1 | 0 | 0 | 0 | 18 | 21 | 21 | 31 | 18 | 10 | 0 | 2 | 128 |
| 14:00 | 16 | 1 | 1 | 4 | 8 | 26 | 24 | 15 | 20 | 10 | 9 | 3 | 3 | 4 | 144 |
| 15:00 | 2 | 2 | 0 | 4 | 16 | 31 | 56 | 35 | 10 | 2 | 1 | 0 | 0 | 0 | 159 |
| 16:00 | 3 | 1 | 0 | 1 | 10 | 53 | 91 | 40 | 7 | 1 | 1 | 0 | 0 | 0 | 208 |
| 17:00 | 0 | 0 | 1 | 1 | 9 | 30 | 55 | 42 | 10 | 2 | 0 | 0 | 0 | 0 | 150 |
| 18:00 | 1 | 1 | 0 | 2 | 6 | 21 | 56 | 23 | 2 | 1 | 0 | 0 | 0 | 0 | 113 |
| 19:00 | 0 | 0 | 0 | 0 | 7 | 11 | 31 | 15 | 9 | 1 | 1 | 0 | 0 | 0 | 75 |
| 20:00 | 0 | 1 | 0 | 0 | 7 | 11 | 17 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 47 |
| 21:00 | 1 | 0 | 0 | 0 | 2 | 10 | 11 | 11 | 3 | 0 | 3 | 1 | 0 | 0 | 42 |
| 22:00 | 0 | 0 | 0 | 1 | 2 | 5 | 6 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 25 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 4 | 1 | 0 | 2 | 0 | 0 | 0 | 14 |
| Total | 55 | 12 | 6 | 17 | 84 | 281 | 568 | 406 | 225 | 134 | 76 | 32 | 3 | 7 | 1906 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 44 MPH |
| 85th Percentile : | 54 MPH |  |
| Statistics | 95th Percentile : | 61 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 45 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 974 |
|  | Percent in Pace : | $51.1 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 252 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $13.2 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/05/21 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 6 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 10 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 4 | 9 | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 26 |
| 06:00 | 0 | 0 | 0 | 1 | 0 | 12 | 20 | 24 | 14 | 3 | 0 | 0 | 0 | 0 | 74 |
| 07:00 | 0 | 0 | 1 | 1 | 3 | 20 | 54 | 31 | 8 | 1 | 0 | 0 | 0 | 0 | 119 |
| 08:00 | 1 | 0 | 0 | 0 | 6 | 23 | 49 | 28 | 13 | 0 | 0 | 0 | 0 | 0 | 120 |
| 09:00 | 3 | 0 | 0 | 0 | 9 | 22 | 29 | 23 | 7 | 2 | 0 | 0 | 0 | 0 | 95 |
| 10:00 | 0 | 0 | 0 | 2 | 9 | 27 | 45 | 26 | 8 | 1 | 3 | 0 | 0 | 0 | 121 |
| 11:00 | 0 | 0 | 0 | 0 | 7 | 21 | 49 | 29 | 8 | 0 | 1 | 0 | 0 | 0 | 115 |
| 12 PM | 1 | 0 | 0 | 3 | 11 | 37 | 51 | 24 | 8 | 0 | 0 | 0 | 0 | 0 | 135 |
| 13:00 | 2 | 1 | 1 | 2 | 7 | 29 | 62 | 28 | 11 | 3 | 0 | 2 | 0 | 0 | 148 |
| 14:00 | 6 | 0 | 2 | 0 | 2 | 43 | 53 | 28 | 13 | 2 | 1 | 0 | 0 | 0 | 150 |
| 15:00 | 1 | 0 | 0 | 1 | 8 | 45 | 75 | 39 | 10 | 0 | 0 | 0 | 0 | 0 | 179 |
| 16:00 | 6 | 0 | 1 | 7 | 9 | 46 | 76 | 31 | 6 | 0 | 0 | 0 | 0 | 0 | 182 |
| 17:00 | 6 | 1 | 0 | 3 | 6 | 28 | 95 | 41 | 14 | 0 | 0 | 0 | 0 | 0 | 194 |
| 18:00 | 2 | 0 | 0 | 1 | 7 | 34 | 49 | 45 | 3 | 0 | 0 | 0 | 0 | 0 | 141 |
| 19:00 | 2 | 0 | 0 | 1 | 5 | 30 | 33 | 16 | 7 | 1 | 1 | 1 | 0 | 0 | 97 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 10 | 22 | 14 | 1 | 3 | 1 | 0 | 0 | 0 | 51 |
| 21:00 | 0 | 0 | 0 | 1 | 0 | 13 | 16 | 9 | 3 | 3 | 2 | 0 | 0 | 0 | 47 |
| 22:00 | 1 | 0 | 0 | 0 | 1 | 6 | 13 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 32 |
| 23:00 | 3 | 0 | 0 | 1 | 1 | 2 | 4 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 18 |
| Total | 34 | 2 | 5 | 24 | 93 | 457 | 812 | 467 | 145 | 22 | 9 | 3 | 0 | 0 | 2073 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
| 85th Percentile : | 48 MPH |  |
| Statistics | 95th Percentile : | 52 MPH |
|  | Mean Speed(Average) : | 43 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 1279 |
|  | Percent in Pace : | $61.7 \%$ |
|  | Number of Vehicles >55 MPH : | 34 |
|  | Percent of Vehicles >55 MPH : | $1.6 \%$ |

Counts Unlimited, Inc.
Page 12
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/06/21 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 6 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 02:00 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 1 | 0 | 0 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 9 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 06:00 | 0 | 0 | 0 | 1 | 2 | 6 | 9 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 30 |
| 07:00 | 1 | 0 | 1 | 2 | 6 | 11 | 15 | 11 | 4 | 4 | 0 | 0 | 0 | 0 | 55 |
| 08:00 | 7 | 0 | 0 | 1 | 4 | 24 | 43 | 27 | 6 | 2 | 1 | 0 | 0 | 0 | 115 |
| 09:00 | 21 | 0 | 0 | 0 | 18 | 19 | 56 | 23 | 10 | 2 | 0 | 0 | 0 | 0 | 149 |
| 10:00 | 27 | 0 | 1 | 5 | 26 | 27 | 91 | 36 | 15 | 4 | 1 | 0 | 0 | 0 | 233 |
| 11:00 | 21 | 0 | 0 | 7 | 22 | 55 | 75 | 15 | 8 | 0 | 0 | 0 | 0 | 0 | 203 |
| 12 PM | 21 | 1 | 0 | 2 | 23 | 60 | 104 | 29 | 11 | 4 | 1 | 0 | 1 | 1 | 258 |
| 13:00 | 3 | 0 | 0 | 4 | 25 | 72 | 71 | 40 | 14 | 2 | 1 | 1 | 0 | 0 | 233 |
| 14:00 | 6 | 0 | 1 | 2 | 18 | 78 | 86 | 51 | 14 | 1 | 2 | 0 | 0 | 0 | 259 |
| 15:00 | 5 | 0 | 0 | 6 | 21 | 63 | 82 | 48 | 15 | 7 | 4 | 2 | 1 | 0 | 254 |
| 16:00 | 1 | 0 | 0 | 2 | 32 | 64 | 75 | 31 | 10 | 2 | 1 | 0 | 0 | 0 | 218 |
| 17:00 | 3 | 0 | 1 | 1 | 9 | 46 | 64 | 32 | 14 | 0 | 1 | 1 | 0 | 0 | 172 |
| 18:00 | 1 | 0 | 1 | 1 | 9 | 30 | 28 | 23 | 16 | 6 | 2 | 0 | 0 | 0 | 117 |
| 19:00 | 0 | 0 | 0 | 1 | 5 | 32 | 21 | 11 | 5 | 1 | 0 | 0 | 0 | 0 | 76 |
| 20:00 | 0 | 0 | 0 | 4 | 7 | 6 | 11 | 9 | 3 | 4 | 1 | 0 | 0 | 0 | 45 |
| 21:00 | 0 | 0 | 0 | 0 | 2 | 5 | 12 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 28 |
| 22:00 | 0 | 0 | 2 | 1 | 1 | 12 | 14 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 40 |
| 23:00 | 0 | 0 | 0 | 1 | 0 | 4 | 4 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 13 |
| Total | 118 | 1 | 7 | 44 | 235 | 619 | 869 | 422 | 150 | 40 | 18 | 5 | 2 | 1 | 2531 |


| Daily | 15th Percentile : | 34 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 41 MPH |
|  | 85th Percentile : | 48 MPH |
| Statistics | 95th Percentile : | 52 MPH |
|  | Mean Speed(Average) : | 41 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 1488 |
|  | Percent in Pace : | $58.8 \%$ |
|  | Number of Vehicles >55 MPH : | 66 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $2.6 \%$ |

Counts Unlimited, Inc.
Page 1
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound


| Daily | 15th Percentile : | 34 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 39 MPH |
| Statistics | 95th Percentile : | 45 MPH |
|  | 95th Percentile : | 50 MPH |
|  | Mean Speed(Average) : | 40 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 677 |
|  | Percent in Pace : | $68.7 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 12 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.2 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound


Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/05/21 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 6 | 14 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 06:00 | 0 | 0 | 0 | 1 | 3 | 11 | 15 | 21 | 9 | 2 | 0 | 0 | 0 | 0 | 62 |
| 07:00 | 0 | 0 | 0 | 2 | 5 | 31 | 42 | 15 | 6 | 0 | 0 | 0 | 0 | 0 | 101 |
| 08:00 | 1 | 0 | 0 | 0 | 4 | 27 | 39 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 81 |
| 09:00 | 0 | 1 | 0 | 0 | 1 | 26 | 22 | 10 | 4 | 0 | 0 | 0 | 0 | 1 | 65 |
| 10:00 | 0 | 0 | 0 | 4 | 4 | 12 | 22 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 58 |
| 11:00 | 0 | 0 | 0 | 0 | 5 | 18 | 23 | 10 | 1 | 0 | 0 | 0 | 1 | 0 | 58 |
| 12 PM | 0 | 1 | 0 | 6 | 11 | 25 | 22 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 74 |
| 13:00 | 2 | 0 | 0 | 3 | 3 | 27 | 23 | 8 | 2 | 2 | 1 | 0 | 0 | 0 | 71 |
| 14:00 | 0 | 0 | 0 | 0 | 5 | 24 | 19 | 9 | 4 | 1 | 1 | 0 | 0 | 0 | 63 |
| 15:00 | 1 | 0 | 0 | 5 | 10 | 34 | 27 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 84 |
| 16:00 | 1 | 1 | 0 | 1 | 8 | 28 | 20 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 63 |
| 17:00 | 3 | 0 | 0 | 4 | 8 | 20 | 25 | 12 | 2 | 1 | 0 | 0 | 0 | 0 | 75 |
| 18:00 | 1 | 0 | 0 | 1 | 12 | 20 | 18 | 5 | 2 | 1 | 1 | 0 | 0 | 0 | 61 |
| 19:00 | 1 | 0 | 0 | 1 | 3 | 10 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 12 |
| 21:00 | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 10 |
| 22:00 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 10 | 4 | 0 | 29 | 87 | 334 | 347 | 136 | 42 | 11 | 4 | 1 | 2 | 1 | 1008 |


| Daily | 15th Percentile : | 35 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 40 MPH |
|  | 85th Percentile : | 46 MPH |
| Statistics | 95th Percentile : | 51 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 41 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 681 |
|  | Percent in Pace : | $67.6 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 19 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.9 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound


Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/03/21 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 01:00 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 02:00 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 06:00 | 0 | 0 | 0 | 0 | 2 | 1 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 07:00 | 0 | 1 | 0 | 0 | 1 | 8 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 08:00 | 1 | 0 | 0 | 1 | 4 | 17 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| 09:00 | 3 | 5 | 0 | 3 | 8 | 5 | 23 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 52 |
| 10:00 | 1 | 0 | 15 | 15 | 9 | 22 | 10 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 79 |
| 11:00 | 2 | 1 | 0 | 4 | 4 | 28 | 20 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 65 |
| 12 PM | 0 | 0 | 4 | 4 | 6 | 22 | 13 | 7 | 1 | 2 | 1 | 0 | 0 | 0 | 60 |
| 13:00 | 1 | 1 | 1 | 0 | 3 | 18 | 29 | 9 | 5 | 2 | 0 | 0 | 0 | 0 | 69 |
| 14:00 | 2 | 3 | 1 | 0 | 7 | 24 | 43 | 17 | 1 | 1 | 1 | 1 | 0 | 0 | 101 |
| 15:00 | 1 | 0 | 1 | 0 | 4 | 19 | 37 | 23 | 7 | 1 | 5 | 0 | 0 | 0 | 98 |
| 16:00 | 3 | 0 | 1 | 0 | 6 | 37 | 62 | 20 | 3 | 0 | 0 | 0 | 0 | 0 | 132 |
| 17:00 | 1 | 0 | 2 | 0 | 4 | 27 | 52 | 28 | 8 | 1 | 0 | 1 | 0 | 0 | 124 |
| 18:00 | 2 | 1 | 0 | 1 | 9 | 24 | 37 | 8 | 2 | 2 | 1 | 0 | 0 | 0 | 87 |
| 19:00 | 2 | 0 | 0 | 0 | 0 | 18 | 23 | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 55 |
| 20:00 | 1 | 0 | 1 | 1 | 1 | 7 | 20 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 38 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 3 | 5 | 6 | 3 | 0 | 1 | 0 | 0 | 0 | 19 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| Total | 22 | 12 | 26 | 29 | 70 | 289 | 407 | 159 | 42 | 12 | 9 | 3 | 0 | 0 | 1080 |


| Daily | 15th Percentile : | 35 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 41 MPH |
|  | 85th Percentile : | 46 MPH |
| Statistics | 95th Percentile : | 51 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 41 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 696 |
|  | Percent in Pace : | $64.4 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 24 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $2.2 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound


Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound


Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/06/21 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 06:00 | 0 | 0 | 0 | 1 | 1 | 5 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 18 |
| 07:00 | 1 | 1 | 0 | 2 | 2 | 5 | 7 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 21 |
| 08:00 | 1 | 0 | 1 | 2 | 4 | 23 | 19 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 58 |
| 09:00 | 3 | 0 | 11 | 11 | 13 | 15 | 28 | 13 | 2 | 1 | 0 | 0 | 0 | 0 | 97 |
| 10:00 | 0 | 3 | 21 | 23 | 17 | 40 | 33 | 21 | 6 | 5 | 3 | 1 | 1 | 0 | 174 |
| 11:00 | 1 | 1 | 6 | 24 | 18 | 48 | 20 | 5 | 1 | 0 | 0 | 1 | 0 | 0 | 125 |
| 12 PM | 2 | 0 | 4 | 18 | 30 | 61 | 39 | 14 | 2 | 3 | 1 | 1 | 1 | 1 | 177 |
| 13:00 | 8 | 1 | 0 | 8 | 11 | 59 | 39 | 15 | 4 | 6 | 1 | 0 | 1 | 0 | 153 |
| 14:00 | 5 | 1 | 2 | 5 | 11 | 36 | 65 | 15 | 6 | 4 | 1 | 2 | 0 | 1 | 154 |
| 15:00 | 2 | 0 | 4 | 2 | 4 | 22 | 54 | 23 | 4 | 2 | 2 | 0 | 1 | 0 | 120 |
| 16:00 | 3 | 0 | 0 | 3 | 5 | 29 | 33 | 4 | 1 | 2 | 1 | 2 | 0 | 0 | 83 |
| 17:00 | 2 | 1 | 0 | 0 | 4 | 11 | 21 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 57 |
| 18:00 | 0 | 0 | 0 | 0 | 1 | 18 | 13 | 17 | 5 | 1 | 2 | 0 | 1 | 0 | 58 |
| 19:00 | 0 | 0 | 1 | 0 | 2 | 16 | 10 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 38 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 2 | 0 | 0 | 3 | 1 | 0 | 0 | 20 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 1 | 12 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 17 |
| 22:00 | 0 | 0 | 0 | 0 | 1 | 5 | 9 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 21 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 9 |
| Total | 28 | 8 | 50 | 99 | 127 | 404 | 426 | 164 | 45 | 26 | 16 | 10 | 6 | 2 | 1411 |


| Daily | 15th Percentile : | 31 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 39 MPH |
|  | 85th Percentile : | 46 MPH |
| Statistics | 95th Percentile : | 53 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 40 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 830 |
|  | Percent in Pace : | $58.8 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 60 |
| Percent of Vehicles $>55 \mathrm{MPH}:$ | $4.3 \%$ |  |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/03/21 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 01:00 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| 02:00 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 04:00 | 0 | 0 | 0 | 0 | 3 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 10 |
| 05:00 | 0 | 0 | 0 | 0 | 3 | 13 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 06:00 | 0 | 0 | 0 | 0 | 6 | 22 | 29 | 10 | 3 | 1 | 0 | 0 | 0 | 0 | 71 |
| 07:00 | 0 | 2 | 3 | 4 | 12 | 66 | 47 | 16 | 6 | 0 | 0 | 0 | 0 | 0 | 156 |
| 08:00 | 2 | 0 | 0 | 2 | 10 | 55 | 40 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 121 |
| 09:00 | 5 | 5 | 0 | 6 | 11 | 21 | 43 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 103 |
| 10:00 | 1 | 0 | 15 | 15 | 17 | 47 | 32 | 13 | 7 | 1 | 0 | 0 | 0 | 0 | 148 |
| 11:00 | 3 | 2 | 1 | 4 | 7 | 49 | 31 | 11 | 5 | 0 | 0 | 1 | 0 | 0 | 114 |
| 12 PM | 0 | 0 | 4 | 4 | 10 | 39 | 40 | 19 | 1 | 3 | 1 | 0 | 0 | 0 | 121 |
| 13:00 | 3 | 3 | 1 | 2 | 9 | 42 | 48 | 14 | 7 | 3 | 0 | 0 | 0 | 0 | 132 |
| 14:00 | 4 | 3 | 1 | 2 | 15 | 43 | 63 | 27 | 4 | 1 | 3 | 1 | 0 | 0 | 167 |
| 15:00 | 1 | 0 | 1 | 4 | 11 | 59 | 64 | 27 | 13 | 1 | 5 | 0 | 0 | 0 | 186 |
| 16:00 | 4 | 4 | 1 | 3 | 15 | 62 | 77 | 23 | 6 | 1 | 1 | 0 | 0 | 0 | 197 |
| 17:00 | 2 | 0 | 2 | 0 | 14 | 47 | 68 | 35 | 12 | 3 | 0 | 1 | 0 | 0 | 184 |
| 18:00 | 3 | 1 | 0 | 4 | 24 | 45 | 50 | 12 | 3 | 2 | 1 | 0 | 0 | 0 | 145 |
| 19:00 | 2 | 0 | 0 | 0 | 2 | 29 | 29 | 12 | 1 | 1 | 0 | 0 | 0 | 0 | 76 |
| 20:00 | 1 | 0 | 1 | 1 | 2 | 9 | 23 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 44 |
| 21:00 | 0 | 0 | 0 | 1 | 4 | 7 | 6 | 8 | 3 | 1 | 1 | 0 | 0 | 0 | 31 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 17 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| Total | 38 | 20 | 30 | 52 | 175 | 666 | 707 | 261 | 80 | 20 | 12 | 3 | 1 | 0 | 2065 |


| Daily | 15th Percentile : | 34 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 40 MPH |
|  | 85th Percentile : | 46 MPH |
| Statistics | 95th Percentile : | 50 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 40 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 1373 |
|  | Percent in Pace : | $66.5 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 36 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.7 \%$ |

Counts Unlimited, Inc.

## PO Box 1178

Corona, CA 92878
Phone: (951) 268-6268
CST003
email: counts@countsunlimited.com
Site Code: 03-21642
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/04/21 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 10 |
| 01:00 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 1 | 0 | 0 | 1 | 2 | 2 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 05:00 | 0 | 0 | 0 | 1 | 1 | 12 | 13 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 31 |
| 06:00 | 0 | 0 | 0 | 1 | 5 | 28 | 24 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 70 |
| 07:00 | 0 | 0 | 0 | 1 | 13 | 47 | 54 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 132 |
| 08:00 | 2 | 0 | 0 | 1 | 16 | 35 | 50 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 120 |
| 09:00 | 4 | 1 | 1 | 2 | 17 | 38 | 35 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 105 |
| 10:00 | 0 | 1 | 0 | 4 | 13 | 40 | 33 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 103 |
| 11:00 | 0 | 1 | 0 | 6 | 12 | 44 | 22 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 97 |
| 12 PM | 2 | 0 | 0 | 9 | 8 | 39 | 37 | 14 | 2 | 1 | 0 | 0 | 0 | 0 | 112 |
| 13:00 | 0 | 0 | 0 | 2 | 14 | 31 | 52 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 117 |
| 14:00 | 12 | 0 | 0 | 5 | 9 | 42 | 45 | 14 | 3 | 4 | 1 | 0 | 0 | 0 | 135 |
| 15:00 | 0 | 0 | 1 | 3 | 22 | 43 | 54 | 18 | 8 | 3 | 3 | 0 | 0 | 0 | 155 |
| 16:00 | 4 | 2 | 1 | 4 | 22 | 64 | 84 | 25 | 5 | 3 | 3 | 0 | 0 | 0 | 217 |
| 17:00 | 0 | 0 | 2 | 3 | 14 | 39 | 61 | 28 | 6 | 3 | 0 | 1 | 1 | 0 | 158 |
| 18:00 | 3 | 0 | 1 | 0 | 8 | 45 | 45 | 11 | 1 | 1 | 0 | 0 | 0 | 0 | 115 |
| 19:00 | 0 | 0 | 0 | 0 | 6 | 24 | 23 | 16 | 1 | 3 | 1 | 1 | 0 | 0 | 75 |
| 20:00 | 0 | 0 | 0 | 0 | 6 | 9 | 19 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 42 |
| 21:00 | 0 | 0 | 0 | 0 | 2 | 15 | 15 | 4 | 1 | 2 | 3 | 3 | 0 | 0 | 45 |
| 22:00 | 0 | 0 | 0 | 1 | 2 | 6 | 8 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 24 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 14 |
| Total | 28 | 5 | 6 | 46 | 193 | 614 | 689 | 228 | 48 | 22 | 11 | 6 | 1 | 1 | 1898 |


| Daily | 15th Percentile : | 35 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 40 MPH |
|  | 85th Percentile : | 45 MPH |
| Statistics | 95th Percentile : | 49 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 41 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 1303 |
|  | Percent in Pace : | $68.7 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 41 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $2.2 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/05/21 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 6 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| 04:00 | 0 | 0 | 0 | 0 | 2 | 4 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 7 | 16 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 28 |
| 06:00 | 0 | 0 | 0 | 1 | 4 | 13 | 21 | 22 | 10 | 2 | 0 | 0 | 0 | 0 | 73 |
| 07:00 | 0 | 0 | 0 | 3 | 5 | 39 | 51 | 19 | 8 | 0 | 0 | 0 | 0 | 0 | 125 |
| 08:00 | 2 | 0 | 0 | 0 | 4 | 33 | 63 | 11 | 3 | 1 | 1 | 0 | 0 | 0 | 118 |
| 09:00 | 0 | 1 | 0 | 0 | 4 | 34 | 37 | 12 | 7 | 0 | 2 | 0 | 0 | 1 | 98 |
| 10:00 | 0 | 0 | 0 | 8 | 9 | 36 | 41 | 25 | 6 | 1 | 1 | 0 | 0 | 0 | 127 |
| 11:00 | 0 | 0 | 0 | 3 | 8 | 38 | 43 | 14 | 4 | 1 | 0 | 0 | 1 | 0 | 112 |
| 12 PM | 0 | 1 | 2 | 6 | 15 | 46 | 47 | 16 | 5 | 1 | 2 | 0 | 0 | 0 | 141 |
| 13:00 | 4 | 1 | 1 | 4 | 8 | 49 | 51 | 22 | 4 | 4 | 2 | 0 | 0 | 0 | 150 |
| 14:00 | 1 | 0 | 1 | 3 | 12 | 57 | 48 | 16 | 7 | 1 | 2 | 0 | 0 | 0 | 148 |
| 15:00 | 2 | 0 | 0 | 5 | 15 | 65 | 65 | 16 | 7 | 2 | 0 | 0 | 0 | 0 | 177 |
| 16:00 | 1 | 3 | 1 | 2 | 23 | 77 | 59 | 15 | 3 | 1 | 1 | 0 | 0 | 0 | 186 |
| 17:00 | 7 | 0 | 0 | 5 | 14 | 51 | 79 | 29 | 6 | 4 | 0 | 0 | 0 | 0 | 195 |
| 18:00 | 2 | 0 | 0 | 2 | 17 | 54 | 51 | 16 | 4 | 2 | 1 | 0 | 0 | 0 | 149 |
| 19:00 | 2 | 0 | 2 | 1 | 6 | 29 | 32 | 19 | 3 | 1 | 1 | 1 | 0 | 0 | 97 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 16 | 20 | 9 | 2 | 1 | 2 | 1 | 1 | 0 | 52 |
| 21:00 | 1 | 0 | 0 | 1 | 3 | 14 | 14 | 6 | 1 | 3 | 0 | 1 | 1 | 0 | 45 |
| 22:00 | 3 | 1 | 0 | 0 | 1 | 9 | 13 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 37 |
| 23:00 | 0 | 0 | 0 | 1 | 0 | 5 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 15 |
| Total | 25 | 7 | 7 | 45 | 152 | 681 | 762 | 283 | 90 | 27 | 16 | 3 | 3 | 1 | 2102 |


| Daily | 15th Percentile : | 35 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 40 MPH |
|  | 85th Percentile : | 46 MPH |
| Statistics | 95th Percentile : | 51 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 41 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 1443 |
|  | Percent in Pace : | $68.6 \%$ |
|  | Number of Vehicles >55 MPH : | 50 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $2.4 \%$ |

Counts Unlimited, Inc.
Page 12
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 11/06/21 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 6 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 1 | 0 | 0 | 2 | 2 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 8 |
| 05:00 | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 11 |
| 06:00 | 0 | 0 | 0 | 3 | 2 | 9 | 15 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 35 |
| 07:00 | 2 | 1 | 1 | 3 | 6 | 19 | 16 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 58 |
| 08:00 | 1 | 0 | 2 | 2 | 14 | 35 | 41 | 13 | 1 | 0 | 3 | 1 | 1 | 0 | 114 |
| 09:00 | 4 | 0 | 11 | 21 | 20 | 30 | 53 | 17 | 3 | 2 | 0 | 1 | 0 | 0 | 162 |
| 10:00 | 2 | 3 | 21 | 24 | 24 | 56 | 55 | 29 | 9 | 7 | 4 | 1 | 1 | 0 | 236 |
| 11:00 | 1 | 1 | 6 | 30 | 30 | 73 | 46 | 11 | 1 | 0 | 0 | 2 | 0 | 0 | 201 |
| 12 PM | 8 | 2 | 6 | 22 | 43 | 83 | 61 | 24 | 3 | 4 | 1 | 2 | 1 | 1 | 261 |
| 13:00 | 13 | 1 | 0 | 8 | 22 | 84 | 57 | 26 | 7 | 6 | 2 | 1 | 2 | 0 | 229 |
| 14:00 | 8 | 1 | 3 | 6 | 23 | 86 | 101 | 24 | 9 | 6 | 1 | 2 | 0 | 1 | 271 |
| 15:00 | 3 | 0 | 5 | 3 | 16 | 75 | 89 | 30 | 11 | 6 | 4 | 5 | 4 | 0 | 251 |
| 16:00 | 6 | 0 | 0 | 9 | 29 | 85 | 61 | 14 | 3 | 6 | 4 | 4 | 0 | 0 | 221 |
| 17:00 | 4 | 1 | 0 | 1 | 16 | 58 | 55 | 21 | 9 | 3 | 1 | 1 | 0 | 0 | 170 |
| 18:00 | 0 | 0 | 0 | 0 | 12 | 50 | 24 | 22 | 6 | 2 | 3 | 0 | 1 | 0 | 120 |
| 19:00 | 0 | 0 | 1 | 2 | 11 | 29 | 23 | 11 | 1 | 0 | 1 | 0 | 0 | 0 | 79 |
| 20:00 | 0 | 1 | 0 | 0 | 7 | 12 | 14 | 3 | 0 | 2 | 5 | 1 | 0 | 0 | 45 |
| 21:00 | 0 | 0 | 0 | 0 | 4 | 6 | 14 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 29 |
| 22:00 | 0 | 0 | 0 | 2 | 3 | 10 | 13 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 35 |
| 23:00 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 14 |
| Total | 53 | 11 | 57 | 138 | 290 | 809 | 750 | 271 | 73 | 49 | 29 | 22 | 11 | 2 | 2565 |


| Daily | 15th Percentile : | 32 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 39 MPH |
| 85th Percentile : | 46 MPH |  |
| Statistics | 95th Percentile : | 53 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 40 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 1559 |
|  | Percent in Pace : | $60.8 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 113 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $4.4 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 07/13/23 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| 05:00 | 7 | 0 | 1 | 2 | 0 | 4 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 18 |
| 06:00 | 0 | 0 | 0 | 0 | 10 | 21 | 19 | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 62 |
| 07:00 | 0 | 0 | 2 | 4 | 14 | 23 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| 08:00 | 1 | 0 | 1 | 6 | 22 | 34 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 |
| 09:00 | 0 | 0 | 0 | 5 | 17 | 19 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 52 |
| 10:00 | 0 | 0 | 0 | 2 | 15 | 21 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 11:00 | 0 | 0 | 1 | 7 | 17 | 20 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| 12 PM | 1 | 0 | 1 | 10 | 26 | 16 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| 13:00 | 2 | 0 | 1 | 6 | 21 | 23 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| 14:00 | 6 | 0 | 0 | 5 | 20 | 15 | 7 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 55 |
| 15:00 | 3 | 1 | 4 | 9 | 25 | 19 | 8 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 75 |
| 16:00 | 3 | 0 | 0 | 6 | 28 | 43 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 91 |
| 17:00 | 0 | 0 | 0 | 2 | 17 | 20 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |
| 18:00 | 0 | 0 | 1 | 0 | 11 | 29 | 12 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 59 |
| 19:00 | 1 | 0 | 0 | 2 | 7 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20:00 | 0 | 0 | 0 | 1 | 4 | 11 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 22 |
| 21:00 | 0 | 0 | 0 | 0 | 4 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 22:00 | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 25 | 1 | 13 | 68 | 266 | 340 | 134 | 36 | 8 | 4 | 0 | 0 | 0 | 0 | 895 |


| Daily | 15th Percentile : | 30 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 36 MPH |
|  | 85th Percentile : | 41 MPH |
| Statistics | 95th Percentile : | 45 MPH |
|  | Mean Speed(Average) : | 36 MPH |
|  | 10 MPH Pace Speed : | $31-40 \mathrm{MPH}$ |
|  | Number in Pace : | 606 |
|  | Percent in Pace : | $67.7 \%$ |
|  | Number of Vehicles >55 MPH : | 4 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $0.4 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 07/14/23 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 06:00 | 0 | 0 | 0 | 0 | 6 | 9 | 12 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 36 |
| 07:00 | 0 | 0 | 0 | 0 | 8 | 23 | 28 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 64 |
| 08:00 | 3 | 1 | 1 | 1 | 5 | 24 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| 09:00 | 0 | 0 | 0 | 2 | 6 | 22 | 12 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 46 |
| 10:00 | 0 | 0 | 0 | 2 | 11 | 26 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 11:00 | 4 | 0 | 4 | 17 | 16 | 13 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| 12 PM | 1 | 0 | 0 | 1 | 11 | 21 | 9 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 47 |
| 13:00 | 2 | 0 | 2 | 1 | 17 | 20 | 10 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 57 |
| 14:00 | 3 | 0 | 2 | 1 | 12 | 22 | 13 | 6 | 1 | 0 | 2 | 0 | 0 | 0 | 62 |
| 15:00 | 3 | 0 | 1 | 2 | 11 | 29 | 15 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 63 |
| 16:00 | 2 | 0 | 0 | 3 | 27 | 45 | 12 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 94 |
| 17:00 | 0 | 0 | 0 | 1 | 33 | 32 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 83 |
| 18:00 | 1 | 0 | 0 | 1 | 8 | 20 | 11 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 43 |
| 19:00 | 1 | 0 | 0 | 1 | 10 | 16 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| 20:00 | 0 | 0 | 0 | 1 | 7 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 21:00 | 0 | 0 | 0 | 1 | 1 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 22:00 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 23:00 | 0 | 0 | 0 | 1 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Total | 20 | 1 | 10 | 39 | 202 | 352 | 178 | 45 | 11 | 3 | 2 | 0 | 0 | 0 | 863 |


| Daily | 15th Percentile : | 31 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 37 MPH |
|  | 85th Percentile : | 43 MPH |
| Statistics | 95th Percentile : | 46 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 37 MPH |
|  | 10 MPH Pace Speed : | $31-40 \mathrm{MPH}$ |
|  | Number in Pace : | 554 |
|  | Percent in Pace : | $64.2 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 5 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $0.6 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound


| Daily | 15th Percentile : | 30 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 35 MPH |
|  | 85th Percentile : | 42 MPH |
| Statistics | 95th Percentile : | 48 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 37 MPH |
|  | 10 MPH Pace Speed : | $31-40 \mathrm{MPH}$ |
|  | Number in Pace : | 985 |
|  | Percent in Pace : | $70.9 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 16 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.2 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 07/13/23 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 4 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 3 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 06:00 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 10 |
| 07:00 | 0 | 1 | 0 | 3 | 3 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 08:00 | 0 | 0 | 0 | 2 | 7 | 8 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 28 |
| 09:00 | 0 | 0 | 0 | 5 | 3 | 13 | 13 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 10:00 | 0 | 1 | 1 | 9 | 26 | 22 | 11 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 75 |
| 11:00 | 0 | 0 | 0 | 1 | 9 | 13 | 17 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 46 |
| 12 PM | 4 | 0 | 0 | 2 | 4 | 12 | 18 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 54 |
| 13:00 | 1 | 0 | 0 | 2 | 13 | 21 | 16 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 66 |
| 14:00 | 2 | 0 | 0 | 0 | 11 | 26 | 28 | 15 | 4 | 0 | 0 | 0 | 0 | 0 | 86 |
| 15:00 | 4 | 0 | 0 | 0 | 3 | 10 | 22 | 28 | 17 | 1 | 0 | 0 | 0 | 0 | 85 |
| 16:00 | 0 | 0 | 1 | 0 | 2 | 4 | 30 | 44 | 11 | 3 | 0 | 0 | 0 | 0 | 95 |
| 17:00 | 0 | 0 | 0 | 1 | 0 | 7 | 21 | 30 | 22 | 1 | 0 | 1 | 0 | 0 | 83 |
| 18:00 | 0 | 0 | 0 | 1 | 0 | 3 | 26 | 33 | 30 | 4 | 1 | 1 | 0 | 0 | 99 |
| 19:00 | 1 | 0 | 0 | 0 | 2 | 0 | 12 | 12 | 15 | 3 | 0 | 0 | 0 | 0 | 45 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 3 | 14 | 11 | 15 | 4 | 1 | 0 | 0 | 0 | 48 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 1 | 9 | 5 | 7 | 0 | 1 | 0 | 0 | 0 | 24 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 7 | 4 | 1 | 1 | 1 | 0 | 0 | 19 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 11 |
| Total | 14 | 2 | 2 | 26 | 87 | 152 | 260 | 227 | 145 | 20 | 6 | 4 | 0 | 0 | 945 |


| Daily | 15th Percentile : | 35 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 43 MPH |
|  | 85th Percentile : | 51 MPH |
| Statistics | 95th Percentile : | 54 MPH |
|  | Mean Speed(Average) : | 44 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 487 |
|  | Percent in Pace : | $51.5 \%$ |
|  | Number of Vehicles >55 MPH : | 30 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $3.2 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 07/14/23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 3 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 6 |
| 07:00 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 12 |
| 08:00 | 0 | 0 | 0 | 1 | 2 | 3 | 8 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 23 |
| 09:00 | 0 | 0 | 0 | 4 | 3 | 3 | 11 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 34 |
| 10:00 | 0 | 0 | 0 | 0 | 0 | 2 | 16 | 14 | 6 | 1 | 1 | 0 | 0 | 0 | 40 |
| 11:00 | 0 | 0 | 0 | 2 | 2 | 7 | 16 | 27 | 9 | 4 | 0 | 0 | 0 | 1 | 68 |
| 12 PM | 0 | 0 | 0 | 0 | 4 | 4 | 7 | 22 | 17 | 0 | 1 | 1 | 0 | 0 | 56 |
| 13:00 | 0 | 1 | 0 | 1 | 0 | 5 | 14 | 25 | 19 | 7 | 1 | 0 | 0 | 0 | 73 |
| 14:00 | 0 | 0 | 0 | 1 | 2 | 7 | 23 | 31 | 10 | 2 | 1 | 0 | 0 | 0 | 77 |
| 15:00 | 0 | 0 | 0 | 1 | 1 | 6 | 51 | 41 | 16 | 3 | 1 | 0 | 0 | 0 | 120 |
| 16:00 | 5 | 0 | 0 | 0 | 1 | 10 | 28 | 42 | 11 | 3 | 0 | 0 | 0 | 0 | 100 |
| 17:00 | 1 | 0 | 0 | 1 | 4 | 3 | 41 | 30 | 9 | 1 | 0 | 0 | 0 | 0 | 90 |
| 18:00 | 1 | 0 | 0 | 0 | 0 | 11 | 15 | 17 | 13 | 5 | 0 | 2 | 0 | 0 | 64 |
| 19:00 | 1 | 0 | 0 | 0 | 0 | 5 | 23 | 18 | 15 | 2 | 0 | 0 | 0 | 0 | 64 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 1 | 16 | 19 | 7 | 3 | 1 | 0 | 0 | 0 | 47 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 1 | 13 | 9 | 9 | 1 | 2 | 0 | 0 | 0 | 35 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 15 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 16 |
| Total | 8 | 1 | 0 | 11 | 19 | 76 | 294 | 330 | 157 | 38 | 9 | 4 | 0 | 1 | 948 |


| Daily | 15th Percentile : | 40 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 45 MPH |
|  | 85th Percentile : | 52 MPH |
| Statistics | 95th Percentile : | 55 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 46 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 624 |
| Percent in Pace : | $65.8 \%$ |  |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 52 |
| Percent of Vehicles $>55 \mathrm{MPH}:$ | $5.5 \%$ |  |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 07/15/23 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 7 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 07:00 | 2 | 0 | 0 | 0 | 3 | 3 | 1 | 3 | 4 | 6 | 2 | 4 | 3 | 0 | 31 |
| 08:00 | 0 | 0 | 0 | 1 | 12 | 8 | 10 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 42 |
| 09:00 | 1 | 0 | 0 | 2 | 16 | 25 | 19 | 14 | 12 | 3 | 0 | 0 | 0 | 0 | 92 |
| 10:00 | 6 | 0 | 2 | 6 | 41 | 51 | 40 | 25 | 4 | 0 | 6 | 0 | 0 | 0 | 181 |
| 11:00 | 2 | 0 | 1 | 3 | 23 | 36 | 79 | 50 | 7 | 8 | 0 | 0 | 0 | 0 | 209 |
| 12 PM | 2 | 0 | 0 | 2 | 7 | 43 | 85 | 57 | 17 | 3 | 4 | 5 | 2 | 0 | 227 |
| 13:00 | 0 | 0 | 0 | 0 | 6 | 27 | 97 | 85 | 18 | 1 | 2 | 0 | 0 | 0 | 236 |
| 14:00 | 6 | 0 | 0 | 7 | 3 | 30 | 54 | 57 | 14 | 4 | 4 | 1 | 0 | 0 | 180 |
| 15:00 | 2 | 0 | 0 | 2 | 1 | 16 | 55 | 47 | 12 | 5 | 1 | 1 | 0 | 0 | 142 |
| 16:00 | 2 | 0 | 0 | 1 | 2 | 17 | 51 | 42 | 12 | 1 | 0 | 0 | 0 | 0 | 128 |
| 17:00 | 3 | 0 | 0 | 0 | 0 | 11 | 36 | 31 | 17 | 4 | 5 | 0 | 0 | 0 | 107 |
| 18:00 | 2 | 0 | 0 | 0 | 3 | 0 | 13 | 13 | 10 | 3 | 0 | 0 | 0 | 0 | 44 |
| 19:00 | 2 | 0 | 0 | 2 | 3 | 6 | 5 | 20 | 4 | 6 | 2 | 1 | 0 | 0 | 51 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 9 | 6 | 3 | 0 | 0 | 0 | 0 | 29 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 5 | 10 | 5 | 2 | 0 | 0 | 1 | 0 | 0 | 24 |
| 22:00 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 4 | 7 | 2 | 0 | 0 | 0 | 0 | 18 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 3 | 1 | 1 | 0 | 0 | 1 | 0 | 13 |
| Total | 30 | 0 | 3 | 27 | 123 | 286 | 577 | 475 | 156 | 51 | 28 | 13 | 6 | 0 | 1775 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 43 MPH |
|  | 85th Percentile : | 49 MPH |
| Statistics | 95th Percentile : | 55 MPH |
|  | Mean Speed(Average) : | 44 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 1052 |
|  | Percent in Pace : | $59.3 \%$ |
|  | Number of Vehicles >55 MPH : | 98 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $5.5 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 07/13/23 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 5 |
| 01:00 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 5 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 5 |
| 03:00 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 04:00 | 0 | 0 | 0 | 1 | 3 | 2 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 11 |
| 05:00 | 7 | 0 | 1 | 2 | 0 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 19 |
| 06:00 | 2 | 0 | 0 | 0 | 11 | 21 | 19 | 12 | 5 | 2 | 0 | 0 | 0 | 0 | 72 |
| 07:00 | 0 | 1 | 2 | 7 | 17 | 28 | 19 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 77 |
| 08:00 | 1 | 0 | 1 | 8 | 29 | 42 | 15 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 100 |
| 09:00 | 0 | 0 | 0 | 10 | 20 | 32 | 23 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 88 |
| 10:00 | 0 | 1 | 1 | 11 | 41 | 43 | 17 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 120 |
| 11:00 | 0 | 0 | 1 | 8 | 26 | 33 | 20 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 94 |
| 12 PM | 5 | 0 | 1 | 12 | 30 | 28 | 24 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 115 |
| 13:00 | 3 | 0 | 1 | 8 | 34 | 44 | 24 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 128 |
| 14:00 | 8 | 0 | 0 | 5 | 31 | 41 | 35 | 15 | 4 | 2 | 0 | 0 | 0 | 0 | 141 |
| 15:00 | 7 | 1 | 4 | 9 | 28 | 29 | 30 | 33 | 18 | 1 | 0 | 0 | 0 | 0 | 160 |
| 16:00 | 3 | 0 | 1 | 6 | 30 | 47 | 37 | 47 | 12 | 3 | 0 | 0 | 0 | 0 | 186 |
| 17:00 | 0 | 0 | 0 | 3 | 17 | 27 | 34 | 33 | 22 | 1 | 0 | 1 | 0 | 0 | 138 |
| 18:00 | 0 | 0 | 1 | 1 | 11 | 32 | 38 | 38 | 31 | 4 | 1 | 1 | 0 | 0 | 158 |
| 19:00 | 2 | 0 | 0 | 2 | 9 | 9 | 16 | 13 | 15 | 3 | 0 | 0 | 0 | 0 | 69 |
| 20:00 | 0 | 0 | 0 | 1 | 4 | 14 | 16 | 13 | 16 | 5 | 1 | 0 | 0 | 0 | 70 |
| 21:00 | 0 | 0 | 0 | 0 | 5 | 8 | 9 | 6 | 7 | 0 | 1 | 0 | 0 | 0 | 36 |
| 22:00 | 0 | 0 | 0 | 0 | 3 | 4 | 5 | 7 | 4 | 1 | 1 | 1 | 0 | 0 | 26 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 13 |
| Total | 39 | 3 | 15 | 94 | 353 | 492 | 394 | 263 | 153 | 24 | 6 | 4 | 0 | 0 | 1840 |


| Daily | 15th Percentile : | 31 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 39 MPH |
|  | 85th Percentile : | 48 MPH |
| Statistics | 95th Percentile : | 53 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 40 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 886 |
|  | Percent in Pace : | $48.2 \%$ |
|  | Number of Vehicles >55 MPH : | 34 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.8 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 07/14/23 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 5 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| 03:00 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 04:00 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 06:00 | 0 | 0 | 0 | 0 | 6 | 9 | 13 | 8 | 5 | 1 | 0 | 0 | 0 | 0 | 42 |
| 07:00 | 0 | 0 | 0 | 0 | 8 | 26 | 30 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 76 |
| 08:00 | 3 | 1 | 1 | 2 | 7 | 27 | 19 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 71 |
| 09:00 | 0 | 0 | 0 | 6 | 9 | 25 | 23 | 9 | 5 | 3 | 0 | 0 | 0 | 0 | 80 |
| 10:00 | 0 | 0 | 0 | 2 | 11 | 28 | 20 | 16 | 6 | 1 | 1 | 0 | 0 | 0 | 85 |
| 11:00 | 4 | 0 | 4 | 19 | 18 | 20 | 23 | 31 | 9 | 4 | 0 | 0 | 0 | 1 | 133 |
| 12 PM | 1 | 0 | 0 | 1 | 15 | 25 | 16 | 25 | 18 | 0 | 1 | 1 | 0 | 0 | 103 |
| 13:00 | 2 | 1 | 2 | 2 | 17 | 25 | 24 | 29 | 20 | 7 | 1 | 0 | 0 | 0 | 130 |
| 14:00 | 3 | 0 | 2 | 2 | 14 | 29 | 36 | 37 | 11 | 2 | 3 | 0 | 0 | 0 | 139 |
| 15:00 | 3 | 0 | 1 | 3 | 12 | 35 | 66 | 42 | 17 | 3 | 1 | 0 | 0 | 0 | 183 |
| 16:00 | 7 | 0 | 0 | 3 | 28 | 55 | 40 | 46 | 12 | 3 | 0 | 0 | 0 | 0 | 194 |
| 17:00 | 1 | 0 | 0 | 2 | 37 | 35 | 55 | 33 | 9 | 1 | 0 | 0 | 0 | 0 | 173 |
| 18:00 | 2 | 0 | 0 | 1 | 8 | 31 | 26 | 18 | 14 | 5 | 0 | 2 | 0 | 0 | 107 |
| 19:00 | 2 | 0 | 0 | 1 | 10 | 21 | 32 | 20 | 15 | 2 | 0 | 0 | 0 | 0 | 103 |
| 20:00 | 0 | 0 | 0 | 1 | 7 | 9 | 18 | 19 | 7 | 3 | 1 | 0 | 0 | 0 | 65 |
| 21:00 | 0 | 0 | 0 | 1 | 1 | 12 | 16 | 9 | 9 | 1 | 2 | 0 | 0 | 0 | 51 |
| 22:00 | 0 | 0 | 0 | 0 | 4 | 3 | 2 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 21 |
| 23:00 | 0 | 0 | 0 | 1 | 5 | 5 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 25 |
| Total | 28 | 2 | 10 | 50 | 221 | 428 | 472 | 375 | 168 | 41 | 11 | 4 | 0 | 1 | 1811 |


| Daily | 15th Percentile : | 34 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 41 MPH |
| 85th Percentile : | 49 MPH |  |
| Statistics | 95th Percentile : | 53 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 42 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 900 |
|  | Percent in Pace : | $49.7 \%$ |
|  | Number of Vehicles >55 MPH : | 57 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $3.1 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

## PO Box 1178

Corona, CA 92878
Phone: (951) 268-6268
Site Code: 003-21642


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

CST001
Site Code: 003-21642


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

CSTOO1
Site Code: 003-21642


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

CSTOO1
Site Code: 003-21642


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

## PO Box 1178

Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

## PO Box 1178

Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com
emai:couns@countsunlimited.com


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

## PO Box 1178

Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

CST001
Site Code: 003-21642


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

## PO Box 1178

Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

CST001
Site Code: 003-21642


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

CST001
Site Code: 003-21642

Northbound, Southbound


Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
CST001
email: counts@countsunlimited.com


Northbound, Southbound

Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com
emai:count@countsunimited.com

Northbound, Southbound


Counts Unlimited, Inc.

County of San Mateo
Sears Ranch Road
N/ La Honda Elementary School
24 Hour Directional Speed Survey

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
CST001
Site Code: 003-21642
email: counts@countsunlimited.com
emaircount@countsunimited.com

Northbound, Southbound


# ATTACHMENT 1a 

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of San Mateo
File Name : CST_LH_JT 7-13
N/S: La Honda Road
E/W: Jeep Trail/OId La Honda Road
Site Code : 08216003
Start Date : 7/13/2023
Page No : 1

Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |

File Name : CST_LH_JT 7-13
N/S: La Honda Road
E/W: Jeep Trail/Old La Honda Road
Site Code : 08216003
Start Date : 7/13/2023
Page No : 2
Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 09:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| 09:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |


| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $12: 15 \mathrm{PM}$ | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 4 |
| $12: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $12: 45 \mathrm{PM}$ | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 5 |


| $01: 00 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 2 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $01: 15 \mathrm{PM}$ | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| $01: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| $01: 45 \mathrm{PM}$ | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 2 | 0 | 2 | 4 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 8 |


| $02: 00 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $02: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $02: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| $02: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |


| $03: 00 ~ P M$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $03: 15 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $03: 30 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $03: 45 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| 04:00 PM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 3 |


| 05:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 06:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

# ATTACHMENT 1a 

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of San Mateo
File Name : CST_LH_JT 7-13
N/S: La Honda Road
E/W: Jeep Trail/Old La Honda Road
Weather: Clear
Site Code : 08216003
Start Date : 7/13/2023
Page No : 3
Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 06:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 07:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| 08:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $08: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $08: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $08: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| 09:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 09:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $10: 00$ | PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $10: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $10: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $10: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 00 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| $11: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grand Total | 4 | 0 | 3 | 7 | 4 | 0 | 4 | 8 | 2 | 0 | 5 | 7 | 3 | 0 | 1 | 4 | 26 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Apprch \% | 57.1 | 0 | 42.9 |  | 50 | 0 | 50 |  | 28.6 | 0 | 71.4 |  | 75 | 0 | 25 |  |  |


|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 12:00 AM to 11:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Intersection Begins at 01:00 PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 2 |
| 01:15 PM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| 01:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:45 PM | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total Volume | 2 | 0 | 2 | 4 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 8 |
| \% App. Total | 50 | 0 | 50 |  | 0 | 0 | 100 |  | 100 | 0 | 0 |  | 100 | 0 | 0 |  |  |
| PHF | . 250 | . 000 | . 500 | . 333 | . 000 | . 000 | . 250 | . 250 | . 250 | . 000 | . 000 | . 250 | . 500 | . 000 | . 000 | . 500 | . 667 |

County of San Mateo
File Name : CST_LH_JT 7-13
N/S: La Honda Road
Site Code : 08216003
E/W: Jeep Trail/Old La Honda Road
Start Date : 7/13/2023
Weather: Clear
Page No : 4


Peak Hour Analysis From 12:00 AM to 11:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 01:00 PM |  |  |  | 04:15 PM |  |  |  | 12:15 PM |  |  |  | 12:30 PM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| +45 mins. | 2 | 0 | 1 | 3 | 1 | 0 | 1 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| Total Volume | 2 | 0 | 2 | 4 | 1 | 0 | 1 | 2 | 1 | 0 | 3 | 4 | 2 | 0 | 0 | 2 |
| \% App. Total | 50 | 0 | 50 |  | 50 | 0 | 50 |  | 25 | 0 | 75 |  | 100 | 0 | 0 |  |
| PHF | . 250 | . 000 | . 500 | . 333 | 250 | . 000 | . 250 | . 250 | . 250 | 000 | . 250 | . 333 | . 500 | . 000 | . 000 | . 500 |

File Name : CST_LH_JT 7-14
N/S: La Honda Road
E/W: Jeep Trail/Old La Honda Road
Site Code : 08216003
Start Date : 7/14/2023
Page No : 1

Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| 02:00 AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $02: 15 \mathrm{AM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $02: 30 \mathrm{AM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $02: 45 \mathrm{AM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| 03:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $03: 15$ AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $03: 30$ AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $03: 45$ AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| 04:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| 06:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $06: 15$ AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $06: 30$ AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $06: 45$ AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| $07: 00 \mathrm{AM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $07: 15 \mathrm{AM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $07: 30 \mathrm{AM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| $07: 45 \mathrm{AM}$ | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 |


| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

File Name : CST_LH_JT 7-14
N/S: La Honda Road
E/W: Jeep Trail/Old La Honda Road
Site Code : 08216003
Start Date : 7/14/2023
Page No : 2
Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 09:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 AM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 AM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |


| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |


| $01: 00 ~ P M$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $01: 15 \mathrm{PM}$ | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| $01: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $01: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |


| 02:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 02:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |


| 03:00 PM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $03: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| $03: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $03: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 3 |


| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $04: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $04: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $04: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| $05: 00 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $05: 15 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $05: 30 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $05: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| $06: 00 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $06: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# ATTACHMENT 1a 

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of San Mateo
File Name : CST_LH_JT 7-14
N/S: La Honda Road
E/W: Jeep Trail/Old La Honda Road
Weather: Clear
Site Code : 08216003
Start Date : 7/14/2023
Page No : 3
Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 06:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| $08: 00 ~ P M ~$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $08: 15 \mathrm{PM}$ | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| $08: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $08: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |


| 09:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 09:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $10: 00$ | PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $10: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $10: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $10: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 00 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| $11: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grand Total | 4 | 0 | 1 | 5 | 3 | 0 | 3 | 6 | 0 | 0 | 4 | 4 | 1 | 0 | 1 | 2 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Apprch \% | 80 | 0 | 20 |  | 50 | 0 | 50 |  | 0 | 0 | 100 |  | 50 | 0 | 50 |  |
| Total $\%$ | 23.5 | 0 | 5.9 | 29.4 | 17.6 | 0 | 17.6 | 35.3 | 0 | 0 | 23.5 | 23.5 | 5.9 | 0 | 5.9 | 11.8 |


|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 12:00 AM to 11:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Intersection Begins at 07:00 AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| 07:45 AM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total Volume | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 |
| \% App. Total | 0 | 0 | 0 |  | 50 | 0 | 50 |  | 0 | 0 | 0 |  | 100 | 0 | 0 |  |  |
| PHF | . 000 | . 000 | . 000 | . 000 | . 250 |  |  | . 250 | . 000 | . 000 | . 000 | . 000 | . 250 | . 000 | . 000 | 250 | . 375 |

County of San Mateo
File Name : CST_LH_JT 7-14
N/S: La Honda Road
Site Code : 08216003
E/W: Jeep Trail/OId La Honda Road
Start Date : 7/14/2023
Weather: Clear
Page No : 4


Peak Hour Analysis From 12:00 AM to 11:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 09:00 AM |  |  |  | 07:00 AM |  |  |  | 02:30 PM |  |  |  | 06:45 AM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 1 |
| Total Volume | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 1 |
| \% App. Total | 100 | 0 | 0 |  | 50 | 0 | 50 |  | 0 | 0 | 100 |  | 100 | 0 | 0 |  |
| PHF | . 250 | . 000 | . 000 | . 250 | 250 | . 000 | . 250 | . 250 | . 000 | 000 | . 250 | . 250 | . 250 | . 000 | . 000 | 250 |

# ATTACHMENT 1a 

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of San Mateo
File Name: CST_LH_JT 7-15
N/S: La Honda Road
E/W: Jeep Trail/OId La Honda Road
Site Code : 08216003
Start Date : 7/15/2023
Page No : 1

Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# ATTACHMENT 1a 

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of San Mateo
File Name : CST_LH_JT 7-15
N/S: La Honda Road
E/W: Jeep Trail/Old La Honda Road
Site Code : 08216003
Start Date : 7/15/2023
Page No : 2
Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 09:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| 09:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 11:00 AM | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | , | 1 | 0 | 0 | 0 | 0 | 3 |
| 11:15 AM | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2 | 0 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 5 |


| 12:00 PM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $12: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $12: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $12: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |


| 01:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| 02:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| 02:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 1 | 3 |
| 02:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 1 | 0 | 0 | 1 | 6 |


| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $03: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| $03: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| $03: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |


| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $04: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $04: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| $04: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |


| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 |
| 06:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# ATTACHMENT 1a 

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of San Mateo
File Name : CST_LH_JT 7-15
N/S: La Honda Road
E/W: Jeep Trail/Old La Honda Road
Weather: Clear
Site Code : 08216003
Start Date : 7/15/2023
Page No : 3
Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 06:30 PM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 06:45 PM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |


| 07:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $07: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| $07: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $07: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |


| 08:00 PM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $08: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $08: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $08: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |


| 09:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 09:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 PM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 09:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $10: 00$ | PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $10: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $10: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $10: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 00 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 15 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 30 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11: 45 \mathrm{PM}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grand Total | 5 | 0 | 1 | 6 | 4 | 0 | 6 | 10 | 1 | 0 | 10 | 11 | 2 | 0 | 0 | 2 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Apprch \% | 83.3 | 0 | 16.7 |  | 40 | 0 | 60 |  | 9.1 | 0 | 90.9 |  | 100 | 0 | 0 |  |
| Total $\%$ | 17.2 | 0 | 3.4 | 20.7 | 13.8 | 0 | 20.7 | 34.5 | 3.4 | 0 | 34.5 | 37.9 | 6.9 | 0 | 0 | 6.9 |


|  | La Honda Road Southbound |  |  |  | Old La Honda Road Westbound |  |  |  | La Honda Road Northbound |  |  |  | Jeep Trail Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 12:00 AM to 11:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for | ntire | tersec | ion Be | gins at 1 | 30 AM |  |  |  |  |  |  |  |  |  |  |  |  |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 11:00 AM | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 |
| 11:15 AM | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total Volume | 2 | 0 | 0 | 2 | 1 | 0 | 1 | 2 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 6 |
| \% App. Total | 100 | 0 | 0 |  | 50 | 0 | 50 |  | 50 | 0 | 50 |  | 0 | 0 | 0 |  |  |
| PHF | . 500 | . 000 | . 000 | . 500 | . 250 | . 000 | . 250 | . 500 | . 250 | . 000 | . 250 | . 500 | . 000 | . 000 | . 000 | . 000 | . 500 |

County of San Mateo
File Name : CST_LH_JT 7-15
N/S: La Honda Road
Site Code : 08216003
E/W: Jeep Trail/OId La Honda Road
Start Date : 7/15/2023
Weather: Clear
Page No : 4


Peak Hour Analysis From 12:00 AM to 11:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 10:30 AM |  |  |  | 12:15 PM |  |  |  | 02:00 PM |  |  |  | 01:30 PM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| +30 mins. | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| Total Volume | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 3 | 0 | 0 | 5 | 5 | 1 | 0 | 0 | 1 |
| \% App. Total | 100 | 0 | 0 |  | 0 | 0 | 100 |  | 0 | 0 | 100 |  | 100 | 0 | 0 |  |
| PHF | . 500 | . 000 | . 000 | . 500 | . 000 | . 000 | . 375 | . 375 | . 000 | 000 | . 625 | . 625 | . 250 | . 000 | . 000 | . 250 |

## ATTACHMENT 1a



|  | Southbound La Honda Road |  |  |  |  |  | Northbound La Honda Road |  |  | Eastbound Jeep Trail |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |  |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 AM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 |  | 0 |
| 1:30 AM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 AM | 0 | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 AM | 0 | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 AM | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 AM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:15 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:30 AM | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:00 AM | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 10:15 AM | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 10:30 AM | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 1 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 7:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 10:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 11:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTAL VOLUMES: | 6 | 15 | 0 | 8 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 30 |

## ATTACHMENT 1a



|  | SouthboundLa Honda Road |  |  |  |  |  | Northbound La Honda Road |  |  | Eastbound Jeep Trail |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |  |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | O | 0 | 0 | 0 |
| 12:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |
| 1:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 8:30 AM | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:15 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 AM | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 11:00 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| 12:00 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:45 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:00 PM | 0 | 0 | 0 | 1 | 0 | 0 | O | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 1 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:15 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 7:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 7:45 PM | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 10:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 |  |
| 11:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |
| OTAL VOLUMES: | 4 | 12 | 0 | 10 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 33 |

## ATTACHMENT 1a



|  | SouthboundLa Honda Road |  |  | WestboundOld La Honda Road |  |  | Northbound La Honda Road |  |  | Eastbound Jeep Trail |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |  |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 AM |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 AM |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 AM | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 AM | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 7:30 AM | 0 | 1 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:45 AM | 0 | 4 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8:00 AM | 0 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 7 |
| 8:15 AM | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 8:30 AM | 0 | 5 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| 8:45 AM | 0 | 19 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 9:00 AM | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:15 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 9:30 AM | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:45 AM | 0 | 30 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| 10:00 AM | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 10:15 AM | 3 | 37 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 10:30 AM | 0 | 6 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 10:45 AM | 0 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 11:00 AM | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 11 |
| 11:15 AM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 11:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 11:45 AM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 12:00 PM | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| 12:15 PM | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 7 |
| 12:30 PM | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 4 |
| 12:45 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 1 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | , | 0 | 0 | 5 |
| 1:45 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 4 |
| 2:00 PM | 0 | 4 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 2:15 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 2:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | , |
| 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| 6:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:45 PM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 7:15 PM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 7:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTAL VOLUMES: | 10 | 165 | 0 | 38 | 0 | 1 | 0 | 14 | 14 | 0 | 0 | 0 | 242 |

File Name : CST_La Honda_Sears AM
N/S: La Honda Road
Site Code : 00322183
E/W: Sears Ranch Road/Entrada Way
Start Date: 3/1/2022
Weather: Clear
Page No : 1

Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Entrada Way Westbound |  |  |  | La Honda Road Northbound |  |  |  | Sears Ranch Road Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM | 0 | 2 | 1 | 3 | 1 | 0 | 11 | 12 | 0 | 18 | 2 | 20 | 1 | 0 | 0 | 1 | 36 |
| 07:15 AM | 2 | 1 | 0 | 3 | 9 | 0 | 19 | 28 | 2 | 24 | 3 | 29 | 0 | 0 | 2 | 2 | 62 |
| 07:30 AM | 3 | 7 | 1 | 11 | 4 | 3 | 18 | 25 | 0 | 18 | 2 | 20 | 1 | 0 | 1 | 2 | 58 |
| 07:45 AM | 3 | 6 | 3 | 12 | 4 | 5 | 12 | 21 | 11 | 11 | 0 | 22 | 0 | 0 | 0 | 0 | 55 |
| Total | 8 | 16 | 5 | 29 | 18 | 8 | 60 | 86 | 13 | 71 | 7 | 91 | 2 | 0 | 3 | 5 | 211 |


| 08:00 AM | 4 | 14 | 4 | 22 | 7 | 12 | 10 | 29 | 13 | 9 | 0 | 22 | 15 | 5 | 12 | 32 | 105 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 08:15 AM | 8 | 7 | 1 | 16 | 2 | 4 | 9 | 15 | 2 | 11 | 2 | 15 | 3 | 9 | 4 | 16 | 62 |
| 08:30 AM | 6 | 5 | 0 | 11 | 2 | 0 | 9 | 11 | 1 | 10 | 3 | 14 | 0 | 1 | 0 | 1 | 37 |
| 08:45 AM | 7 | 9 | 1 | 17 | 5 | 0 | 8 | 13 | 0 | 10 | 4 | 14 | 3 | 0 | 3 | 6 | 50 |
| Total | 25 | 35 | 6 | 66 | 16 | 16 | 36 | 68 | 16 | 40 | 9 | 65 | 21 | 15 | 19 | 55 | 254 |
| Grand Total | 33 | 51 | 11 | 95 | 34 | 24 | 96 | 154 | 29 | 111 | 16 | 156 | 23 | 15 | 22 | 60 | 465 |
| Apprch \% | 34.7 | 53.7 | 11.6 |  | 22.1 | 15.6 | 62.3 |  | 18.6 | 71.2 | 10.3 |  | 38.3 | 25 | 36.7 |  |  |
| Total \% | 7.1 | 11 | 2.4 | 20.4 | 7.3 | 5.2 | 20.6 | 33.1 | 6.2 | 23.9 | 3.4 | 33.5 | 4.9 | 3.2 | 4.7 | 12.9 |  |



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 07:15 AM

| 相 |  |  |  |  | AM |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 07:15 AM | 2 | 1 | 0 | 3 | 9 | 0 | 19 | 28 | 2 | 24 | 3 | 29 | 0 | 0 | 2 | 2 | 62 |
| 07:30 AM | 3 | 7 | 1 | 11 | 4 | 3 | 18 | 25 | 0 | 18 | 2 | 20 | 1 | 0 | 1 | 2 | 58 |
| 07:45 AM | 3 | 6 | 3 | 12 | 4 | 5 | 12 | 21 | 11 | 11 | 0 | 22 | 0 | 0 | 0 | 0 | 55 |
| 08:00 AM | 4 | 14 | 4 | 22 | 7 | 12 | 10 | 29 | 13 | 9 | 0 | 22 | 15 | 5 | 12 | 32 | 105 |
| Total Volume | 12 | 28 | 8 | 48 | 24 | 20 | 59 | 103 | 26 | 62 | 5 | 93 | 16 | 5 | 15 | 36 | 280 |
| \% App. Total | 25 | 58.3 | 16.7 |  | 23.3 | 19.4 | 57.3 |  | 28 | 66.7 | 5.4 |  | 44.4 | 13.9 | 41.7 |  |  |
| PHF | . 750 | . 500 | . 500 | . 545 | . 667 | . 417 | . 776 | . 888 | . 500 | . 646 | . 417 | . 802 | . 267 | . 250 | . 313 | . 281 | . 667 |


| County of San Mateo | File Name :CST_La Honda_Sears AM |
| :--- | :--- |
| N/S: La Honda Road | Site Code : 00322183 |
| E/W: Sears Ranch Road/Entrada Way | Start Date $: 3 / 1 / 2022$ |
| Weather: Clear | Page No $: 2$ |



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 08:00 AM |  |  |  | 07:15 AM |  |  |  | 07:15 AM |  |  |  | 08:00 AM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 4 | 14 | 4 | 22 | 9 | 0 | 19 | 28 | 2 | 24 | 3 | 29 | 15 | 5 | 12 | 32 |
| +15 mins. | 8 | 7 | 1 | 16 | 4 | 3 | 18 | 25 | 0 | 18 | 2 | 20 | 3 | 9 | 4 | 16 |
| +30 mins. | 6 | 5 | 0 | 11 | 4 | 5 | 12 | 21 | 11 | 11 | 0 | 22 | 0 | 1 | 0 | 1 |
| +45 mins. | 7 | 9 | 1 | 17 | 7 | 12 | 10 | 29 | 13 | 9 | 0 | 22 | 3 | 0 | 3 | 6 |
| Total Volume | 25 | 35 | 6 | 66 | 24 | 20 | 59 | 103 | 26 | 62 | 5 | 93 | 21 | 15 | 19 | 55 |
| \% App. Total | 37.9 | 53 | 9.1 |  | 23.3 | 19.4 | 57.3 |  | 28 | 66.7 | 5.4 |  | 38.2 | 27.3 | 34.5 |  |
| PHF | 781 | 625 | 375 | . 750 | . 667 | . 417 | . 776 | . 888 | 500 | . 646 | 417 | 802 | 350 | . 417 | . 396 | 430 |

File Name : CST_La Honda_Sears PM
N/S: La Honda Road
Site Code : 00322183
E/W: Sears Ranch Road/Entrada Way
Start Date : 3/1/2022
Weather: Clear
Page No : 1

Groups Printed- Total Volume

|  | La Honda Road Southbound |  |  |  | Entrada Way Westbound |  |  |  | La Honda Road Northbound |  |  |  | Sears Ranch Road Eastbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 04:00 PM | 14 | 21 | 1 | 36 | 10 | 1 | 6 | 17 | 2 | 14 | 4 | 20 | 1 | 0 | 1 | 2 | 75 |
| 04:15 PM | 16 | 19 | 1 | 36 | 5 | 0 | 7 | 12 | 0 | 24 | 2 | 26 | 1 | 0 | 1 | 2 | 76 |
| 04:30 PM | 15 | 25 | 1 | 41 | 0 | 1 | 8 | 9 | 0 | 8 | 9 | 17 | 4 | 0 | 0 | 4 | 71 |
| 04:45 PM | 18 | 24 | 1 | 43 | 4 | 1 | 5 | 10 | 1 | 13 | 5 | 19 | 1 | 1 | 2 | 4 | 76 |
| Total | 63 | 89 | 4 | 156 | 19 | 3 | 26 | 48 | 3 | 59 | 20 | 82 | 7 | 1 | 4 | 12 | 298 |


| $05: 00 ~ P M$ | 11 | 11 | 2 | 24 | 13 | 1 | 10 | 24 | 1 | 19 | 3 | 23 | 1 | 3 | 3 | 7 | 78 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $05: 15 \mathrm{PM}$ | 10 | 21 | 2 | 33 | 2 | 1 | 8 | 11 | 0 | 14 | 2 | 16 | 3 | 2 | 1 | 6 | 66 |
| $05: 30 \mathrm{PM}$ | 19 | 11 | 0 | 30 | 1 | 0 | 4 | 5 | 3 | 16 | 5 | 24 | 1 | 2 | 1 | 4 | 63 |
| $05: 45 \mathrm{PM}$ | 14 | 16 | 0 | 30 | 5 | 0 | 4 | 9 | 0 | 10 | 4 | 14 | 0 | 2 | 1 | 3 | 56 |
| Total | 54 | 59 | 4 | 117 | 21 | 2 | 26 | 49 | 4 | 59 | 14 | 77 | 5 | 9 | 6 | 20 | 263 |
| Grand Total | 117 | 148 | 8 | 273 | 40 | 5 | 52 | 97 | 7 | 118 | 34 | 159 | 12 | 10 | 10 | 32 | 561 |
| Apprch \% | 42.9 | 54.2 | 2.9 |  | 41.2 | 5.2 | 53.6 |  | 4.4 | 74.2 | 21.4 |  | 37.5 | 31.2 | 31.2 |  |  |
| Total \% | 20.9 | 26.4 | 1.4 | 48.7 | 7.1 | 0.9 | 9.3 | 17.3 | 1.2 | 21 | 6.1 | 28.3 | 2.1 | 1.8 | 1.8 | 5.7 |  |



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:15 PM

| eak Hour for | tire | terse | Be | at 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04:15 PM | 16 | 19 | 1 | 36 | 5 | 0 | 7 | 12 | 0 | 24 | 2 | 26 | 1 | 0 | 1 | 2 | 76 |
| 04:30 PM | 15 | 25 | 1 | 41 | 0 | 1 | 8 | 9 | 0 | 8 | 9 | 17 | 4 | 0 | 0 | 4 | 71 |
| 04:45 PM | 18 | 24 | 1 | 43 | 4 | 1 | 5 | 10 | 1 | 13 | 5 | 19 | 1 | 1 | 2 | 4 | 76 |
| 05:00 PM | 11 | 11 | 2 | 24 | 13 | 1 | 10 | 24 | 1 | 19 | 3 | 23 | 1 | 3 | 3 | 7 | 78 |
| Total Volume | 60 | 79 | 5 | 144 | 22 | 3 | 30 | 55 | 2 | 64 | 19 | 85 | 7 | 4 | 6 | 17 | 301 |
| \% App. Total | 41.7 | 54.9 | 3.5 |  | 40 | 5.5 | 54.5 |  | 2.4 | 75.3 | 22.4 |  | 41.2 | 23.5 | 35.3 |  |  |
| PHF | . 833 | . 790 | . 625 | . 837 | . 423 | . 750 | . 750 | . 573 | . 500 | . 667 | . 528 | . 817 | . 438 | . 333 | . 500 | . 607 | . 965 |

County of San Mateo N/S: La Honda Road
E/W: Sears Ranch Road/Entrada Way
Weather: Clear

File Name : CST_La Honda_Sears PM
Site Code : 00322183
Start Date: 3/1/2022
Page No : 2


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 04:00 PM |  |  |  | 04:15 PM |  |  |  | 04:15 PM |  |  |  | 04:30 PM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 14 | 21 | 1 | 36 | 5 | 0 | 7 | 12 | 0 | 24 | 2 | 26 | 4 | 0 | 0 | 4 |
| +15 mins. | 16 | 19 | 1 | 36 | 0 | 1 | 8 | 9 | 0 | 8 | 9 | 17 | 1 | 1 | 2 | 4 |
| +30 mins. | 15 | 25 | 1 | 41 | 4 | 1 | 5 | 10 | 1 | 13 | 5 | 19 | 1 | 3 | 3 | 7 |
| +45 mins. | 18 | 24 | 1 | 43 | 13 | 1 | 10 | 24 | 1 | 19 | 3 | 23 | 3 | 2 | 1 | 6 |
| Total Volume | 63 | 89 | 4 | 156 | 22 | 3 | 30 | 55 | 2 | 64 | 19 | 85 | 9 | 6 | 6 | 21 |
| \% App. Total | 40.4 | 57.1 | 2.6 |  | 40 | 5.5 | 54.5 |  | 2.4 | 75.3 | 22.4 |  | 42.9 | 28.6 | 28.6 |  |
| PHF | . 875 | . 890 | 1.000 | . 907 | . 423 | . 750 | . 750 | . 573 | . 500 | . 667 | . 528 | . 817 | . 563 | . 500 | . 500 | . 750 |


| Location: | County of San Mateo |
| :--- | :--- |
| N/S: | La Honda Road |
| E/W: | Sears Ranch Road |



|  | $\begin{array}{c}\text { North Leg } \\ \text { La Honda Road }\end{array}$ | $\begin{array}{c}\text { East Leg } \\ \text { Entrada Way }\end{array}$ | $\begin{array}{c}\text { South Leg } \\ \text { La Honda Road }\end{array}$ | $\begin{array}{c}\text { West Leg } \\ \text { Sears Ranch Road }\end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Pedestrians | Pedestrians | Pedestrians | Pedestrians |$]$| 2 |
| :--- |
| $4: 00 \mathrm{PM}$ |


| Location: | County of San Mateo |
| :--- | :--- |
| N/S: | La Honda Road |

Date: 4/12/2018
N/S: La Honda Road
E/W: Sears Ranch Road
Day: Wednesday

| BICYCLES |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Southbound La Honda Road |  |  | Westbound Entrada Way |  |  | Northbound La Honda Road |  |  | Eastbound Sears Ranch Road |  |  |  |
|  | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |  |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL VOLUMES: | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |


|  | Southbound La Honda Road |  |  | Westbound <br> Entrada Way |  |  | Northbound La Honda Road |  |  | Eastbound Sears Ranch Road |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |  |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:45 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL VOLUMES: | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |

Counts Unlimited, Inc.

County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound


Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/08/23 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 2 | 0 | 0 | 0 | 1 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 5 | 5 | 2 | 0 | 0 | 0 | 0 | 21 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 11 | 15 | 15 | 7 | 2 | 0 | 0 | 0 | 0 | 50 |
| 07:00 | 0 | 0 | 0 | 5 | 5 | 18 | 34 | 27 | 8 | 3 | 0 | 1 | 0 | 0 | 101 |
| 08:00 | 0 | 0 | 0 | 1 | 3 | 13 | 27 | 27 | 8 | 2 | 0 | 0 | 0 | 0 | 81 |
| 09:00 | 0 | 0 | 0 | 0 | 0 | 14 | 22 | 23 | 2 | 2 | 0 | 0 | 0 | 0 | 63 |
| 10:00 | 0 | 0 | 1 | 2 | 8 | 10 | 29 | 16 | 4 | 0 | 0 | 0 | 0 | 0 | 70 |
| 11:00 | 0 | 0 | 0 | 0 | 3 | 15 | 21 | 17 | 8 | 0 | 0 | 0 | 0 | 0 | 64 |
| 12 PM | 5 | 0 | 0 | 0 | 2 | 10 | 18 | 18 | 1 | 3 | 0 | 0 | 0 | 0 | 57 |
| 13:00 | 0 | 0 | 3 | 0 | 4 | 18 | 31 | 11 | 7 | 1 | 0 | 1 | 0 | 0 | 76 |
| 14:00 | 2 | 0 | 0 | 2 | 2 | 11 | 22 | 9 | 6 | 3 | 1 | 0 | 0 | 0 | 58 |
| 15:00 | 0 | 0 | 0 | 0 | 7 | 20 | 15 | 12 | 3 | 4 | 1 | 0 | 1 | 0 | 63 |
| 16:00 | 0 | 0 | 0 | 1 | 1 | 25 | 26 | 13 | 6 | 3 | 0 | 0 | 0 | 0 | 75 |
| 17:00 | 0 | 0 | 0 | 2 | 8 | 20 | 25 | 13 | 2 | 1 | 0 | 1 | 0 | 0 | 72 |
| 18:00 | 0 | 0 | 0 | 0 | 4 | 11 | 9 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 29 |
| 19:00 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 14 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Total | 9 | 0 | 4 | 13 | 50 | 214 | 319 | 215 | 68 | 28 | 3 | 3 | 1 | 0 | 927 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 49 MPH |
| Statistics | 95th Percentile : | 54 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 43 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 534 |
|  | Percent in Pace : | $57.6 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 35 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $3.8 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/09/23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 06:00 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 07:00 | 0 | 0 | 1 | 0 | 1 | 3 | 14 | 6 | 9 | 2 | 0 | 0 | 0 | 0 | 36 |
| 08:00 | 0 | 0 | 0 | 0 | 2 | 7 | 9 | 8 | 4 | 1 | 2 | 0 | 0 | 0 | 33 |
| 09:00 | 0 | 0 | 0 | 1 | 2 | 6 | 16 | 19 | 8 | 2 | 0 | 0 | 0 | 0 | 54 |
| 10:00 | 0 | 0 | 0 | 0 | 5 | 7 | 24 | 13 | 5 | 2 | 0 | 0 | 0 | 1 | 57 |
| 11:00 | 0 | 2 | 0 | 1 | 7 | 16 | 29 | 17 | 13 | 1 | 1 | 2 | 0 | 3 | 92 |
| 12 PM | 2 | 0 | 0 | 0 | 0 | 18 | 28 | 19 | 12 | 4 | 0 | 1 | 0 | 0 | 84 |
| 13:00 | 6 | 0 | 0 | 2 | 3 | 21 | 30 | 22 | 10 | 4 | 1 | 1 | 1 | 0 | 101 |
| 14:00 | 5 | 0 | 0 | 0 | 3 | 16 | 25 | 19 | 9 | 3 | 4 | 2 | 3 | 2 | 91 |
| 15:00 | 2 | 0 | 1 | 0 | 4 | 19 | 35 | 24 | 5 | 2 | 4 | 2 | 1 | 0 | 99 |
| 16:00 | 1 | 0 | 1 | 0 | 7 | 25 | 43 | 17 | 8 | 3 | 2 | 1 | 2 | 2 | 112 |
| 17:00 | 0 | 0 | 0 | 0 | 8 | 25 | 37 | 27 | 5 | 3 | 3 | 0 | 1 | 1 | 110 |
| 18:00 | 0 | 0 | 0 | 0 | 4 | 11 | 16 | 9 | 1 | 3 | 1 | 0 | 0 | 0 | 45 |
| 19:00 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 3 | 2 | 0 | 1 | 0 | 0 | 0 | 15 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 11 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Total | 16 | 2 | 4 | 4 | 50 | 187 | 331 | 211 | 95 | 32 | 20 | 9 | 8 | 9 | 978 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 43 MPH |
|  | 85th Percentile : | 50 MPH |
| Statistics | 95th Percentile : | 58 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 44 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 542 |
|  | Percent in Pace : | $55.4 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 78 |
| Percent of Vehicles $>55 \mathrm{MPH}:$ | $8.0 \%$ |  |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/07/23 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| 07:00 | 0 | 0 | 1 | 0 | 0 | 10 | 13 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 32 |
| 08:00 | 0 | 0 | 0 | 0 | 1 | 9 | 11 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 09:00 | 0 | 0 | 0 | 0 | 0 | 8 | 14 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 35 |
| 10:00 | 0 | 0 | 0 | 2 | 4 | 4 | 16 | 6 | 5 | 0 | 1 | 0 | 0 | 0 | 38 |
| 11:00 | 0 | 1 | 0 | 0 | 1 | 13 | 26 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 46 |
| 12 PM | 0 | 0 | 0 | 0 | 6 | 9 | 24 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 46 |
| 13:00 | 0 | 0 | 0 | 0 | 4 | 26 | 26 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 67 |
| 14:00 | 0 | 0 | 0 | 0 | 0 | 12 | 39 | 8 | 2 | 1 | 1 | 0 | 0 | 0 | 63 |
| 15:00 | 0 | 0 | 0 | 0 | 2 | 18 | 40 | 27 | 4 | 1 | 0 | 0 | 0 | 0 | 92 |
| 16:00 | 0 | 0 | 0 | 0 | 0 | 14 | 65 | 19 | 4 | 0 | 0 | 0 | 0 | 0 | 102 |
| 17:00 | 0 | 0 | 0 | 1 | 2 | 12 | 43 | 25 | 1 | 0 | 0 | 0 | 0 | 0 | 84 |
| 18:00 | 0 | 0 | 0 | 0 | 2 | 20 | 44 | 16 | 2 | 2 | 0 | 1 | 0 | 0 | 87 |
| 19:00 | 0 | 0 | 0 | 0 | 0 | 4 | 27 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 47 |
| 20:00 | 0 | 0 | 0 | 0 | 1 | 6 | 20 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 44 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 5 | 12 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 19 |
| 22:00 | 0 | 0 | 0 | 0 | 1 | 4 | 7 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 18 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |
| Total | 0 | 1 | 1 | 3 | 25 | 179 | 441 | 179 | 37 | 6 | 2 | 1 | 0 | 0 | 875 |


| Daily | 15th Percentile : | 37 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 47 MPH |
| Statistics | 95th Percentile : | 50 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 43 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 620 |
|  | Percent in Pace : | $70.9 \%$ |
|  | Number of Vehicles >55 MPH : | 9 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.0 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/08/23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| 07:00 | 0 | 0 | 0 | 0 | 0 | 7 | 18 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| 08:00 | 0 | 0 | 0 | 0 | 3 | 13 | 15 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 39 |
| 09:00 | 0 | 0 | 0 | 1 | 5 | 14 | 22 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 47 |
| 10:00 | 1 | 1 | 0 | 0 | 3 | 7 | 18 | 18 | 5 | 0 | 0 | 0 | 0 | 0 | 53 |
| 11:00 | 0 | 0 | 0 | 0 | 3 | 16 | 18 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 54 |
| 12 PM | 0 | 0 | 0 | 0 | 3 | 7 | 23 | 15 | 7 | 0 | 0 | 0 | 1 | 0 | 56 |
| 13:00 | 0 | 0 | 2 | 2 | 3 | 10 | 36 | 18 | 6 | 3 | 0 | 0 | 1 | 0 | 81 |
| 14:00 | 0 | 0 | 0 | 2 | 0 | 14 | 29 | 23 | 5 | 2 | 0 | 0 | 0 | 0 | 75 |
| 15:00 | 0 | 0 | 0 | 1 | 1 | 8 | 42 | 41 | 6 | 2 | 0 | 0 | 0 | 0 | 101 |
| 16:00 | 0 | 1 | 0 | 0 | 3 | 13 | 45 | 39 | 4 | 4 | 2 | 1 | 0 | 0 | 112 |
| 17:00 | 0 | 0 | 0 | 0 | 1 | 12 | 38 | 31 | 6 | 0 | 0 | 0 | 0 | 0 | 88 |
| 18:00 | 0 | 0 | 1 | 0 | 2 | 8 | 21 | 24 | 3 | 1 | 0 | 0 | 0 | 0 | 60 |
| 19:00 | 0 | 0 | 0 | 1 | 0 | 9 | 17 | 16 | 7 | 1 | 0 | 0 | 0 | 0 | 51 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 10 | 5 | 2 | 3 | 0 | 0 | 0 | 31 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 1 | 27 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 39 |
| 22:00 | 0 | 0 | 0 | 0 | 2 | 7 | 13 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 27 |
| 23:00 | 0 | 0 | 0 | 0 | 4 | 7 | 1 | 8 | 5 | 1 | 1 | 0 | 0 | 0 | 27 |
| Total | 2 | 4 | 3 | 8 | 33 | 159 | 396 | 289 | 69 | 17 | 6 | 1 | 2 | 0 | 989 |


| Daily | 15th Percentile : | 38 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 43 MPH |
|  | 85th Percentile : | 49 MPH |
| Statistics | 95th Percentile : | 53 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 44 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 685 |
|  | Percent in Pace : | $69.3 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 26 |
| Percent of Vehicles $>55 \mathrm{MPH}:$ | $2.6 \%$ |  |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Southbound


Counts Unlimited, Inc.

County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/07/23 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 6 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| 04:00 | 0 | 0 | 0 | 0 | 2 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 6 | 5 | 13 | 6 | 2 | 1 | 0 | 0 | 0 | 34 |
| 06:00 | 0 | 0 | 0 | 1 | 1 | 11 | 17 | 22 | 13 | 0 | 1 | 0 | 0 | 0 | 66 |
| 07:00 | 0 | 0 | 1 | 0 | 2 | 24 | 64 | 41 | 15 | 1 | 2 | 0 | 0 | 0 | 150 |
| 08:00 | 0 | 0 | 0 | 0 | 5 | 26 | 54 | 29 | 6 | 3 | 0 | 0 | 0 | 0 | 123 |
| 09:00 | 0 | 0 | 0 | 1 | 4 | 14 | 35 | 39 | 11 | 1 | 0 | 0 | 0 | 0 | 105 |
| 10:00 | 0 | 0 | 0 | 4 | 4 | 18 | 42 | 18 | 9 | 1 | 2 | 0 | 0 | 0 | 98 |
| 11:00 | 0 | 1 | 0 | 0 | 3 | 17 | 30 | 17 | 10 | 2 | 1 | 0 | 0 | 0 | 81 |
| 12 PM | 0 | 0 | 0 | 0 | 6 | 14 | 40 | 18 | 7 | 1 | 0 | 0 | 0 | 1 | 87 |
| 13:00 | 0 | 0 | 0 | 0 | 7 | 45 | 58 | 19 | 5 | 1 | 1 | 0 | 0 | 0 | 136 |
| 14:00 | 0 | 0 | 1 | 1 | 2 | 32 | 64 | 15 | 5 | 2 | 2 | 0 | 0 | 0 | 124 |
| 15:00 | 2 | 0 | 0 | 1 | 8 | 32 | 61 | 36 | 7 | 1 | 0 | 0 | 0 | 0 | 148 |
| 16:00 | 0 | 1 | 1 | 1 | 2 | 38 | 80 | 29 | 5 | 0 | 1 | 0 | 0 | 0 | 158 |
| 17:00 | 0 | 0 | 0 | 2 | 4 | 30 | 59 | 31 | 4 | 2 | 2 | 0 | 0 | 0 | 134 |
| 18:00 | 0 | 0 | 0 | 0 | 5 | 27 | 49 | 17 | 2 | 2 | 0 | 1 | 0 | 0 | 103 |
| 19:00 | 0 | 0 | 0 | 0 | 1 | 6 | 31 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | 56 |
| 20:00 | 0 | 0 | 1 | 0 | 1 | 6 | 23 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 48 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 5 | 13 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 23 |
| 22:00 | 0 | 0 | 0 | 0 | 1 | 5 | 8 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 20 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |
| Total | 2 | 2 | 4 | 11 | 60 | 359 | 748 | 386 | 114 | 21 | 14 | 2 | 0 | 1 | 1724 |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound


Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.356171, -122.266255
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/09/23 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 12 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| 02:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 06:00 | 0 | 0 | 1 | 0 | 2 | 4 | 10 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 24 |
| 07:00 | 0 | 0 | 3 | 0 | 1 | 9 | 22 | 12 | 12 | 2 | 1 | 0 | 0 | 0 | 62 |
| 08:00 | 0 | 0 | 0 | 2 | 3 | 13 | 28 | 19 | 5 | 2 | 2 | 0 | 0 | 0 | 74 |
| 09:00 | 0 | 0 | 0 | 7 | 4 | 13 | 34 | 26 | 15 | 11 | 3 | 3 | 2 | 3 | 121 |
| 10:00 | 0 | 0 | 1 | 9 | 16 | 15 | 53 | 37 | 15 | 10 | 0 | 0 | 2 | 1 | 159 |
| 11:00 | 0 | 3 | 1 | 10 | 10 | 37 | 57 | 40 | 20 | 2 | 5 | 3 | 1 | 3 | 192 |
| 12 PM | 2 | 0 | 0 | 7 | 10 | 26 | 69 | 58 | 22 | 9 | 1 | 7 | 2 | 0 | 213 |
| 13:00 | 7 | 1 | 0 | 9 | 7 | 41 | 67 | 54 | 25 | 9 | 6 | 4 | 3 | 0 | 233 |
| 14:00 | 5 | 1 | 1 | 0 | 9 | 33 | 58 | 44 | 22 | 10 | 5 | 2 | 6 | 4 | 200 |
| 15:00 | 2 | 1 | 1 | 0 | 7 | 29 | 73 | 49 | 12 | 8 | 6 | 4 | 5 | 5 | 202 |
| 16:00 | 1 | 1 | 1 | 1 | 8 | 28 | 82 | 39 | 15 | 3 | 5 | 1 | 3 | 2 | 190 |
| 17:00 | 0 | 0 | 0 | 2 | 10 | 30 | 53 | 36 | 6 | 5 | 4 | 1 | 1 | 1 | 149 |
| 18:00 | 0 | 0 | 1 | 0 | 4 | 13 | 32 | 26 | 8 | 4 | 1 | 0 | 0 | 0 | 89 |
| 19:00 | 0 | 0 | 0 | 1 | 0 | 3 | 16 | 9 | 7 | 0 | 2 | 0 | 0 | 0 | 38 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 5 | 14 | 10 | 7 | 1 | 1 | 0 | 0 | 0 | 38 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 4 | 10 | 11 | 5 | 1 | 1 | 0 | 0 | 0 | 33 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 15 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 6 | 7 | 5 | 1 | 1 | 1 | 1 | 1 | 0 | 23 |
| Total | 17 | 7 | 10 | 48 | 95 | 313 | 699 | 495 | 205 | 80 | 45 | 26 | 26 | 19 | 2085 |


| Daily | 15th Percentile : | 37 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 43 MPH |
|  | 85th Percentile : | 51 MPH |
| Statistics | 95th Percentile : | 59 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 45 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 1194 |
|  | Percent in Pace : | $57.3 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 196 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $9.4 \%$ |

Counts Unlimited, Inc.
Page 1
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/07/23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 1 | 1 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 10 | 6 | 1 | 0 | 1 | 0 | 0 | 29 |
| 06:00 | 0 | 0 | 0 | 0 | 2 | 6 | 20 | 15 | 10 | 1 | 2 | 0 | 0 | 0 | 56 |
| 07:00 | 0 | 0 | 0 | 1 | 0 | 14 | 55 | 27 | 17 | 0 | 1 | 1 | 0 | 0 | 116 |
| 08:00 | 0 | 0 | 0 | 0 | 3 | 14 | 33 | 36 | 11 | 0 | 1 | 0 | 0 | 0 | 98 |
| 09:00 | 0 | 0 | 0 | 3 | 2 | 11 | 29 | 18 | 3 | 1 | 0 | 0 | 0 | 0 | 67 |
| 10:00 | 0 | 0 | 0 | 1 | 3 | 18 | 17 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 53 |
| 11:00 | 0 | 0 | 0 | 1 | 2 | 3 | 15 | 9 | 0 | 4 | 0 | 0 | 0 | 0 | 34 |
| 12 PM | 0 | 1 | 0 | 0 | 2 | 13 | 13 | 10 | 2 | 1 | 0 | 0 | 0 | 0 | 42 |
| 13:00 | 0 | 0 | 1 | 2 | 7 | 25 | 19 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 69 |
| 14:00 | 0 | 0 | 1 | 2 | 6 | 16 | 26 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 57 |
| 15:00 | 0 | 0 | 1 | 2 | 10 | 11 | 15 | 10 | 2 | 1 | 0 | 0 | 0 | 0 | 52 |
| 16:00 | 0 | 0 | 1 | 2 | 3 | 13 | 23 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 51 |
| 17:00 | 0 | 0 | 0 | 0 | 2 | 16 | 19 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 49 |
| 18:00 | 0 | 0 | 0 | 0 | 4 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 19:00 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 22:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 2 | 4 | 15 | 49 | 183 | 306 | 185 | 61 | 9 | 4 | 2 | 0 | 0 | 821 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 48 MPH |
| Statistics | 95th Percentile : | 52 MPH |
|  | Mean Speed(Average) : | 43 MPH |
|  | 10 MPH Pace Speed : | $40-49 \mathrm{MPH}$ |
|  | Number in Pace : | 491 |
|  | Percent in Pace : | $59.8 \%$ |
|  | Number of Vehicles >55 MPH : | 15 |
|  | Percent of Vehicles >55 MPH : | $1.8 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/08/23 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 2 | 0 | 0 | 0 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 22 |
| 06:00 | 0 | 0 | 0 | 0 | 1 | 10 | 11 | 16 | 11 | 1 | 0 | 1 | 0 | 0 | 51 |
| 07:00 | 0 | 0 | 0 | 4 | 4 | 15 | 40 | 25 | 11 | 0 | 0 | 0 | 0 | 0 | 99 |
| 08:00 | 0 | 0 | 0 | 0 | 4 | 15 | 30 | 18 | 7 | 1 | 0 | 0 | 0 | 0 | 75 |
| 09:00 | 0 | 0 | 0 | 0 | 4 | 10 | 25 | 15 | 5 | 0 | 0 | 0 | 0 | 0 | 59 |
| 10:00 | 0 | 0 | 0 | 1 | 8 | 14 | 27 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 67 |
| 11:00 | 0 | 0 | 0 | 0 | 6 | 11 | 21 | 20 | 6 | 0 | 0 | 0 | 0 | 0 | 64 |
| 12 PM | 2 | 0 | 0 | 5 | 5 | 12 | 14 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 55 |
| 13:00 | 2 | 0 | 2 | 1 | 2 | 25 | 28 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 77 |
| 14:00 | 1 | 0 | 0 | 3 | 6 | 13 | 20 | 8 | 1 | 1 | 1 | 0 | 0 | 0 | 54 |
| 15:00 | 0 | 0 | 1 | 4 | 9 | 14 | 14 | 10 | 7 | 3 | 0 | 0 | 0 | 0 | 62 |
| 16:00 | 0 | 0 | 0 | 0 | 4 | 18 | 32 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 71 |
| 17:00 | 0 | 0 | 0 | 3 | 11 | 24 | 24 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 71 |
| 18:00 | 0 | 0 | 0 | 1 | 1 | 13 | 3 | 5 | 2 | 0 | 0 | 1 | 0 | 0 | 26 |
| 19:00 | 0 | 0 | 1 | 0 | 0 | 4 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| 22:00 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Total | 7 | 0 | 4 | 22 | 73 | 213 | 313 | 189 | 65 | 10 | 2 | 2 | 0 | 0 | 900 |


| Daily | 15th Percentile : | 35 MPH |
| :---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 48 MPH |
| Statistics | 95th Percentile : | 52 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 42 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 526 |
|  | Percent in Pace : | $58.4 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 14 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.6 \%$ |

Counts Unlimited, Inc.

County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound


Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Southbound


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
| 85th Percentile : | 46 MPH |  |
| Statistics | 95th Percentile : | 49 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 42 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 593 |
|  | Percent in Pace : | $70.2 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 2 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $0.2 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/08/23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 07:00 | 0 | 0 | 0 | 0 | 0 | 11 | 9 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 31 |
| 08:00 | 0 | 0 | 0 | 1 | 3 | 11 | 16 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| 09:00 | 0 | 0 | 0 | 1 | 5 | 11 | 20 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| 10:00 | 0 | 1 | 0 | 1 | 5 | 12 | 18 | 17 | 2 | 0 | 0 | 0 | 0 | 0 | 56 |
| 11:00 | 1 | 0 | 0 | 0 | 3 | 21 | 22 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 53 |
| 12 PM | 0 | 1 | 0 | 2 | 2 | 8 | 25 | 13 | 2 | 2 | 0 | 0 | 0 | 0 | 55 |
| 13:00 | 0 | 0 | 0 | 1 | 4 | 26 | 30 | 11 | 2 | 1 | 0 | 0 | 0 | 0 | 75 |
| 14:00 | 1 | 1 | 0 | 2 | 10 | 25 | 26 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 80 |
| 15:00 | 1 | 0 | 0 | 1 | 4 | 17 | 52 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 105 |
| 16:00 | 0 | 0 | 0 | 0 | 6 | 16 | 47 | 31 | 6 | 3 | 0 | 0 | 0 | 0 | 109 |
| 17:00 | 0 | 0 | 0 | 0 | 3 | 22 | 32 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 78 |
| 18:00 | 1 | 1 | 0 | 1 | 3 | 14 | 20 | 17 | 3 | 0 | 0 | 0 | 0 | 0 | 60 |
| 19:00 | 0 | 0 | 0 | 1 | 0 | 12 | 23 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 45 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 4 | 16 | 8 | 3 | 1 | 1 | 0 | 0 | 0 | 33 |
| 21:00 | 0 | 0 | 0 | 0 | 2 | 13 | 17 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 38 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 10 | 12 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 25 |
| 23:00 | 0 | 0 | 0 | 1 | 9 | 1 | 6 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 28 |
| Total | 4 | 6 | 0 | 12 | 59 | 240 | 393 | 219 | 25 | 8 | 2 | 0 | 0 | 0 | 968 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 47 MPH |
| Statistics | 95th Percentile : | 49 MPH |
|  |  |  |
|  | Mean Speed(Average) : | 42 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 633 |
|  | Percent in Pace : | $65.4 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 10 |
| Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.0 \%$ |  |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Southbound

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/09/23 | 0 | 0 | 0 | 1 | 1 | 1 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 06:00 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 12 |
| 07:00 | 0 | 0 | 0 | 0 | 1 | 5 | 6 | 12 | 0 | 1 | 0 | 0 | 0 | 0 | 25 |
| 08:00 | 0 | 0 | 0 | 1 | 5 | 14 | 12 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 41 |
| 09:00 | 0 | 0 | 0 | 1 | 7 | 18 | 16 | 13 | 10 | 4 | 0 | 0 | 0 | 0 | 69 |
| 10:00 | 0 | 0 | 0 | 8 | 16 | 14 | 34 | 11 | 9 | 4 | 3 | 0 | 0 | 0 | 99 |
| 11:00 | 0 | 0 | 2 | 3 | 9 | 14 | 46 | 17 | 3 | 3 | 0 | 0 | 0 | 0 | 97 |
| 12 PM | 3 | 0 | 1 | 3 | 13 | 24 | 44 | 33 | 9 | 4 | 2 | 1 | 0 | 0 | 137 |
| 13:00 | 0 | 1 | 0 | 0 | 11 | 28 | 40 | 34 | 3 | 4 | 0 | 0 | 0 | 0 | 121 |
| 14:00 | 0 | 0 | 0 | 1 | 6 | 30 | 44 | 22 | 7 | 3 | 0 | 0 | 0 | 0 | 113 |
| 15:00 | 0 | 0 | 0 | 0 | 5 | 21 | 45 | 17 | 10 | 4 | 0 | 0 | 0 | 0 | 102 |
| 16:00 | 1 | 0 | 0 | 0 | 1 | 10 | 36 | 21 | 4 | 1 | 0 | 1 | 0 | 0 | 75 |
| 17:00 | 0 | 0 | 0 | 1 | 3 | 11 | 14 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 39 |
| 18:00 | 0 | 0 | 1 | 0 | 1 | 9 | 10 | 18 | 1 | 0 | 0 | 0 | 0 | 0 | 40 |
| 19:00 | 0 | 0 | 1 | 0 | 0 | 6 | 5 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 6 | 13 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 34 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 2 | 7 | 11 | 2 | 2 | 0 | 0 | 0 | 0 | 25 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 13 |
| 23:00 | 0 | 0 | 0 | 0 | 1 | 2 | 7 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 16 |
| Total | 4 | 1 | 5 | 19 | 83 | 221 | 394 | 254 | 77 | 32 | 7 | 2 | 0 | 0 | 1099 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
| 85th Percentile : | 49 MPH |  |
| Statistics | 95th Percentile : | 54 MPH |
|  | Mean Speed(Average) : | 43 MPH |
|  | 10 MPH Pace Speed : | $41-50 \mathrm{MPH}$ |
|  | Number in Pace : | 648 |
|  | Percent in Pace : | $59.0 \%$ |
|  | Number of Vehicles > 55 MPH : | 41 |
|  | Percent of Vehicles >55 MPH : | $3.7 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/07/23 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 1 | 1 | 0 | 0 | 1 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 05:00 | 0 | 0 | 1 | 0 | 0 | 4 | 10 | 10 | 6 | 1 | 0 | 1 | 0 | 0 | 33 |
| 06:00 | 0 | 0 | 0 | 0 | 2 | 7 | 24 | 17 | 10 | 1 | 2 | 0 | 0 | 0 | 63 |
| 07:00 | 0 | 0 | 0 | 2 | 1 | 24 | 69 | 31 | 19 | 0 | 1 | 1 | 0 | 0 | 148 |
| 08:00 | 0 | 0 | 0 | 1 | 4 | 23 | 46 | 40 | 11 | 0 | 1 | 0 | 0 | 0 | 126 |
| 09:00 | 0 | 0 | 0 | 3 | 6 | 17 | 45 | 26 | 3 | 1 | 0 | 0 | 0 | 0 | 101 |
| 10:00 | 0 | 0 | 1 | 2 | 11 | 26 | 31 | 17 | 2 | 0 | 0 | 0 | 0 | 0 | 90 |
| 11:00 | 0 | 0 | 0 | 3 | 6 | 16 | 39 | 11 | 1 | 4 | 0 | 0 | 0 | 0 | 80 |
| 12 PM | 0 | 2 | 0 | 0 | 4 | 17 | 35 | 15 | 3 | 1 | 0 | 0 | 0 | 0 | 77 |
| 13:00 | 0 | 0 | 2 | 2 | 16 | 53 | 41 | 22 | 2 | 0 | 0 | 0 | 0 | 0 | 138 |
| 14:00 | 0 | 0 | 1 | 2 | 6 | 27 | 59 | 19 | 6 | 0 | 0 | 0 | 0 | 0 | 120 |
| 15:00 | 1 | 0 | 2 | 2 | 13 | 32 | 51 | 39 | 3 | 1 | 0 | 0 | 0 | 0 | 144 |
| 16:00 | 0 | 0 | 1 | 2 | 3 | 33 | 81 | 27 | 2 | 0 | 0 | 0 | 0 | 0 | 149 |
| 17:00 | 0 | 0 | 0 | 1 | 7 | 25 | 55 | 36 | 5 | 0 | 0 | 0 | 0 | 0 | 129 |
| 18:00 | 0 | 0 | 0 | 0 | 6 | 32 | 47 | 11 | 0 | 1 | 1 | 0 | 0 | 0 | 98 |
| 19:00 | 0 | 0 | 0 | 0 | 2 | 13 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| 20:00 | 0 | 0 | 0 | 0 | 1 | 11 | 21 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 45 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 6 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 22:00 | 0 | 0 | 0 | 1 | 2 | 7 | 4 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 20 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Total | 2 | 3 | 8 | 21 | 92 | 383 | 699 | 362 | 79 | 10 | 5 | 2 | 0 | 0 | 1666 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
| Statistics | 95th Percentile : | 47 MPH |
|  | 95th Percentile : | 50 MPH |
|  | Mean Speed(Average) : | 43 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 1082 |
|  | Percent in Pace : | $64.9 \%$ |
|  | Number of Vehicles $>55 \mathrm{MPH}:$ | 17 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.0 \%$ |

Counts Unlimited, Inc.
County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/08/23 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 2 | 2 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 23 |
| 06:00 | 0 | 0 | 0 | 0 | 1 | 13 | 13 | 19 | 11 | 1 | 0 | 1 | 0 | 0 | 59 |
| 07:00 | 0 | 0 | 0 | 4 | 4 | 26 | 49 | 35 | 12 | 0 | 0 | 0 | 0 | 0 | 130 |
| 08:00 | 0 | 0 | 0 | 1 | 7 | 26 | 46 | 26 | 7 | 1 | 0 | 0 | 0 | 0 | 114 |
| 09:00 | 0 | 0 | 0 | 1 | 9 | 21 | 45 | 22 | 5 | 0 | 0 | 0 | 0 | 0 | 103 |
| 10:00 | 0 | 1 | 0 | 2 | 13 | 26 | 45 | 30 | 6 | 0 | 0 | 0 | 0 | 0 | 123 |
| 11:00 | 1 | 0 | 0 | 0 | 9 | 32 | 43 | 25 | 7 | 0 | 0 | 0 | 0 | 0 | 117 |
| 12 PM | 2 | 1 | 0 | 7 | 7 | 20 | 39 | 27 | 5 | 2 | 0 | 0 | 0 | 0 | 110 |
| 13:00 | 2 | 0 | 2 | 2 | 6 | 51 | 58 | 26 | 4 | 1 | 0 | 0 | 0 | 0 | 152 |
| 14:00 | 2 | 1 | 0 | 5 | 16 | 38 | 46 | 23 | 1 | 1 | 1 | 0 | 0 | 0 | 134 |
| 15:00 | 1 | 0 | 1 | 5 | 13 | 31 | 66 | 40 | 7 | 3 | 0 | 0 | 0 | 0 | 167 |
| 16:00 | 0 | 0 | 0 | 0 | 10 | 34 | 79 | 45 | 9 | 3 | 0 | 0 | 0 | 0 | 180 |
| 17:00 | 0 | 0 | 0 | 3 | 14 | 46 | 56 | 29 | 0 | 1 | 0 | 0 | 0 | 0 | 149 |
| 18:00 | 1 | 1 | 0 | 2 | 4 | 27 | 23 | 22 | 5 | 0 | 0 | 1 | 0 | 0 | 86 |
| 19:00 | 0 | 0 | 1 | 1 | 0 | 16 | 29 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 59 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 9 | 17 | 8 | 3 | 1 | 1 | 0 | 0 | 0 | 39 |
| 21:00 | 0 | 0 | 0 | 0 | 3 | 15 | 18 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 43 |
| 22:00 | 0 | 0 | 0 | 0 | 2 | 10 | 13 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 28 |
| 23:00 | 0 | 0 | 0 | 1 | 9 | 3 | 7 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 32 |
| Total | 11 | 6 | 4 | 34 | 132 | 453 | 706 | 408 | 90 | 18 | 4 | 2 | 0 | 0 | 1868 |


| Daily | 15th Percentile : | 36 MPH |
| ---: | ---: | ---: |
|  | 50th Percentile : | 42 MPH |
|  | 85th Percentile : | 47 MPH |
| Statistics | 95th Percentile : | 51 MPH |
|  | Mean Speed(Average) : | 42 MPH |
|  | 10 MPH Pace Speed : | $36-45 \mathrm{MPH}$ |
|  | Number in Pace : | 1159 |
|  | Percent in Pace : | $62.0 \%$ |
|  | Number of Vehicles >55 MPH : | 24 |
|  | Percent of Vehicles $>55 \mathrm{MPH}:$ | $1.3 \%$ |

Counts Unlimited, Inc.

County of San Mateo
State Route 84
Near 37.345396, -122.272018
72 Hour Directional Speed Survey
Northbound, Southbound

| Start | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | Total |
| 12/09/23 | 0 | 0 | 0 | 1 | 1 | 1 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 13 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 02:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 06:00 | 0 | 0 | 1 | 0 | 1 | 5 | 9 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 24 |
| 07:00 | 0 | 0 | 0 | 0 | 2 | 7 | 17 | 22 | 7 | 2 | 0 | 0 | 0 | 0 | 57 |
| 08:00 | 0 | 0 | 0 | 2 | 10 | 19 | 20 | 12 | 8 | 2 | 0 | 0 | 0 | 0 | 73 |
| 09:00 | 1 | 0 | 0 | 1 | 8 | 27 | 39 | 29 | 14 | 4 | 0 | 0 | 0 | 0 | 123 |
| 10:00 | 0 | 0 | 0 | 9 | 20 | 22 | 56 | 26 | 13 | 6 | 4 | 0 | 0 | 0 | 156 |
| 11:00 | 2 | 1 | 2 | 5 | 12 | 29 | 77 | 39 | 10 | 6 | 2 | 2 | 0 | 1 | 188 |
| 12 PM | 5 | 0 | 1 | 4 | 18 | 39 | 76 | 51 | 22 | 5 | 2 | 1 | 0 | 0 | 224 |
| 13:00 | 5 | 2 | 0 | 2 | 16 | 44 | 72 | 53 | 16 | 5 | 1 | 0 | 0 | 0 | 216 |
| 14:00 | 4 | 1 | 1 | 1 | 10 | 47 | 74 | 39 | 17 | 6 | 0 | 0 | 0 | 0 | 200 |
| 15:00 | 2 | 0 | 0 | 0 | 7 | 41 | 81 | 41 | 18 | 11 | 1 | 0 | 0 | 0 | 202 |
| 16:00 | 2 | 0 | 0 | 5 | 10 | 42 | 75 | 38 | 7 | 6 | 1 | 4 | 3 | 0 | 193 |
| 17:00 | 0 | 0 | 0 | 3 | 15 | 43 | 53 | 25 | 6 | 1 | 0 | 1 | 0 | 0 | 147 |
| 18:00 | 0 | 0 | 1 | 1 | 4 | 23 | 25 | 21 | 4 | 2 | 1 | 0 | 0 | 0 | 82 |
| 19:00 | 0 | 0 | 1 | 0 | 1 | 13 | 8 | 13 | 2 | 0 | 0 | 0 | 0 | 0 | 38 |
| 20:00 | 0 | 0 | 0 | 1 | 0 | 7 | 13 | 13 | 3 | 1 | 0 | 0 | 0 | 0 | 38 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 4 | 11 | 11 | 4 | 3 | 0 | 0 | 0 | 0 | 34 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 15 |
| 23:00 | 0 | 0 | 0 | 0 | 2 | 4 | 11 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 23 |
| Total | 21 | 4 | 7 | 35 | 141 | 422 | 737 | 447 | 161 | 61 | 15 | 8 | 3 | 1 | 2063 |

## APPENDIX B

## EXISTING LEVEL OF SERVICE WORKSHEETS

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.1 |  |  |  |  |  |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | Y |  |  | -1 | b |  |
| Traffic Vol, veh/h | 1 | 1 | 1 | 99 | 235 | 0 |
| Future Vol, veh/h | 1 | 1 | 1 | 99 | 235 | 0 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 1 | 1 | 104 | 247 | 0 |







HCM 6th TWSC
4: La Honda Rd \& Sears Ranch Rd/Entrada Way

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay, s/veh | 4.1 |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{7}$ | $\uparrow$ |  |  | \& |  |  | $\$$ |  |  | \$ |  |
| Traffic Vol, veh/h | 8 | 4 | 7 | 29 | 3 | 40 | 4 | 85 | 25 | 80 | 105 | 7 |
| Future Vol, veh/h | 8 | 4 | 7 | 29 | 3 | 40 | 4 | 85 | 25 | 80 | 105 | 7 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 0 | - | 50 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, \# | \# | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 4 | 7 | 31 | 3 | 42 | 4 | 89 | 26 | 84 | 111 | 7 |



## APPENDIX C

## EXISTING PLUS PROJECT LEVEL OF SERVICE WORKSHEETS

ATTACHMENT 1a
HCM 6th TWSC
1: La Honda Rd \& Existing Road/Site E Entrance



ATTACHMENT 1a
HCM 6th TWSC
2: La Honda Rd \& Site E Exit

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



ATTACHMENT 1a
HCM 6th TWSC
3: La Honda Rd \& Site D Driveway

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



ATTACHMENT 1a
HCM 6th TWSC
4: La Honda Rd \& Sears Ranch Rd/Entrada Way

| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay, s/veh | 6 |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |  |
| Lane Configurations | ${ }^{*}$ | $\hat{\beta}$ |  |  | $\uparrow$ |  |  | * |  |  | * |  |  |
| Traffic Vol, veh/h | 23 | 6 | 17 | 24 | 22 | 59 | 36 | 69 | 5 | 12 | 29 | 11 |  |
| Future Vol, veh/h | 23 | 6 | 17 | 24 | 22 | 59 | 36 | 69 | 5 | 12 | 29 | 11 |  |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Sign Control Star | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |  |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |  |
| Storage Length | 0 | - | 50 | - | - | - | - | - | - | - | - | - |  |
| Veh in Median Storage, \# | \# | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |  |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |  |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |  |
| Heavy Vehicles, \% | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |  |
| Mvmt Flow | 24 | 6 | 18 | 25 | 23 | 62 | 38 | 73 | 5 | 13 | 31 | 12 |  |



ATTACHMENT 1a
HCM 6th TWSC
1: La Honda Rd \& Existing Road/Site E Entrance

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.1 |  |  |  |  |  |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | Mr |  |  | $\neq$ | $\uparrow$ |  |
| Traffic Vol, veh/h | 0 | 0 | 2 | 74 | 141 | 4 |
| Future Vol, veh/h | 0 | 0 | 2 | 74 | 141 | 4 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, $\%$ | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 2 | 78 | 148 | 4 |


| Major/Minor M | Minor2 |  | Major1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 232 | 150 | 152 | 0 | - | 0 |
| Stage 1 | 150 | - | - | - | - | - |
| Stage 2 | 82 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 756 | 896 | 1429 | - | - | - |
| Stage 1 | 878 | - | - | - | - | - |
| Stage 2 | 941 | - | - | - | - | - |
| Platoon blocked, \% |  |  |  | - | - | - |
| Mov Cap-1 Maneuver | 755 | 896 | 1429 | - | - | - |
| Mov Cap-2 Maneuver | 755 | - | - | - | - | - |
| Stage 1 | 877 | - | - | - | - | - |
| Stage 2 | 941 | - | - | - | - | - |
|  |  |  |  |  |  |  |
| Approach | EB |  | NB |  | S |  |
| HCM Control Delay, s | 0 |  | 0.2 |  | 0 |  |
| HCM LOS | A |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | NBL | NBT EBLn1 |  | 1 SBT | SBR |
| Capacity (veh/h) |  | 1429 | - | - | - | - |
| HCM Lane V/C Ratio |  | 0.001 | - | - | - | - |
| HCM Control Delay (s) |  | 7.5 | 0 | 0 | - | - |
| HCM Lane LOS |  | A | A | A | - | - |
| HCM 95th \%tile Q(veh) |  | 0 | - | - | - | - |

ATTACHMENT 1a
HCM 6th TWSC
2: La Honda Rd \& Site E Exit

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



ATTACHMENT 1a
HCM 6th TWSC
3: La Honda Rd \& Site D Driveway





| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |







## APPENDIX D

## COLLISION DATA



Total Count: 144 RT 35 (SKYLINE BL) AND RT 1 (CABRILLO HWY), SAN MATEO CO.

Primary Rd SR-84 W/B
City UNINCORP. Primary Collision Factor Weather1 CLEAR Hit and Run

Distance (ft) $\mathbf{3 0}$
County SAN MATEO UNSAFE SPEED

Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action PARTY INFO
AF1 Viol
Route Postmile Prefix Postmile a of Hwy

Party Type Age Sex Race Sobriety1 Sobriety2

| 1F | DRVR 38 | M | W | HNBD |
| :--- | :--- | :--- | :---: | :---: |
| $\mathbf{2}$ | DRVR 41 | M | W | HNBD |
| Primary Rd SR-84 |  | Distance (ft) 200 |  |  |
| City <br> Primary |  |  |  |  |

City UNINCORP.
County SAN MATEO
Primary Collision Factor Weather1 CLOUDY Hit and Run Rdwy Cond2
Col
$\qquad$
Info OAF1 Viol

| IP Veh Make | Year | Sp Info | OAF1 Viol | OA |
| :---: | :---: | :---: | :---: | :---: |
| 00 MAZD | 2018 | - 3 | N |  | Loc Type Ramp/Int VICTIM INFO




| Primary Rd SR-84 | SAN MATE | ction E Secondary Rd | DR. | NCIC 9330 | State Hwy? N | Route 02190 | Postmile Prefix | Postmile |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COR | nty SAN MATEO | pulation 9 Rpt Dist | Beat 021 | pe | ans Dist | Badge 02219 | 90 Collision Date | 0190614 | me 1720 | Day FRI |
| ry Collision Factor | WRONG SIDE | Violation 21460A Collision | pe SIDESWIPE | Severity | JURY | led 0 | \# Injured 1 | Away? Y | rocess Date | te 20190624 |
| Weather1 CLOUDY | Wea | dwy Surface DRY | Rdwy | 11 | CND | Rdw |  |  | Spec Cond | Cond 0 |
| Hit and Run FELONY | Motor Veh Involved | $h$ OTHER MV | Lighting DAYLI |  | Action |  | Cntrl Dev NT PR | CTR | Type | Ramp/Int |

PARTY INFO VICTIM INFO



| 1F | DRVR 998 |  |  | IMP UNK | IMP UNK | OPPOS LN | W | - | 9900 | UNKNO |  | - | 3 | N | - | B | B |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | DRVR 39 | M | 0 | HNBD |  | PROC ST | E | C | 0200 | DUCA | 2011 | - | 3 | N | - | - | W | DRVR SERIOUS | 39 | M | 1 | P | W | 1 |






Hit and Run MSDMNR Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ne Pr Action
PARTY INFO Veh CHP Veh Mak
9900 -



| Primary Rd HIGHWAY-1 N/B | Distance (ft) 4224 |
| :--- | :--- |
| City UNINCORP. | County SAN MATEO |
| Primary Collision Factor | IMPROP TURN |






```
Primary Collision Factor UNSAFE SPEED
```

Weather1 CLEAR UNSAFE SPEED
Hitaner1 CLEAR Hit and Run

Weather2 Violation 22350 Rollision
Motor Veh Involved With




 Population 9 Rpt Dist Beat 503 Type 3 CalTrans Dist Badge 022211 Collision Date 20190804 Time 1205 Day SuN Population 97 Rpt Dist Beat 503 Type 3 CalTrans Dist 022211 Collision Date 20190804 Time 1205 Day SuN Violation 22107 Collision Type HIT OBJECT Severity INJURY $\begin{aligned} & \text { Rdwy Surface DRY } \text { Rdwy Cond1 NO UNUSL CND } \\ & \text { FIXED OBJ }\end{aligned}$
PARTY INFO

Rdwy Cond2 Spec Cond 0
Weather1 CLOUDY $\quad$ Weather2

Cntrl Dev NT PRS/FCTR Loc Type
Ramp/Int
VICTIM INFO
 1F DRVR 49 F W HNBD
Primary Rd 12049 LA HONDA F Distance (ft) 528

## City UNINCORP. County SAN MATEO

 Primary Collision Factor IMPROP TURN Weather1 CLEARWeather2 PROC ST W C 0200 HARL 2019 - 3 N $\begin{array}{llllllllllllll}\text { Direction W Secondary Rd } & \text { OLD LA HONDA RD } & \text { NCIC } & 9330 & \text { State Hwy? N } & \text { Route } & \text { Postmile Prefix } & \text { Postmile } & \mathbf{N} & \mathbf{N} & \text { Side of Hwy }\end{array}$ ealn RLEAR Rdwy Surface DRY OVIsion Type OVERTURNED Severity PDO XED OBJ PARTY INFO

$$
\begin{array}{ll}
\text { Rdwy Cond1 } & \text { NO UNUSL CND } \\
\text { Lighting DAYLIGHT } & \text { Ped Action }
\end{array}
$$

Badge 022140 Collision Date 20190809 Killed 0 \# Injured 0 Tow Away? Y Proce 0200 Day FRI Rdwy Cond2 Cntrl Dev NT PRS/FCTR Loc Type Spec Cond 0

VICTIM INFO



## Primary Rd LA HONDA RD Distance (ft) $\mathbf{0}$ City WOODSIDE UNSAFE SPEED

 Primary Collision FaWeather1 CLEAR Direction Secondary Rd SKYLINE BL NCIC 4100 State Hwy? N Route Postmile Prefix
Population 2 Rpt Dist WOOD Beat 030 Type CalTrans Dist Violation 22350 Collision Type HEAD-ON Severity INJURY Rdwy Cond1 NO UNUSL CND
 PARTY INFO

Badge 25136 Collision Date 20190812 Time 1815 Side of Hwy \# Killed $0 \quad$ \# Injured 1 Tow Away? N Process Date 20190830 Rdwy Cond2

Cntrl Dev NT PRS/FCTR Loc Type Spec Cond 0

VICTIM INFO

PARTY INFO




# Case Listing 





| 1 F |  |
| :---: | :---: |
|  |  |


PARTY INFO VICTIM INFO

| Race Sobriety1 Sobriety2 Move Pre Coll Dir SW Veh CHP Veh Make Year Sp Info OAF1 Viol OAF2 Safety Equip Role Ext of Inj Age Sex Seat Pos Safety Equip |
| :---: |
|  |  |


| 1F |  | DRVR 16 | F | W | HNBD |
| :---: | :---: | :---: | :---: | :---: | :---: |

 \# Killed 0 \# Injured 0 Tow Away? Y Process Date 2019123
 PARTY INFO




Primary Rd SR-84 W/B
City UNINCORP.
Primary Collision Factor
Weather1 CLEAR
County SAN MAT) 3168

| Direction E | Secondary Rd | HILDEBRAND ROAD NCIC 9330 | State Hw |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Population | $\mathbf{9}$ | Rpt Dist | Beat 021 | Type | $\mathbf{1}$ CalTrans Dist |
| Violation $\mathbf{2 2 1 0 7}$ | Collision Type | HIT OBJECT | Severity PDO |  |  | Weather2 Rdwy Surface WET Rdwy Cond1 NO UNUSL CND Hit and Run Motor Veh Involved With FIXED OBJ

Lighting DARK - NO ST LTS Ped Action Badge 022169 Collision Date 20200131 Time 2500 Side of Hwy City UNINCORP. PARTY INFO Rdwy Cond? Injured 0 Tow Away? N Day FRI
PARTY INFO
$\qquad$ Rdwy Cond2 Cntrl Dev NT PRS/FCTR Loc Type Spec Cond 0 VICTIM INFO

1F DRVR 998 IMP UNK IMP UNK OTHER $\quad$ W A $\quad 0100$
Poute Postmile Prefix

Postmile

| ute | ostmile Prefix | Postmile |  | Si |
| :---: | :---: | :---: | :---: | :---: |
| Badge 0221 | 85 Collision Date | 20200201 | Time 1225 | Day SAT |
| Killed 0 | \# Injured 2 T | Tow Away? N | Process Da | ate 20200210 |
| Rdwy C | 㱓 |  | Spec | Cond 0 |
|  | Cntrl Dev NT PRS | S/FCTR | Type | Ramp/Int |



|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Party | Type Age | Sex | Race Sobriety1 | Sobriety2 |  |
| 1F | DRVR 24 | F | A | HNBD |  |
|  |  |  |  |  |  |

PARTY INFO
VICTIM INFO

 Role Ext of Inj Age Sex Seat Pos Safety Equip Ejected DRVR POSSIBLE 24 F | PASS POSSIBLE 30 | M |
| :--- | :--- | :--- |


PARTY INFO VICTIM INFO







PARTY INFO
VICTIM INFO
 1F DRVR 25 M H HBD-UI OTHER E A 0100 SUBA 2018 3 22107 DRVR SERIOUS 25 M 1F DRVR 25 M H HBD-UI

Vear Sp Info OAF1Viol

| $\mathbf{L} \quad \mathbf{G}$ | $\mathbf{D R}$ |
| :--- | :--- |
|  | $\mathbf{P A}$ |
| Route |  | PASS SERIOUS



| Party | Type Age | Sex | Race Sobriety1 | Sobriety2 | M |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1F | DRVR 34 | M | W | HNBD | R |



Motor Veh Involved With Rdwy Surface DRY
FIXED OBJ $\begin{aligned} & \text { Rdwy Cond1 NO UNUSL CND } \\ & \text { Lighting DAYLIGHT }\end{aligned}$

## PARTY INFO

PARTY INFO VICTIM INFO

| Weather1 CLEAR Hit and Run | Weather2 <br> Motor Veh Involved With | Rdwy Surface DRY FIXED OBJ |  | Rdwy Cond DAYLIGHT | NO UNUSL CND | Rdwy Cond2 |  |  | Spec Cond 0 <br> Ramp/Int |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hit and Run | Motor Veh Involved With | FIXED OBJ | Lighting | DAYLIGHT | Ped Action | Cntrl Dev | NT PRS/FCTR | Loc Type | Ramp/Int |
|  |  | PARTY INFO |  |  |  |  |  | M INFO |  |


| IF |
| :---: |
|  |  |



1 DRVR 41 M W HNBD
Primary Rd SR-84 (LA HONDA I Distance (ft) 2640
City UNINCORP. $\quad$ County SAN MATEO

Hit and Run LEAR Lighting Rdwy Cond1 NO UNUSL CND

| Party Type Age Sex | Race Sobriety1 | Sobriety2 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | DRVR 41 | M | O | HNBD |  |
| Primar Rd SR-84 (LA HONDA |  |  |  |  |  |

County SAN MATEO
PROC ST
 Direction E Secondary Rd KEBET RIDGE RD NCIC 9330 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy Population 9 Rpt Dist Beat 021 Type 1 CalTrans Dist Badge 022436 Collision Date 20200502 Time $1820 \quad$ Day SAT Violation 21460A Collision Type BROADSIDE Severity INJURY \# Killed 0 \# Injured 6 Tow Away? Y Process Date 20200506 Rdwy Surface DRY
OTHER MV
PARTY INFO
Righting Rdwy Cond1 NO UNUSL CND
Lighting DAYLIGHT Ped Action Cond2
Cntrl Dev NT PRS/FCTR Loc Type Spec Cond 0
Ramp/Int
VICTIM INFO



| DRVR POSSIBLE 32 | M | $\mathbf{1}$ | L | G | $\mathbf{0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| PASS POSSIBLE 62 | F | $\mathbf{3}$ | L | G | $\mathbf{0}$ |
| PASS POSSIBLE 4 | M | $\mathbf{4}$ | L | Q | $\mathbf{0}$ |
| PASS POSSIBLE 29 | F | $\mathbf{6}$ | L | G | $\mathbf{0}$ |
| DRVR POSSIBLE 60 | M | $\mathbf{1}$ | M | G | $\mathbf{0}$ |
| PASS POSSIBLE 63 | F | $\mathbf{3}$ | M | G | $\mathbf{0}$ |



| Party Type Age Sex Race Sobriety1 Sobriety2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1F | DRVR 55 | M | W | HNBD |  |
| 2 | DRVR 59 | M | W | HNBD |  |

Primary Rd STATE ROUTE 35 Distance (ft) 528 City UNINCORP

County SAN MATEO

| ASSING | E | C | 0200 | YAMA | 2016 | - | 3 | N | - | - | W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FT TURN | E | A | 0700 | MAZD | 2016 | - | 3 | N | - | M | G |


| City UNINCORP. | County SAN MATEO |
| :--- | :--- |
| Primary Collision Factor | IMPROP TURN |

Weather1 CLEAR Weather2
Population 9 Rpt Dist $\quad$ Beat 042 Type 1 CalTrans Dist
Postmile Prefix Postmile

VICTIM INFO
Hit and Run Motor Veh Involved With

Rdwy Surface Collision Type OVERTURNED Severity INJURY
Badge 021942 Collision Date 20200509 $\qquad$ Side of Hwy ren

Motor Veh Involved With NON
NON-CLSN
Rdwy Cond1 NO UNUSL CND
Killed 0 \# Injured 1 Tow Away? N Process Date 20200522 PARTY INFO

Lighting DAYLIGHT Ped Action
Rdwy Cond2
Spec Cond 0


| 1F |
| :---: |
|  |  |




Hit and Run

Weather1 CLEAR Weather2 Rdwy Surface DRY $\quad$ Rdwy Cond1 NO UNUSL CND

Motor Veh Involved With NON-CLSN Lighting DAYLIGHT
Lighting DAYLIGHT

Ped Action Rdwy Cond2 Spec Cond 0

PARTY INFO

Cntrl Dev NT PRS/FCTR Loc Type


| PARTY INFO |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Coll Dir SW Veh CHP Veh Make Year Sp Info OAF1 Viol OAF2 Safety Equip |  |  |
| Role Ext of Inj Age Sex Seat Pos |  |  |



| 1 |  |  |
| :---: | :---: | :---: |
|  |  |  |





| $\mathbf{1}$ | DRVR $36 \quad$ M | H | HNBD |  |
| :--- | :--- | :--- | :--- | :--- |
| 2F | DRVR 998 |  | IMP UNK | IMP UNK |

Primary Rd SR-84 (LA HONDA I Distance (ft) 1056
City UNINCORP.
Primary Collision Factor

County SAN MATEO

Hit and Run

## Weather2

Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND
021 Beat 0 iolation 22350 Collision Type REAR END Severity INJURY \# Killed 0 \# Injured 2 Tow Away? Y Process Date 20200716 \# Killed 0 \# Injured 2 Tow Away? Y Process Date 20200716
Rdwy Cond2
Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG

Loc Type Ramp/Int
PARTY INFO
VICTIM INFO





| Party Type Age Sex Pace Sobriety1 Sobriety2 Move Pro Coll Dir SW Voh CHP Voh Make Year Splnfo OAF1 Viol OAF2 Safoty Equip |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | VICTIM INFO |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Role | Ext of Inj | Age |  |
| 1F | DRVR 22 | M | W | HNBD |  | PROC ST | N | A | 0100 | MERC | 2008 | - | 3 | N | - | M | G |  |  |  |  |
| 2 | DRVR 61 | M | 0 | HNBD |  | PROC ST | W | A | 0700 | LAND | 2013 | - | 3 | N | - | L | G |  |  |  |  |



Primary Rd SR-35 (SKYLINE BI Distance (ft) 1584

## City UNINCORP.

Primary Collision Factor Weather1 CLEAR Hit and Run

County SAN MATEO MPROP TURN $\begin{array}{llllllllll}\text { ROC ST } & \mathbf{E} & \mathbf{A} & \mathbf{0 7 0 0} & \text { JEEP } & \mathbf{2 0 0 4} & -\quad \mathbf{3} & \mathbf{N} & - & \mathbf{M} \\ \text { Direction S } & \text { Secondary Rd } & \text { OLD LA HONDA RD. NCIC } & \mathbf{9 3 3 0} & \text { State Hwy? } & \text { Y Route }\end{array}$ Population 9 Rpt Dist Beat 052 Type 1 CalTrans Dist Violation 22107 Collision Type HIT OBJECT Severity PDO Rdwy Cond1 NO UNUSL CND Reather2 $\begin{aligned} & \text { Rdwy Surface DRY } \\ & \text { Motor Veh Involved With } \\ & \text { OTHER OBJ }\end{aligned} \quad$ Lighting DAYLIGHT NO UNUSL CND

Badge 021987 Collision Date 20200830 Time 1800 Day SUN Killed 0 \# Injured 0 Tow Away? Y Process Date 20200909 Rdwy Cond2 Spec Cond 0 Cntrl Dev NT PRS/FCTR Loc Type Ramp/lnt

## VICTIM INFO <br> <br> VICTIM INFO

 <br> <br> VICTIM INFO}




Report run on: 10/20/2021
Total Count: 144
\#211264AC 2019 - AV. 2020/2021 CRASHES ON RT 84 (LA HONDA RD/WOODSIDE RD) BETWEEN
RT 35 (SKYLINE BL) AND RT 1 (CABRILLO HWY), SAN MATEO CO.
Case Listing
Primary Rd RT 35
City WOODSIDE Primary Collision Factor Weather1 CLEAR Hit and Run

County SAN MATEO IMPROP TURN

Weather2 Violation 22107 Colision Type HEAD-ON Severity INJURY
Motor Veh Involved With BICYCLE Lighting DAYLIGHT Ped Action

Route 35 Postmile Prix ATHCHMENT 1a
Badge Postmile Prefix - Postmile 10.558 Side of Hwy N \# Killed $0 \quad$ \# Collision Date 20200927 Time 0000 Day SUN Rdwy Cond2 Spec Cond 0 Cntrl Dev NT PRS/FCTR Loc Type I Ramp/Int 5 VICTIM INFO




$$
\text { PARTY INFO } \quad \text { VICTIM INFO }
$$



 City UNINCORP. County SAN MATEO Population 9 Rpt Dist Beat 021 Type $\mathbf{1}$ CalTrans Dist Violation 22107 Collision Type OVERTURNED Severity PDO Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND

Badge 021243 Collision Date 20201004 Time 2133 Day SUN Primary Collision Factor IMPROP TURN Weather1 CLEAR Hit and Run MSDMNR

Rdwy Cond1 NO UNUSL CND
DARK - NO ST LTS Ped Action Weather2 Rdwy Surface DRY

Lighting DARK - NO ST LTS Ped Action
Rdwy Cond2
Spec Cond 0
Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int
PARTY INFO
VICTIM INFO



 Hit and Run Motor Veh Involved With FIXED OBJ
Hit and Run Motor Veh Involved With FIXED OBJ
PARTY INFO
Lighting DARK - NO ST LTS Ped Action Rdwy Cond2

Spec Cond 0
Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

## VICTIM INFO





City UNINCORP. Primary Collision Fa
Weather1 CLEAR

County SAN MATEO 1056 Hit and Run $\begin{array}{lllll}\text { County SAN MATEO } & \text { Population } \mathbf{9} & \text { Rpt Dist } & \text { Beat } \mathbf{0 2 1} \text { Type } \mathbf{1} \text { CalTrans Dist } \\ \text { IMPROP TURN } & \text { Violation } \mathbf{2 2 1 0 7} & \text { Collision Type } & \text { OVERTURNED Severity INJURY }\end{array}$ Direction W Secondary Rd SEQUOIA DRIVE NCIC 9330 State Hwy? Y Route Direction Wecondary Rd SEQUOIA DRIVE NCIC 9330 State Hwy? Y Route Postmile Prefix Postmile | Badge 022504 Collision Date |  | Sostmile of Hwy |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 20201017 | Time $1430 \quad$ Day SAT |  | \# Killed 0 \# Injured 1 Tow Away? Y Process Date Day SAT


 PARTY INFO VICTIM INFO
 Primary Rd SR-84 E/B Distance (ft) 2112 City UNINCORP.
Primary Collision Fa Weather1 CLEAR Hit and Run

County SAN MATEO Direction W Secondary Rd SR-35 IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity PDO Population 9 Rpt Dist Beat 021 Type 1 CalTrans Dist IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity PDO

02504 Postmile Time 2000 side of Hwy Badge 022504 Collision Date 20201107 Time 2000 Day SAT

Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND
PARTY INFO

Lighting DARK - NO ST LTS Ped Action
Rdwy Cond2 Tow Away? Y Process Date 202011
Cntrl Dev NT PRS/FCTR Loc Type Rec Ramp/Int
VICTIM INFO


 1F DRVR 51 M A HNBD RAN OFF RD E A 0100 ACURA 1995 - 3 N





$1 F$ DRVR 23 M H HNBD PR

| City UNINCORP. | County SAN MATEO |
| :--- | :--- |
| Primary Collision Factor | UNSAFE SPEED |

## VICTIM INFO



 CLEAR

Motor Veh Involved With OTHER MV Lighting DAYLIGHT NO UNUSL CND Rdwy Cond2
Cntrl Dev NT PRS/FCTR Loc Type Spec Cond 0
Ramp/Int PARTY INFO




Primary Rd SR-35 (SKYLINE BC Distance (ft) 2112



 PARTY INFO


 City UNINCORP. County SAN MATEO Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type OVERTURNED Severity INJURY Hit and Run

Rdwy Surface DRY
Rdwy Cond1 NO UNUSL CND
Lighting DAYLIGHT Ped Action
PARTY INFO

Badge 022244 Collision Date 20210513 Time 1440 Day THU




PARTY INFO








Cntrl Dev NT PRS/FCTR Loc Type

| $x$ Race Sobriety1 Sobriety2 Move Pre Coll Dir SW Veh CHP Veh Make Year Sp Info OAF1 Viol OAF2 Safety Equip Role Ext of Inj Age Sex Seat Pos Safety Equip Eje te |  |
| :---: | :---: |
|  |  |
|  |  |


| 1F DRVR 59 | M W HNBD | U |
| :--- | :--- | :--- | :--- |
| Primary Rd SR-1 (CABRILLO H Distance (ft) 7392 |  |  |

```
City UNINCORP
```

County SAN MATEO
Primary Collision Factor IMPROP TURN Vopulation 9 Rpt Dist Beat 020 Type 1 CalTrans Dist Violation 22107 Collision Type OVERTURNED Severity FATAL Hit and Run CLOUDY Rdwy Surface DRY Lighting DARK - NO ST LTS Ped Action
PARTY INFO
VICTIM INFO




Report run on: 10/20/2021
\#211264AC 2019-AV. 2020/2021 CRASHES ON RT 84 (LA HONDA RD/WOODSIDE RD) BETWEEN RT 35 (SKYLINE BL) AND RT 1 (CABRILLO HWY), SAN MATEO CO. Total Count: 144

Case Listing
ATTACHMENT 1a Page 24
 City UNINCORP. County SAN MATEO IMPROP TURN Weather1 CLEAR
Hit and Run Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Motor Veh Involved With NON-CLSN Lighting DARK - NO ST LTS Ped Action PARTY INFO Postmile Postmile Prefix Badge 022394 Collision Date 20210926 Time 0115 Day SUN \# Killed 0 \# Injured 1 Tow Away? Y Process Date 20211007 Rdwy Cond2 $\qquad$ Cntrl Dev NT PRS/FCTR Loc Type Ramp/lnt VICTIM INFO


# EXISTING CONDITIONS / OPPORTUNITIES AND CONSTRAINTS REPORT 

Date: November 18, 2022<br>(revised March 29, 2024)<br>Prepared for: Melissa Borgesi, Planner<br>Midpeninsula Regional Open Space District<br>5050 El Camino Real<br>Los Altos, CA 94022<br>mborgesi@openspace.org<br>Prepared by: Douglas Nelson and Megan Dale<br>RHAA Landscape Architecture \& Planning<br>225 Miller Avenue<br>Mill Valley, CA 94941<br>megan.dale@rhaa.com

RE: La Honda Creek Parking Area and Trailhead - Existing Conditions/Opportunity and Constraints Report

## Executive Summary

Midpeninsula Regional Open Space District (Midpen) is undertaking a review to evaluate potential sites for parking and trailhead locations to access the central area of the La Honda Creek Open Space Preserve that is currently closed to the public. The La Honda Creek Parking and Trailhead Access Feasibility Study was driven by the 2020 La Honda Public Access Working Group (PAWG) process during which a group of representatives from La Honda and throughout Midpen looked for sites with the potential to offer access into the Preserve. The PAWG's final recommendation included a suite of six sites across which a variety of uses, amenities, and parking and trailhead access facilities would be distributed. The PAWG also recommended several short-term measures to consider while the longerterm Feasibility Study was underway.

This analysis will review four of those sites (Sites B2, B3, D, and E3) as well as a bridge associated with Site D (Bridge at D), which warrants its own section in the report. The two remaining sites (the C sites or Sites C1 and C2) recommended by the PAWG propose amenities for an area one mile north of the existing Sears Ranch Road parking lot. The C sites are outside of RHAA's scope of work due to the minimal nature of contemplated site improvements. Midpen staff will separately study these improvements and the feasibility of short term measures the PAWG recommended.

The purpose of this report is to compile site observations and technical report data generated and collected for this project by RHAA and our consultant team into a comprehensive analysis of existing site conditions and each site's distinct opportunities and constraints. The conceptual program of each site

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
will be adjusted based on guidance from Midpen's Planning and Natural Resources Committee and community input.

## Existing Conditions

RHAA's and Midpen's consultant teams prepared the following technical studies for Sites B2, B3, D, Bridge at D, and E3 between October 2021 - October 2022 (see Appendices):

- BKF Engineers, Boundary and Topographic Survey, dated September 2022
- CG\&E, Cal Engineering \& Geology, Preliminary Geologic and Geotechnical Assessment Report, dated March 2022
- LSA, Access (Traffic) Study, dated October 2022 (revised March 2024)
- LSA, Biological Resource Evaluation Study, dated October 2022
- LSA, Cultural Landscape Report (Site E3), dated April 2022
- LSA, Cultural Resources Survey Study, dated March 2022
- LSA, Tree Inventory Table, dated January 2022
- Vollmar, Botanical Resource Survey Report, dated November 2021
- Vollmar, Delineation of Potential Jurisdictional Waters (Site B2, B3, D), dated May 2022
- Vollmar, Delineation of Potential Jurisdictional Waters (Site E3), dated May 2022


## Site Analysis/Opportunities and Constraints

Each site was analyzed based on three categories of existing conditions: Site Characteristics, Site Circulation, and Environmental Resources. A list of opportunities and constraints, applicable agency consultations, and recommendations associated with each site has been included to help evaluate whether the site is a viable option for development as a parking area and trailhead. This information will be reviewed at a public meeting of the Planning and Natural Resources Committee, and input will inform the path forward and the basis of the program for those sites advancing into the feasibility study phase and conceptual site planning.

We look forward to collaborating with you in developing and implementing a shared vision for the La Honda Creek Open Space Preserve.

Sincerely,


Douglas Nelson
Principal Emeritus
doug@rhaa.com
(415) 360-2853

## megan Dodn

Megan Dale
Senior Associate
megan.dale@rhaa.com
(415) 360-2849

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

## Table of Contents

1.0 INTRODUCTION ..... 6
1.1 GENERAL ..... 6
1.2 PROJECT DESCRIPTION ..... 10
1.3 PURPOSE, SCOPE OF WORK, AND GOALS ..... 10
2.0 PROPOSED SITES AND PROGRAM ..... 12
2.1 SITE B2 ..... 13
2.2 SITE B3 ..... 15
2.3 SITE D ..... 16
2.4 SITE D - BRIDGE ..... 17
2.5 SITE E3 - RED BARN ..... 18
3.0 SUMMARY OF OPPORTUNITY AND CONSTRAINTS AND RECOMMENDATIONS BY SITE ..... 19
3.1 SITE B2 ..... 19
3.2 SITE D ..... 24
3.3 SITE D BRIDGE ..... 28
3.4 SITE E3 ..... 31
3.5 SITE B3 ..... 40
4.0 NEXT STEPS ..... 42
5.0 EXHIBIT A - DETAILED EXISTING CONDITIONS BY SITE ..... 43
5.1 SITE B2 ..... 43
5.1.1 SITE B2 - SITE CHARACTERISTICS. ..... 43
5.1.2 SITE B2 - SITE CIRCULATION ..... 47
5.1.3 SITE B2 - ENVIRONMENTAL RESOURCES. ..... 49
5.2 SITE B3 ..... 55
5.2.1 SITE B3 - SITE CHARACTERISTICS ..... 55
5.2.2 SITE B3 - SITE CIRCULATION ..... 55
5.2.3 SITE B3 - ENVIRONMENTAL RESOURCES ..... 55
5.3 SITE D ..... 56
5.3.1 SITE D - SITE CHARACTERISTICS ..... 56
5.3.2 SITE D - SITE CIRCULATION ..... 59
5.3.3 SITE D - ENVIRONMENTAL RESOURCES ..... 62
5.4 SITE D - BRIDGE ..... 68
5.4.1 SITE D BRIDGE - SITE CHARACTERISTICS ..... 68
5.4.2 SITE D BRIDGE - SITE CIRCULATION ..... 70
5.4.3 SITE D BRIDGE - ENVIRONMENTAL RESOURCES. ..... 71
5.5 SITE E3 - RED BARN ..... 76
5.5.1 SITE E3 - SITE CHARACTERISTICS ..... 76
5.5.2 SITE E3 - SITE CIRCULATION ..... 80
5.5.3 SITE E3 - ENVIRONMENTAL RESOURCES ..... 83
6.0 EXHIBIT B - RECORDS REVIEW ..... 90

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## APPENDICES

A. BKF Engineers, Boundary and Topographic Survey, dated September 2022
B. Cal Engineering \& Geology, Preliminary Geologic and Geotechnical Assessment Report, dated March 2022
C. LSA, Access (Traffic) Study, dated October 2022 (revised March 2024)
D. LSA, Biological Resource Evaluation Study, dated October 2022
E. LSA, Cultural Landscape Report (Site E3), dated April 2022
F. LSA, Cultural Resources Survey Study, dated March 2022
G. LSA, Tree Inventory Table, dated January 2022
H. Vollmar, Botanical Resource Survey Report, dated November 2021
I. Vollmar, Delineation of Potential Jurisdictional Waters (Site B2, B3, D), dated May 2022
J. Vollmar, Delineation of Potential Jurisdictional Waters (Site E3), dated May 2022

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

## LIST OF ABBREVIATIONS AND ACRONYMS

| APN | Assessor's parcel number |
| :--- | :--- |
| BMPs | Best Management Practices |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CNPS | California Native Plant Society |
| CRLF | California red-legged frog |
| CRPR | California Rare Plant Rank |
| Midpen | Midpeninsula Regional Open Space District |
| EIR | Environmental Impact Report |
| GIS | Geographic Information System |
| IPM | Midpen's Integrated Pest Management Program |
| IS/MND | Initial Study/Mitigated Negative Declaration |
| Master Plan | La Honda Creek Open Space Preserve Master Plan |
| OHWM | Ordinary High-Water Mark |
| PAWG | La Hondic Access Working Group |
| Preserve | La Honda Creek Feasibility Project |
| project | Right-of-way |
| ROW | Resource Management Policies |
| RMPs | Regional Water Quality Control Board |
| RWQCB | San Francisco dusky-footed woodrat |
| SFDFW | San Mateo County |
| SMCo | State Route 35 |
| SR-35 | U.S. Army Corps of Engineers |
| SR-84 | USeological Survey |
| USACE | USFWS |

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 1.0 INTRODUCTION

### 1.1 GENERAL

Midpeninsula Regional Open Space District (Midpen) manages the 6,142-acre La Honda Creek Open Space Preserve (Preserve), which is located within unincorporated San Mateo County in the northern Santa Cruz Mountains. The Preserve is comprised of coastal scrub, redwood and hardwood forest, and rolling grassy hills with views to the Pacific Ocean. The Preserve is used by hikers, equestrians, and dog walkers.


Figure 1-1 Midpen's Jurisdictional Boundary and La Honda Creek Open Space Preserve

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
In 2012, Midpen's Board approved the La Honda Creek Master Plan (Master Plan) and at the same time, adopted the Master Plan's Initial Study/Mitigated Negative Declaration (IS/MND). The Master Plan includes Environmental Protection Guidelines, which are the measures from Midpen's 2003 San Mateo Coastal Annexation Draft and Final Environmental Impact Report that apply to area of La Honda Creek Preserve that lie within the Coastside Protection Area. The Master Plan is a 30 -year plan to guide stewardship efforts and recreational access and includes an expanded trail system for hiking and equestrian use with specific trails identified for dogs on leash and bicycle use. The land has historically been used for ranching, and conservation grazing operations continue to be a part of the land use.

In 2017, Midpen studied adding a new parking area near the Red Barn off State Route 84 (also known as La Honda Road or SR-84) in La Honda. After hearing concerns from the La Honda community about traffic and visual impacts, Midpen paused the project to create a working group made up of La Honda residents and Midpen's District ward representatives to help the project team explore other options to provide access to the currently closed middle section of the Preserve.

For the purposes of this report, the traffic discussions note SR-84 as officially designated as an east-west state highway but in the section of the Preserve where these sites are located, the travel lanes are oriented north-south, which leads to confusion. Therefore, this document refers to the eastbound direction of SR-84 as northbound and the westbound direction of SR-84 to southbound to match the physical orientation of the highway in this location.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 1-2 2012 La Honda Creek Open Space Preserve Master Plan

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 1-3 Public Access Sites studied in the 2020 La Honda PAWG Report

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 1.2 PROJECT DESCRIPTION

The project sites evaluated under this report are located along SR-84 and are intended to provide access to the central areas of the Preserve. Sites B2 and B3 are located off Sears Ranch Road in La Honda, California. North of these sites, on SR-84, is Site D. And further north on SR-84 is Site E3 at the Red Barn site. The public access improvements contemplated across these sites include public trailhead access, paved and gravel parking lots, restrooms, and a replacement bridge (bridge at Site $D$ ) at an existing trail.

### 1.3 PURPOSE, SCOPE OF WORK, AND GOALS

The purpose of the Feasibility Study is to determine if the proposed sites can support and accommodate a parking area, trailhead, and associated infrastructure. For this study, the consultant team analyzed each site and will develop conceptual renditions that support the following Board-approved project goals with the understanding that more than one of these sites will be needed to achieve all the goals.

## Board-approved project goals

- Establish new public access in the central portion of the Preserve.
- Design elements to reflect the rural character of the site and the Red Barn.
- Provide safe public access.
- Balance public access with grazing activities and other uses.
- Include amenities that facilitate environmental education.
- Protect scenic views of and from the site.
- Protect natural resources to the extent possible.
- Incorporate climate change adaption where appropriate.
- Provide equitable access opportunities to accommodate the diverse community Midpen serves.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 1-4 Existing parking lot at Sears Ranch Road at Preserve Gate LH11


Figure 1-5 Existing entry sign at Sears Ranch Road parking lot at Preserve Gate LH11

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 2.0 PROPOSED SITES AND PROGRAM

After consideration of each site's specific characteristics, the PAWG recommended distributing the types of access (permit/docent or full public access), trail uses (equestrian), and infrastructure (restroom and hitching posts) throughout multiple sites.

As a starting point, the Existing Conditions/Opportunities and Constraints Report evaluates the maximum parking capacity feasible at each site to cover the broadest limits of potential parking development, understanding that a full build-out may not be ultimately implemented. In addition, where equestrian parking is considered, at least four equestrian trailer spaces are assumed.
La Honda Creek Parking Area Feasibility Study

Figure 2-1 Locations of four sites and bridge studied in this report

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 2.1 SITE B2

Site B2 is located approximately 0.5 miles northwest of the intersection of SR-84 and Sears Ranch Road and downhill and west of the Preserve's existing paved parking lot with a west aspect slope. The site is primarily covered in grasses with minimal trees except those along the private access road to the south that leads through Preserve Gate LH14 to an existing staff residence located further west of the site.

## Program Elements for Site B2

- Equestrian trailer gravel parking area (approximately four equestrian trailer spaces for up to eight horses).
- Overflow vehicular parking from the existing Sears Ranch Road parking lot (approximately 40 to 80 overflow standard parking spaces).
- Trail access to the existing Sears Ranch Road parking lot and trail system.
- Potential Sears Ranch Road improvements for the section of road from La Honda Elementary School to the existing Sears Ranch Road parking lot (see Site B3).


Figure 2-2 Site B2

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Site B2 - Sears Ranch Road Widening
$\ddot{\oplus} \because{ }_{0}$
Figure 2-3 Site B2 Sears Ranch Road Widening

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 2.2 SITE B3

Site B3 is located at the end of Sears Ranch Road and north of La Honda Elementary School at Preserve Gate LH15. This site is bounded on the west by approximately 1,000 feet of Sears Ranch Road that would need to be improved from the school's driveway to the existing paved Sears Ranch Road parking lot. Trees line both sides of Sears Ranch Road up to this site. The potential parking area at Site B3 is a level area that is down a steep slope east of Sears Ranch Road. The site is framed by trees along the southern fence but is primarily covered in grasses with wetland plant species located along the southern coterminous border with the school.

## Program Elements for Site B3

- Equestrian trailer gravel parking area (approximately four equestrian trailer spaces for up to eight horses).
- Overflow vehicular parking from the existing Sears Ranch Road parking lot (approximately 20 to 30 overflow parking standard spaces).
- Trail access to the existing Sears Ranch Road parking lot and trail system.
- Potential Sears Ranch Road improvements for the section of road from the school to the existing Preserve Sears Ranch Road parking lot.


Site B3

Figure 2-4 Site B3

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 2.3 SITE D

Site $D$ is centrally located within the Preserve approximately 4 miles south of the State Route 35 (SR-35) and SR-84 intersection. The site is west of SR-84 at Preserve Gate LH07 between SR-84 post mile markers 10.8 and 11. Approximately 400 feet of SR-84 fronts this property, and a wide shoulder is adjacent to the highway. The site is relatively flat and is heavily shaded with tree canopy.

## Program Elements for Site D

- Paved parking area with a new trailhead (approximately 20 to 40 vehicles).
- Potential vault restroom facility.
- Vehicular access to and from SR-84.
- Traffic safety enhancements.
- Trail access via the bridge over La Honda Creek connecting to the existing trail system.
- Bridge replacement (see 2.4 Site D - Bridge)


Bridge Site, Site D, \& Site E3

Figure 2-5 Site D in relation to Site E3

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 2.4 SITE D - BRIDGE

The bridge is approximately 0.2 miles down an existing ranch road from Site D . Due to the abutment conditions, the bridge has been deemed structurally unusable for public access. The bridge requires replacement or structural repairs to support pedestrian loads and possibly vehicle loads (vehicle use for Midpen patrol and maintenance). Upgrades to the existing unpaved road leading to the bridge from Preserve Gate LH07 are not part of the scope of this study.

## Program Element for Site D-Bridge

- Replacement bridge over La Honda Creek.


Site D \& Bridge Site
$\ddot{\oplus} \underset{0}{\square}={ }_{x \infty}$
Figure 2-6 Site D and the Bridge Site

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 2.5 SITE E3 - RED BARN

Site E3 is located 1 mile north of Site D on the west side of SR-84 between post mile markers 12 and 12.35. The site has approximately 800 feet of SR-84 frontage. The Red Barn is located on this property, and the picturesque view of the barn and grasses within the corral can be seen by north-bound and south-bound travelers along SR-84. The land is sloped down from the highway and contains existing entry and egress roads used primarily by the staff residence and grazing tenants. The site is a level area located behind existing trees and near an existing white shed that sits downslope from the staff residence.

## Program Elements for Site E3

- Gravel parking area (approximately 10 to 15 vehicles).
- Permit and docent-led access only to limit daily traffic movements to and from SR-84.
- Vehicular access to and from SR-84.
- Traffic safety enhancements.
- Trail access to the Red Barn.


Site E3
(1) $\varlimsup_{0}^{-100}$

Figure 2-7 Site E3

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 3.0 SUMMARY OF OPPORTUNITY AND CONSTRAINTS AND RECOMMENDATIONS BY SITE

Over the past year, RHAA completed a wide range of technical studies, analyzed the existing conditions, and found three sites that are recommended to advance further into design and evaluation as potential locations that can offer access to the central area of the Preserve. RHAA found one site that is recommended to be removed from consideration. The following is a site-by-site summary of opportunities and constraints, starting with the sites being recommended for further evaluation (Site B2, D, and E3) and concluding with the site not being recommended (Site B3). For more detail on existing conditions, refer to the Existing Conditions/Opportunities and Constraints (5.0 Exhibit A), Existing Conditions Plans (Figures 1.1 - 5.3b), and Appendices for additional information.

## Potential sites to further evaluate:

### 3.1 SITE B2

Site B2 appears to be the best site for equestrian parking as well as for overflow parking for the existing Sears Ranch Parking area. Site B2 raises minimal to no concerns regarding potential impacts to sensitive environmental resources. This site has a large, relatively flat area suitable for equestrian and standard parking. Waters or natural resources would be minimally affected. This site has no state or federal permitting jurisdictions near the project location.


Site B2
$\ddot{\square} \underset{\square}{\rightleftarrows}$
Figure 3-B2-1 Site B2. Also see Figures: 1.1, 1.2, and 1.3

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-B2-2 Site B2 facing north


Figure 3-B2-3 Site B2 facing northeast up the steep bank

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-B2-4 Site B2 facing north towards grazing road and barn


Figure 3-B2-5 SR-84 at Sears Ranch Road facing north

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-B2-6 SR-84 at Sears Ranch Road facing south


Figure 3-B2-7 Sears Ranch Road facing south at existing turnout

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 3-B2-8 Sears Ranch Road facing north at narrow section of road near school

## Opportunities

- The site has a large, relatively flat area suitable for equestrian and standard parking.
- Waters or natural resources would be minimally affected.
- This site has no state or federal permitting jurisdictions near the project location.


## Constraints/Challenges

- Providing traffic safety for equestrian trailers entering and exiting SR-84 at Sears Ranch Road.
- Widening Sears Ranch Road from the school to the parking lot to accommodate equestrian trailers; identifying property ownership and, if necessary, negotiating access for road improvements.
- Ensuring ingress/egress to the existing staff residence is maintained.
- Protecting the scenic views of lower elevations (barn and pond) and higher elevations that look down into the site.
- Minimizing the impact to conservation grazing pastures and ensuring that the grazing operation is considered when site planning; efficiently locating fencing around the parking to minimize loss of pasture.
- Avoiding or mitigating numerous shallow slumps, as well as shallow slumps and landslides along Sears Ranch Road, since these limit the area of development.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

- The proposed widening of Sears Ranch Road will need to remain outside the 50 -foot setback of the wetland seep (located at B3) to avoid jurisdictional waters and undergo permitting.
- If Site B 2 is the only feasible site for a future well to provide water for the grazing tenant's operation, parking and trailhead improvements to the site would need to be coordinated with this work to accommodate the approximately three feet by four feet footprint of the well.


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.
- Borings are recommended to characterize subsurface conditions for areas of development to identify remediation or avoidance. Obtain a County permit for 3 borings estimated depth of 15 to 30 feet to characterize subsurface materials for proposed parking lot area.
- The LANGAN report identified areas of artificial fill that may require remediation via earthwork or the development of retention structures.
- If needed, use of steel beam and walls are recommended but will be dependent on the final design configuration and the results of the geotechnical investigation and analysis.
- Designing a new parking area with a minimal footprint is recommended to reduce the loss of active grazing land.
- The LSA Access (Traffic) Study recommends no modifications for the intersection of SR-84/Sears Ranch Road.
- The LSA Access (Traffic) Study recommends widening Sears Ranch Road to 20 feet between the La Honda Elementary School and the existing parking lot.
- San Mateo County's Active Transportation Plan evaluated pedestrian safety in downtown La Honda and included recommendations for addressing the disconnected/inaccessible walking network along SR-84/Sears Ranch Road and the safety of pedestrians crossing SR-84 at Sears Ranch Road. Midpen can consider working with Caltrans to identify potential improvements for pedestrian access.
- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.
- Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements.


### 3.2 SITE D

Site $D$ appears to be feasible to continue studying for development potential. From a traffic safety standpoint, the site can maximize sight lines (for drivers waiting in the driveway) for the SR-84 traffic speeds if the driveway is moved 50 feet north of Preserve Gate LHO7 and the stop bar in the driveway is recessed to accommodate a right-turn pocket. Moving the driveway north 50 feet meets sight distance for drivers in the driveway to the southbound lanes but not for the northbound lanes; therefore, additional traffic devices and warnings focused on the travel speed of vehicles on the highway could also be implemented to address safety concerns. With these devices and warnings, northbound vehicles on the highway would have the stopping sight distance and time to see the driveway and to stop and slow if someone is making a left in front of them from the driveway.

This site has a moderately flat area suitable for a paved parking lot with room to treat stormwater while also avoiding the adjacent wetland channel. Many larger, densely packed trees that would need to be

## ATTACHMENT 2

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)
removed for development are invasive or fire hazard trees. Removing them would provide a fire management benefit through CALFIRE's program. Perimeter trees could be retained for shade, and new native vegetation could be planted to assist with screening.


Site D \& Bridge Site
(1)

Figure 3-D-1 Site D and the Bridge Site. Also see Figures: 3.1, 3.2, and 3.3


Figure 3-D-2 Site D facing south under existing canopy

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-D-3 Site D facing west at Preserve Gate LHO7


Figure 3-D-4 Site D facing north at SR-84

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 3-D-5 Site D facing south at SR-84

## Opportunities

- The site is centrally located within the Preserve.
- An existing flat area with a wide highway shoulder is ideal for a parking lot, which would be the only one of the four sites able to support a restroom.
- The area is shaded with existing tree canopy.
- The proposed parking area can avoid jurisdictional waters.


## Constraints/Challenges

- Safe access to SR-84.
- Since the short, upper section of the existing ranch road is not owned by Midpen, plan for a new trail connection from the future parking lot to a Midpen-owned portion of the existing ranch road or investigate additional property rights for public access over the ranch road if a new trail connection is not feasible.
- Protection of the nearby creek.
- Potential deep landslides and areas of significant instability may require mitigation measures for the planned development. Conduct a more extensive geotechnical study and prepare design of mitigation measures.


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.
- Borings are recommended to characterize subsurface conditions for areas of development to identify remediation or avoidance. Obtain a County and Caltrans (if in ROW) permit for 3 borings estimated depth of 20 to 30 feet to characterize subsurface materials for proposed parking lot area, restroom foundation, and potential retaining walls.
- Designs should consider slope inclinations of 3:1 (horizontal: vertical) or shallower unless supported by retention structures or using geogrid reinforced engineered fill.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Avoid areas of significant instability.
- The colluvium / landslide deposit needs further exploration.
- Remediation measures to address the identified instabilities may include segmental block or cast-in-place concrete wall supported with pier and grade and buried stabilization piles. The selection of remedial or stabilization measures will depend on the planned improvements configuration and findings from the subsurface exploration and engineering analysis.
- The development of a trail is feasible, but a potential deep landslide and areas of significant instability could increase the level of maintenance needed.
- Access easements or agreements may be required.
- The Level of Service at the proposed driveway would be within Caltrans standards.
- The driveway is recommended to be placed 50 feet north of Preserve Gate LHO7 to improve sight distance to the southbound lanes.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology and a left-turn pocket is not warranted.
- A short right-turn pocket ( 25 feet) with an abbreviated ( 60 feet) transition into and out of the driveway would maximize sight distance from the driveway to $S R-84$.
- A full deceleration and acceleration lane is not recommended because it could be used as a passing lane, reducing road safety.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound approaches and interconnecting warning beacon to the loop detector at the exit lane in the driveway.
- Midpen can consider working with Caltrans to determine whether features would be added to the state highway to prevent passing at this location as part of the project.
- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.
- Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements.


### 3.3 SITE D BRIDGE

The rail car bridge at Site $D$ appears to be feasible to replace if the abutments of the new bridge are outside the Ordinary High-Water Mark (OHWM) and above the top-of-bank of La Honda Creek. The existing bridge could be removed in segments, and access to the site is reasonable. Both a pedestrian and vehicular bridge will be studied.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-Br-1 Bridge over La Honda Creek at Site D. Also see Figures: 4.1, 4.2, and 4.3


Figure 3-Br-2 Bridge over La Honda Creek at Site D facing west

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-Br-3 Bridge over La Honda Creek at Site D facing east

## ATTACHMENT 2

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Opportunities

- Replacing the bridge can allow for vehicle and/or pedestrian access.
- The existing, wide access road provides access for a crane to remove the bridge in segments.


## Constraints/Challenges

- The bridge was assessed previously and is currently zero-rated by a structural engineer and needs to be replaced before it can be used for public access.
- Any abutments would need to be outside the Ordinary High-Water Mark (OHWM) and above the top-of-bank of the creek to avoid potential impacts to state and federal Waters and associated permitting with the USACE and RWQCB. A CDFW permit would likely still be required. The CDFW permit could possibly be done using existing permit coverage under the Open Space Maintenance and Restoration Program Manual. If federal jurisdiction cannot be avoided, it is recommended that this bridge become a standalone project and not combined with the parking area, which does not have a federal jurisdiction.
- The local geotechnical mapping reconnaissance was hindered by heavy vegetation cover and thus the initial assessment cannot exclude the potential for landslides and other site conditions that may have an impact on the development of the area.
- The existing rail car cannot be reused due to the need for a longer span. Removal of the rail car will likely require lead abatement.


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.
- Borings are recommended to characterize subsurface conditions for areas of development at abutment locations. Obtain a County permit for 2 borings estimated depth of 30 to 45 feet to characterize bridge abutments.
- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.
- The bridge design should avoid working in the OHWM and be above the top-of-bank of La Honda Creek. North of the bridge is a jurisdictional non-wetland swale, which should also be avoided.
- Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements.


### 3.4 SITE E3

Site E3 appears to be feasible to continue studying for development potential for limited access only. From a traffic safety standpoint, traffic volumes are expected to be low enough that no queue would form on SR-84 of vehicles trying to enter the site if using a one-way entrance and one-way exit system. The Access (Traffic) Study does not recommend either driveway include left- and right-turn restrictions, as no feasible location within a reasonable distance from Site E3 along SR-84 could be found that would accommodate u-turns. Similar to Site D, traffic devices and warning improvements to slow traffic on SR84 and prevent speeding and illegal passing could address safety concerns. Restricting the number of

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
visitors at any given time with permit/docent-led event reservations also helps manage capacity and trip generation.

The site has a small area hidden by vegetation that would be ideal for a small parking area. Since many of the trees providing existing screening are recommended to be removed in part due to fire safety, new native vegetation could be planted to maintain the screening as viewed from the highway.


Site E3

Figure 3-E3-1 Site E3. Also see Figures: 5.1a, 5.1b, 5.2a, 5.2b, 5.3a, and 5.3b

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-2 Site E3 access drive at Preserve Gate LH06 facing southwest


Figure 3-E3-3 Site E3 behind trees from top of dirt access drive facing southeast

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-4 Site E3 existing dirt access drive at midway point facing north


Figure 3-E3-5 Site E3 existing dirt access drive to level area facing north

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-6 Site E3 level area of proposed parking and white shed facing west


Figure 3-E3-7 Site E3 level area of proposed parking and existing trees facing east

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)


Figure 3-E3-8 Site E3 Red Barn from level area of proposed parking facing southeast


Figure 3-E3-9 Site E3 existing gravel exit drive to Preserve Gate REDO1 facing southeast

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-10 Site E3 existing entry drive at Preserve Gate LH06 facing northbound on SR-84


Figure 3-E3-11 Site E3 existing entry drive at Preserve Gate LH06 facing southbound on SR-84

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-E3-12 Site E3 existing exit drive at Preserve Gate RED01 facing northbound on SR-84


Figure 3-E3-13 Site E3 existing exit drive at Preserve Gate RED01 facing southbound on SR-84

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

## Opportunities

- Provide access to view the Red Barn structure.
- Potential site to access a future connection to the Bay Area Ridge Trail corridor.
- New native plantings can address loss of screening due to CALFIRE tree removal that is part of their ongoing fuel reduction efforts; otherwise, existing vegetation can serve to screen the proposed parking area.
- Driveway improvements can enhance sight lines at SR-84 and improve access to the proposed parking area.
- Traffic calming and speed reduction enhancements can enhance traffic safety.


## Constraints/Challenges

- The La Honda community raised concerns about traffic safety and aesthetics during the planning process for the 2018 Red Barn Public Access Project and during the 2019/2020 PAWG process.
- Excessive speed and illegal passing occur at this location.
- Avoid extensive grading that could visually impact the aesthetic view of the Red Barn.
- Ensure the existing staff residence will not be affected by the new public access.
- Ensure existing grazing tenant operations are considered when site planning.
- Avoid or mitigate shallow slumps, since these limit the area of development.
- When the internal area is open to the public, highway shoulder parking would need to be prohibited to dissuade visitors from parking on the roadway to enter the Preserve.


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.
- Borings are recommended to characterize subsurface conditions for areas of development to identify remediation or avoidance. Obtain a County and Caltrans (if in ROW) permit for 3 borings estimated depth of 10 to 30 feet to characterize subsurface materials for proposed parking lot area and access driveway. Obtain a County and Caltrans (if in ROW) permit for 2 borings estimated depth of 45 feet to characterize area of Bay Area Ridge Trail crossing.
- For either type of programming, the Level of Service at the proposed driveways would be within Caltrans standards.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology, and a left-turn pocket is not warranted.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound approaches to the exit driveway and interconnecting warning beacon to the loop detector at the exit lanes.
- On-site observation shows that some vehicles are attempting to pass over a solid yellow line at this location. A barrier would need to be designed to accommodate left-turns out of the exiting driveway. Midpen can consider working with Caltrans to determine whether features would be added to the state highway to prevent passing at this location as part of the project.
- Highway shoulder parking would need to be prohibited to dissuade visitors from parking on the roadway to enter the Preserve when the internal area is open to the public.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

- Storm drainage patterns should match existing conditions and any new outfalls include conveyance and dissipation to reduce potential for erosion.
- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.
- Any tree impacts should be minimized, and mitigation should follow San Mateo County requirements.
- Midpen's IPM and Wildland Fire Resiliency Program Plan recommend fuel reduction of the trees.


## Site not recommended to move forward to evaluate:

### 3.5 SITE B3

Site B3 should be avoided for development of a parking area and is not recommended to move forward in the next feasibility study phase due to the jurisdictional seep wetland.


Site B3

Figure 3-B3-1 Site B3. Also see Figures: 2.1, 2.2, and 2.3

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)


Figure 3-B3-2 Site B3 facing north at Sears Ranch Road and Preserve Gate LH15


Figure 3-B3-3 Site B3 facing south at Sears Ranch Road with school behind

## Constraints/Challenges

- Site B 3 should be avoided due to the jurisdictional seep wetland affecting the buildability of any parking area improvements at this location; therefore, limited analysis is included for this site.
- Road widening of the Sears Ranch Road entryway to accommodate equestrian trailer access; identifying property ownership and, if necessary, negotiating access for road improvements.
- Providing safe access for equestrian trailers entering and existing SR-84 at Sears Ranch Road.
- Potential impacts (visual, traffic, circulation) to the school due to its close proximity.
- Avoiding or mitigating numerous shallow slumps and shallow landslides along Sears Ranch Road, since these limit the area of development.
- Site B3 may be the site of a future well to provide water for the grazing tenant's operation.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 4.0 NEXT STEPS

Pending the PNR Committee's concurrence with the three sites recommended in this report to continue studying for development potential, RHAA will advance into design and evaluation and develop conceptual design plan alternatives. Input received from the PNR Committee and members of the public on this report's findings will be considered and incorporated into this design and evaluation phase of work.

Conceptual design plan alternatives will be brought back to the PNR Committee for additional Committee and public feedback with the goal of assessing site feasibility of the three recommended sites and selecting a preferred alternative for each to forward to the Board for consideration. Once feasibility and a preferred alternative for each feasible site is affirmed by the Board, environmental review would be conducted.


Figure 4-1 Existing trailhead at Sears Ranch Road

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 5.0 EXHIBIT A - DETAILED EXISTING CONDITIONS BY SITE

The following is a site-by-site synthesis of existing conditions based on the most current and past technical studies. The analysis of existing conditions is separated into three categories (site characteristics, site circulation, and environmental resources) to cover specific information regarding site characteristics and land use, traffic and access organization, and the waters and habitats that require special permitting, agency consultation, and policy considerations with each of these categories. A list of applicable policies, agency consultations, or recommendations are also included as applicable for each site. Refer to the Existing Conditions/Opportunities and Constraints Plans (Figures 1.1-5.3b) and Appendices for additional information.

### 5.1 SITE B2

Site B2 appears to be the best site for equestrian parking as well as overflow parking for the existing Sears Ranch Road parking area. The site poses minimal to no concerns regarding potential impacts to sensitive environmental resources.

### 5.1.1 SITE B2 - SITE CHARACTERISTICS

### 5.1.1(1) Site B2 - Land Ownership

The seven-acre site is located within La Honda Creek Open Space Preserve APN 078290060 at the end of Sears Ranch Road, fully within Midpen lands. No parcel adjustments are needed for a parking lot.

The Access (Traffic) Study indicates that the entryway from Sears Ranch Road would need to be widened to 20 feet minimum to meet San Mateo County Fire standards and to accommodate two-way traffic, which would be necessary based on the number of trips generated. Access easements or agreements may be needed. Widening Sears Ranch Road may affect APN 078290 050, APN 078290 060, and APN 083361 110, which are owned by Midpen, and APN 083361 070, which is owned by an adjoining neighbor. Entryway improvements would potentially affect existing fencing and involve some grading or retaining walls on the east side.

## Applicable Policies

- Access easements or agreements, if needed


## Agency Consultations

- San Mateo County Planning and Building Permitting (work in right-of-way)


## Recommendations

- None


### 5.1.1(2) Site B2 - Site Access

Site B2 is accessed from Sears Ranch Road, which in turn is accessed from SR-84. The intersection of SR84/Sears Ranch Road is a two-way stop-controlled intersection where the west leg (Sears Ranch Road) and the eastern leg (Entrada Way) of the intersection have stop signs and SR-84 is free-flowing. The PAWG selected the $B$ sites for equestrian parking because vehicles with trailers would be pulling out of the driveway onto Sears Ranch Road rather than SR-84.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- None

Agency Consultations

- San Mateo County Planning and Building Permitting (work in right-of-way)
- San Mateo County Fire


## Recommendations

- None


### 5.1.1(3) Site B2 - Natural Boundaries

The site has a large slope on the east side and two roads along the eastern and southern perimeter. The eastern road at the end of Sears Ranch Road is the main access point. The southern road is a private drive to the staff residence, which is tree-lined along its border.

## Applicable Policies

- None

Recommendations

- None


### 5.1.1(4) Site B2 - Site Topography

The top of the Sears Ranch Road entryway has a level high point. The flatter portion of the site ( $2-7 \%$ slope) sits below a large 250 -foot-wide slope ( $20-30 \%$ slope) west of that high point. The existing grazing access road on the north has a $5-10 \%$ slope, and the portion of the slope to get down to the flat area is $12-16 \%$. Water drains down the eastern slope and accumulates on the southern portion of the site. Development of this southern area should be avoided. Slopes west of the site drop away into an ephemeral tributary of Harrington Creek.

## Applicable Policies

- Resource Management Policies, SA-1 (minimize evidence of human impacts within preserves)
- Resource Management Policies, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- Resource Management Policies, WR-2, (manage human activities to control erosion)


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.


### 5.1.1(5) Site B2 - Viewsheds and Scenic Corridors

From an adjacent peak to the west, a parking lot at Site B2 would be visible. The parking lot would also be visible from the existing barn and trail from within the site. Screening a parking lot would help reduce views of the parking lots from these sites.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- San Mateo County General Plan, Visual Quality Policies, Scenic Corridor
- Resource Management Policies, Scenic Aesthetic Resources


## Recommendations

- None


### 5.1.1(6) Site B2 - Site Screening

To maintain viewsheds of natural elements from the nearby peaks to the west, a potential parking lot should be screened on the west and north. However, the PAWG suggests keeping unobstructed views of the barn and pond from the existing parking lot, so those trees may block this view. A balance of screening will need to be determined. Existing trees on the south should be retained unless such time that they are incorporated into future fire resiliency or integrated pest management work. The east slope between the site and the existing parking lot creates a natural site screen.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-3 (screening of staging areas)
- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- Resource Management Policies, SA-1 (minimize the evidence of human impacts within preserves)
- Resource Management Policies, FM-1 (fire and fuel management to protect the public)
- Integrated Pest Management Guidance Manual, IPM-1 - Manage pests in fuel management areas to reduce risk to human life and property, while also protecting natural resources.


## Recommendations

- None


### 5.1.1(7) Site B2 - Exposure and Shading

The site has a west facing exposure, mild climate, and limited tree cover. When the existing parking lot was built, no additional tree canopy/shade was required or added.

## Applicable Policies

- None


## Recommendations

- None


### 5.1.1(8) Site B2-Geological Conditions

Site B2 has documented shallow slump failures and shallow landslides within the planned areas of improvement from the reconnaissance research. However, most of the slope instabilities and other hazards identified can be avoided or maintained with retaining walls. In 2016, LANGAN noted moderately to highly expansive clay loam. Pavement profiles were provided. This report notes the potential of expansive soils to impact structures and pavements and long-term impacts, including maintenance due to soil creep. Additional information is available in the appendix, Preliminary Geologic and Geotechnical Assessment Report, Cal Engineering \& Geology, March 2022.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- Resource Management Policies GS-1, Measure 1 (minimize construction of major improvements to avoid high risk areas)
- Resource Management Policies, GS-2 (minimize soil erosion and sedimentation)


## Recommendations

- Borings are recommended to characterize subsurface conditions to identify remediation or avoidance.
- The LANGAN report identified that areas of artificial fill may require remediation via earthwork or the development of retention structures.
- If needed, use of steel beam and walls may be considered depending on the final design configuration and the results of the geotechnical investigation and analysis.


### 5.1.1(9) Site B2 - Land Use

Grazing Operations: Grazing tenants currently use the site. Any improvements would need cattle guards, gates, and fencing to keep the livestock out of the parking area.

Existing structures: The existing barn and grazing access road will need to remain open and accessible to the tenants.

Staff Residence: The staff residence and driveway southwest of the site will need to remain private access only.

Existing Parking Lot: The existing Sears Ranch Road parking lot should remain open during any improvements. If needed, the lot may be closed for specific construction activities, with any closures kept to a minimum.

Proximity to La Honda Elementary School: Any improvements will need to avoid and minimize traffic and circulation impacts to the school.

Trail users: Trails are currently open to hikers and equestrians, with seasonal dog access on the Grasshopper Loop Trail. In the future, when mountain bikes are introduced as a new use, preserve visitation and trip generation are anticipated to increase.

## Applicable Policies

- San Mateo County General Plan, 6.12 (minimize agricultural land use conflicts)
- Resource Management Policies, GM-7 (public access to minimize impacts on grazing operations)


## Recommendations

- Designing a new parking area with a minimal footprint is recommended to reduce the loss of active grazing land.


### 5.1.1(10) Site B2 - Utilities

Any improvements will need to work with the existing storm drainage and utility poles on the site. Sears Ranch Road has a drainage ditch on the west side that would need to be reinstated should the road be widened. Consideration of a parking area at this location opens the opportunity to remove/underground

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)
utility lines that extend from this area toward the interior of the Preserve, completing Objective PA-7.2 Remove obstructions to important viewshed within the Master Plan.

Site B2 may be the site of a future well to provide water for the grazing tenant's operation. Well infrastructure would need to be coordinated with any planned parking and trailhead improvements.

Agency Consultations

- San Mateo County Planning and Building
- Pacific Gas \& Electric (PG\&E)


## Recommendations

- None


### 5.1.2 SITE B2 - SITE CIRCULATION

### 5.1.2(1) Site B2 - Roadway Safety and Sight Distance

Road safety due to speed and illegal passing on SR-84 is a PAWG and La Honda community concern that was carefully considered in LSA's 2022 Access (Traffic) Study. Collision data between 2017 and 2021 was examined. Within that period, two sideswipe collisions occurred at the intersection of SR-84/Sears Ranch Road when a vehicle was attempting to pass in the intersection. Traffic speeds appear to be more moderate along Sears Ranch Road. On Sears Ranch Road, the travel speed was observed to be 22 mph when surveyed in November 2021. Based on the observed traffic volumes on SR-84 and the anticipated inbound and outbound traffic at the site, delays and the level of service at the intersection of SR$84 /$ Sears Ranch Road are anticipated to be within Caltrans standards. Queues for all movements at the intersection are anticipated to be less than one vehicle according to Highway Capacity Manual methodology. This means that the project is not expected to result in an operational traffic impact to the intersection, and no physical improvements would be required.

The Access (Traffic) Study concluded that additional traffic generated by a new parking lot to SR-84 from Sears Ranch Road would not degrade the intersection performance, even considering school traffic and highest volumes on Saturdays. No additional turn lane is recommended on Sears Ranch Road.

Currently, vehicles making a left-turn from Sears Ranch Road onto northbound SR-84 find sight distance to the south to be limited. Drivers stopped at the intersection first look left to confirm no vehicles are approaching southbound on the highway, then roll into the southbound lane and look right to confirm no vehicles are approaching northbound before completing their left-turn. Because the collision data shows two collisions from illegal passing in the intersection, and adding a center turn median on SR-84 would potentially encourage more people to illegally pass at the intersection, no modifications are recommended. There is sufficient line of sight once entering the southbound lane to check for northbound traffic.

The Sears Ranch Road entryway to Site B2 between the elementary school and the existing parking lot narrows from 32 feet to a range of 12 feet to 20 feet. The existing Sears Ranch Road parking lot received an exemption from San Mateo County from their requirement to widen the road by installing a turnout instead. The B2 lot trip generation estimates show 52 inbound and 46 outbound trips during the busiest hour, which would occur on weekends. At this volume of traffic, simultaneous inbound and outbound

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
trips on Sears Ranch Road are likely to occur and the single lane sections of Sears Ranch Road would not be adequate. Therefore, the Access (Traffic) Study recommends widening to 20 feet between the school and existing parking lot. This will meet San Mateo County Fire standards and provide one travel lane in each direction to accommodate horse trailer access on the portion of road.

## Applicable Policies

- Caltrans Highway Design Manual, Chapter 4, Policy 405.1 (sight distance)
- San Mateo County, Active Transportation (pedestrian safety improvements)
- San Mateo County Public Works/Office of Education, Safe Route to School (Sears Ranch Road is a designated route)


## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- The Access (Traffic) Study recommends no modifications for the intersection of SR-84/Sears Ranch Road.
- The Access (Traffic) Study recommends widening Sears Ranch Road to 20 feet between the La Honda Elementary School and the existing Sears Ranch Road parking lot if an additional parking area is constructed.
- San Mateo County's Active Transportation Plan evaluated pedestrian safety in downtown La Honda and included recommendations for addressing the disconnected/inaccessible walking network along SR-84/Sears Ranch Road and the safety of pedestrians crossing SR-84 at Sears Ranch Road. Midpen can consider working with Caltrans to identify potential improvements for pedestrian access.


### 5.1.2(2) Site B2 - Entry/Exit Access Patterns

Access to the site would be from the Preserve Gate LH11 at the end of Sears Ranch Road. After the elementary school, Sears Ranch Road narrows from 32 feet to a range of 12 feet to 20 feet. A parking area at Site B2 would require San Mateo County Fire and Planning review and a determination on widening the stretch of Sears Ranch Road that lies beyond the school.

## Agency Consultations

- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.1.2(3) Site B2 - Emergency Access

Any new roads would need to meet San Mateo County Fire minimum width, maximum length, turning radius, and turn around specifications. Any new gates would need to provide San Mateo County Fire access.

## Applicable Policies

- Resource Management Policies, FM-1 (fire and fuel management to protect the public)


## Agency Consultations

- San Mateo County Fire
- La Honda Fire Brigade


## Recommendations

- None


### 5.1.3 SITE B2 - ENVIRONMENTAL RESOURCES

### 5.1.3(1) Site B2 - Wetlands and Waters and Riparian Setbacks

No jurisdictional waters lie within Site B2. Potential jurisdictional waters exist along the west side of Sears Ranch Road and include a non-wetland swale. If the road is widened, modification of this drainage feature may require permit approvals.

Widening of the Sears Ranch Road entryway may impact the 50-foot and 100-foot setbacks for a wetland seep that is located along a coterminous border with the nearby school. If the road is widened along the west, it will need to remain outside the 50-foot setback and undergo permitting.

## Applicable Policies

- Resource Management Policies, WR-1, Measure 1 (inventory features that can affect water resources)
- Resource Management Policies, WR-7 (preserve wetland and ponds)
- Resource Management Policies, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- IS/MND, Mitigation Measure BIO-6

Agency Consultations

- San Mateo County Planning and Building
- Regional Water Quality Control Board (RWQCB)
- US Army Corps of Engineers (USACE)

Recommendations

- None


### 5.1.3(2) Site B2 - Site Drainage

Water on the site drains east to west by sheet flow.
Applicable Policies

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Resource Management Plan, WR-2 (restore hydrologic processes altered by human activity)


## Recommendations

- Storm drainage patterns should match existing conditions and any new outfalls should include conveyance and dissipation to reduce potential for erosion.


### 5.1.3(3) Site B2 - Water Quality

Any impervious surface would meet stormwater runoff treatment and detention requirements.

## Applicable Policies

- San Mateo Countywide, C. 3 Regulated Projects Guide

Recommendations

- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.


### 5.1.3(4) Site B2 - Plant Communities and Critical Habitat

Site B2 is comprised of Valley and Foothill Grassland (sloped and flat area) and Closed Cone Pine Forest (trees along staff residence access road). Sears Ranch Road has Valley Foothill Grassland (along the road edge) and Coastal Scrub and Cismontane Woodland (along the western side of the road). The area is being grazed by cattle.

Sensitive natural communities observed near Site B2 include Creeping Rye Grass, which is considered sensitive by California Department of Fish and Wildlife (CDFW) and under CEQA.

This site is designated as critical habitat for California red-legged frog (CRLF) by the USFWS. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

## Applicable Policies

- Resource Management Plan, VM-1 (maintain the diversity of native plant communities)
- Resource Management Plan, WM-2 (protect, maintain, and enhance habitat features)
- Resource Management Plan, HC-2 (identify and protect existing habitat networks to prevent further compromise of ecosystem integrity)
- Integrated Pest Management Guidance Manual policies (retaining dead trees / snags, and size restrictions / evaluations to avoid the removal of large trees)


## Agency Consultations

- US Army Corps of Engineers (USACE)
- US Fish and Wildlife Service

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.1.3(5) Site B2 - Heritage/Significant Trees

Significant Trees (>38" DBH) and Heritage Trees (DBH varies per species) impacted by removal or proposed development would need to be mitigated.

Site B2 has two Significant Trees that can be avoided. Both trees are Pinus radiata. CNPS considers P. radiata a rare species ranked 1 B .1 ( $\mathrm{G} 1 / \mathrm{S} 1$ ) within native stands at Ano Nuevo, Cambria, and the Monterey Peninsula. Outside of these three native stands, the species is considered an invasive. Due to potential genetic integrity issues, Midpen biologists recommends that $P$. radiata be removed.

The Sears Ranch Road right-of-way has two Heritage Trees that could potentially be affected by road widening. One of the Heritage Trees is a Coast Live Oak. The other one of the Heritage Trees is a Bay tree, which is a primary vector for Sudden Oak Death. Given its location and high exposure to Sudden Oak Death, it is recommended to be removed by Midpen biologists.

## Applicable Policies

- San Mateo County Planning, Heritage Tree Ordinance
- San Mateo County Planning, Significant Tree Ordinance
- Resource Management Plan, IPM-2 (prevent introduction of new pest species)
- Resource Management Plan, M-1 (review and consider all applicable District Policies, programmatic permits, and CEQA documents to develop the project scope, incorporating the following practices (listed in order of priority): avoidance, minimization and/or mitigation of potential impacts)
- Resource Management Plan, M-4 (develop a compensatory mitigation strategy as a measure of last resort)


## Agency Consultations

- San Mateo County Planning


## Recommendations

- Minimize impacts.
- Mitigation should follow San Mateo County requirements.


### 5.1.3(6) Site B2 - Special Status Plants

Development of Site B2 would not impact special-status plants, since none were found during the protocol-level plant surveys completed in 2021.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, VM-3 (identify location and condition of special status plants and their habitats)


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.1.3(7) Site B2 - Invasive Plant Species

No representative invasive weeds are within the project site; however, there are invasive species found within the site that have a distinct boundary and are wide-spread and unmappable, such as poison hemlock, bull thistle, Avena spp, Torilis, Centaurea spp, and Helminthotheca.

Applicable Policies

- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Recommendations

- None


### 5.1.3(8) Site B2 - Wildlife Corridor

No designated wildlife corridors for specific species have been identified; however, allowing general wildlife movement should be considered when designing fencing, culverts, underpasses, and other measures. Frogs and turtles found in the surrounding ponds are presumed to move across the landscape to and from other ponds, creeks, and upland features.

## Applicable Policies

- Resource Management Plan, HC-2 (prevent existing habitat networks)
- Resource Management Plan, WM-1 (maintain the diversity of native wildlife)


## Recommendations

- None


### 5.1.3(9) Site B2 - Special Status Animals

The Biological Resources Habitat Assessment evaluated 35 special status wildlife species, most of which could migrate through, forage, and breed at the site. These should continue to be monitored.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, WM-4 (protect and enhance habitats and populations of specialstatus animal species)


## Recommendations

- None


### 5.1.3(10) Site B2 - Sensitive Bird Resources

Any tree removal would have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)


## Recommendations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- None


### 5.1.3(11) Site B2 - Roosting Bats

Suitable habitat for roosting, hibernating, and foraging habitat may be present on site and should be monitored.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)


## Recommendations

- None


### 5.1.3(12) Site B2 - Roadway Noise

No roadway noise from SR-84 would affect Site B2.
Applicable Policies

- Resource Management Plan, SA-3 (minimize unnatural noise)
- San Mateo County Noise Ordinance


## Recommendations

- None


### 5.1.3(13) Site B2 - Cultural Resources

No cultural resource constraints were identified. The Cultural Resources Survey Study does not recommend monitoring. If archaeological deposits or Native American human remains are identified during project construction, Midpen would implement Master Plan Environmental Protection Guidelines.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, CUL-1 (protocol for unexpected discovery of archaeological and paleontological cultural materials)
- La Honda Creek Open Space Preserve Master Plan, CUL-2 (Native American burial plan)
- La Honda Creek Open Space Preserve Master Plan, CUL-4 (manage potential impacts of shortterm construction activities on historic resources)
- District-Wide Resource Management Policies, CR-3 (protect cultural resources from disturbance)
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration
- La Honda Creek Open Space Preserve Master Plan, Environmental Protection Guidelines for Cultural Resources


## Recommendations

- None


### 5.1.3(14) Site B2 - State and Federal Environmental Permitting

There are no state/federal permitting jurisdictions near Site B2. Because there is no federal and State nexus associated with CDFW or USFWS permits, which would require a take permit and provide Midpen

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
with take coverage, biomonitoring is likely needed to avoid take of federally and State listed specialstatus species that may be potentially encountered in the Preserve.

State/federal permitting jurisdictions that apply to the widening of Sears Ranch Road include those for the non-wetland swale (RWQCB) and seep wetland (USACE, CDFW, RWQCB). If the road widening affects the non-wetland swale, it would trigger the need for a RWQCB permit. No work is proposed in the seep wetland, and it would be avoided during project planning and construction, eliminating the need for other agency permits at this site.

## Applicable Policies

- State Clean Water Act
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration, Mitigation Measure BIO-5

Agency Consultations

- Regional Water Quality Control Board (RWQCB)

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.2 SITE B3

Site B3 should be avoided for development and is not recommended to move forward in the next feasibility study phase due to a jurisdictional seep wetland.

### 5.2.1 SITE B3 - SITE CHARACTERISTICS

### 5.2.1(1) Site B3 - Land Ownership

The 2.6-acre site is located within La Honda Creek Open Space Preserve APN 078290060 on Sears Ranch Road just north of the La Honda Elementary School. The Sears Ranch Road entryway beyond the school is recommended by the Access (Traffic) Study to be widened to 20 feet minimum, and this site forms part of the eastern boundary of the road. Gate access to Site B3 is within the County right-of-way. Along with existing fencing, this gate may be affected by possible road improvements triggered by development of Site B2.

Agency Consultations

- San Mateo County Planning and Building Permit (work in right-of-way)


### 5.2.1(2) Site B3 - Site Access

Site B3 is currently accessed from Sears Ranch Road at Preserve Gate LH15.

## Applicable Policies

- None


### 5.2.1(3) Site B3 - Utilities

Site B3 may be the site of a future well to provide water for the grazing tenant's operation.

### 5.2.2 SITE B3 - SITE CIRCULATION

### 5.2.2(1) Site B3 - Roadway Safety and Sight Distance

The Sears Ranch Road entryway is recommended to be widened. Given the similarities to Site B2, See Site B2 recommendations.

### 5.2.3 SITE B3 - ENVIRONMENTAL RESOURCES

### 5.2.3(1) Site B3 - Wetlands and Waters Riparian Setbacks

Jurisdictional waters prohibit the development of a parking lot. Widening of the Sears Ranch Road entryway would need to avoid, minimize, or mitigate impacts to the seep wetland.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.3 SITE D

Site D appears to be feasible to continue studying for development potential. From a traffic safety standpoint, the site has improved sight lines to southbound SR-84 if the driveway is moved 50 feet north. A short southbound right-turn pocket would improve sight distance from the driveway to SR-84. Additional traffic devices and warnings could also improve the access. This site has a moderately flat area suitable for a paved parking lot with room to treat any stormwater while also avoiding an adjacent wetland channel. Many of the larger trees that would need to be removed for development are invasive and CALFIRE's fuel reduction project includes removing eucalyptus trees from Midpen lands, so removing these trees would provide a fire management benefit. Perimeter trees could be retained for shade, and new vegetation could be planted to assist with screening.

### 5.3.1 SITE D - SITE CHARACTERISTICS

### 5.3.1(1) Site D - Land Ownership

The 1.4-acre study area is located within La Honda Creek Open Space Preserve APN 078280110 along SR-84. The site is accessed at Preserve Gate LHO7, and an existing access road extends westward to La Honda Creek and connects to the Preserve trail system via an existing bridge. The road passes through a portion of the adjacent property to the south, and Midpen currently has a Patrol Easement with the landowner at APN 078190 210. If this road is used by the public, a new easement would be needed.

## Recommendations

- Identify if any access easements or agreements are needed.


### 5.3.1(2) Site D - Site Access

Site D is currently accessed from SR-84 at an existing, unpaved driveway through Preserve Gate LH07.

## Applicable Policies

- None


## Recommendations

- None


### 5.3.1(3) Site D - Natural Boundaries

The site has a moderate slope with the highway on its eastern boundary and is defined by a moderate slope to the west and steep slopes on the northeast and northwest from the drainage channel.

## Applicable Policies

- None


## Recommendations

- None


### 5.3.1(4) Site D - Site Topography

The site slopes northeast to southwest following SR-84 at 6\%-10\%. The grades naturally drop off at 3:1 to 1:1 towards La Honda Creek.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- Resource Management Plan, SA-1 (minimize evidence of human impacts within preserves)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- Resource Management Plan, WR-2, (manage human activities to control erosion)


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.


### 5.3.1(5) Site D - View Sheds and Scenic Corridors

Views from SR-84 Scenic Corridor are open towards Site D on the west. With the extensive tree cover, there are no views beyond the site to the west.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- San Mateo County Scenic Corridor
- San Mateo County General Plan, Visual Quality Policies
- District-Wide Resource Management Plan, Scenic Aesthetic Resources


## Recommendations

- None


### 5.3.1(6) Site D - Site Screening

Maintain or add native vegetation along the perimeter of SR-84 to help obscure the potential parking lot. It should be noted that trees such as non-native Eucalyptus are planned to be removed as a separate project in coordination with CALFIRE and their ongoing fuel reduction efforts.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-3 (screening of staging areas)
- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- Resource Management Plan, SA-1 (minimize the evidence of human impacts within preserves)


## Recommendations

- None


### 5.3.1(7) Site D - Exposure and Shading

The site has a west facing exposure, mild climate, and heavy tree cover. Retaining and planting native trees in this parking lot will help mitigate any tree loss.

Applicable Policies

- None

Recommendations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

- None


### 5.3.1(8) Site D - Geological Conditions

Site $D$ is feasible to build from a geotechnical standpoint. Borings are recommended to characterize subsurface conditions for areas of development to identify remediation or avoidance issues. The initial interpretation is that retaining walls should suffice to support the parking area upslope. Additional information is available in the appendix, Preliminary Geologic and Geotechnical Assessment Report, Cal Engineering \& Geology, March 2022.

## Applicable Policies

- Resource Management Plan, GS-1, Measure 1 (minimize construction of major improvements to avoid high risk areas)
- Resource Management Plan, GS-2 (minimize soil erosion and sedimentation)

Agency Consultations

- Caltrans Encroachment Permit


## Recommendations

- Borings are recommended to characterize subsurface conditions to identify remediation or avoidance.
- Designs should consider slope inclinations of 3:1 (horizontal: vertical) or shallower unless supported by retention structures or using geogrid reinforced engineered fill.
- Avoid areas of significant instability.
- The colluvium / landslide deposit needs further exploration.
- Remediation measures to address the identified instabilities may include segmental block or cast-in-place concrete wall supported with pier and grade and buried stabilization piles. The selection of remedial or stabilization measures will depend on the planned improvements configuration and findings from the subsurface exploration and engineering analysis.
- The development of a trailhead is feasible, but a potential deep landslide and areas of significant instability could increase the level of maintenance needed. A more extensive geotechnical study is needed to confirm the design.


### 5.3.1(9) Site D - Land Use

Grazing Operations: Grazing tenants do not typically use the site for access. Since there are two grazing tenants nearby, there could be a potential for cattle to travel onto the site. Due to active grazing activities, a parking area would need cattle guard, gates, and fencing to keep livestock out.

Proximity to Neighbor: Part of the access road that leads into the property lies on the adjacent property owner's property. Any public access or use of the road would need an easement. Alternatively, a new trail can be created that would not require access over the portion of road not owned by Midpen.

Trail users: The access road that leads into the preserve is currently closed for public access, except for Midpen staff and Midpen-authorized consultants, contractors, grazing tenants, etc. Opening new areas and additional trail mileage within the preserve to public use is anticipated to increase the level of preserve visitation and trip generation.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Applicable Policies

- San Mateo County General Plan, 6.12 (minimize agricultural land use conflicts)
- Resource Management Plan, GM-7 (public access to minimize impacts on grazing operations)


## Recommendations

- Access easements or agreements needed.


### 5.3.1(10) Site D - Utilities

Any improvements will need to work with the existing utility poles and call box on site.

## Agency Consultations

- San Mateo County Planning and Building
- PG\&E


## Recommendations

- None


### 5.3.2 SITE D - SITE CIRCULATION

### 5.3.2(1) Site D - Roadway Safety and Sight Distance

Road safety is a PAWG and La Honda community concern that was seriously considered in the Access (Traffic) Study because the historic number of collisions on SR-84 is higher than statewide average (although lower than nearby SR-35). This may be due in part to the average travel speed. Although the posted speed limit is 40 mph , the 85th percentile speed of vehicles near Site D was 50 mph .

The initial traffic count was completed in the non-summer month of November 2021. After the first Planning and Natural Resources Committee Meeting in December 2022, this District Board Committee requested collecting additional traffic volumes in the summer to determine whether summer conditions differ substantially. The additional traffic volume was collected in July 2023, but there was a malfunction with the data collection at Site D. This data was discarded.

However, another traffic count was collected in December 2023 (at Site E3 and D) to use as a comparison to the valid July 2023 data near Site E3, which allows some conclusions to be reached regarding summer roadway conditions near Site D. Traffic volumes at Site E3 and D are nearly identical. Lower traffic volume was observed during summer weekdays. Summer volumes are 73 percent higher on Saturdays than weekdays. Non-summer volumes are 15 to 25 percent higher on Saturdays than weekdays. On average, SR-84 carries approximately 1,800 (summer) to 2,000 (non-summer) vehicles per day within the study area on a weekday, and approximately 3,200 (summer) or 2,000 to 2,500 (nonsummer) vehicles per day on Saturdays.

Using the comparison of speeds at Site E3 and D, the conditions near Site D during summer can be inferred. Had the data collection instrument functioned properly, the $85^{\text {th }}$ percentile speed near Site $D$ would likely have been between 45 mph and 50 mph with a most common speed between 41 mph and 45 mph . Vehicles traveling over 60 mph are likely to have been 1 percent or less of the total volume, and vehicles traveling over 70 mph are likely to have been no more than observed in non-summer months.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

Overall, at both sites and during all seasons, the predominant speed of vehicles is approximately 50 mph , or about 10 mph over the posted speed limit.

The District Board Committee also requested more data on bicycles. Bicycle volumes varied from approximately 30 per weekday to 200 bicycles on a summer Saturday. Bicycles travel at a lower speed than vehicles; therefore, the required stopping sight distance and intersection sight distance is sufficient for vehicles to observe and avoid bicycles at exit driveways. Collisions involving bicycles were either outside the study area or occurred before 2017, and none of the collisions in Figure 7 of the Access Study involved bicycles.

Peak usage (on a weekend) is estimated to result in an increase of 20 inbound and 18 outbound vehicle trips during the busiest hour.

Based on the observed traffic volumes on SR-84, the anticipated inbound and outbound traffic at the site, and Highway Capacity Manual methodology, the delay and level of service for the proposed paved driveway is anticipated to be within Caltrans standards. Queues for inbound and outbound movements at the project driveway would be less than one vehicle according to Highway Capacity Manual methodology. This means that the traffic consultant does not anticipate the necessity for vehicles to stop on SR-84 waiting to turn into the site. On SR-84, no additional turn lanes or widening would be necessary to maintain traffic flow or level of service. A separate left-turn pocket is not warranted according to National Cooperative Highway Research Program (NCHRP) Report 279. The addition of a left-turn pocket on SR-84 would potentially encourage people to use the lane to pass illegally, so it is not recommended.

If public access to Site $D$ is provided at the existing access point (Preserve Gate LHO7), which is currently used by Midpen vehicles and grazing tenants, sight distance at the Site D driveway would not be sufficient for the current roadway speeds. Vehicles traveling south on SR-84 affect vehicles turning both left and right from Site D. Therefore, the driveway is recommended to be placed 50 feet north of Preserve Gate LHO7 to improve sight distance to the southbound lanes. However, sight distance for northbound lanes is not met at the current prevailing speed, so advanced warning devices are recommended. With this modification, sufficient sight distance to the driveway would be provided so that vehicles on SR-84 would be able to stop if an obstruction is present (this is referred to as stopping sight distance). Sufficient sight distance to southbound traffic would be provided so that vehicles exiting the driveway and turning right would be able to choose a gap in traffic that would not cause a vehicle on SR-84 to alter velocity. However, vehicles exiting the driveway to turn left would not be able to see far enough to select a similar gap in northbound traffic. While northbound vehicles would have enough distance to slow, it is possible that slowing would be necessary if a vehicle exiting the driveway turns left in front of them.

Sight distance from the driveway is improved if vehicles stop short of the roadway. A short turn pocket ( 25 feet) with an abbreviated ( 60 feet) transition into and out of the driveway would place the stop bar farther back from SR-84 and maximize sight distance from the driveway to SR-84. A full deceleration and acceleration lane is not recommended because it could be used illegally as a passing lane, reducing road safety.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

In order to provide the sight distance to the south to meet the intersection sight distance standard at the current prevailing speed, vegetation and earthwork would need to be removed from the hillside south of the project. It is likely that a retaining wall would need to be constructed to preserve the line of sight. However, the proposal to place the paved driveway 50 feet north of Gate LH07 and recess the stop bar would result in sufficient stopping sight distance, which is the minimum required to avoid a collision.

At this driveway, the Access (Traffic) Study recommends implementing a combination of elements from the California Manual on Uniform Traffic Control Devices (MUTCD). Specifically, a combination of roadway signage W2-2, W16-13P "When Flashing," and a warning beacon are recommended to be placed at the northbound and southbound approaches to Site D driveway. Loop detectors at the exiting lane would be interconnected with the warning beacon to alert vehicles on SR-84 to the presence of exiting vehicles. This would have a twofold effect. First, the warning beacon would have the effect of extending the sight distance from the roadway to the driveway. Second, knowledge of the presence of vehicles entering the roadway should cause vehicles on SR-84 to exercise caution and slow to the speed limit. This would reduce the necessary sight distance from the driveway to SR-84. By incorporating these design features, roadway safety can be maximized while fulfilling the La Honda Creek Master Plan goal to provide public access to the central area of the Preserve.

## Applicable Policies

- Caltrans Highway Design Manual, Chapter 4, Policy 405.1 (sight distance)

Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- The Level of Service at the proposed driveway would be within Caltrans standards.
- The driveway is recommended to be placed 50 feet north of Preserve Gate LH07 to improve sight distance to the southbound lanes.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology and a left-turn pocket is not warranted.
- A short turn pocket ( 25 feet) with an abbreviated ( 60 feet) transition into and out of the driveway would place the stop bar farther back, maximizing sight distance from the driveway to SR-84.
- A full deceleration and acceleration lane is not recommended because it could be used as a passing lane, reducing road safety.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound approaches and interconnecting warning beacon to the loop detector at the exit lane.


### 5.3.2(2) Site D - Entry/Exit Access Patterns

Shifting the driveway 50 feet to the north improves sight lines.

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- None


### 5.3.2(3) Site D - Emergency Access

Any new roads will need to meet San Mateo County Fire minimum width, maximum length, turning radius, and turn around specifications. Any new gates will need to have San Mateo County Fire access.

## Applicable Policies

- Resource Management Plan, FM-1 (fire and fuel management to protect the public)

Agency Consultations

- San Mateo County Fire
- La Honda Fire Brigade

Recommendations

- None


### 5.3.2(4) Site D - Pump Truck Access

A new vault restroom would require pump truck access and a turnaround.
Applicable Policies

- None

Recommendations

- None


### 5.3.3 SITE D - ENVIRONMENTAL RESOURCES

### 5.3.3(1) Site D - Wetlands and Waters and Riparian Setbacks

Potential jurisdictional waters near the site include a wetland channel to the north. The channel, however, is outside Site D. Any development should be setback 100 feet from the channel.

## Applicable Policies

- Resource Management Plan, WR-1, Measure 1 (inventory features that can affect water resources)
- Resource Management Plan, WR-7 (preserve wetland and ponds)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)


## Recommendations

# ATTACHMENT 2 

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- None


### 5.3.3(2) Site D - Site Drainage

Water drains across the site to the west, eventually reaching La Honda Creek.

## Applicable Policies

- Resource Management Plan, WR-2 (restore hydrologic processes altered by human activity)


## Recommendations

- Storm drainage patterns should match existing conditions and any new outfalls should include conveyance and dissipation to reduce the potential for erosion.


### 5.3.3(3) Site D - Water Quality

Any impervious surface would likely require stormwater runoff treatment and detention.
Applicable Policies

- San Mateo Countywide, C. 3 Regulated Projects Guide


## Recommendations

- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.


### 5.3.3(4) Site D - Plant Communities and Critical Habitat

Site D is comprised of Cismontane Woodland (adjacent to the road at SR-84) and backed by North Coast Coniferous Forest / Redwood Forest (downhill towards La Honda Creek).

Sensitive natural communities include the Redwood Forest and Woodland. These plant communities are considered sensitive by CDFW and under CEQA.

This site is designated as critical habitat for California red-legged frog (CRLF) by the USFWS. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

## Applicable Policies

- Resource Management Policies, VM-1 (maintain the diversity of native plant communities)
- Resource Management Policies, WM-2 (protect, maintain, and enhance habitat features)
- Resource Management Policies, HC-2 (identify and protect existing habitat networks to prevent further compromise of ecosystem integrity)
- Integrated Pest Management Guidance Manual policies (retaining dead trees / snags, and size restrictions / evaluations to avoid the removal of large trees)

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.3.3(5) Site D - Heritage/Significant Trees

Significant Trees (>38" DBH) and Heritage Trees (DBH varies per species) impacted by removal or proposed development would need to be mitigated. It should be noted trees such as non-native eucalyptus will be removed as a separate project in coordination with CALFIRE and their ongoing fuel reduction efforts.

Site $D$ has four Significant Trees that could potentially be affected by the parking area within the Preserve boundary.

Site $D$ has two Significant Trees that could potentially be affected by the parking area within the Caltrans right-of-way.

## Applicable Policies

- San Mateo County Planning, Heritage Tree Ordinance
- San Mateo County Planning, Significant Tree Ordinance
- Caltrans, Encroachment Permits Manual, Chapter 500 (tree removal)
- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Agency Consultations

- San Mateo County Planning
- Caltrans


## Recommendations

- Impacts should be minimized.
- Any mitigation would follow County or Caltrans requirements depending on whether the trees are located within Caltrans' right-of-way or not.
- Resource Management Plan, M-1 (review and consider all applicable District Policies, programmatic permits, and CEQA documents to develop the project scope, incorporating the following practices (listed in order of priority): avoidance, minimization and/or mitigation of potential impacts)
- Resource Management Plan, M-4 (develop a compensatory mitigation strategy as a measure of last resort)


### 5.3.3(6) Site D - Special Status Plants

Development at Site D would not impact any special-status plants. California Bottle-brush Grass (CRPR 4.3) and Western Leatherwood (CRPR 1B.2) are directly outside Site D. Impacts to these plants should be avoided. The site contains several locally rare species, including Red Baneberry, Scouler's Willow, and Foamflower.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, VM-3 (identify location and condition of special status plants and their habitats)


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.3.3(7) Site D - Invasive Plant Species

Invasive weeds within the project site include Monterey Cypress, Acacia, and French Broom.

## Applicable Policies

- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Recommendations

- None


### 5.3.3(8) Site D - Wildlife Corridor

No documented wildlife corridors for specific species have been identified; however, allowing general wildlife movement across the site should be considered when designing fencing, culverts, underpasses, and other measures. Frogs and turtles found in the surrounding ponds are presumed to move across the landscape to and from other ponds, creeks, and upland features.

## Applicable Policies

- Resource Management Plan, HC-2 (prevent existing habitat networks)
- Resource Management Plan, WM-1 (maintain the diversity of native wildlife)


## Recommendations

- None


### 5.3.3(9) Site D - Special Status Animals

The Biological Resources Habitat Assessment evaluated 35 special status wildlife species, most of which could migrate through, forage, and breed at the site. These should continue to be monitored.

The only special-status species detected during the Biological Resources Habitat Assessment was San Francisco dusky-footed woodrat (SFDFW), which is a California Species of Special Concern. District protocol should be implemented to minimize impacts and relocate houses if they are within the development footprint.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, WM-4 (protect and enhance habitats and populations of specialstatus animal species)


## Recommendations

- None


### 5.3.3(10) Site D - Sensitive Bird Resources

Any tree removal will have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Recommendations

- None


### 5.3.3(11) Site D - Roosting Bats

Suitable habitat for roosting, hibernating, and foraging habitat may be present on site and should be monitored.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)


## Recommendations

- None


### 5.3.3(12) Site D - Roadway Noise

Mitigating roadway noise with berms from SR-84 would be an opportunity for Site D.

## Applicable Policies

- Resource Management Plan, SA-3 (minimize unnatural noise)
- San Mateo County Noise Ordinance

Recommendations

- None


### 5.3.3(13) Site D - Cultural Resources

No cultural resource constraints were identified. The Cultural Resources Survey Study does not recommend monitoring. In the event that archaeological deposits or Native American human remains are identified during project construction, Midpen would implement Master Plan Environmental Protection Guidelines and mitigation measures from the Initial Study/Mitigated Negative Declaration.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, CUL-1 (protocol for unexpected discovery of archaeological and paleontological cultural materials)
- La Honda Creek Open Space Preserve Master Plan, CUL-2 (Native American burial plan)
- La Honda Creek Open Space Preserve Master Plan, CUL-4 (manage potential impacts of shortterm construction activities on historic resources)
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration
- Resource Management Policies, CR-3 (protect cultural resources from disturbance)
- La Honda Creek Open Space Preserve Master Plan, Environmental Protection Guidelines for Cultural Resources


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study
Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.3.3(14) Site D - State and Federal Environmental Permitting

State/federal permitting jurisdictions near this project location include those for the wetland channel (USACE, CDFW, RWQCB). No work is proposed in the wetland channel, and it would be avoided during project planning and construction, eliminating the need for regulatory agency permits at this site.

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.4 SITE D - BRIDGE

The bridge is part of Site $D$ in that it connects Site $D$ to the Preserve and is evaluated separately from Site $D$ in this report due to its specific site conditions. Site D Bridge appears to be feasible to replace if the abutments of the new bridge are outside the Ordinary High-Water Mark (OHWM) and above the top-of-bank of La Honda Creek. The existing bridge could be removed in segments, and access to the site is reasonable. Both a pedestrian and vehicular bridge should be studied.

### 5.4.1 SITE D BRIDGE - SITE CHARACTERISTICS

### 5.4.1(1) Site D Bridge - Land Ownership

The 0.25-acre study area is located within La Honda Creek Open Space Preserve APN 078280110 along SR-84. The access road to the bridge is accessed at Preserve Gate LHO7.

## Applicable Policies

- None


## Recommendations

- None


### 5.4.1(2) Site D Bridge - Site Access

The site is reached from an existing access road starting at Preserve Gate LH07.

## Applicable Policies

- None


## Recommendations

- None


### 5.4.1(3) Site D Bridge - Natural Boundaries

The bridge is located at a low point over La Honda Creek. The banks of the stream are 20 feet tall and 50 feet wide.

## Applicable Policies

- None


## Recommendations

- None


### 5.4.1(4) Site D Bridge - Site Topography

The stream banks are nearly vertical, greater than 1:1, on both sides of the bridge.

## Applicable Policies

- Resource Management Plan, SA-1 (minimize evidence of human impacts within preserves)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- Resource Management Plan, WR-2, (manage human activities to control erosion)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site. Conceptual designs should strive to balance cut and fill.


### 5.4.1(5) Site D Bridge - Exposure and Shading

The site has a mild climate, and it is in a valley at a stream crossing with heavy tree cover.
Applicable Policies

- None

Recommendations

- None


### 5.4.1(6) Site D Bridge - Existing Bridge

The existing steel framed (rail car) bridge is 50 feet long and 12 feet wide ( 6 feet wide clear travel), and it is supported by rotted logs. The logs are approximately 26 feet long on the southern abutment, and approximately 34 feet long on the northern abutment.

A Structural Investigation Report completed in 2013 provided a visual assessment of the bridge and concluded "while the bridge itself is in good condition, the abutments and log retaining wall banks are in dangerously bad condition. We recommend that this bridge not be used until the abutment and banks are repaired or replaced." Prior to design, geotechnical drilling on both sides of the bridge will be needed to provide structural information regarding footings.

## Applicable Policies

- Open Space Maintenance and Restoration Program (OSMRP) Permitting (if non-vehicular)


## Agency Consultations

- San Mateo County Planning and Building


## Recommendations

- None


### 5.4.1(7) Site D Bridge - Geological Conditions

The bridge at Site $D$ is feasible to rebuild. There is 3 feet of scour at the base in the stream, but the southern abutment was partly washed away from the other logs. Any new abutments are recommended to be placed beyond the top-of-bank. The bridge site is outside of the San Mateo County Hazard Mapping tool's area of evaluation as noted in the geotechnical report. Landslides or embankment instabilities in the vicinity of the existing bridge were not observed during the January 2022 site reconnaissance. Additional information is available in the appendix, Preliminary Geologic and Geotechnical Assessment Report, Cal Engineering \& Geology, March 2022.

Applicable Policies

## ATTACHMENT 2

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Resource Management Plan, GS-1, Measure 1 (minimize construction of major improvements to avoid high risk areas)
- Resource Management Plan, GS-2 (minimize soil erosion and sedimentation)


## Recommendations

- Borings are recommended to characterize subsurface conditions for areas of development at abutment locations.


### 5.4.1(8) Site D Bridge - Land Use

Grazing Operations: Grazing tenants currently use the surrounding area. Any improvements would need to be coordinated with tenants.

Trail users: The access road leading to the bridge crossing is currently closed for public access except for Midpen staff and Midpen-authorized consultants, contractors, grazing tenants, etc. Opening the area and additional trails to public access will likely increase preserve visitation and trip generation.

Applicable Policies

- San Mateo County General Plan, 6.12 (minimize agricultural land use conflicts)
- Resource Management Plan, GM-7 (public access to minimize impacts on grazing operations)


## Recommendations

- None


### 5.4.2 SITE D BRIDGE - SITE CIRCULATION

### 5.4.2(1) Site D Bridge - Entry/Exit Access Patterns

The site is reached from an existing access road starting at Preserve Gate LH07. The road proceeds down a steep slope and ends at a pedestrian bridge that crosses La Honda Creek. There is an existing hammerhead turnaround east of the bridge.

Agency Consultations

- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- None


### 5.4.2(2) Site D Bridge - Emergency Access

The new bridge is programmed to be rated for a Ranger pickup truck for emergency access, but an option to limit this to a pedestrian bridge will also be explored.

## Applicable Policies

- Resource Management Plan, FM-1 (fire and fuel management to protect the public)

Agency Consultations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- San Mateo County Fire
- La Honda Fire Brigade

Recommendations

- None


### 5.4.3 SITE D BRIDGE - ENVIRONMENTAL RESOURCES

### 5.4.3(1) Site D Bridge - Wetlands and Waters and Riparian Setbacks

Potential jurisdictional waters at the bridge site include a non-wetland stream channel with the OHWM, a non-wetland stream above the OHWM, and riparian habitat.

## Applicable Policies

- Resource Management Plan, WR-1, Measure 1 (inventory features that can affect water resources)
- Resource Management Plan, WR-7 (preserve wetland and ponds)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)


## Recommendations

- The bridge design should avoid working in the OHWM and be above the top-of-bank of La Honda Creek.
- North of the bridge is a jurisdictional non-wetland swale, which should also be avoided.


### 5.4.3(2) Site D Bridge - Site Drainage

La Honda Creek and its surrounding watershed flow through the site. The confluence of Weeks Creek and La Honda Creek is just upstream from the bridge.

Applicable Policies

- Resource Management Plan, WR-2 (restore hydrologic processes altered by human activity)

Recommendations

- None


### 5.4.3(3) Site D Bridge - Water Quality

If bridge concrete footings create a new impermeable surface, then permitting may be required.

## Applicable Policies

- San Mateo Countywide, C. 3 Regulated Projects Guide


## Recommendations

- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

### 5.4.3(4) Site D Bridge - Plant Communities and Critical Habitat

The bridge at Site D is dominated by North Coast Coniferous Forest / Redwood Forest. Sensitive natural communities include riparian habitat and the Redwood Forest and Woodland. These plant communities are considered sensitive by CDFW and under CEQA.

This site is designated as critical habitat for California red-legged frog (CRLF). La Honda Creek is critical habitat for steelhead and coho Salmon. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

Applicable Policies

- Resource Management Plan, VM-1 (maintain the diversity of native plant communities)
- Resource Management Plan, WM-2 (protect, maintain, and enhance habitat features)
- Resource Management Plan, HC-2 (identify and protect existing habitat networks to prevent further compromise of ecosystem integrity)
- Integrated Pest Management Guidance Manual policies (retaining dead trees / snags, and size restrictions / evaluations to avoid the removal of large trees)


## Recommendations

- None


### 5.4.3(5) Site D Bridge - Heritage/Significant Trees

Significant Trees ( $>38^{\prime \prime}$ DBH) and Heritage Trees (DBH varies per species) impacted by removal or proposed development would need to be mitigated.

Site D has two Heritage and five Significant Trees that could potentially be affected by the bridge project.

## Applicable Policies

- San Mateo County Planning, Heritage Tree Ordinance
- San Mateo County Planning, Significant Tree Ordinance


## Agency Consultations

- San Mateo County Planning


## Recommendations

- Impacts should be minimized.
- Any mitigation should follow San Mateo County requirements.
- Resource Management Plan, M-1 (review and consider all applicable District Policies, programmatic permits, and CEQA documents to develop the project scope, incorporating the following practices (listed in order of priority): avoidance, minimization and/or mitigation of potential impacts)
- Resource Management Plan, M-4 (develop a compensatory mitigation strategy as a measure of last resort)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.4.3(6) Site D Bridge - Special Status Plants

Development of the bridge at Site D would not impact any special-status plants. Directly outside the site are Scouler's Willow and California Bottle-brush Grass (CRPR 4.3). These plants should be avoided.

Potential impact of riparian habitat may occur at the bridge.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, VM-3 (identify location and condition of special status plants and their habitats)
- IS/MND, Mitigation Measure BIO-5


## Recommendations

- None


### 5.4.3(7) Site D Bridge - Invasive Plant Species

Invasive weeds near the project site include Upright Veldt Grass and French Broom.

## Applicable Policies

- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Recommendations

- None


### 5.4.3(8) Site D Bridge - Wildlife Corridor

No documented wildlife corridors for specific species have been identified; however, allowing general wildlife movement across the site should be considered when designing fencing, culverts, underpasses, and other measures. Frogs and turtles found in the surrounding ponds are presumed to move across the landscape to and from other ponds, creeks, and upland features. La Honda Creek is a travel corridor for steelhead and coho salmon. Work above and adjacent to the creek must avoid and minimize impacts to these species and their habitat.

## Applicable Policies

- Resource Management Plan, HC-2 (prevent existing habitat networks)
- Resource Management Plan, WM-1 (maintain the diversity of native wildlife)


## Recommendations

- None


### 5.4.3(9) Site D Bridge - Special Status Animals

The Biological Resources Habitat Assessment evaluated 35 special status wildlife species, most of which could migrate through, forage, and breed at the site. These should continue to be monitored.

The only special-status species detected during the Biological Resources Habitat Assessment was San Francisco dusky-footed woodrat (SFDFW), which is a California Species of Special Concern. District

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
protocol should be implemented to minimize impacts and relocate woodrat houses if they are within the development footprint.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, WM-4 (protect and enhance habitats and populations of specialstatus animal species)


## Recommendations

- None


### 5.4.3(10) Site D Bridge - Sensitive Bird Resources

Any tree removal would have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

Recommendations

- None


### 5.4.3(11) Site D Bridge - Roosting Bats

Suitable habitat for roosting under the bridge, hibernating, and foraging habitat may be present on site and should be monitored.

Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)

Recommendations

- None


### 5.4.3(12) Site D Bridge - Cultural Resources

No cultural resource constraints were identified. The Cultural Resources Survey Study does not recommend monitoring. In the event that archaeological deposits or Native American human remains are identified during project construction, Midpen would implement Master Plan Environmental Protection Guidelines and mitigation measures from the Initial Study/Mitigated Negative Declaration.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, CUL-1 (protocol for unexpected discovery of archaeological and paleontological cultural materials)
- La Honda Creek Open Space Preserve Master Plan, CUL-2 (Native American burial plan)
- La Honda Creek Open Space Preserve Master Plan, CUL-4 (manage potential impacts of shortterm construction activities on historic resources)
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration
- Resource Management Policies, CR-3 (protect cultural resources from disturbance)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- La Honda Creek Open Space Preserve Master Plan, Environmental Protection Guidelines for Cultural Resources

Recommendations

- None


### 5.4.3(13) Site D Bridge - State and Federal Environmental Permitting

State/federal permitting jurisdictions near this project location include those for the non-wetland stream channel with OHWM (USACE/USFWS, CDFW, RWQCB), non-wetland stream above OHWM (CDFW, RWQCB), and riparian habitat (CDFW).

Applicable Policies

- State and Federal Clean Water Acts, Section 401 and 404
- State and Federal Endangered Species Acts
- California Department of Fish and Game Code, Section 1602
- IS/MND, Mitigation Measure BIO-5


## Agency Consultations

- Regional Water Quality Control Board (RWQCB)
- US Army Corps of Engineers (USACE)
- California Department of Fish and Wildlife (CDFW)
- US Fish and Wildlife Service (USFWS)

Recommendations

- None


## ATTACHMENT 2

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.5 SITE E3 - RED BARN

Site E3 appears to be feasible to continue studying for limited access only. From a traffic safety standpoint, the site can maximize sight lines by limiting access at the Preserve Gate LH06 driveway to entrance-only and providing a second driveway for vehicles to make left or right turns exiting the site at the Preserve Gate RED01 driveway. Similar to Site D, traffic devices and warning improvements could slow traffic on SR-84 and prevent speeding and illegal passing to maximize sight lines. Restricting the number of visitors at any given time with permit/docent-led event reservations also helps manage capacity and trip generation. The site has a small area screened by vegetation that would be ideal for parking. Since many of the trees providing existing screening are recommended to be removed in part due to Integrated Pest Management (IPM) and Wildland Fire Resiliency programs, new native vegetation could be planted to maintain the screening.

### 5.5.1 SITE E3 - SITE CHARACTERISTICS

### 5.5.1(1) Site E3 - Land Ownership

The six-acre study area is located within La Honda Creek Open Space Preserve APN 078280110 along SR-84 at the Red Barn. The north gate (Preserve Gate LH06) to the Preserve overlaps APN 078260030. This gate will need to maintain access to the northern neighboring property.

## Applicable Policies

- None


## Recommendations

- None


### 5.5.1(2) Site E3 - Site Access

The site currently has two access points, a north driveway at Preserve Gate LH06 and a south driveway at Preserve Gate RED01.

## Applicable Policies

- None

Recommendations

- None


### 5.5.1(3) Site E3 - Natural Boundaries

The site has a moderate slope with the highway on its eastern boundary and gradually slopes down to the Red Barn and corral low point. The remaining area slopes downhill to the west and south.

## Applicable Policies

- None

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.5.1(4) Site E3 - Site Topography

The site slopes northeast to southwest following SR-84 at 6\%. The grades down to the corral are 3:1, which is not in the project study area. Site E3 is approximately 10 feet higher than the corral. The grades down to the Red Barn slope at $5 \%$. The grades at the entry road are $5 \%$ downhill, and the grades at the exit road are $9 \%$ uphill.

## Applicable Policies

- Resource Management Plan, SA-1 (minimize evidence of human impacts within preserves)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)
- Resource Management Plan, WR-2, (manage human activities to control erosion)


## Recommendations

- Avoid off-site soil fill to prevent soil-borne disease and introduction of invasive species at the site.
- Conceptual designs should strive to balance cut and fill.


### 5.5.1(5) Site E3 - View Sheds and Scenic Corridors

The Red Barn is in clear view from the SR-84, a San Mateo County Scenic Corridor. The barn sits in an open field framed by surrounding woodland. SR-84 has a sweeping turn north of the site marked by a steep embankment on the east. An existing turnout with views along SR-84 exists for southbound traffic.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- San Mateo County General Plan, Visual Quality Policies, Scenic Corridor
- Resource Management Plan, Scenic Aesthetic Resources


## Recommendations

- None


### 5.5.1(6) Site E3 - Site Screening

Maintaining or adding vegetation in front of a parking area will help obscure the site from SR-84. Any new grading should not hide or detract from the Red Barn. Per the CALFIRE Wildland Fire Resiliency Program Plan, the eucalyptus would need to be removed for fire safety. The Monterey Pines should also be removed because they are non-native to encourage the growth of existing oak saplings. A phased approach for removal and the option to plant more screening should be considered.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, AES-3 (screening of staging areas)
- La Honda Creek Open Space Preserve Master Plan, AES-4 (screening in scenic corridors)
- Resource Management Plan, SA-1 (minimize the evidence of human impacts within preserves)


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.5.1(7) Site E3 - Exposure and Shading

The site has a mild climate, and it is southwest facing exposure with a wind row of trees on the east side of the potential parking area.

## Applicable Policies

- None


## Recommendations

- None


### 5.5.1(8) Site E3-Geological Conditions

Site E3 is feasible to build from a geotechnical standpoint. No slides exist in the flat area proposed for parking. There is a small slide, which is more of a maintenance issue, on the uphill side of the dirt access road near an existing white shed. Shallow slumps were identified along the edges of the proposed development. A shallow slump near the Red Barn suggests increased moisture in the area. Additional information is available in the appendix, Preliminary Geologic and Geotechnical Assessment Report, Cal Engineering \& Geology, March 2022.

## Applicable Policies

- Resource Management Plan, GS-1, Measure 1 (minimize construction of major improvements to avoid high risk areas)
- Resource Management Plan, GS-2 (minimize soil erosion and sedimentation)


## Agency Consultations

- Caltrans Encroachment Permit


## Recommendations

- None


### 5.5.1(9) Site E3 - Land Use

Grazing Operations: Grazing tenants currently use the site for grazing, and they enter and exit the site using the existing access. In addition, they use an existing ranch road that passes partially through the northern neighboring property to reach northern areas of the Preserve. Any improvements would need fencing, cattle guard, and/or gates to keep the livestock out of the parking area.

Existing structures: The existing white shed and Red Barn will need to remain accessible to Midpen and the tenants. The northern gate, Preserve Gate LH06, would remain in place and kept open as a decorative element while a new metal gate would be in installed farther down the driveway to allow for additional stacking room.

Staff Residence: The staff residence north of the site will need to remain private access only.
Proximity to Neighbor: An adjacent private property to the north will need to retain access to the existing access road that turns north from the gate area into the private property.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
Trail users / Permit only / Docent-led events: The area is currently closed to public access, except for Midpen staff and Midpen-authorized consultants, contractors, grazing tenants, etc. The number of vehicles allowed would be determined by site constraints. Given the size of the site, Midpen assumed there would be approximately 10-15 parking spaces, and that further study and conceptual designs would refine the number of spaces. All recent studies were under the assumption $10-15$ vehicles would be allowed with restricted daily trips or consolidated arrival times for limited use via permit-only and docent-led events.

## Applicable Policies

- San Mateo County General Plan, 6.12 (minimize agricultural land use conflicts)
- Resource Management Plan, GM-7 (public access to minimize impacts on grazing operations)


## Recommendations

- None


### 5.5.1(10) Site E3-Utilities

Any improvements would need to work with the existing joint poles and storm drainpipes on site.

## Agency Consultations

- San Mateo County Planning and Building
- PG\&E


## Recommendations

- None


### 5.5.1(11) Site E3 - Interpretation and Education

The PAWG recommended interpretive signage at the SR-84 pull out in front of the Red Barn as part of their short-term measures. Vehicles would be slowing to pull into the turnout and then would have to check that it is clear behind them before pulling back into the roadway. This short-term measure is likely infeasible and not recommended. Instead, as an alternative solution, interpretive signage could be installed in the interior at Site E3.

## Applicable Policies

- Resource Management Plan, GM-6 (rural agricultural heritage)
- Resource Management Plan, PI-1 (provide interpretive programming, facilities, and materials)
- Resource Management Plan, PI-3 (provide public outreach to encourage public knowledge and appreciation of resources)


## Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 5.5.2 SITE E3 - SITE CIRCULATION

### 5.5.2(1) Site E3 - Roadway Safety and Sight Distance

Road safety is a PAWG and La Honda community concern that was seriously considered in the Access (Traffic) Study. Although the posted speed limit is 40 mph , vehicles near Site E3 were observed to have an 85 th percentile speed between 48 to 49 mph .

The initial traffic count was completed in the non-summer month of November 2021. After the first Planning and Natural Resources Committee Meeting in December 2022, this District Board Committee requested collecting additional traffic volumes in the summer to determine whether summer conditions differ substantially. The additional traffic volume was collected in July 2023 and again in December 2023.

Traffic volumes at Site E3 and D are nearly identical. Lower traffic volume was observed during summer weekdays. Summer volumes are 73 percent higher on Saturdays than weekdays. Non-summer volumes are 15 to 25 percent higher on Saturdays than weekdays. On average, SR-84 carries approximately 1,800 (summer) to 2,000 (non-summer) vehicles per day within the study area on a weekday, and approximately 3,200 (summer) or 2,000 to 2,500 (non-summer) vehicles per day on Saturdays.

The $85^{\text {th }}$ percentile speed near Site E3 was 49 mph for non-summer traffic and 48 for summer traffic. Speeds were about 5 to 10 mph over the posted speed limit and slightly higher in the southbound (downhill) direction than the northbound (uphill) direction. Speeds during the summer were slightly lower northbound and slightly higher southbound than observed in the non-summer data. It should be noted that vehicle speeds on Saturday were no higher than average. Near Site E3, the most common speed in the southbound (downhill) direction is between 41 mph and 45 mph (for both the non-summer and summer traffic). In the northbound direction (uphill), the most common speed is between 36 mph and 40 mph . Vehicles traveling over $60 \mathrm{mph}(20 \mathrm{mph}$ over the speed limit) are 1 to 2 percent of the total volume, with 6 percent observed on a non-summer Saturday. Vehicles traveling over 70 mph ( 30 mph over the speed limit) are 1 percent or less of traffic volume, and no more than observed in non-summer months. Overall, at E3 during all seasons, the predominant speed of vehicles is approximately 50 mph , or about 10 mph over the posted speed limit.

The District Board Committee also requested more data on bicycles. Bicycle volumes varied from approximately 30 per weekday to 200 bicycles on a summer Saturday. Bicycles travel at a lower speed than vehicles; therefore, the required stopping sight distance and intersection sight distance is sufficient for vehicles to observe and avoid bicycles at exit driveways. Collisions involving bicycles were either outside the study area or occurred before 2017, and none of the collisions in Figure 7 of the Access Study involved bicycles.

Based on the observed traffic volumes on SR-84, the anticipated inbound and outbound traffic at the site, and Highway Capacity Manual methodology, the delay and level of service are anticipated to be within Caltrans standards. Queues for inbound and outbound movements at the project driveway would be less than one vehicle according to Highway Capacity Manual methodology. This means that the traffic consultant does not anticipate the necessity for vehicles to stop in SR-84 waiting to turn into the site. On SR-84, no additional turn lanes or widening would be recommended.

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

Public access to Site E3 would be provided at existing access points currently used by Midpen vehicles and grazing tenants. Inbound vehicles would use the existing paved access. As mentioned above, northbound left-turn vehicles are not expected to queue on SR-84 at the existing driveway. A separate left-turn pocket for inbound vehicles is not warranted according to National Cooperative Highway Research Program (NCHRP) Report 279. Therefore, the operation of the existing paved access would be the same as existing conditions with the exception of additional stacking distance being available when a new gate is installed farther in on the driveway.

Outbound vehicles would use a new paved driveway where an unpaved driveway currently exists. Sight distance at the driveway is not sufficient for the current roadway speeds. Similar to Site $D$, the Access (Traffic) Study is recommending implementing a combination of elements from the California Manual on Uniform Traffic Control Devices (MUTCD). Specifically, a combination of roadway signage W2-2, W1613 "When Flashing," and a warning beacon are recommended to be placed at the northbound and southbound approaches to Site E3 exit driveway. Loop detectors at the exiting lanes would be interconnected with the warning beacon to alert vehicles on SR-84 to the presence of exiting vehicles. This would have a twofold effect. First, the warning beacon would have the effect of extending the sight distance from the roadway to the driveway. Second, knowledge of the presence of vehicles entering the roadway should cause vehicles on SR-84 to exercise caution and slow to the speed limit. This would reduce the necessary sight distance from the driveway to SR-84. By incorporating these design features, roadway safety can be maximized while fulfilling the La Honda Creek Master Plan goal to provide public access to the central area of the Preserve.

This lot will be constrained and limited, given its small size (10-15 cars) and its carefully managed frequency (through reservations/permits only) - this too will assist with reducing potential traffic/circulation impacts. Peak usage (on a weekend) is estimated to result in 12 inbound and 11 outbound trips during the busiest hour if visits are reserved and self-led. Docent led visits could result in 18 inbound or 18 outbound trips in an hour.

## Applicable Policies

- Caltrans Highway Design Manual, Chapter 4, Policy 405.1 (sight distance)


## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- For either type of programming, the Level of Service at the proposed driveways would be within Caltrans standards.
- No queue for northbound left-turn vehicles is anticipated according to Highway Capacity Manual Methodology and a left-turn pocket is not warranted.
- The Access (Traffic) Study recommends installing advance warning sign combination W2-2, warning beacon, and W16-13P "When Flashing" at both northbound and southbound

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
approaches to the exit driveway and interconnecting warning beacon to the loop detector at the exit lanes.

- On-site observation shows that some vehicles are attempting to pass over a solid yellow line at this location. A barrier would need to be designed to accommodate left-turns out of the exiting driveway. Midpen can consider working with Caltrans to determine whether features would be added to the state highway to prevent passing at this location as part of the project.
- Highway shoulder parking would need to be prohibited to dissuade visitors from parking on the roadway and entering the Preserve when the internal area is open to the public.


### 5.5.2(2) Site E3 -Entry/Exit Access Patterns

Access to the site is currently through the north driveway and south driveway. The Access (Traffic) Study recommends entry only at the north driveway and exit only at the south driveway and limiting daily trips at this site via a permit parking or docent-led event program.

## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- None


### 5.5.2(3) Site E3 - Emergency Access

Any new roads would need to meet San Mateo County Fire requirements regarding minimum width, maximum length, turning radius, and turn around specifications. Any new gates would need to have San Mateo County Fire access.

## Applicable Policies

- Resource Management Plan, FM-1 (fire and fuel management to protect the public)


## Agency Consultations

- Caltrans
- San Mateo County Fire
- La Honda Fire Brigade
- San Mateo County Planning and Building


## Recommendations

- None


### 5.5.2(4) Site E3 - Emergency Landing Zone

An emergency landing zone exists on Midpen owned land on the west side of SR-84.
Agency Consultations

- San Mateo County Fire

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

## Recommendations

## - None

### 5.5.2(5) Site E3-Regional Trail Connections

A future Bay Area Ridge Trail crossing has not been planned for crossing SR-84. Although there is no Bay Area Ridge Trail connection planned east of SR-84, Midpen would like to take this opportunity to explore the idea in concept with Caltrans. The initial analysis shows this crossing feasible from a site characteristic, site circulation, and environmental resources standpoint.

A representative from the Bay Area Ridge Trail Council presented to the PAWG at the 12/12/2019 PAWG meeting to share the organization's vision of a continuous, regional multi-use trail that circles the Bay Area ridgelines. The Bay Area Ridge Trail also provided a memo supporting the PAWG in their effort to find the most feasible option for future staging and public access that will eventually close this high priority gap in the Ridge Trail.

The Master Plan includes a goal to close a critical gap on the Bay Area Ridge Trail, connecting the regional trail to the Preserve. A crossing was previously considered during the 2017 Red Barn parking project. Once the 2017 project was placed on hold, the PAWG was made aware of the regional connection need while exploring recommendations. A high-level review of a crossing at site E3 has been included in the Feasibility Study. Further study would be needed if the crossing is moved forward. A wildlife crossing, if contemplated, would be a separate effort and project.

The site north of SR-84 has thick colluvial deposits, but a Bay Area Ridge Trail crossing over SR-84 is technically feasible-both tunnel and bridge are options. An elevated abutment should be outside the Caltrans right-of-way. Any drilling within the Caltrans right-of-way will need an encroachment permit.

## Applicable Policies

- San Mateo Countywide Trails Plan policies


## Agency Consultations

- Caltrans


## Recommendations

- None


### 5.5.3 SITE E3 - ENVIRONMENTAL RESOURCES

### 5.5.3(1) Site E3 - Wetlands and Waters and Riparian Setbacks

Potential jurisdictional waters near the study area include a non-wetland drainage swale. A culvert may need to be added to the road and would need RWQCB permitting.

If in the future, there is an opportunity to pursue a Bay Area Ridge Trail crossing of SR-84, then permitting for the incised non-wetland channel (USACE, CDFW, RWQCB) and riparian corridor habitat along Weeks Creek (CDFW) would be needed.

## Applicable Policies

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Resource Management Plan, WR-1, Measure 1 (inventory features that can affect water resources)
- Resource Management Plan, WR-7 (preserve wetland and ponds)
- Resource Management Plan, FM-3 (ensure forest management activities are compatible with riparian ecosystem and water resources protection and policies)


## Agency Consultations

- RWQCB


## Recommendations

- None


### 5.5.3(2) Site E3 - Site Drainage

Water drains east to west on the site toward a low point in the corral. South of the site drains to Weeks Creek.

## Applicable Policies

- Resource Management Plan, WR-2 (restore hydrologic processes altered by human activity)


## Recommendations

- Storm drainage patterns should match existing conditions and any new outfalls include conveyance and dissipation to reduce potential for erosion.


### 5.5.3(3) Site E3 - Water Quality

Any impervious surface would likely require stormwater runoff treatment and detention.

## Applicable Policies

- San Mateo Countywide, C. 3 Regulated Projects Guide


## Recommendations

- Where more than 10,000 square feet of new impervious areas are added or replaced, stormwater runoff treatment and detention should be considered.


### 5.5.3(4) Site E3 - Plant Communities and Critical Habitat

Site E3 is comprised of Valley and Foothill Grassland (corral and back area near the Red Barn), Closed Cone Pine Forest (tree row in front of potential parking area), and Cismontane Woodland (northwest perimeter).

This site is designated as critical habitat for California red-legged frog (CRLF) by the USFWS. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation within the federal government. Designations affect only federal agency actions or federally funded or permitted activities (USFWS).

## Applicable Policies

- Resource Management Plan, VM-1 (maintain the diversity of native plant communities)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Resource Management Plan, WM-2 (protect, maintain, and enhance habitat features)
- Resource Management Plan, HC-2 (identify and protect existing habitat networks to prevent further compromise of ecosystem integrity)
- Integrated Pest Management Guidance Manual policies (retaining dead trees / snags, and size restrictions / evaluations to avoid the removal of large trees)


## Agency Consultations

- US Fish and Wildlife Service


## Recommendations

- None


### 5.5.3(5) Site E3 - Cultural Landscape

The Cultural Landscape Report evaluated the 10-acre Red Barn area and determined that the site is not a cultural landscape because the site no longer retains sufficient integrity to convey the historic significance, except for the Red Barn. The Red Barn is individually eligible for listing under both the National Register of Historic Places and California Register of Historic Resources. For this reason, the Red Barn is a historical resource for the purpose of CEQA.

Applicable Policies

- None


## Recommendations

- None


### 5.5.3(6) Site E3 - Heritage/Significant Trees

Significant Trees (>38" DBH) and Heritage Trees (DBH varies per species) impacted by removal or proposed development would need to be mitigated.

Site E3 has 21 Significant Trees that could potentially be affected by the parking area within the Preserve boundary. Per the CALFIRE Wildland Fire Resiliency Program Plan, the eucalyptus would need to be removed for fire safety. The Monterey Pines should be removed because they are non-native to encourage the growth of existing oak saplings. A phased approach for removal and the option to plant more screening should be considered.

Several trees are Pinus radiata. CNPS considers P. radiata a rare species ranked 1B.1 (G1/S1) but only three native stands exist in California, at Ano Nuevo, Cambria, and the Monterey Peninsula. Outside of these three native stands, the species is considered an invasive species. Due to potential genetic integrity issues, Midpen ecologists and arborists recommend that they be removed.

## Applicable Policies

- San Mateo County Planning, Heritage Tree Ordinance
- San Mateo County Planning, Significant Tree Ordinance
- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Agency Consultations

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- San Mateo County Planning


## Recommendations

- Impacts should be minimized.
- Any mitigation should follow San Mateo County requirements.
- IPM and Wildland Fire Resiliency Program Plan recommend fuel reduction of the trees.
- Resource Management Plan, M-1 (review and consider all applicable District Policies, programmatic permits, and CEQA documents to develop the project scope, incorporating the following practices (listed in order of priority): avoidance, minimization and/or mitigation of potential impacts)
- Resource Management Plan, M-4 (develop a compensatory mitigation strategy as a measure of last resort)
- Removal of granary trees is evaluated on a case-by-case basis and would need to occur over time to minimize impacts, and replanting would be done to ensure screening.


### 5.5.3(7) Site E3 - Special Status Plants

Development of E3 would not impact special-status plants.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, VM-3 (identify location and condition of special status plants and their habitats)

Recommendations

- None


### 5.5.3(8) Site E3 - Invasive Plant Species

Invasive weeds within and near the project site include Blue Gum Eucalyptus, Monterey Pine, Harding Grass, and English Ivy.

## Applicable Policies

- Resource Management Plan, IPM-2 (prevent introduction of new pest species)


## Recommendations

- None


### 5.5.3(9) Site E3 - Wildlife Corridor

No documented wildlife corridors for specific species have been identified; however, allowing general wildlife movement across each site should be considered when designing fencing, culverts, underpasses, and other measures. Frogs and turtles found in the surrounding ponds are presumed to move across the landscape to and from other ponds, creeks, and upland features.

## Applicable Policies

- Resource Management Plan, HC-2 (prevent existing habitat networks)
- Resource Management Plan, WM-1 (maintain the diversity of native wildlife)

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report 18 November 2022 (revised March 29, 2024)

Recommendations

- None


### 5.5.3(10) Site E3 - Special Status Animals

The Biological Resources Habitat Assessment evaluated 35 special status wildlife species, most of which could migrate through, forage, and breed at the site. These should continue to be monitored.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)
- Resource Management Plan, WM-4 (protect and enhance habitats and populations of specialstatus animal species)


## Recommendations

- None


### 5.5.3(11) Site E3 - Sensitive Bird Resources

Tree removal would have seasonal restrictions to limit impacts on nesting birds. Pre-construction surveys for birds would set limits on tree removal and pruning to avoid nesting and active acorn granary usage.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)


## Recommendations

- None


### 5.5.3(12) Site E3 - Roosting Bats

Suitable habitat for roosting, hibernating, and foraging habitat may be present on site and should be monitored. Special-status bats have been observed roosting in the Red Barn. Construction restrictions and buffers would apply.

## Applicable Policies

- Resource Management Plan, FM-2 (conduct surveys for special status species)


## Recommendations

- Construction Measures: Public access and ranch improvements adjacent to the Red Barn (e.g., construction of the parking lot, trails, retaining walls, cattle corral) should be conducted outside the bat maternity season (generally April 15 - September 1). If work is conducted during the maternity season, low noise-producing activities (e.g., moving construction vehicles, handwork, fence building, pedestrian traffic, etc.) should stay at least 120 feet from the barn, and high noise-producing activities (e.g., grading, excavation, drilling, trenching, scraping, etc.) should stay at least 150 feet from the barn. Idling trucks or operating generators should be 150 feet from the barn to avoid impacts from exhaust fumes.
- Because adult and sub-adult pallid bats remain in the barn well into September and possibly October, maintain reduced buffers of 60 feet for low noise-producing activities and 75 feet for

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)
high-noise producing activities, as noted above, until colony individuals disperse for the winter (from mid-October through the end of November).

- If these work buffer distances are infeasible due to the need for access or construction adjacent to the barn, then the project team should consult with the bat biologists to determine alternate mitigation measures, such as pre-construction surveys or noise level and equipment restrictions.
- Work can proceed without disturbance buffers between November 30 and February 28.


### 5.5.3(13) Site E3 - Roadway Noise

Mitigating roadway noise from SR-84 would be an opportunity for Site E3 to improve user and wildlife experience.

## Applicable Policies

- Resource Management Plan, SA-3 (minimize unnatural noise)
- San Mateo County Noise Ordinance


## Recommendations

- None


### 5.5.3(14) Site E3 - Cultural Resources

No cultural resource constraints were identified. The Cultural Resources Survey Study does not recommend monitoring. In the event that archaeological deposits or Native American human remains are identified during project construction, Midpen would implement Master Plan Environmental Protection Guidelines and mitigation measures in the La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration.

## Applicable Policies

- La Honda Creek Open Space Preserve Master Plan, CUL-1 (protocol for unexpected discovery of archaeological and paleontological cultural materials)
- La Honda Creek Open Space Preserve Master Plan, CUL-2 (Native American burial plan)
- La Honda Creek Open Space Preserve Master Plan, CUL-4 (manage potential impacts of shortterm construction activities on historic resources)
- La Honda Creek Master Plan Initial Study/Mitigated Negative Declaration
- Resource Management Policies, CR-3 (protect cultural resources from disturbance)
- La Honda Creek Open Space Preserve Master Plan, Environmental Protection Guidelines for Cultural Resources


## Recommendations

- None


### 5.5.3(15) Site E3 - State and Federal Environmental Permitting

State/federal permitting jurisdictions near this project location include those for the non-wetland drainage (RWQCB). Should Midpen pursue the Bay Area Ridge Trail crossing at SR-84, then permitting for the incised non-wetland channel (USACE/USFWS, CDFW, RWQCB) and riparian corridor habitat along Weeks Creek (CDFW) would be needed.

## Applicable Policies

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- State and Federal Clean Water Acts, Section 401 and 404
- State and Federal Endangered Species Acts
- California Department of Fish and Game Code, Section 1602
- IS/MND, Mitigation Measure BIO-5

Regulatory Agency Consultations

- Regional Water Quality Control Board (RWQCB)
- US Army Corps of Engineers (USACE), Clean Water Act
- California Department of Fish and Wildlife (CDFW)
- US Fish and Wildlife Service

Recommendations

- None

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

### 6.0 EXHIBIT B - RECORDS REVIEW

Midpeninsula Open Space District provided RHAA with the following documents pertaining to the sites. These records were reviewed and synthesized in this analysis report.

## Project Team Reports

- BKF Engineers, Boundary and Topographic Survey, dated September 2022
- CG\&E, Cal Engineering \& Geology, Preliminary Geologic and Geotechnical Assessment Report, dated March 2022
- LSA, Access (Traffic) Study, dated October 2022
- LSA, Biological Resource Evaluation Study, dated October 2022
- LSA, Cultural Landscape Report (Site E3), dated April 2022
- LSA, Cultural Resources Survey Study, dated March 2022
- LSA, Tree Inventory Table, dated January 2022
- Vollmar, Botanical Resource Survey Report, dated November 2021
- Vollmar, Delineation of Potential Jurisdictional Waters (Site B2, B3, D), dated May 2022
- Vollmar, Delineation of Potential Jurisdictional Waters (Site E3), dated May 2022


## Previous Records Review

- AECOM, 2016, Memorandum-Sears Ranch Parking Area Biotic Study, dated 28 October 2016
- ALTA Owners Policy, 1991, Form No. 1402-87, Schedule A, dated 03 April 1991
- ASCENT Environmental, 2012, La Honda Creek Open Space Master Plan, Draft Initial Study/Mitigated Negative Declaration, dated 2 July 2012
- Birds Observed at the La Honda Creek Open Space Preserve, 2013, table
- BKF Engineers, 2017, Red Barn- Cut and Fill Exhibit Alternative 3-Phase 1, dated 01 December 2017
- BKF Engineers, 2016, La Honda Creek Open Space Preserve, Red Barn Public Access Area, Tree Survey, San Mateo County, dated 23 November 2016
- BKF Engineers, 2021, Topographic Survey of the Lands of the Mid-Peninsula Regional Open Space District, County of San Mateo, dated 23 November 2021
- BKF Engineers, 2021, Topographic Survey of the Lands of the Mid-Peninsula Regional Open Space District, County of San Mateo, dated 30 November 2021
- California Highway Patrol, 2019, \#190913 2009 AV. 2017/2018 Collisions on SR-84 Between SR 35 and SR 1, San Mateo County, dated 31 July 2019
- California Highway Patrol, 2021, \#211264AC 2019-AV.2020/2021 Crashes on RT 84
- (La Honda RD/Woodside RD) Between RT 35 (Skyline BL) and RT 1 (Cabrillo HWY), San Mateo CO., dated 20 October 2021
- Conservation by Design, Inc., 2011, District-Wide Interpretive Plan, dated December 2011
- Conservation Metrics, 2020, Automated Acoustic Surveys for Marbled Murrelet, Steller's Jay, and Northern Spotted Owl in the Santa Cruz Mountains

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Fall Creek Engineering, Inc., 2017, Revised Stormwater Drainage Report, La Honda Creek Open Space Preserve, San Mateo County, California, dated 26 April 2017
- Fall Creek Engineering, Inc., 2017, Sears Ranch Road, Sears Ranch Improvements and Parking Lot Installation, La Honda Creek Open Space Preserve, San Mateo County, California, April 2017
- Hexagon Transportation Consultants, Inc., 2016, Memorandum, La Honda Creek Open Space Preserve-Red Barn Access Study, dated 10 August 2016
- H.T. Harvey \& Associates-Ecological Consultants, 2017 LA Honda Space Preserve-Bat Surveys for the Red Barn Public Access Project (HTH 4009-01), dated 12 October 2017
- H.T. Harvey \& Associates-Ecological Consultants, 2021, Memorandum: Analysis of E-bike Noise and Recommendations for Buffer Distances between Bike Trails and Bat Roosts/Nesting Birds, dated 17 September 2021
- H.T. Harvey \& Associates-Ecological Consultants, 2017, Winter Bat Survey for the Red Barn Public Access Project (HTH 4009-01), dated 30 March 2017
- LANGAN, 2016, Geotechnical Investigation, Sears Ranch Road Interim Staging Area, La Honda, California, dated 22 April 2016
- LANGAN, 2016, Memorandum, Additional Geotechnical Recommendations - Sears Ranch Road Sears Ranch Road Interim Staging Area, dated 01 November 2016
- LSA, 2016, Historic Resource Evaluation, Red Barn Staging Area, La Honda Creek Open Space Preserve, Unincorporated San Mateo County, California, dated August 2016
- Midpeninsula Regional Open Space District, 2012, Meeting 12-29, Agenda Item 7, dated 22 August 2012
- Midpeninsula Regional Open Space District, 2020, Meeting R-20-81, Agenda Item 2, dated 28 July 2020
- Midpeninsula Regional Open Space District, 2012, La Honda Creek Open Space Master Plan, dated August 2012
- Midpeninsula Regional Open Space District, 2012, La Honda Creek Open Space Master Plan, Mitigation Monitoring Program, dated 22 August 2012
- Midpeninsula Regional Open Space District, 2014, McDonald Ranch Premise Map, dated October 2014
- Midpeninsula Regional Open Space District data accessed December 2021 available through the California Natural Diversity Database https://wildlife.ca.gov/Data/CNDDB.
- Midpeninsula Regional Open Space District, 2021, Memorandum: Update on the Electric Bicycle (e-bike) Noise Study, dated 10 November 2021
- Midpeninsula Regional Open Space District, 2021, Project Limits-Site B2, dated 21 June 2021
- Midpeninsula Regional Open Space District, 2021, Project Limits-Site B3, dated 21 June 2021
- Midpeninsula Regional Open Space District, 2021, Project Limits-Site D and Hwy 84, dated 21 June 2021
- Midpeninsula Regional Open Space District, 2021, Project Limits-Site E3, dated 21 June 2021
- Pathways for Wildlife, date unknown, American Badger Habitat Suitability Assessment: Cost Surface Layer with Draft Linkage Design and Badger Records


## ATTACHMENT 2

La Honda Creek Parking Area and Trailhead Feasibility Study Existing Conditions/Opportunities and Constraints Report
18 November 2022 (revised March 29, 2024)

- Paul A. Heady and Winifred F. Frick Central Coast Bat Research Group, 2000, Impact Assessment and Mitigation/ Action Recommendations for the Pallid Bat Colony in the La Honda Big Red Basin
- Paul A. Heady and Winifred F. Frick Central Coast Bat Research Group, 2002, Post-Construction Assessment for the Pallid Bat Colony in the La Honda Big Red Basin
- SAGE ASSOCIATES, Agricultural and Environmental Consultants, 2007, La Honda Creek Open Space Preserve, Grazing Management Plan for Former McDonald \& Dyer Sites, dated November 2007
- San Mateo County, 2020, Active Transportation Plan - Draft Final, dated 13 August, 2019.
- Sean E. McAllister, 2019, La Honda Open Space Preserve, Marbled Murrelet Surveys, 2018 \& 2019, dated 17 October 2017
- Timothy C. Best, CEG Engineering Geology and Hydrology, 2007, Driscoll Ranch Road Erosion Inventory, dated September 2007
- TRA Environmental Sciences, 2017, La Honda Creek Open Space Preserve, Red Barn Public Access Area, Jurisdictional Waters and Wetland Delineation, dated January 2017
- Tim Garrison, P.E. Consulting Engineer, 2013, Structural Investigation-LH07, La Honda Creek Bridge, dated 9 April 2013
- Vaughan Forestry, 2016, Draft- Red Barn Public Access Area Project, dated 12 December 2016
- Vollmar Natural Lands Consulting, 2021, LA Honda Creek, El Corte De Madera Creek, Thornewood, and Windy Hill Open Space Preserves, San Mateo County, California, dated November 2021
- W-Trans, 2017, Memorandum, Interim Transportation Circulation Technical Memorandum for the Red Barn Public Access Area in the La Honda Creek Open Space Preserve, dated 03 February 2017
- W-Trans, 2020, La Honda Creek Open Space Access Analysis, dated 17 January 2020


[^0]:    I:\RAA2102\G\Conceptual_Plan.ai (11/22/2022)

