

R-23-137 Meeting 23-32 November 8, 2023

SPECIAL MEETING AGENDA ITEM **15**

AGENDA ITEM

Highway 35 Multi-use Trail Crossing and Parking Feasibility Study at Purisima Creek Redwoods Open Space Preserve

GENERAL MANAGER'S RECOMMENDATION

Accept conceptual parking design Option A.2 (upper and lower parking area expansion with two-way circulation and the associated multi-use trail crossing location and design) as the project description and scope to initiate environmental review under the California Environmental Quality Act for the Highway 35 Multi-use Trail Crossing and Parking Project.

SUMMARY

The Highway 35 Multi-Use Trail Crossing and Parking Feasibility Study (Project) is a partnership between the Midpeninsula Regional Open Space District (District), San Francisco Public Utilities Commission (SFPUC), Bay Area Ridge Trail Council (Ridge Trail Council) and Peninsula Open Space Trust (POST). The Project is evaluating a multi-use trail crossing location over Highway 35 and connector trail in the northeastern reaches of Purisima Creek Redwoods Open Space Preserve (Purisima, Preserve), as well as the potential expansion of the existing North Ridge parking area.

On April 4 and July 25, 2023 (R-23-38, R-23-87), the Planning and Natural Resources Committee (PNR) provided feedback on the Project's opportunities and constraints analysis, location of a feasible highway crossing, and conceptual parking design options for the Purisima North Ridge parking area. The PNR recommended parking concept Option A.2 as the preferred parking option due to the two-way circulation, greatest increase in onsite parking, and ability to implement Transportation Demand Management (TDM) strategies.

BACKGROUND

The District is conducting a feasibility study to identify a trail crossing location from the Purisima North Ridge parking area across Skyline Boulevard (Highway 35) to connect existing segments of the Bay Area Ridge Trail within Purisima, west of Highway 35, to a new segment of the Bay Area Ridge Trail planned on the east side of Highway 35 (Ridge Trail Extension). The feasibility study also analyzes the potential expansion of the North Ridge parking area to serve visitors to both the existing Preserve trailhead and to the proposed Ridge Trail Extension.

Project Goals

The intent of the Project is to enhance regional connectivity through a multi-use trail crossing that will allow access to trails on both sides of Highway 35 and to identify ways to reconfigure and increase parking capacity at the North Ridge parking area. Project goals and strategies have been identified to guide the development of Project elements and evaluate Project success.

Goal 1: Support the implementation of the regional Bay Area Ridge Trail. Strategies:

- Identify a multi-use trail crossing and trail spur location to connect the SFPUC's new segment of the Bay Area Ridge Trail to the Preserve and the existing Ridge Trail segment within the Preserve.
- Maximize safety and minimize neighbor impacts when evaluating multi-use trail crossing locations and infrastructure.
- Develop the multi-use trail crossing and spur trail to accommodate low-intensity recreational use by hikers, bicyclists and equestrians, consistent with Bay Area Ridge Trail corridor goals.
- Collaborate with partner agencies to complete the planning, design and implementation of the multi-use trail crossing and spur trail.

Goal 2: Improve public access and visitor experience at Purisima's North Ridge trailhead using ecologically sensitive design, construction practices, and long-term maintenance and management.

Strategies:

- Add parking capacity through the reconfiguration of existing parking spaces and expansion of the North Ridge Parking Area.
- Improve the existing trailhead amenities, such as replacing the existing restroom with a new Americans with Disabilities Act (ADA) compliant vault restroom, replacing dated signboards with current standard design, and adding bicycle parking.
- Incorporate Transportation Demand Management Strategies consistent with the Board-approved Purisima Multimodal Access Study.
- Design recreational amenities to protect the scenic corridor.
- Maximize safety and minimize neighbor impacts when evaluating the multi-use trail crossing, parking enhancements and vehicle circulation.
- Maintain routine patrols and maintenance and use adaptive management to address unforeseen issues that arise from increased visitation to the North Ridge trailhead.

The Project site includes an area west of Highway 35 within Purisima, comprised of the existing North Ridge parking area and adjacent open areas west of the parking area (see Attachment 1). The Project site also includes the Caltrans Highway 35 right-of-way and approximately four acres of SFPUC Watershed lands east of Highway 35 for the spur trail study area.

The North Ridge parking area and trailhead is the northernmost entry point into Purisima, located along Highway 35, providing public access to hiking, biking, and equestrian trails within the Preserve. The existing North Ridge parking area is an unstriped gravel lot with 41 standard parking spaces and 2 ADA parking spaces (see Attachment 2). Equestrian parking at the North Ridge lot is accommodated along the northwest boundary of the parking area, with space for approximately two equestrian trailers. The North Ridge trailhead includes standard amenities such as an equestrian hitching post, map and sign boards, a boot brush, and a single-stall vault restroom. As with many other District Preserves, the North Ridge trailhead receives peak

visitation on weekends and the parking area, which currently only serves visitors to Purisima, frequently reaches capacity during peak visitation periods.

Adjacent to the North Ridge parking lot is an open, flat area (upper expansion area) that is available as a helicopter landing zone for CalFire emergency response. Further west of this open area, the land slopes down and levels out to another open, flat area (lower expansion area) adjacent to a District employee residence. This lower expansion area can be accessed from the existing North Ridge parking lot via a separate driveway along the Preserve's north property boundary. Both the upper and lower expansion areas have been previously disturbed, and the upper expansion area has occasionally been used for overflow parking for community events, such as the Kings Mountain Art Fair.

Purisima contains existing segments of the Bay Area Ridge Trail, of which these segments contribute to over 400 miles (and counting) of existing multi-use trail that follow the ridgelines encircling the San Francisco Bay. A new alignment of the Bay Area Ridge Trail (Ridge Trail Extension) is being constructed on SFPUC Watershed lands east of the North Ridge trailhead, with an estimated completion date in late 2024. This poses an opportunity to connect Purisima and its Bay Area Ridge Trail segment to the new Ridge Trail Extension through the Project's multi-use trail crossing on Highway 35. With a multi-use trail crossing, the North Ridge parking area can also serve as the southern staging area for the Ridge Trail Extension.

DISCUSSION

Technical Studies

District staff contracted with professional consulting firms to complete various technical studies to analyze the biological, historic, cultural, traffic, geotechnical, and topographic characteristics of the Project area. The biological survey did not uncover any special-status wildlife species or other sensitive biological resources within the Project area. Analysis from a Pathogens Risk Assessment found that the Project area within Purisima has relatively low levels of contamination risk, while areas east of Hwy 35 are highly receptive to potential contamination and are considered sensitive sites. The cultural and historic resource surveys did not identify any known archaeological or historic resources within or in the vicinity of the Project site, although staff will coordinate with the appropriate tribes to receive guidance during the CEQA environmental review process on addressing a potential discovery/unearthing of cultural resources. A topographic survey and geotechnical recommendations report did not uncover any issues for construction of a parking area in the upper or lower expansion areas.

A traffic study was conducted by TJKM Transportation Consultants (TJKM) to evaluate the sight distance conditions for the two existing parking area driveways and the feasibility/design of a new on-grade trail crossing on Highway 35. Data collected in April 2022 was used to determine if adequate sight distance is available for vehicles exiting the existing driveways, and if northbound and southbound vehicles on Highway 35 have adequate stopping sight distance for a new on-grade trail crossing. TJKM also reviewed five years of traffic collision data within the vicinity of the project site to inform the final recommendations. Based on the available information, TJKM concluded that there is a feasible on-grade trail crossing location immediately adjacent to the existing exit driveway. TJKM recommends improvements within the right-of-way to maintain site distances and enhance visibility of the crossing. Furthermore, TJKM concluded that the existing driveway is the most favorable configuration for ingress and egress. TJKM sought concurrence from the California Department of Transportation (Caltrans)

on their findings and recommendations. Caltrans reviewed the findings and requested additional information in the final report, which was provided by TJKM. Caltrans does not have any further comments at this time. Additional coordination with Caltrans will be required for future encroachment permits, which would occur after a Board-selected alternative is analyzed as part of the CEQA environmental review process. Additional details of the recommended crossing location and roadway improvements are shown in Attachment 3.

Related Studies and Transportation Demand Management (TDM) Strategies

The Purisima Multimodal Access Study was approved by the Board on November 9, 2022, which recommends TDM strategies both specific to the Purisima North Ridge parking area and Preserve-wide. The expectation is that many of these strategies are suitable for the North Ridge trailhead site and can be incorporated into the design and long-term management of the parking area, where one or more of these strategies may be implemented concurrently:

Highest priority TDMs

- Peak period parking reservations/priority parking
- Bicycle parking and facilities (including bicycle repair stations)
- Temporarily redesignate spaces on specific days/times to best meet demands
 - May include designating special parking areas temporarily for carpool, equestrian, or other uses
- Real-time parking lot occupancy sensors and signage
- Electric Vehicle (EV) charging infrastructure

Lower priority TDMs

- Vehicle wayfinding signage
- Clearly identify permitted on-street / shoulder parking
- Accommodate future shuttle / transit systems

Site Opportunities and Constraints

Opportunities and Constraints for the Project were developed by analyzing the results of the technical studies and identifying site conditions that need to be considered for the multi-use trail crossing, spur trail, and North Ridge parking expansion (see Attachment 9). Key opportunities and constraints are summarized below.

Natural Resources:

The biological survey did not uncover any special-status wildlife species, nesting birds or raptors, aquatic resources, roosting bats, or other sensitive biological resources within the Project area. Best Management Practices (BMPs) are recommended to avoid construction impacts to nearby biological resources, including nesting bird surveys, San Francisco dusky-footed woodrat midden avoidance buffer, marbled murrelet avoidance and mitigation measures, BMPs to prevent Phytophthora and other pathogen contamination, and BMPs related to construction runoff and drainage.

Public Access:

The traffic study identified a suitable multi-use crossing location on Highway 35 as well as roadway improvements to establish a safer crossing with sufficient lines of sight at the proposed crossing location. Two onsite parking expansion sites are located adjacent to the North Ridge parking area; expansion of the parking area coupled with TDM strategies would alleviate parking demands and potentially meet anticipated parking needs at the North Ridge trailhead.

Local and Regional Connectivity:

Existing segments of the Bay Area Ridge Trail within Purisima can be accessed from the North Ridge trailhead, which makes a multi-use trail crossing at Highway 35 from the planned Ridge Trail Extension to the North Ridge trailhead a natural and direct connection point.

Cultural and Historic Resources:

The cultural resources survey did not identify any previously recorded cultural resources within the Project area and no archaeological resources were encountered during the pedestrian survey. Aside from consultations with Native American tribes for review of the preliminary concept plans and during the CEQA environmental review process, no further action is recommended regarding cultural or archaeological resources. The historic resource evaluation for the onsite employee residence found that the structure was not eligible for listing at the local, state, or national level and no further action is necessary for this structure (the residence would remain in place and continue to be used as an employee residence).

Aesthetics:

Highway 35 is a state scenic highway and subject to both State of California and San Mateo County policies regulating development along scenic corridors. An existing vegetated barrier that serves as a partial screen lies between the Caltrans right-of-way and the existing parking area. Although the Project will direct new development (parking expansion areas and vault restroom) away from the Highway 35 scenic corridor zone, the upper parking expansion area and replacement vault restroom (which will be relocated to more central site for improved ADA accessibility) may be partially visible from the highway. The lower parking expansion area is set further back from the roadway and at a lower elevation as compared to the existing parking area, making this area less visible from Highway 35.

Operations and Maintenance:

The North Ridge trailhead has available electrical and cellular service, which could support new parking area amenities and infrastructure, such as electric vehicle charging and real-time parking sensors. The existing vault restroom is in deteriorating condition and requires replacement with an ADA-accessible model and ADA accessible path. Staff have reached out to the agencies and organizations that may utilize the landing zone at the upper expansion area, including CalFire, San Mateo County Fire, and the Kings Mountain Volunteer Fire Department. These organizations are aware of the Project and have not requested further coordination at this time. In addition, there are other landing zones located in the vicinity of the Project area that are currently used by these organizations. These nearby alternative landing zone locations include private properties on Cyprus Ridge Road, less than a mile north of the Project site, and Tunitas Creek Road, approximately two miles south of the Project site. The nearest alternative landing zone on District lands is located at El Corte de Madera Creek Preserve, approximately five miles south of the Project site. Should a Project alternative be selected for CEQA review that would change the use of the landing zone, District staff will engage in additional coordination with these agencies to confirm the landing zone can be formally retired.

Public Engagement

From 2021 to 2023, the District engaged with stakeholder groups and partners as part of Project-focused meetings and at meetings that included the Purisima-to-the-Sea project and the Purisima Multimodal Access Study. These engagement activities were used to gather feedback on existing challenges at the North Ridge parking area, desired amenities that should be considered for this

parking area, as well as parking area conceptual designs. The feedback received is incorporated into the opportunities and constraints analysis. Prior key engagement activities include:

- Kings Mountain Association July 24, 2021, March 15, 2022 and November 9, 2022
- Midcoast Community Council February 23, 2022
- Peninsula Trails Team (comprised of regional trails partners and public land managers) – October 19, 2022
- Fisher Investments (neighboring property) November 9, 2022
- Stakeholder group meetings November 15, 2022 and 17, 2022
- Virtual public meeting June 7, 2023

In addition, preliminary Project information was shared at many community events between 2021 and 2023 for the Purisima Multimodal Access Study and Purisima-to-the-Sea projects, including, but not limited to farmer's markets, community council meetings, advisory council meetings, and District-led open houses.

A summary of the feedback received across the public engagement meetings and during PNR Committee meetings is included in the table below:

Table 1. Public Feedback

able 1. Public Feedback				
Theme/Topic	General Feedback/Comments			
Conceptual Parking Design Options	 Support for options A.2 (Upper & Lower Expansion, Two-Way Circulation), B.1 (Upper Only, One-Way Circulation), and B.2 (Upper & Lower Parking Expansion areas, One-Way Circulation). A neighbor shared concerns about the change to the "serenity" of the neighborhood setting with the parking changes. Concern regarding shoulder parking on Highway 35. Some suggestions included removing these altogether for safety concerns or formalizing (striping) these spaces to prevent cars parking inappropriately on the highway shoulder. In particular, the location of the three shoulder spaces south of the parking area entrance would make it difficult for cars to get back into the parking area if these were occupied. 			
Equestrian Parking/Access	 Neighbors and equestrians both shared that few equestrians currently visit the North Ridge trailhead due to a lack of designated equestrian parking. Equestrians supported the inclusion of designated equestrian parking spaces and said they appreciated being considered in the planning process and would use these equestrian parking if provided. Proximity of equestrian parking to standard vehicle parking is not a significant safety concern and the different types of parking do not necessarily need to be separated. For example, equestrian parking at Rancho San Antonio is located next to standard vehicle parking and gets a good amount of foot traffic. Two designated equestrian spaces at North Ridge may be sufficient. Providing four equestrian spaces would make it much easier for equestrians to count on available parking but they may not be regularly occupied. 			

	 An equestrian suggested waiting to implement an equestrian parking reservation system at North Ridge until staff can confirm this is needed or would be utilized. Enforcement of equestrian parking areas should be considered so that standard vehicles do not use this space.
Transportation Demand Management (TDM) Strategies	• If two designated equestrian parking stalls are provided, another two stalls could be provided as flexible stalls for larger vehicles that could be used by either equestrians, bicycling groups transporting bikes and other gear, or school/educational programs, etc. These flexible spaces could also be reserved to allow groups to plan their outings to the North Ridge trailhead.
Circulation	 Consider how one-way circulation through the parking area will interfere with traffic on Highway 35. Anticipate that cars may back up on the highway if a vehicle stops at the parking entrance or if vehicles circle back into the parking area. Suggestions to remove shoulder parking on Highway 35 and use that space for vehicles to loop around the parking area.
Highway Crossing/Traffic Recommendations	 Neighbors expressed concerns about the safety of an on-grade trail/road crossing due to excessive speeding on Highway 35 (especially on weekends) and the road curvature. A neighbor suggested a tunnel for a safe crossing and lights should not
	 A heighbor suggested a tunner for a safe crossing and lights should not be used for the crossing. Equestrians shared that they have used similar equestrian/pedestrian crossings on Highway 50 and other highways that could be perceived as "unsafe" for trail crossings. The equestrians appreciate these crossings, which are not highly used but necessary for equestrians to connect to county parks and equestrian facilities.
	• Important to consider who will be using the crossings and how much traffic is expected on the highway to balance the risk of formalizing an on-grade crossing.
	• Concerns regarding line of sight and the time it will take for larger, slower vehicles (such as equestrian trailers) to turn out of the parking area and onto Highway 35.
	 Concerns related to foggy conditions along Highway 35 that will reduce visibility. Better/clearer roadway parking signage can discourage parking along
	 the roadway, which is impacting neighboring properties. Multiple suggestions for additional warning features, including crossing lights and pavement markings (although acknowledging that designs will ultimately be determined by Caltrans).
	 Interest in keeping the crossing consistent with the rural character of the area.
General/Amenities	 General support for the Project if concerns are addressed. New regional trail connection may increase traffic and trash. Support for the proposed trailhead amenities and two restroom stalls. Suggestion to include emergency response information on trailhead signage.

Conceptual Parking Area Design Options

Staff prepared four conceptual parking area design options, which strive to accommodate the increased demand for access to the Preserve from hikers, equestrians, and bicyclists while minimizing neighbor and environmental resource impacts. Each option will meet or exceed accessibility requirements under the ADA.

The parking area, in all configurations shown, would have over 5,000 square feet of impervious area and therefore require Low Impact Development (LID) measures in compliance with the Municipal Regional Stormwater Permit. Although not shown, each design would include LID measures such as bio-swales, detention basins, or pervious pavements; the details of which will be developed through the design process in association with the type of paving surface selected.

Similarly, the striping shown in each conceptual design option is intended to convey the intent of circulation and function; the final striping plan and type of striping will be developed through the design process. Staff recommends the striping comply with industry standard marking conventions, such as straight white parking space lines, rather than decorative or illustrative parking space lines to minimize installation and maintenance costs. Moreover, standard conventions are the norm for drivers and support good compliance.

Furthermore, it should be noted that each design option includes the recommendations of the traffic engineering study to maintain existing entrance and exit driveways, locate an on-grade crossing adjacent to the exit driveway, establish a no-parking zone along the western side of Skyline Boulevard and formalize shoulder parking at designated spaces (approximately six standard vehicle spaces). The final design solution for the on-grade trail crossing and parking improvements located within the highway right-of-way will be at the discretion of Caltrans through the encroachment permit process.

Four conceptual parking design options were presented to the Planning and Natural Resources (PNR) Committee on July 25, 2023 and the PNR selected Option A.2 as the preferred option for full Board's consideration.

Option A.2 Upper & Lower Expansion, Two-Way Circulation (Preferred Option) This design option proposes to improve the upper area for standard vehicle parking and develop the lower expansion area for designated equestrian parking. It includes a main parking aisle with approximately 51 parking spaces and two-way vehicle circulation within the aisle as well as a second row of parking spaces with approximately 23 stalls and one-way vehicle circulation. This option provides the greatest amount of onsite parking with approximately 74 passenger vehicle spaces in the upper area and 2 to 3 equestrian spaces in the lower area (see Attachment 4). A new driveway would be constructed down to the lower area to allow equestrian vehicles to "pullthrough" when parking. Equestrian parking is appropriate for the lower area because it offers the most separation between horses and other user groups and, based on the number of spaces available for use, offers the lowest volume of visitors adjacent to the employee residence. New vegetation would buffer the employee residence from the parking area. The second aisle can flexibly meet TDM strategies, including priority / reservation parking. Access to this aisle could be managed with a gate or kiosk if deemed appropriate. In this design option, the restroom can be located at the current, south end of the area near the existing trailhead, or relocated to the north end of the parking area, where there is more space for staging. The approximate footprint of drivable surface is 39,500 square feet. An ADA path of travel is provided on the west side of

the upper parking area that connects to the Highway 35 crossing and restroom option #2 on the north end of the parking area, and to the ADA parking spaces and restroom option #1 on the south end of the parking area. A new vehicular connection to the employee residence would be created off the one-way aisle constructed through the lower area.

Option A.1 Upper Expansion Only, Two-Way Circulation

This design option proposes to improve the upper area only (see Attachment 5). It includes a main parking aisle with approximately 50 parking spaces and two-way vehicle circulation within the aisle. This is very similar to the current parking configuration, but with more effective use of the space. A second one-way aisle is proposed with approximately 4 equestrian parking spaces and ample adjacent space for horse staging. Similar to Option A.2, TDM strategies could be implemented in the second aisle of the upper area. Pedestrian circulation and restroom locations are generally consistent with Option A.2. The approximate footprint of drivable surface is 25,000 square feet.

Option B.1 Upper Expansion Only, One-Way Circulation

Design Option B.1. has the smallest footprint and lower construction costs (see Attachment 6). This option proposes one-way vehicle circulation and angled parking spaces for approximately 41 passenger vehicles in the main aisle. Consistent with Option A.2, a second aisle is proposed with approximately 4 equestrian parking spaces, which can flexibly meet TDM strategies. Pedestrian circulation and restroom locations are generally consistent with Option A.2. The approximate footprint of drivable surface is 22,500 square feet.

Option B.2 Upper & Lower Expansion, One-Way Circulation

This design expands on option B.1 by relocating the equestrian parking to the lower expansion area and introducing a second row of angled passenger vehicle spaces in the upper area (see Attachment 7). Approximately 61 passenger vehicle spaces can fit in the upper area, with 2 to 3 equestrian spaces down below via a new one-way driveway. Similar to Option A.2, new vegetation would buffer the employee residence from the parking area and a new vehicular connection created to the residence. Pedestrian circulation and restroom locations are generally consistent with Option A.2. The approximate footprint of drivable surface is 34,750 square feet.

Phasing

Implementation of any parking design option, including Option A.2 can be phased. For example, option A can be implemented as phase A.1 initially. Once additional capacity is needed, option A.2 can be implemented with little change or reconstruction of the A.1 improvements.

Preliminary Cost Estimate in Current Dollars

Preliminary estimates are shown below that compare the probable construction costs for each design option (see Table 2). Estimates are based on the findings of the site assessments, technical studies, and recommended construction methods. The estimates provide a rough order of magnitude cost, commiserate with the limited amount of information available in the current design. Each estimate includes the components shown in the attached conceptual designs, including parking and circulation improvements, TDM strategies, trailhead amenities, on-grade crossing infrastructure, and right-of-way improvements. Many factors will impact the final construction costs, including design changes, permit conditions, and fluctuations in material and labor costs. The estimates were prepared using current 2023 dollar values because the target construction date has not yet been identified.

Table 2. Design Concept Summary

	Exis	ting	Optio	n A.1	(Prefe	erred) n A.2	Optio	n B.1	Optio	n B.2
	Cars	Eq.	Cars	Eq.	Cars	Eq.	Cars	Eq.	Cars	Eq.
Existing Lot + Upper Area	41*	0*	50	4	74	0	41	4	61	0
Lower Expansion Area	0	0	0	0	0	2	0	0	0	2
Hwy 35 Shoulder	10	0	3	0	3	0	3	0	3	0
Total	51	0	53	4	77	2	44	4	64	2
Impervious Area	17,49	90 sf	25,00	00 sf	39,50	00 sf	22,50	00 sf	34,75	50 sf
Preliminary Cost Estimate	n/	′a	\$2,13	5,000	\$3,05	0,000	\$2,02	5,000	\$2,83	8,000

^{*}Although the existing parking lot can accommodate equestrian parking, it does not provide designated equestrian parking spaces. Existing capacity is approximately 26 cars and 2 equestrian spaces.

Cars = Standard vehicle parking stalls, 9' x 18'

Eq. = Designated equestrian trailer parking stalls, 12'x 55'

Each option is intended to support the project's goals and strategies. A comparison of the conceptual parking area design alternatives is shown in Attachment 8. The criteria used to compare the options include value, impact to site, integration of TDMs, alignment with Project goals and policies, and public support.

Feedback on the Project from two PNR Committee meetings is summarized in Table 3. Staff developed the four conceptual parking design options after receiving preliminary feedback from the PNR Committee meeting on April 4, 2023 and presented the concept designs to the PNR at the July 25, 2023 Committee meeting. The four conceptual design options show different combinations of circulation, development footprints, total parking counts, and location options for designated equestrian parking stalls. At the July meeting, PNR expressed support for parking concept Option A.2 due to the two-way circulation design and ability to provide the greatest increase in onsite parking spaces (including designated equestrian spaces). In addition, Option A.2 supports future implementation of TDM strategies by incorporating a second drive aisle for controlled access for uses such as carpool, reservation, and/or flexible parking areas. PNR also recommended that shoulder parking on Highway 35 be reduced from what was shown in the concept designs due to public concern about safety and circulation within the highway right-of-way. Based on this feedback, staff updated the concept designs to remove three parking stalls in the Highway 35 right-of-way, south of the parking area entrance. This recent change is incorporated in this report and in the attachments.

PNR also provided feedback on the multi-use trail crossing location, acknowledging safety concerns from the public and that specific design considerations for the on-grade crossing be discussed with Caltrans during the permitting phase of the Project.

A summary of the PNR feedback received in April and July 2023 is provided below.

sf = Square feet

Table 3. PNR Committee Feedback (April 4, 2023 & July 25, 2023)

Table 3. PNR Committee Feedback (April 4, 2023 & July 25, 2023)			
Theme/Topic	General Feedback/Comments		
Conceptual Design Options*	 Support for Option A.2 due to its loop capability within the parking area (through upper and lower expansion areas) and greatest amount of onsite parking (to address growing parking demand and shift parking away from the highway shoulder). Interest in parking reconfiguration options with and without expansion into the lower area near the District residence. Interest in having the lower expansion area be for equestrian parking, as long as screening is provided for the adjacent residence. Interest in increasing equestrian parking in the lower expansion area (shown in Options A.2 and B.2) from two to three spaces, if possible Preference to remove shoulder parking along Highway 35 south of the parking area entrance. 		
Equestrian Parking Demand	 Consider the demand for equestrian parking at the North Ridge trailhead (a range of 2-4 designated equestrian spaces requested). Possibility of a reservation system for equestrian parking to insure equestrian trailer space is available. 		
Highway Crossing/ Traffic Recommendations	• Concerns regarding parking area circulation that encourages vehicles to loop onto Highway 35 to look for parking. Although, this may not be preventable regardless of parking area circulation.		
Transportation Demand Management (TDM) Strategies	• Support for parking reservations and flexible parking areas for part of the parking area. More information is needed regarding equity considerations for visitors with limited access to technology and understanding the success of parking reservation systems at other parks/preserves.		
	 Consider where a shuttle stop could be incorporated at this location, such as on the highway shoulder or within the parking area. More information is needed about the required space for a potential shuttle drop-off and pick-up area and whether a shuttle could circulate 		
	 through the parking area. If a shuttle stop is not provided, visitors may "self-shuttle" by parking cars at two parking areas. Bike racks and other bike facilities may not need to be prioritized at the North Ridge trailhead since not many people will ride their bikes to the preserve. 		
	Need to consider if/how many electric vehicle (EV) spaces are necessary given the limited size of the parking areas, and how the addition of this infrastructure may increase parking demand due to decreased general parking spaces.		
General/Amenities	• Suggestion to identify the best site for the restroom of the two options.		

^{*}Conceptual parking design options were developed after the April 4th PNR meeting and shared at the July 25th PNR Committee meeting.

FISCAL IMPACT

There is no immediate fiscal impact associated with the recommendation. The Fiscal Year 2023-24 (FY24) budget includes \$90,000, which covers design development to inform the CEQA

environmental review process. Funds for permitting and construction will be recommended in a future fiscal year as a part of the annual Budget and Action Plan process.

This project is not currently funded by Measure AA as it is still within a feasibility stage. However, implementation of capital improvements may be eligible for Measure AA funding reimbursements in the future.

PRIOR BOARD AND COMMITTEE REVIEW

September 29, 2020: The Legislative, Funding and Public Affairs Committee (LFPAC) reviewed a partnership agreement and recommended Board adoption of a resolution authorizing the General Manager to accept \$114,000 in grant funding from the SFPUC for the Project.

- o Board Report (R-20-101)
- Minutes

October 28, 2020: The Board adopted a resolution authorizing the General Manager to accept grant funding for the Project.

- o Board Report (Res. 20-32)
- o Minutes

April 4, 2023: PNR received a presentation on the Project and provided feedback on the Project goals, technical studies, opportunities and constraints analysis, and preliminary considerations for parking expansion.

- o Board Report (R-23-38)
- Minutes

July 25, 2023: PNR provided feedback on conceptual parking design options and TDM strategies to consider at the Purisima North Ridge parking area. PNR selected a preferred parking design option to forward to the Board.

- o Board Report (R-23-87)
- Minutes

PUBLIC NOTICE

Public notice was provided as required by the Brown Act. In addition, public notices were sent to interested parties of the Preserve and to hiking, biking, equestrian, accessibility, and regional trails interested parties lists as well as the Kings Mountain Neighborhood Association.

CEQA COMPLIANCE

Board selection of a preferred design option for the Highway 35 Multi-use Trail Crossing and Parking Feasibility Study is not a project subject to the California Environmental Quality Act (CEQA). Environmental review for project design and engineering is anticipated to occur as part of the Purisima Comprehensive Use and Management Plan CEQA document, based on Board selection of a project design alternative as the CEQA project description.

NEXT STEPS

Staff will explore grant funding and partner cost-sharing opportunities to fund subsequent phases of the project.

Future Project Phases	Tentative Schedule
Environmental review conducted as part of Purisima Comprehensive Use	FY24 and FY25
and Management Plan	
Design development, engineering, and permitting	FY25 and FY26
Construction	TRD

Attachment(s)

- 1. Project Area
- 2. Existing Conditions
- 3. Traffic and Crossing Recommendations
- 4. Conceptual Parking Design Option A.2 (Preferred)
- 5. Conceptual Parking Design Option A.1
- 6. Conceptual Parking Design Option B.1
- 7. Conceptual Parking Design Option B.2
- 8. Parking Area Design Alternative Comparison
- 9. Existing Conditions & Opportunities and Constraints Analysis

Responsible Department Head:

Jason Lin, PE, Engineering and Construction Department Manager Jane Mark, AICP, Planning Department Manager

Prepared by:

Scott Reeves, Senior Capital Project Manager, Engineering and Construction Department Brittany Wheatman, AICP, Planner II, Planning Department

Contact person:

Brittany Wheatman, AICP, Planner II, Planning Department

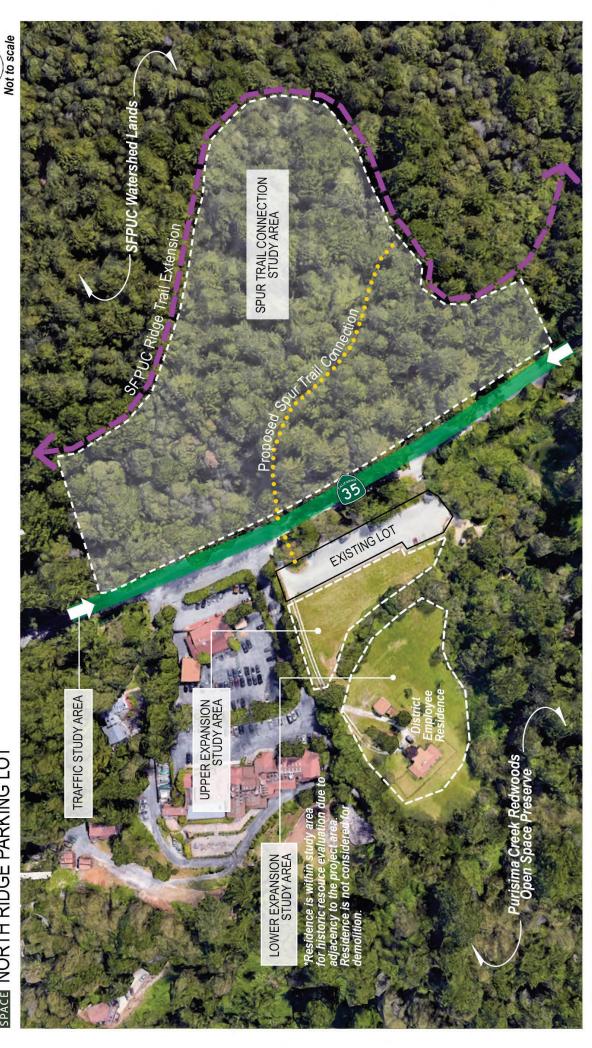
Graphics prepared by:

Scott Reeves, Senior Capital Project Manager

MIDPENINSULA

HWY 35 MULTI-USE TRAIL CROSSING AND PARKING EXPANSION FEASIBILITY STUDY

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE NORTH RIDGE PARKING LOT



ATTACHMENT 1.b PROJECT STUDY AREAS



HWY 35 MULTI-USE TRAIL CROSSING AND PARKING AREA PREFERRED CONCEPT PLAN

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE NORTH RIDGE PARKING LOT

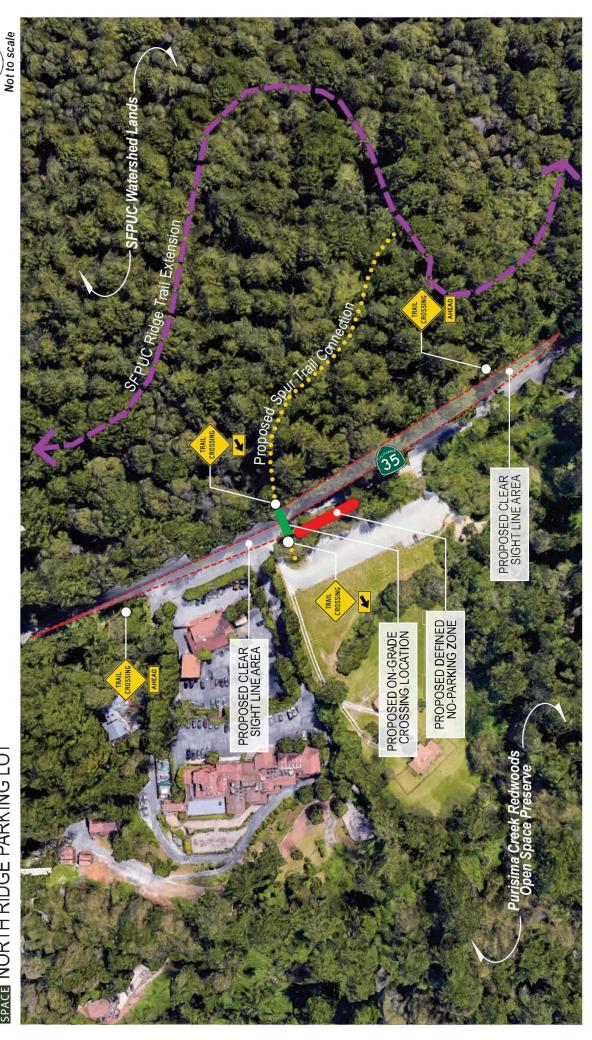




ATTACHMENT 2 EXISTING CONDITIONS

HWY 35 MULTI-USE TRAIL CROSSING AND PARKING EXPANSION FEASIBILITY STUDY PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE 🖁 NORTH RIDGE PARKING LOT



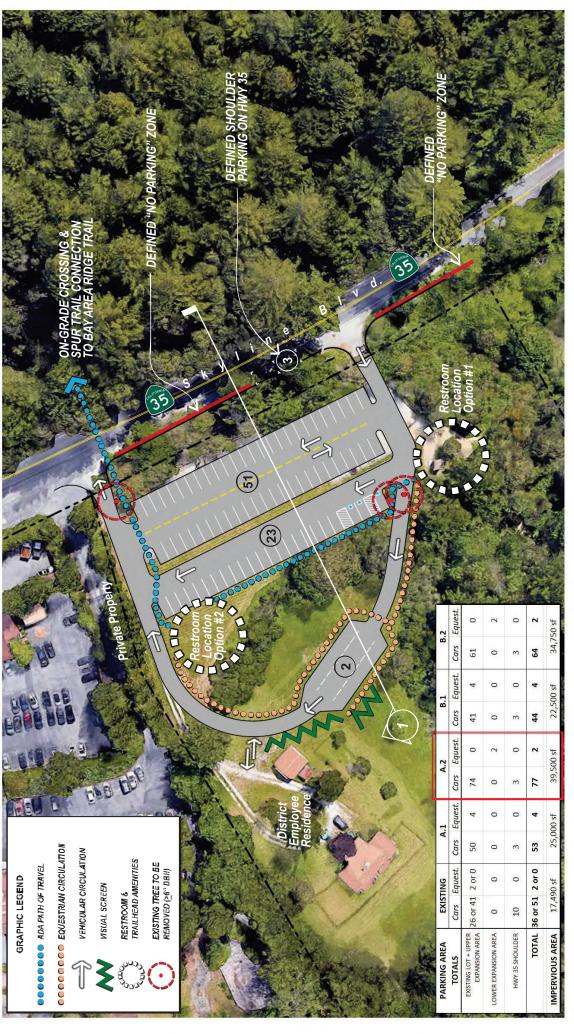


ATTACHMENT 3 ON-GRADE CROSSING RECOMMENDATIONS

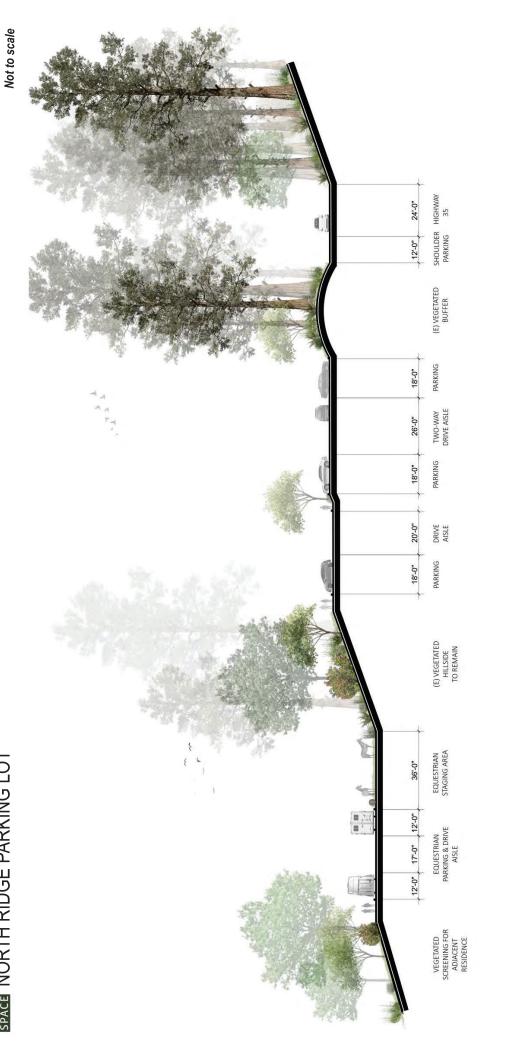
HWY 35 MULTI-USE TRAIL CROSSING AND PARKING AREA PREFERRED CONCEPT PLAN

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE NORTH RIDGE PARKING LOT





HWY 35 MULTI-USE TRAIL CROSSING AND PARKING AREA PREFERRED CONCEPT PLAN PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE SPACE NORTH RIDGE PARKING LOT

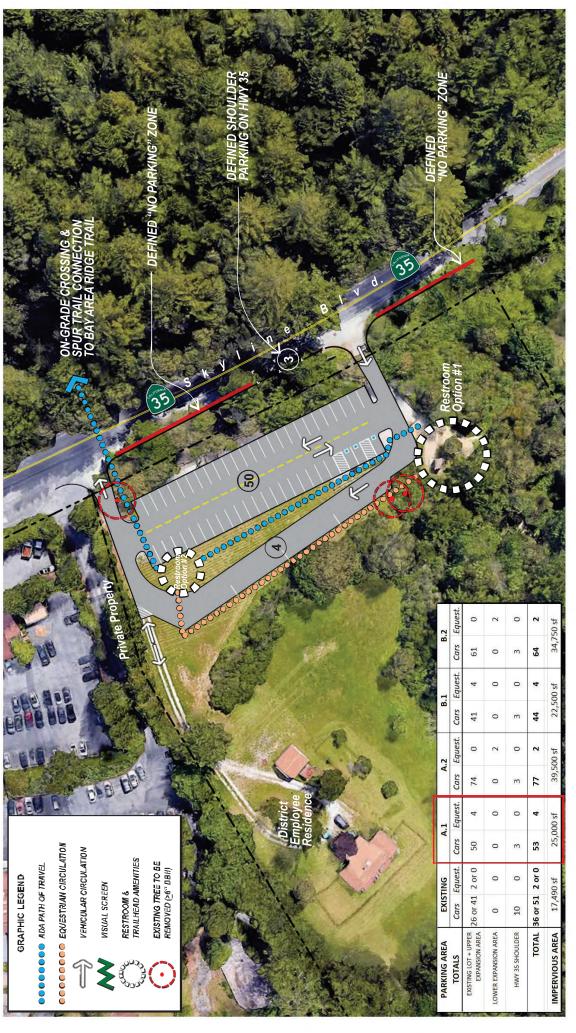


HWY 35 MULTI-USE TRAIL CROSSING AND PARKING AREA PREFERRED CONCEPT PLAN

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE NORTH RIDGE PARKING LOT



Not to scale





HWY 35 MULTI-USE TRAIL CROSSING AND PARKING AREA PREFERRED CONCEPT PLAN

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE NORTH RIDGE PARKING LOT



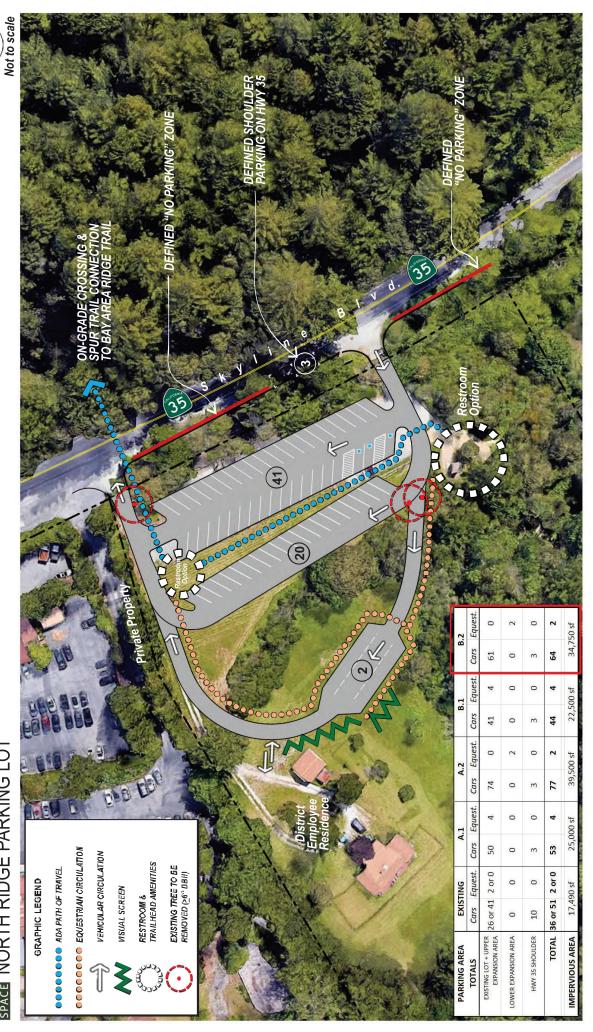
Not to scale



NOVEMBER 8, 2023

HWY 35 MULTI-USE TRAIL CROSSING AND PARKING AREA PREFERRED CONCEPT PLAN

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE NORTH RIDGE PARKING LOT



Attachment 8: Parking Area Design Alternatives Comparison

Option A.1	Expansion vs. Cost*	Minimizing Impact to Site	Integration of TDMs	Project Goals & Policies	(Parking)**
	•	•	•	•	•
Provides value for cost by i standard parking a designat spaces.	Provides moderate value for the overall cost by increasing standard vehicle parking and providing designated equestrian spaces.	Retains key site elements by keeping parking within the upper expansion area.	Provides a second drive aisle that can be controlled for flexible or priority parking.	Increases parking within the previously developed upper expansion area and increases traffic safety by providing two-way circulation within the parking area.	Supports public interest in providing designated equestrian parking and internal circulation. Does not provide a significant increase in standard vehicle parking.
Provides a significance of the parking	Provides a significant increase in standard vehicle parking and includes designated equestrian spaces, which has the greatest value for the cost of construction.	Modifies the site's character by expanding parking to the lower expansion area, although this area has been previously disturbed. Vegetation clearing and grading is required for expansion into the lower area. Screening is recommended to provide separation from onsite residence.	Provides a second upper drive aisle and lower expansion area that can both have controlled access for flexible or priority parking.	Maximizes onsite parking within the previously developed upper and lower expansion areas and increases traffic safety by providing two-way circulation within the parking area.	Supports public interest in providing more standard vehicle parking, internal circulation, and designated equestrian parking.

Option B.1	•		•	0	•
	Provides the lowest	Retains the site's	Provides a second	Does not significantly	Supports public
	value for the overall	character by keeping	drive aisle that can be	increase onsite parking	interest for designated
	cost. This option	parking at the upper	controlled for flexible	and retains one-way	equestrian parking but
	provides designated	expansion area with	or priority parking.	circulation that	does not provide any
	equestrian parking but	the least amount of		requires vehicles to	additional standard
	does not provide an	impervious area.		circulate onto Highway	vehicle parking. Does
	increase in total			35.	not support public
	standard vehicle				interest in keeping
	parking.				circulation within the
					site (i.e., making
					circulation two-way).
Option B.2	•	•	•	•	•
	Provides the second	Modifies the site's	Provides a second	Increases onsite	Supports public
	highest value for the	character by expanding	upper drive aisle and	parking within the	interest for additional
	number of additional	parking to the lower	lower expansion area	previously developed	standard vehicle
	standard vehicle	expansion, although	that can both have	upper and lower	parking and designated
	spaces and provides	this area has been	controlled access for	expansion areas,	equestrian parking.
	designated equestrian	previously disturbed.	flexible or priority	although retains one-	Does not support
	parking.	Vegetation clearing	parking.	way circulation that	public interest in
		and grading is required		requires vehicles to	keeping circulation
		for expansion into		circulate onto Highway	within the site (i.e.,
		lower area. Screening		35.	making circulation
		is recommended to			two-way).
		provide separation			
		from onsite residence.			

*Analyzes the value of each option based on preliminary cost estimates and estimated increase in total standard vehicle parking spaces.

Strongest alignment with policy/goal

Stronger alignment with policy/goal

Medium alignment with policy/goal

Weaker alignment with policy/goal

O Weakest alignment with policy/goal

^{**}The highway crossing and traffic safety remain priorities for the project, however, this comparison focuses on parking area design only.

EXISTING CONDITIONS & OPPORTUNITIES AND CONSTRAINTS

Table of Contents

1.0	Project Background and Goals	2
1.1	Project Background	2
1.2	Project Goals	3
2.0	Existing Conditions	4
2.1	Natural Resources	4
2.2	Public Access	4
2.3	Local and Regional Connectivity	5
2.4	Cultural Resources	6
2.5	Aesthetics	6
2.6	Operations and Maintenance	6
3.0	Technical Studies	7
3.1	Biological Resources Survey and Phytophthora Risk Assessment	7
3.2	Traffic Survey	8
3.3	Cultural and Historic Resources Survey	8
4.0	Opportunities and Constraints	9
4.1	Natural Resources	10
4.2	Public Access	11
4.3	Local and Regional Connectivity	13
4.4	Cultural and Historic Resources	13
4.5	Aesthetics	13
4.6	Operations and Maintenance	14
5.0	Public and Stakeholder Engagement	15
5.1	Partner and Agency Meetings	16
5.2	Neighborhood Meetings	16
5.3	Stakeholder Group Meetings	16
5.4	Prior Board and Committee Meetings	17
6.0	Program Elements	17
6.1	Purisima Multimodal Recommendations	18
7.0	Attachments	19

1.0 Project Background and Goals

1.1 Project Background

The District is conducting a feasibility study to identify a trail crossing location from the Purisima Creek Redwoods (Purisima, Preserve) North Ridge parking area across Skyline Boulevard (Highway 35) to connect existing segments of the Bay Area Ridge Trail within Purisima, west of Highway 35, to a new segment of the Bay Area Ridge Trail planned on the east side of Highway 35 (Ridge Trail Extension). The feasibility study will also analyze the potential expansion of the North Ridge parking area to serve visitors to both the existing trailhead and to the proposed Ridge Trail Extension. The Highway 35 Multiuse Trail Crossing and Parking Study (Project) is a partnership between the District, San Francisco Public Utilities Commission (SFPUC), Bay Area Ridge Trail Council (Ridge Trail Council), and Peninsula Open Space Trust (POST).

The intent of the Project is to enhance regional connectivity through a multi-use highway crossing allowing access to trails on both sides of Highway 35 and to identify ways to reconfigure and increase parking capacity of the North Ridge parking area.

The North Ridge parking area and trailhead is the northern-most entrance to Purisima, located on the west side of Highway 35, approximately midway between Highway 92 to the north and Highway 84 to the south (see Attachment 1a). To the east of Highway 35 are SFPUC's watershed lands, where SFPUC is planning to construct a new segment of the Bay Area Ridge Trail (Ridge Trail Extension). The Ridge Trail Extension would run approximately six miles south from Highway 92 on SFPUC watershed lands and terminate near the boundary of the Golden Gate National Recreation Area (GGNRA) Phleger Estate property. As part of the Ridge Trail Extension project, SFPUC will construct a new parking area at the north end of the new trail, just south of the intersection of Highways 92 and 35. The Purisima North Ridge parking area will be the nearest parking location to the south end of the six-mile Ridge Trail Extension and is likely to attract future trail users looking to access the new trail segment. Lack of a nearby highway crossing location from the North Ridge parking area to the east side of Highway 35 may potentially create safety concerns for users of the Ridge Trail Extension attempting to cross Highway 35 from the North Ridge parking area. In addition, an increase in visitors to the North Ridge parking area may exacerbate parking congestion in a lot that is prone to exceeding capacity on weekends from current visitors to Purisima.

To address these potential impacts from the Ridge Trail Extension, the District and its project partners (Ridge Trail Council, POST, and SFPUC) identified the need to study the feasibility of a crossing location on Highway 35 and an expansion of the existing North Ridge parking area. This Project will analyze expanded parking and multimodal access options at the North Ridge parking area, identify a multi-use trail crossing area on Highway 35, and an alignment of a spur trail to connect the Highway 35 crossing location directly to the SFPUC's planned Ridge Trail Extension. The North Ridge trailhead provides access to an existing segment of the Bay Area Ridge Trail within Purisima and the multi-use trail crossing and spur trail would connect it with the planned Ridge Trail Extension. Providing connections between Purisima and the Ridge Trail Extension will contribute an important regional connection for multiple trail users, including hikers, bicyclists, and equestrians.

The Project is occurring in parallel with two other planning studies at Purisima to improve public access and complete regional trail connections. In 2022, District staff completed the Purisima Creek Multimodal

Access Study, which evaluated existing visitation at Purisima and developed a plan to address parking and traffic congestion issues, increase greener modes of transportation, and better manage visitation at the preserve. The Multimodal Access Study recommends a series of Transportation Demand Management strategies (TDMs) to be implemented preserve-wide as well as some strategies specific to the North Ridge parking area, in order of priority.

Planning for the Purisima-to-the-Sea Trail and Parking Area project is also underway, which is studying the addition of five miles of new trail within Purisima to link the California Coastal Trail to the Bay Area Ridge Trail. The project also includes planning of a new parking area to improve capacity for coastal access to Purisima.

The District is supporting the implementation of a regional trail network through the efforts of these projects and through ongoing partnerships to provide access to important trail connections. Purisima is located at a significant junction for regional trails that will provide north-south corridors along the Bay Area Ridge Trail, as well as east-west corridors through the Bay to Sea Trail with the Purisima-to-the-Sea component. These regional trail networks not only provide opportunities to connect trail users to a variety of open spaces, but also to understand the importance of regional conservation efforts and contiguous open spaces for maintaining natural ecosystems.

1.2 Project Goals

The intent of the Project is to enhance regional connectivity through a multi-use highway crossing allowing access to trails on both sides of Highway 35 and to identify ways to reconfigure and increase parking capacity of the North Ridge parking area. Project goals and strategies have been identified to guide the development of Project elements and evaluate Project success.

Goal 1: Support the implementation of the regional Bay Area Ridge Trail.

Strategies:

- Identify a multi-use trail crossing and trail spur location to connect the SFPUC's new segment of the Bay Area Ridge Trail to the Preserve and the existing Ridge Trail segment within the Preserve.
- Maximize safety and minimize neighbor impacts when evaluating multi-use trail crossing locations and infrastructure.
- Develop the multi-use trail crossing and spur trail to accommodate low-intensity recreational use by hikers, bicyclists and equestrians, consistent with Bay Area Ridge Trail corridor goals.
- Collaborate with partner agencies to complete the planning, design and implementation of the multi-use trail crossing and spur trail.

Goal 2: Improve public access and visitor experience at Purisima's North Ridge trailhead using ecologically sensitive design, construction practices, and long-term maintenance and management.

Strategies:

• Add parking capacity through reconfiguration of existing parking spaces and expansion of the North Ridge Parking Area.

- Improve the existing trailhead amenities, such as replacing the existing restroom with a new ADA compliant vault restroom, replacing dated signboards with current standard design, and adding bicycle parking.
- Incorporate Transportation Demand Management Strategies consistent with the Boardapproved Purisima Multimodal Access Study recommendations.
- Design recreational amenities to protect the scenic corridor.
- Maximize safety and minimize neighbor impacts when evaluating the multi-use trail crossing, parking enhancements and vehicle circulation.
- Maintain routine patrols and maintenance and use adaptive management to address unforeseen issues that arise from increased visitation to the North Ridge trailhead.

2.0 Existing Conditions

The Project site includes an area west of Highway 35 within Purisima Creek Redwoods Open Space Preserve, comprised of the existing North Ridge parking area and adjacent open areas west of the parking area. The site of the existing North Ridge parking area was purchased as an addition to the Preserve in 1983 (R-83-05). Prior to this land purchase, the District had acquired a public easement over the area that allowed for vehicular access and parking as part of the original Whittemore Gulch purchase, the first acquisition to form what is now called Purisima Creek Redwoods Open Space Preserve (R-82-30). The site was identified as having the potential to allow for a parking area adjacent to Skyline Boulevard to provide Preserve access. In 1988, with grant funds from the State of California, the North Ridge parking area was enlarged to the current capacity for passenger vehicles and horse trailers and trailhead improvements were completed. According to a review of the Use and Management Plan for the Preserve in 1989, public use of the Preserve increased sharply with the new public access improvements and the available parking associated with the three Preserve trailheads (North Ridge, Purisima Creek/Higgins Road, and Redwood) reached capacity on weekends (R-89-20).

The boundaries of the existing parking area and proposed parking expansion areas follow the Purisima property boundary with Fisher Investments to the north and Highway 35 right of way to the east. The employee residence defines the west boundary of the lower parking expansion area, and the southwest boundaries of the project site are defined by dense forest and other vegetation that signal the start of the preserve (see Attachment 1b). The Project site also includes the Caltrans Highway 35 right of way and approximately four acres of SFPUC Watershed lands east of Highway 35 for the spur trail study area.

2.1 Natural Resources

North Ridge trailhead is located along the upper ridge of a watershed that flows west into the preserve and into Purisima Creek. Due to the location of the trailhead on a ridge bordering two watersheds, many aquatic features such as creeks, rivers, and wetlands do not occur near the trailhead, but further west into the preserve where the topography slopes toward the coast.

2.2 Public Access

The North Ridge parking area and trailhead is the northern most entry point into Purisima Creek Redwoods Open Space Preserve and is located along Highway 35, approximately 4.5 miles south of its intersection with Highway 92 (Attachment 1c). From the North Ridge trailhead, visitors can access the 5,400-acre Purisima preserve located on the western slopes of the Santa Cruz Mountains. Purisima

offers twenty-two miles of public trails with access for hikers, bicyclists, and equestrians as well as views of the coast from various trails along the ridgelines that slope toward the coast from east to west.

The parking area is adjacent to the west side of Highway 35 with a vegetated barrier between the parking area and the highway right-of-way. The gravel parking area can accommodate perpendicular parking for 41 standard vehicle spaces and two ADA spaces. The parking area is unstriped and does not delineate parking stalls, except for the two ADA spaces that are identified by ADA parking signs and a blue curb. Wheel stops line the west and east sides of the parking area and help to define the boundaries of the existing lot. While the North Ridge parking area does not include designated equestrian parking spaces, approximately two equestrian trailers can be accommodated for parallel parking along the split-rail fencing on the northwest side of the parking lot. The North Ridge trailhead includes standard trailhead amenities such as an equestrian hitching post, map and sign boards, a boot brush, and a single-stall vault restroom. The vault restroom, installed in 1999, is in deteriorating condition and requires improvements and an accessible path to meet ADA accessibility standards.

The North Ridge parking area is accessible by a one-way entrance on the south end of the parking area and a one-way exit at the north end of the parking area, which circulate traffic in a single direction through the parking area from south to north. There are no entry or exit signs visible from Highway 35, aside from a "do not enter" sign at the north driveway that indicates that it is an exit only. Within the parking area, an exit sign is posted near the north driveway and a "not an exit" sign is posted near the south driveway. A preserve sign for Purisima Creek Redwoods is located next to the North Ridge entrance and is visible from Highway 35.

Of the four parking areas available for visitors to Purisima, the North Ridge parking area can accommodate the largest number of on-site vehicle parking. All four parking areas frequently exceed capacity on the weekends, during peak visitation, and visitors often use informal, roadside parking when the lots are full. The Purisima Multimodal Access Study (2022) found that during the peak summer months, the North Ridge parking area alone averaged between 225 to 525 vehicles and 500 to 1,225 pedestrians per day¹, despite its maximum 41-car capacity.

2.3 Local and Regional Connectivity

Highway 35 provides key access points not only to Purisima, but also to the greater Skyline region, including direct access to seven other preserves within the District and many other open spaces that together act as a protected, regional greenbelt throughout the mid-peninsula. Among the many trails and open spaces accessible from Highway 35 are a series of existing and planned regional trails that provide connections throughout the Bay Area. Purisima will provide important trail connections for many regional trails, including the Bay Area Ridge Trail and the planned Bay to Sea trail, lead by POST, which will be an approximately 40-mile regional trail that is envisioned to connect communities from the San Francisco Bay to the Pacific Ocean. A key component of the Bay to Sea trail will be the development of the District's Purisima-to-the-Sea trail, which will create a five-mile trail connection through Purisima to the California Coastal Trail along Highway 1. Purisima also contains existing segments of the Bay Area Ridge Trail, of which these segments contribute to over 400 miles (and counting) of existing multi-use trail that follow the ridgelines encircling the San Francisco Bay. The alignment of the Ridge Trail

¹ Purisima Creek Multimodal Access and Transportation Demand Management Study. Attachment 1, page 10.

Extension on SFPUC Watershed lands poses an opportunity to connect Purisima and its Bay Area Ridge Trail segment to the new trail extension through the Project's multi-use trail crossing on Highway 35.

2.4 Cultural Resources

The Project area is within a region that was historically occupied by tribes of the Ramaytush Ohlone people. Ohlone territory spanned from areas north of the San Francisco Bay down the coast as far as Carmel Valley, and inland to the coast range. San Mateo County is home to numerous historic Ohlone sites and villages, whose boundaries were typically defined by topographic features such as rivers, watersheds, and ridgelines. The nearest known cultural site of the Ramaytush Ohlone is a well-known and historically significant village site located at what is now the private Filoli Estate, approximately two miles northeast of the Project area on the eastern slope of the Santa Cruz Mountains.

2.5 Aesthetics

The North Ridge trailhead is surrounded by a rural, forested setting, primarily comprised of redwood forest with some annual grassland and Monterey cypress woodland. The area is also sparsely populated with single family residences and businesses along the Highway 35 corridor. The North Ridge trailhead is accessible from Highway 35, a rural, two-lane highway providing north and south-bound travel along the ridgeline of the Santa Cruz Mountains. The California Department of Transportation (Caltrans) has designated Highway 35 as a scenic highway, which is meant to preserve the visual character of highways and manage new development to preserve the scenic and natural features visible from the highways. The stretch of Highway 35 in the vicinity of the North Ridge trailhead is lined with heavy vegetation that contributes to its scenic beauty, but can also make roadway visibility challenging at high speeds.

2.6 Operations and Maintenance

Adjacent to the west boundary of the existing parking lot is an approximately 0.3-acre (13,000 square foot) open, flat area (Upper area) that is vacant aside from the hitching post. This Upper area is used as a helicopter landing zone by the California Department of Forestry and Fire Protection (CalFire) for emergency response. Further west of the Upper area, moving into the preserve, the land slopes down to another open, flat area (approximately 1.2 acres or 52,000 square feet) where a employee residence and separated garage are located (Lower area). This Lower area previously hosted an experimental fog collector, a device installed in 2016 to conduct initial studies of moisture collection from fog that occurs over the Santa Cruz mountains. The fog collector was removed in December of 2022 after the data collection ended in 2018 and the device was left idle for many years. The slope separating the two open areas west of the North Ridge parking area is also covered with dense vegetation, which provides visual and physical separation between the trailhead and the employee residence. The employee residence is accessed by a gated, gravel driveway along the north boundary of the preserve that connects the property to the North Ridge parking area.

The adjacent property to the north of the North Ridge parking area is owned and occupied by a private company, Fisher Investments. Their property is highly developed with offices and other support buildings as well as a parking area accessible from Highway 35. To the east of the North Ridge parking area and of Highway 35 are SFPUC watershed lands, which are undeveloped and primarily consist of dense redwood forest. Adjacent properties to the south of the North Ridge trailhead are private, single-family homes. The closest private driveway is 400 feet south of the entry driveway to the North Ridge trailhead.

The posted speed limit is 50 mph at the North Ridge trailhead, however, many nearby residents and frequent preserve visitors have provided public comments that vehicles often go at much higher speeds. The District is aware of safety concerns regarding the speed of vehicles travelling along Highway 35 and the feasibility study aims to identify potential safety concerns related to the Project.

3.0 Technical Studies

District staff contracted with professional consulting firms to complete various technical studies to analyze the biological, cultural, traffic, and topographic characteristics of the Project area (including both the Upper and Lower parking expansion areas). The methodology, key findings, and recommendations from these studies are summarized below.

3.1 Biological Resources Survey and Phytophthora Risk Assessment

In June, 2022, AECOM conducted a thorough Biological Resources Survey to identify any existing or potential biological resources within the proposed Project area. In particular, the survey was conducted to identify all San Francisco dusky-footed woodrat (SFDFW) middens present within the project area, any substantial or permanent nesting bird resources (e.g. suitable nesting trees) in the area, any aquatic features including jurisdictional wetlands or other waters, the presence of any bat maternity roosts within the onsite residence, and the suitability of the Project site for special-status wildlife habitat. A daytime biological survey analyzed an area consisting of the Project site, traffic survey area, spur trail study area, and included three buffer areas of up to 1,000 feet for nesting birds. A bat emergence survey was also conducted during the evening to monitor any bat activity near the employee residence and garage.

The surveys found one active SFDFW midden at a distance approximately 250 feet from the project area, which is unlikely to be affected by the Project. No active raptor, accipiter, or passerine bird nests or nesting platforms were found in the vicinity of the Project site; however, a Monterey cypress tree being used as an acorn woodpecker granary was found in the Spur Trail study area. The survey found no evidence of aquatic resources or jurisdictional wetlands and special status species within the Project area, nor was there evidence of the presence of bat maternity roosts within the onsite employee residence or garage.

Due to the project site's proximity to Huddart County Park which is a designated critical habitat for the endangered marbled murrelet, District staff conducted a site assessment for marbled murrelet and consulted with California Department of Fish and Wildlife (CDFW) about the potential need for special species protections. However, based on results of the site assessment and discussions with CDFW, both the District and CDFW staff confirmed that no suitable murrelet habitat within the project area and within the project vicinity, therefore the project will have zero species impacts. Noise and visual disturbance avoidance measures will likely not be necessary.

In February 2023, AECOM prepared a Phytophthora Risk Assessment in order to identify the modality of soil pathogen infection and to provide specific mitigation and best management practices to minimize the introduction or spread of Phytophthora species at the site. Analysis found that the project area has

relatively low levels of contamination risk; however, areas east of Hwy 35 are highly receptive to contamination and are considered sensitive sites.

3.2 Traffic Survey

TJKM Transportation Consultants (TJKM) evaluated the sight distance conditions for the two existing parking area driveways and the feasibility/design of a new on-grade trail crossing on Highway 35. TJKM performed a Sight Distance analysis using standards in "Highway Design Manual", 2020 7th Edition by the California Department of Transportation, a policy on Geometric Design of Highways and Street, 2018 7th Edition, from the American Association of State Highway and Transportation Officials (AASHTO) and the California Manual on Uniform Traffic Control Devices (CA-MUTCD). In April 2022, TJKM measured vehicle speeds in the vicinity of the North Ridge parking area to determine the project design speed. The project design speed is the 85th percentile of actual speeds measured on the roadway; it is used to determine if adequate sight distance is available for vehicles exiting the existing driveways, and if northbound and southbound vehicles on Highway 35 have adequate stopping sight distance for the new on-grade trail crossing. Although the posted speed limit is 50 mph, the design speed measured on the road was 51.7 mph northbound and 51.0 mph southbound. TJKM rounded these findings up to 55 mph as the final design speed used in the feasibility analysis. TJKM also reviewed five years of traffic collision data within the vicinity of the project site to inform the final recommendations. There were no reported incidents directly in front of the parking area to prompt additional recommendations. The traffic collision data can be found as an appendix to the traffic report. Based on the available information, TJKM concluded that there is a feasible on-grade trail crossing location immediately adjacent to the existing exit driveway. TJKM recommended improvements within the right-of-way to preserve site distances and enhance visibility of the trail crossing (see Attachment 1d). Furthermore, TJKM concluded that the existing driveway configuration is the most favorable for ingress and egress. TJKM has sought concurrence with the California Department of Transportation (Caltrans) on their findings and recommendations. Caltrans reviewed the findings and requested additional information in the final report, which was provided by TJKM. Caltrans does not have any further comments at this time. Additional coordination with Caltrans will be required for future encroachment permits, which would occur after a Board-approved alternative is selected and analyzed as part of the CEQA environmental review process. Refer to roadway trail crossing graphics for more details (Attachment 1d).

3.3 Cultural and Historic Resources Survey

Cogstone Resource Management, Inc. conducted cultural and historic resource surveys in the fall and winter of 2022 to determine if any cultural or historic resources were present within the Project area that may be affected by implementation of the Project. Cogstone conducted background research involving a search for archaeological and historical records at the Northwest Information Center (NWIC) as well as a request for a Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC). Cogstone also conducted a pedestrian survey of the Project area to determine whether any archaeological resources were present. No archaeological resources were observed during the survey and the background research did not find any previously recorded cultural or historical resources located within the Project area. The boundary of one historic resource, the Filoli Estate, was located within the half mile search radius, but is outside of the Project area and is unlikely to be affected by the proposed Project. The SLF search identified one tribal band and the NAHC recommended they be contacted for information on any tribal cultural resources in the vicinity of the Project. The District will

will contact the tribe directly once preliminary concept plans are available and again when a design alternative is selected and the Project proceeds to the environmental review phase, as required by the California Environmental Quality Act (CEQA) and in accordance with Assembly Bill (AB) 52 consultations. No archaeological monitoring is anticipated due to the geological age of the soils as well as the absence of any known cultural resources within the Project area.

Cogstone also conducted an Historic Resources Evaluation for the nearby onsite employee residence that was built over 50 years ago (circa 1948) given its proximity to the parking area. The residence includes Ranch style architectural elements such as a low pitch roof with a wide eave overhang. The entire exterior of the single-family residence was photographed and recorded on the Department of Parks and Recreation 523 (DPR 523) forms. Due to a lack of significance and notable architectural alteration, the residence was not found eligible for listing at the local, state, or national level. No further evaluation is recommended. No changes are proposed for this residence, which would remain in place as part of the Project and continued to be used as an employee residence to maintain onsite presence and vigilance of the property.

4.0 Opportunities and Constraints

This section describes the opportunities and constraints for the Project site, which are related to important attributes of the site and require consideration for Project program development.

Opportunities and constraints are categorized by topic area (such as Natural Resources or Public Access) and some attributes may be listed as both an opportunity and a constraint based on their relationship to the Project goals. In addition, several policies and best management practices (BMPs) that may be relevant to the Project are listed below.

Potential applicable policies, guidelines, or regulations:

- Caltrans Highway Design Manual
- District Best Management Practices
- District Good Neighbor Policy
- District Resource Management Policies
- Purisima Multimodal Access Study
- San Mateo County Active Transportation Plan
- San Mateo County General Plan. 4.22 Scenic Corridors. Protect and enhance the visual quality of scenic corridors by managing the location and appearance of structural development.
- San Mateo County General Plan. 4.24 Rural Development Design Concept. Regulate the location and siting of structures in rural areas to encourage positive visual quality in relation to the scenic character of the natural landscape.
- San Mateo County Heritage/Significant Tree Ordinance
- San Mateo County Trails Plan
- San Mateo Water Pollution Prevention Program

^{*}Relevant policies, guidelines or regulations are shown with corresponding opportunities or constraints and labeled with and asterisk.

4.1 Natural Resources

Attribute	Opportunities & Constraints	Discussion
Biological Resources	О	The biological survey conducted for the Project site did not uncover any special-status wildlife species, nesting birds or raptors, aquatic resources, roosting bats, or other sensitive biological resources within the Project area. A Dusky-Footed Woodrat midden is present about 250 feet from the Project area, which is well beyond the minimum avoidance buffer of 3-10 feet established by the District. It is unlikely that midden would be affected by the Project at this distance. It is unlikely that marbled murrelet protections will be required during construction. Construction activities should avoid direct impacts to trees within the spur trail study area during bird nesting season (between March 15 and August 30). * District wildlife BMPs: nesting bird surveys, SF dusky-footed woodrat midden avoidance buffer, marbled murrelet AMMs
Biological Resources	С	There is dense vegetation along the east side of Highway 35 (on SFPUC Watershed lands), which may affect the spur trail alignment as well as the line of sight for the multi-use crossing. Some vegetation may need to be removed and/or trimmed back to improve line of sight for the crossing as well as develop the spur trail connection to the Ridge Trail Extension. *San Mateo County Heritage/Significant Tree Ordinance
Hydrology	С	Drainage from the existing parking area and trailhead flows west, into the preserve, while drainage on the east side of Highway 35 flows east, contributing to the SFPUC watershed. An existing drainage culvert is located just south of the North Ridge trailhead and parking entrance. Drainage from the site may be affected by construction activities related to parking expansion as well as an increase in impervious surfaces. Potential runoff from an expanded parking area will need to be evaluated to ensure there will be no impacts to water quality and buffers implemented where/if necessary. *San Mateo Water Pollution Prevention Program
Pathogens	O/C	The Phytophthora risk assessment determined that the project site has relatively low levels of pathogen contamination west of Highway 35. However, movement of Phytophthora pathogens may also migrate from the Project area and construction activities (e.g. reseeding) to SFPUC property east of Highway 35 and some sensitive areas will require particular protection from infection. *Phytophthora Risk Assessment BMPs and AMMs

4.2 Public Access

Attribute	Opportunities & Constraints	Discussion
Parking Area	O	The existing North Ridge parking area and trailhead are frequently visited and familiar to visitors of Purisima, as it is currently the largest parking area available for the preserve. Expansion of the parking area coupled with multimodal access strategies are expected to significantly alleviate parking demands and potentially meet anticipated parking needs at this trailhead. The Project will maintain the existing vegetated buffer and berm between the parking lot and Highway 35 to minimize visibility of the parking area from the highway. The separate driveway for entrance and exit will also be preserved to better accommodate larger vehicles such as shuttle buses, emergency vehicles, and equestrian trailers. This will save space by not requiring a turn-around area. Minor improvements to signage may be implemented to better identify the entry and exit to vehicles travelling along Highway 35.
Parking Capacity	С	Although expansion of the parking area would add much needed parking at the North Ridge trailhead, the available expansion areas are limited in size. Future expansion will likely not fulfill the maximum parking demand at peak visitation hours and TDM strategies should be considered to manage parking. *Good Neighbor Policy *Purisima Mulitmodal Access Study
Trail Crossing Location	O	Based on the traffic study conducted at the North Ridge trailhead, an adequate line of sight was identified that would allow for a safer crossing location just south of the exit driveway. The adequate line of sight indicates that vehicles traveling north and south bound along Highway 35 will have enough warning, visibility, and space to yield to trail users crossing at the recommended location. The traffic study also recommended the use of crossing signage that is consistent with many other highway crossing locations along Highway 35 and would be familiar to trail users and vehicles approaching the crossing. *Caltrans Highway Design Manual Policy 405.1 *SMC Active Transportation
Trail Crossing Safety	С	During the stakeholder engagement process neighbors expressed concern over current excessive vehicle speeds along Highway 35 that are perceived to be much higher than the posted speed limit. While the traffic study analysis used current traffic data and accounted for greater vehicle speeds along Highway 35 in its recommendation of the highway crossing location, further consultation with Caltrans is required to determine the final crossing design and signage that would be appropriate for the recommended crossing location.
Parking	0	On the west side of Highway 35, the existing parking area and adjacent upper expansion area are generally flat with a very gradual

	I	
		slope to the west, into the preserve. Adjacent to this area, a steep, vegetated slope separates the upper parking expansion area from the lower expansion area and employee residence. The terrain levels out again at the lower expansion area and residence with just a gradual slope to the southwest. The existing topography will influence the parking capacity for both the upper and lower parking expansion areas and neither expansion area will require significant grading. During the stakeholder engagement process, interest was expressed in adding designated equestrian parking at the North Ridge trailhead. Although equestrian parking is currently permitted at North Ridge, equestrians must share the space with standard vehicle parking and there is rarely enough available space to park equestrian trailers during peak visitation hours. Reconfiguring and expanding the parking area will provide an opportunity to address public interest in adding designated equestrian parking to the North Ridge parking area.
Parking	С	The steep, vegetated slope creates a barrier between the upper parking expansion area and the lower expansion area and employee residence. This slope limits the area that can be used for on-site parking expansion as well as internal circulation if the lower expansion area is utilized. The addition of designated equestrian parking would mean reducing the number of additional standard vehicle parking that could be accommodated onsite. Although feedback from the stakeholder engagement process showed interest in designated equestrian parking, it's unclear how many spaces are required to meet the demand for equestrian parking and whether this should be prioritized over the addition of standard vehicle parking, which is in high demand at this location.
Proximity to Adjacent Properties	0	There are limited adjacent properties and driveways in the vicinity of the Project site that could be impacted by an increase in visitation to the North Ridge parking area. The Fisher Investments property, adjacent to the north boundary of the North Ridge parking area, has an opposite visitation schedule from visitors to North Ridge where most Fisher Investments employees are working on site during the weekdays, while Purisima has peak visitation on weekends. *Good Neighbor Policy
Proximity to Adjacent Properties	С	The lower parking expansion area is adjacent to the existing employee residence. Use of the lower parking expansion area for additional visitor parking may require a buffer from the residence for privacy and to maintain District operational access to and from the residence. Although the Fisher Investments property is busiest on weekdays when visitation to Purisima is lower, the Ridge Trail Extension may increase weekday visitation that could contribute to more traffic congestion in the vicinity of the private property. *Good Neighbor Policy

4.3 Local and Regional Connectivity

Attribute	Opportunities & Constraints	Discussion
Trail Crossing Location	0	Existing segments of the Bay Area Ridge Trail within Purisima can be accessed from the North Ridge trailhead, which makes a multi-use trail crossing at Highway 35 from the planned Ridge Trail Extension to the North Ridge trailhead a natural and direct connection point. *San Mateo County Trails Plan

4.4 Cultural and Historic Resources

Attribute	Opportunities & Constraints	Discussion	
Cultural Resources	0	The cultural resources survey conducted for the Project site did not identify any previously recorded cultural resources within the Project area and no archaeological resources were encountered during the pedestrian survey. A Sacred Lands File search identified one Native American Tribe that will be consulted when preliminary concept plans are available and during the planning and CEQA environmental review process to obtain more information about any potential cultural resources within the Project site. Due to the results of the pedestrian survey, background research, and soil analysis, archaeological monitoring is not recommended during development of the Project. *District Cultural Resources Policies	
Historic Resources	0	The historic resources evaluation thoroughly documented and analyzed the site's existing employee residence to determine if it is historically significant. Despite the age of residence, originally constructed sometime between 1941 and 1948, this building is not recommended as eligible for listing at the local, state, or national level due to lack of significance and the notable architectural alterations made to the residence since it was originally built. *District Cultural Resources Policies	

4.5 Aesthetics

Attribute	Opportunities	Discussion
	& Constraints	
Caltrans		Caltrans designates portions of Highway 35 as a state scenic highway,
Scenic	0	including the portion of Highway 35 adjacent to the Project site.
Highway	U	Caltrans and San Mateo County have developed policies that regulate
Designation		development along scenic corridors and provide guidance for other

		,
		visual resources. The existing North Ridge parking area is adjacent to Highway 35 and partially visible from the highway. A barrier of redwood trees along the east boundary of the parking lot separates the existing parking area from the highway right-of-way and provides a natural visual barrier, which will remain regardless of the final parking area program. In addition, the proposed lower parking expansion area is set back from the roadway and is lower in elevation as compared to the existing parking area, which will help to reduce visibility of the expanded parking area from the highway. The Project proposes to maintain the existing entry and exit driveways to the parking area along Highway 35 to minimize the Project's visibility from the scenic highway.
		* San Mateo County General Plan. 4.22 Scenic Corridors California Streets and Highways Code Division 1, Chapter 2, Article 2.5
Caltrans Scenic Highway Designation	С	Although the Project will direct new development to areas away from Highway 35, there is potential for changes to be visible from the highway, including the upper parking expansion area and the replacement vault restroom, which would be relocated to a more central location to address ADA barriers. In addition, the Project will require a crossing sign and two crossing warning signs to be installed along Highway 35 to identify the multi-use trail crossing location. While these traffic features will be minimal, they are meant to be highly visible to vehicles travelling on Highway 35 to promote safer crossing. Vegetation clearing along Highway 35 right-of-way will also occur, both to support the traffic study recommendations for improving line of sight to the multi-use trail crossing as part of the Project and separately through Fire Safe San Mateo County to support fuel reduction efforts for wildfire prevention. *San Mateo County General Plan. 4.24 Rural Development Design Concept. California Streets and Highways Code Division 1, Chapter 2, Article 2.5

4.6 Operations and Maintenance

Attribute	Opportunities & Constraints	Discussion	
Utilities and Services	0	Above-ground power lines run along Highway 35 adjacent to the Project site and underground electric lines currently serve the employee residence, garage, and the existing parking area entry and exit gates. A water main line also runs beneath Highway 35, including a water distribution line that serves the employee residence. Cellular service is also available at the existing North Ridge parking area.	
Utilities and Services	С	Sewer service is not available at the employee residence nor at the North Ridge trailhead. The trailhead provides a vault restroom for public use. Relocating the vault restroom would be a challenge due to	

		the existing topography and vegetation near the trailhead that limits alternative locations. The vault restroom will be replaced with an ADA-accessible model. Vault restrooms, as opposed to plumbed restrooms, are only permissible on a case-by-case basis through an exemption with the County of San Mateo. Preliminary inspection by District staff indicates that the site meets the criteria to allow the exemption.
CalFire Landing Zone	С	District staff have reached out to the agencies and organizations that may utilize the landing zone at the upper expansion area, including CalFire, San Mateo County Fire, and the Kings Mountain Volunteer Fire Department. These organizations are aware of the Project and have not requested further coordination at this time. In addition, there are other landing zones located in the vicinity of the Project area that are currently used by these organizations. These nearby alternative landing zone locations include private properties on Cyprus Ridge Road, less than a mile north of the Project site, and Tunitas Creek Road, approximately two miles south of the Project site. The nearest alternative landing zone on District lands is located at El Corte de Madera Creek Preserve, approximately five miles south of the Project site. Should a Project alternative be selected for CEQA review that would change the use of the landing zone, District staff will engage in additional coordination with these agencies at that time to confirm the site can be formally retired.

5.0 Public and Stakeholder Engagement

From 2021 to 2022, the District engaged with stakeholder groups and partners as part of the Project focused meetings and at meetings that included the Purisima-to-the-Sea project and the Purisima Multimodal Access Study. These engagement activities were used to gather initial feedback on existing challenges at the North Ridge parking area and any desired amenities that should be considered for this parking area. Feedback received includes the following²:

Theme/Topic	General Feedback/Comments
Traffic and Safety	 Concerns related to providing a safe pedestrian roadway crossing due to current vehicle speeds on Highway 35 Neighbors would like to see roadway striping and advanced warning beacon for trail crossing Concerns related to roadside parking that create potentially unsafe roadway conditions for pedestrians and vehicles Suggestion to modify parking area entrance to allow vehicles to turn into the parking area quickly

 $^{^2}$ This feedback has been received in addition to previous feedback that was presented to the PNR Committee and the Board as part of the Purisima Multimodal Access engagement on <u>August 2nd, 2022</u> (see attachment 5).

	 Suggestion to review historic traffic accident data in the vicinity of North Ridge to better understand safety issues Concerns related to foggy conditions on Highway 35 that could limit visibility
Parking and Visitor Capacity	 Allowing E-bikes within the Preserve may reduce parking demand Request for better equestrian parking and access at this trailhead Better/clearer roadway parking signage can discourage parking along the roadway that impacts neighboring properties
Amenities	 Support for the proposed trailhead amenities Suggestion to include emergency response information on trailhead signage
General	 General support for the Project if concerns are addressed New regional trail connection may result in additional traffic and trash Concerns regarding relocating the CalFire helicopter landing zone and how this would impact fire response

5.1 Partner and Agency Meetings

On October 19th, 2022, District staff made a presentation at a monthly meeting of the Peninsula Trails Team, a working group made up of regional trails partners and land managers, including representatives from POST, SFPUC, Ridge Trail Council, California Coastal Conservancy, County of San Mateo, National Parks Service, Golden Gate National Recreation Area, and the District. Following the presentation of the Project scope, updated schedule, and the results of the completed technical studies, the group discussed regional implications for the new trail connection as well as the potential timing for future planning and CEQA environmental review.

5.2 Neighborhood Meetings

District staff met with representatives from local organizations including members of the Kings Mountain Association, a neighborhood association, and the facilities manager of Fisher Investments, the neighboring property to the north of the Project site. District staff presented the Project to the Kings Mountain Association in March and November of 2022 and engaged in group discussions. District staff also provided a presentation to the facilities manager of Fisher Investments on November 9th, 2022 to notify them of the Project, answer questions, and receive initial feedback.

5.3 Stakeholder Group Meetings

District staff invited individuals who were familiar with Purisima and other District preserves to participate in focused virtual stakeholder meetings held on November 15th and 17th, 2022. The individuals invited to the stakeholder meetings were identified from their previous participation in public engagement activities with the District and represented a range of user groups, including hikers, cyclists, equestrians, ADA-accessibility interests, and District docents and volunteers. The virtual

stakeholder meetings were organized with a brief presentation by District staff, followed by polling questions and open discussion.

5.4 Prior Board and Committee Meetings

To date, the Highway 35 Multi-use Crossing and Parking Expansion Feasibility Study has been brought before the District's Legislative, Funding and Public Affairs Committee (LFPAC) at the following meetings:

 September 29, 2020: The LFPAC reviewed the partnership agreement with SFPUC and provided comments. The LFPAC voted unanimously to forward a recommendation to the full Board of Directors to adopt the resolution authorizing the General Manager to execute the grant agreement. (R-20-101, Meeting Minutes)

The Highway 35 Multi-use Crossing and Parking Expansion Feasibility Study has also been brought before the full District Board at the following meetings:

 October 28, 2020: The Board adopted a resolution authorizing the General Manager to accept grant funding from SFPUC for the proposed Project. (R-20-32, Meeting Minutes)

6.0 Program Elements

The Project proposes to expand parking for passenger vehicles and horse trailers. The trailhead would have amenities typical to District preserves, including a vault restroom, trailhead sign boards, boot brush, bike racks, and an equestrian mounting block. The parking lot, trailhead, and restroom would meet ADA accessibility requirements.

The Committee is asked to provide feedback on the share of passenger vehicle, horse trailer, and shuttle spaces that should be accommodated as part of the proposed parking expansion design. The share of spaces is based on the expansion potential that exists at the Upper Area, comprised of the existing parking area and the adjacent vacant area to the west, and the Lower Area, comprised of the vacant area adjacent to the employee residence. District staff completed a spatial analysis for the Upper and Lower Areas, which is detailed below (refer also to Attachment 1e).

The Upper Area could accommodate any of the following scenarios:

Capacity Scenarios	Number of Passenger	Number of Horse	Number of Shuttle Bus
	Vehicle Parking ³	Trailer Parking ⁴	Parking ⁵
Scenario 1	65	0	0
Scenario 2	45	4	0
Scenario 3	45	0	4

³ AASHTO Geometric Design of Highways and Streets Exhibit 2-3 Passenger Car (P)

⁴ AASHTO Geometric Design of Highways and Streets Exhibit 2-21 Passenger Car and Trailer (P/T)

⁵ AASHTO Geometric Design of Highways and Streets Exhibit 2-8 Conventional School Bus (S-BUS-11 [S-BUS-36])

The Lower Area could accommodate any of the following scenarios:

Capacity Scenarios	Number of Passenger	Number of Horse	Number of Shuttle Bus
	Vehicle Parking	Trailer Parking	Parking
Scenario 1	15	0	0
Scenario 2	0	2	0
Scenario 3	0	0	2

Staff seeks the Board's direction on the scenarios to develop final parking program alternatives, which may be a combination of the scenarios listed above and may include other parking elements. For example, one possible combination of these scenarios that maximizes all three uses is to provide 45 passenger vehicles, 2 horse trailer spaces and 2 shuttle spaces in the Upper Area; and 15 passenger vehicle spaces in the Lower Area. The above scenarios are only to demonstrate maximum available space at each expansion area and are not the only parking alternatives that should be considered for the Project.

6.1 Purisima Multimodal Recommendations

The Purisima Multimodal Access Study, approved by the Board on November 9, 2022, recommends a series of transportation demand management strategies (TDMs) for the preserve's parking areas, including the North Ridge parking area. The TDMs considered for the North Ridge parking area are categorized by priority level based on a variety of factors such as ease of implementation, overall effectiveness for improving public access, and interest from the public. The expectation is that many of these strategies will be suitable for the site and be incorporated into the design and long-term management of the parking area TDMs that are being considered for the North Ridge trailhead include the following:

Highest priority TDMs

- Peak period parking reservations/priority parking
- Bicycle parking and facilities (including bicycle repair stations)
- Temporarily redesignate spaces on specific days/times to best meet demands
 - May include designating special parking areas temporarily for carpool, equestrian, shuttle pick-up/drop-off, or other uses
- Real-time parking lot occupancy sensors and signage
- Electric Vehicle (EV) charging infrastructure

Lower priority TDMs

- Vehicle way-finding signage
- Clearly identify permitted on-street / shoulder parking
- Accommodate future shuttle / transit systems

Highway 35 Multi-use Trail Crossing and Parking Expansion

7.0 Attachments

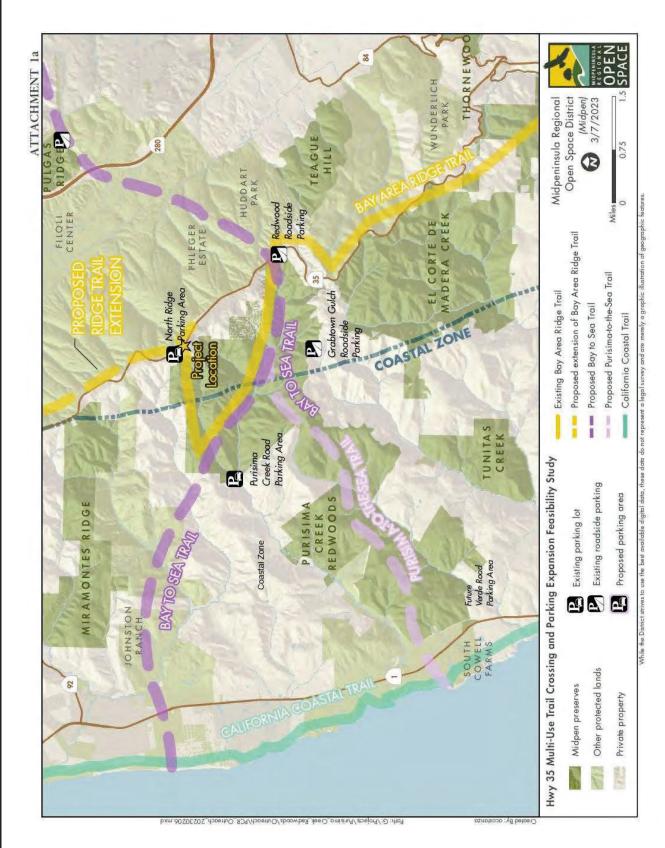
Attachment 1a: Project location

Attachment 1b: Project area

Attachment 1c: Existing Conditions

Attachment 1d: On-grade Crossing Recommendations

Attachment 1e: Spatial Analysis



HWY 35 MULTI-USE TRAIL CROSSING AND PARKING EXPANSION FEASIBILITY STUDY

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE

NORTH RIDGE PARKING LOT



ATTACHMENT 1.b PROJECT STUDY AREAS

HWY PURISI

HWY 35 MULTI-USE TRAIL CROSSING AND PARKING EXPANSION FEASIBILITY STUDY

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE

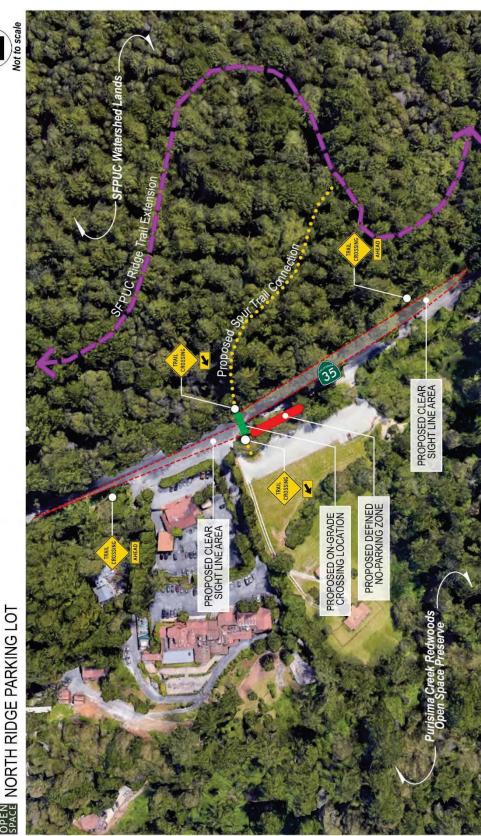




ATTACHMENT 1.c EXISTING CONDITIONS

HWY 35 MULTI-USE TRAIL CROSSING AND PARKING EXPANSION FEASIBILITY STUDY PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE





ATTACHMENT 1.d ON-GRADE CROSSING RECOMMENDATIONS

HWY 35 MULTI-USE TRAIL CROSSING AND PARKING EXPANSION FEASIBILITY STUDY

PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE

NORTH RIDGE PARKING LOT



ATTACHMENT 01.e PARKING SPATIAL ANALYSIS