



DRAFT IS/MND for Darrell Water Tanks Replacement Project

Prepared for



Town of Hillsborough Public
Works Department
Contact: Natalie Gribben, P.E., QSD

Prepared by



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April 16, 2021



DRAFT IS/MND

for

Darrell Water Tanks Replacement Project

Prepared for:

Town of Hillsborough
Public Works Department
1600 Floribunda Avenue
Hillsborough, California 94010

Contact:

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Senior Civil Engineer
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Prepared by:



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APRIL 16 2021

Table of Contents

PROJECT INFORMATION.....	1
1. Project Title.....	1
2. Lead Agency Name and Address	1
3. Contact Person and Phone Number	1
4. Project Location.....	1
5. Project Sponsor's Name and Address	1
6. General Plan Designation	1
7. Zoning	1
8. Description of Project.....	4
9. Surrounding Land Uses and Setting.....	11
10. Other Public Agencies	22
11. California Native Tribes.....	22
12. Purpose	23
13. Environmental Factors Potentially Affected	25
14. ENVIRONMENTAL CHECKLIST.....	26
I.Aesthetics	26
II.Agriculture and Forestry Resources	43
III.Air Quality.....	47
IV.Biological Resources	54
V.Cultural Resources.....	69
VI.Energy.....	79
VII.Geology and Soils	84
VIII.Greenhouse Gas Emissions	102
IX.Hazards and Hazardous Materials.....	106
X.Hydrology and Water Quality.....	116
XI.Land Use and Planning	124
XII.Mineral Resources.....	127
XIII.Noise	129
XIV.Population and Housing	137
XV.Public Services	140
XVI.Recreation	145
XVII.Transportation.....	147
XVIII.Tribal Cultural Resources.....	154
XIX.Utilities and Service Systems.....	160
XX.Wildfire.....	167
XXI.Mandatory Findings of Significance	171
PREPARATION.....	173
DETERMINATION	174
REFERENCES USED IN PREPARING THE INITIAL STUDY CHECKLIST	175

List of Figures

Figure 1 – Regional Location	2
Figure 2 – Project Vicinity	3
Figure 3 – Proposed Site Plan	7
Figure 4 – Proposed Tank Cross Section	8
Figure 5 – Tree Removal Plan.....	9
Figure 6 – Conceptual Landscape Plan	10
Figure 7 – Existing Topography and Pad Elevations.....	12
Figure 8 – Nearest Structures and Infrastructure	13
Figure 9 – Photo Key Map	14
Figure 9a – Site Photos of Interior Project Site.....	15
Figure 9b – Site Photos of Interior Project Site.....	16
Figure 9c – Site Photos of Interior Project Site	17
Figure 9d – Site Photos from Off-site - Views Looking Easterly.....	18
Figure 9e – Site Photos from Off-site Views of SR-35 Construction Access	19
Figure 10 – Visual Simulation.....	20
Figure 11 – Historic Resources.....	73
Figure 12 – Regional Fault Map	86
Figure 13 – Exploratory Testing and Geology	87
Figure 14 – Noise Measurement Locations	134

List of Tables

Table 1. Elevations in Project Vicinity.....	21
Table 2. Additional Land Use in the Project Vicinity.....	21
Table I-1. Darrell Tank Adjacent Land Use.....	27
Table I-2. Existing Tree Health on Project Site.....	28
Table I-3. Trees for Removal.....	32
Table I-4. Replacement Landscaping.....	33
Table I-5. County of San Mateo Scenic Corridor Policies and Project Commitments.....	33
Table I-6. Town of Hillsborough Aesthetic Policies and Project Commitments.....	38
Table III-1. BAAQMD Project-Level Air Quality CEQA Thresholds of Significance.....	48
Table III-2. Construction-Related Maximum Daily Pollutant Emissions.....	51
Table VIII-1. Project-Related Greenhouse Gas Emissions.....	105
Table XIII-1. CA/T Equipment Noise Emissions and Acoustical Usage Factor Database.....	132
Table XVII-11. Trip Generation.....	150

Appendices

Appendix A: Air Quality, GHG, Energy

Appendix B: Biological Resources

Appendix C: Cultural Resources

Appendix D: Geology and Soils

Appendix E: Phase I Environmental Assessment

Appendix F: Arborist Report

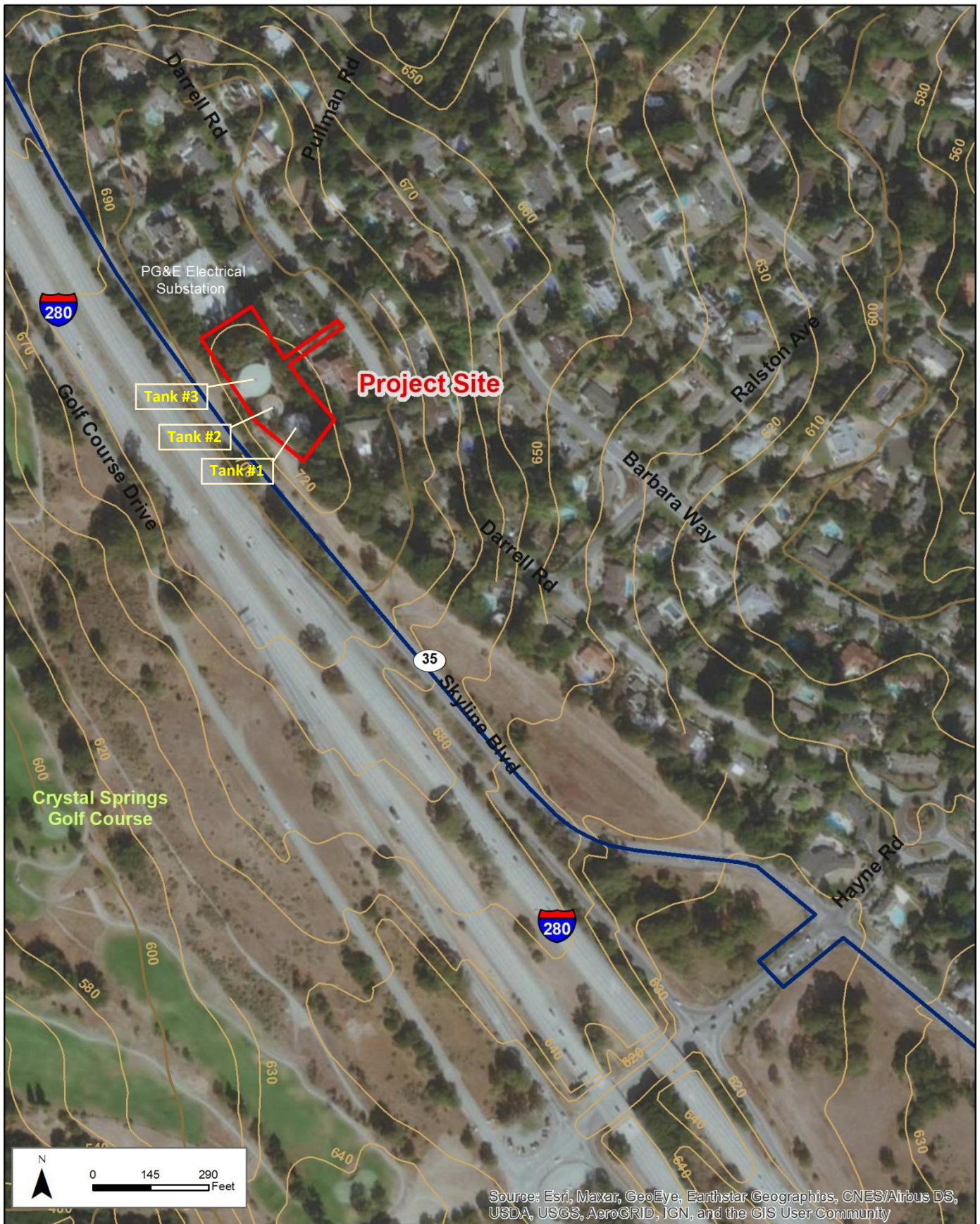
Appendix G: Noise

Appendix H: Traffic

Appendix I: Letters to Tribes

PROJECT INFORMATION

1. **Project title:** Darrell Water Tanks Replacement Project
2. **Lead agency name and address:** Town of Hillsborough Address: 1600 Floribunda Avenue, Hillsborough, California 94010
3. **Contact person and phone number:** Natalie Gribben, P.E., QSD, Senior Civil Engineer, Public Works Department. Town of Hillsborough. Phone: (650) 375-7444
4. **Project location:** 549 Darrell Road Hillsborough, California 94010 -
The Project is in northern San Mateo County along the western jurisdictional limits of the Town of Hillsborough, approximately midway between the northerly and southerly Town limits, on a site developed with three existing tanks (See Figure 1, Regional Location and Figure 2, Local Vicinity).
5. **Project sponsor's name and address:** Town of Hillsborough Address: 1600 Floribunda Avenue, Hillsborough, California 94010
6. **General plan designation:** Public Facilities and Services
7. **Zoning:** Residential District



Legend

- Project Site Boundary
- Town of Hillsborough Boundary
- Elevation in feet Above Mean Sea Level

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 2. Project Vicinity

8. Description of project:

Background

The Project is a new 120-foot diameter ground-level circular pre-stressed concrete water tank. Proposed tank height ranges from 24 feet above ground surface along the exterior edges of the structure to 29 feet above ground surface at the center of the tank roof to allow for roof drainage of 2 percent slope (See Figure 3, Proposed Site Plan and Figure 4, Tank Cross Section). The Project will replace two existing ground-level 24-foot-tall steel water tanks (Darrell Tanks #1 and #2) and will include modification of some existing on-site underground piping and utilities, earthwork and tree removals, and landscaping replacement as described below and shown in Figure 5, Tree Removal Plan and Figure 6, Conceptual Landscape Plan. The new larger tank will allow an existing inefficient pump station (Oak View Pump Station) and substandard tanks (Forest View Tanks) be removed from service from the Town's potable water delivery system. The Project will improve overall efficiency, effectiveness, safety, and reliability of the Town's water system. Darrell Tanks #1 and #2 were found to have seriously degraded coatings during routine inspections as summarized in the Hillsborough Water Master Plan – Phase 1 study (CSG, 2011), which also documents that Darrell Tank #2 has a seriously degraded steel roof.

Removal of Darrell Tanks #1 and #2 and proposed site preparation and construction of the new 2-million-gallon circular pre-stressed concrete replacement water tank is hereafter referred to as the "Project". Activities associated with construction and site preparation of the Project include tree removal of trees that are in poor and very poor health throughout the site, earthwork within the southerly half of the Project Site, including over excavation and subgrade preparation for structural tank floor slab and foundation, piping, valves, utilities relocations, replacement of paved and gravel surfaces, and the planing and temporary use the adjacent existing dirt access road from SR-35 that will be used for temporary equipment and truck access, staging and laydown. Retaining walls are proposed to the west of the proposed tank (130 feet long and up to 5 feet high) and to the east of the proposed tank (92 feet long and p to 3 feet high).

Darrell Tanks are an important storage component of the Town of Hillsborough's potable water system. The Town's water system includes 18 pressure zones, a total of 17 active ground-level steel tanks, 1 subterranean concrete reservoir, 116 miles of water mains, 14 active pump stations and 4,260 service connections. The Town purchases 1,100 to 1,500 million gallons of water annually. Approximately 85 percent of the Town's water is from the San Francisco Public Utilities Commission (SFPUC) and the remaining 15 percent is from local watersheds in Alameda County and San Francisco Peninsula. Approximately 90 percent of this water is distributed to single-family residences in the Town of Hillsborough. The remaining 10 percent of water deliveries go to two golf courses, 6 schools and for municipal connections.

The Darrell Tanks Site has been developed with three water tanks since the early 1950's. Darrell Tanks #1 and #2 were built in 1952. Darrell Tank #3 was built in 1958. Review of Historical Aerial Photos (<https://www.historicaerials.com/viewer>) indicates that the surrounding land in the Project Vicinity remained undeveloped until the mid-1980's and was subsequently subdivided for single family residences and eventually built out with low-density single-family residences. Refer to Section 9, Project Vicinity for additional information.

Construction Schedule

Construction for the Project is anticipated to begin late 2021 and end in early 2023. Construction will occur in five phases – 1) Mobilization, 2) Demolition of existing tanks, 3) Site Preparation for

new tank, 4) Tank Construction and 5) Final Site Work and the following activities will occur during each phase:

- **Mobilization:** Groom temporary access road at Skyline, install construction trailer (one week).
- **Demolition:** Remove existing tanks and foundations for two steel tanks, approximately 100 cubic yards of material, from the site and cut valves (one month).
- **Site Preparation:** Perform tree removals, remedial earthwork and soils stabilization, install column foundation supports, construct retaining walls, install underground inlet/outlet piping and install concrete at grade foundations for tanks. Earthwork quantities are estimated at approximately 3,850 cubic yards. Site soils will be mixed on site with lime and cement or equivalent methods; import of base material is estimated at 1,000 cubic yards. Over excavation for tank foundations will be 3 feet to 5 feet below existing ground surface (2 months).
- **Tank Construction:** Build new tank, yard piping, concrete work, construction of stairs and appurtenances (12 months).
- **Final Site Work:** Install Pipe and valves, landscaping/trees, paving, clean up, restore site, replace fencing (2 weeks).

Demolition and Construction Activities

Activity on the Project Site will occur during work hours between 8:00 AM to 5:00 PM, Monday through Friday. Arrival, tailgate training and plan for the day will occur in the morning at approximately 8:00 AM. The Project Site will be cleaned up and locked up by 5:00 PM. Deliveries will occur between 8:00 AM and 4:00 PM.

The contractor's crew will be at the site between 8:00 AM and 5:00 PM. Truck trips will vary according to phase. The haul route would be via SR-35 to Hayne Road at I-280.

Equipment in Use During Construction

The following types and quantities of equipment will be in use at the Project Site and will include but not be limited to:

- **Mobilization:** Field office trailer, backhoe for potholing, two service trucks.
- **Demolition:** Cat 235 Excavator with demolition hammer attachment, Front End Loader, Two 15 cubic-yard dump trucks, two service trucks, crane, two chain saws, stump grinder. There will be not more than 1-2 truck trips daily during demolition with not more than 70 total truck trips during demolition.
- **Grading:** Pug Mill Mixer, Bulldozer, Front End Loader Cat 235 Excavator, two service trucks and haulers. This phase will include up to 50 truck trips using haulers to import 1,000 cubic yards of base material for soils stabilization.
- **Tank Construction:** Crane, Cat 235 Excavator, up to 5 Concrete Trucks per day maximum over a three-month duration, two service trucks. Concrete delivery for tank and vaults will be approximately 655 cubic yards with an estimated 130 to 140 truck trips occurring during the 18-month construction period.

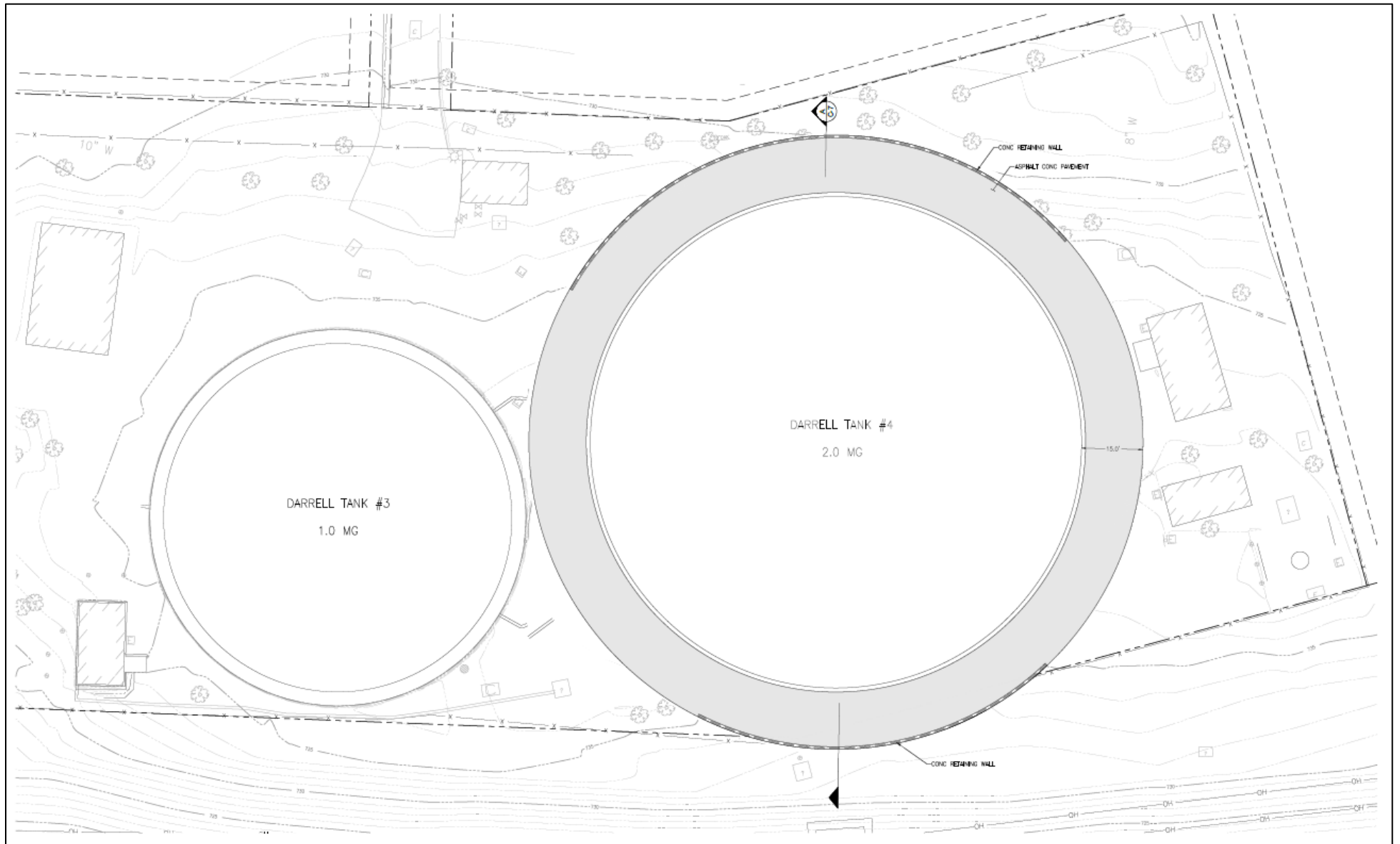
Ongoing Maintenance and Operations

Existing Darrell Tank No. 3 will continue to function via gravity flow, which is supplemented with off-site pumps. Maintenance will consist of yearly inspection conducted by a diver. Existing site landscaping will continue to be maintained by the Town.

Discretionary Permits and Approvals

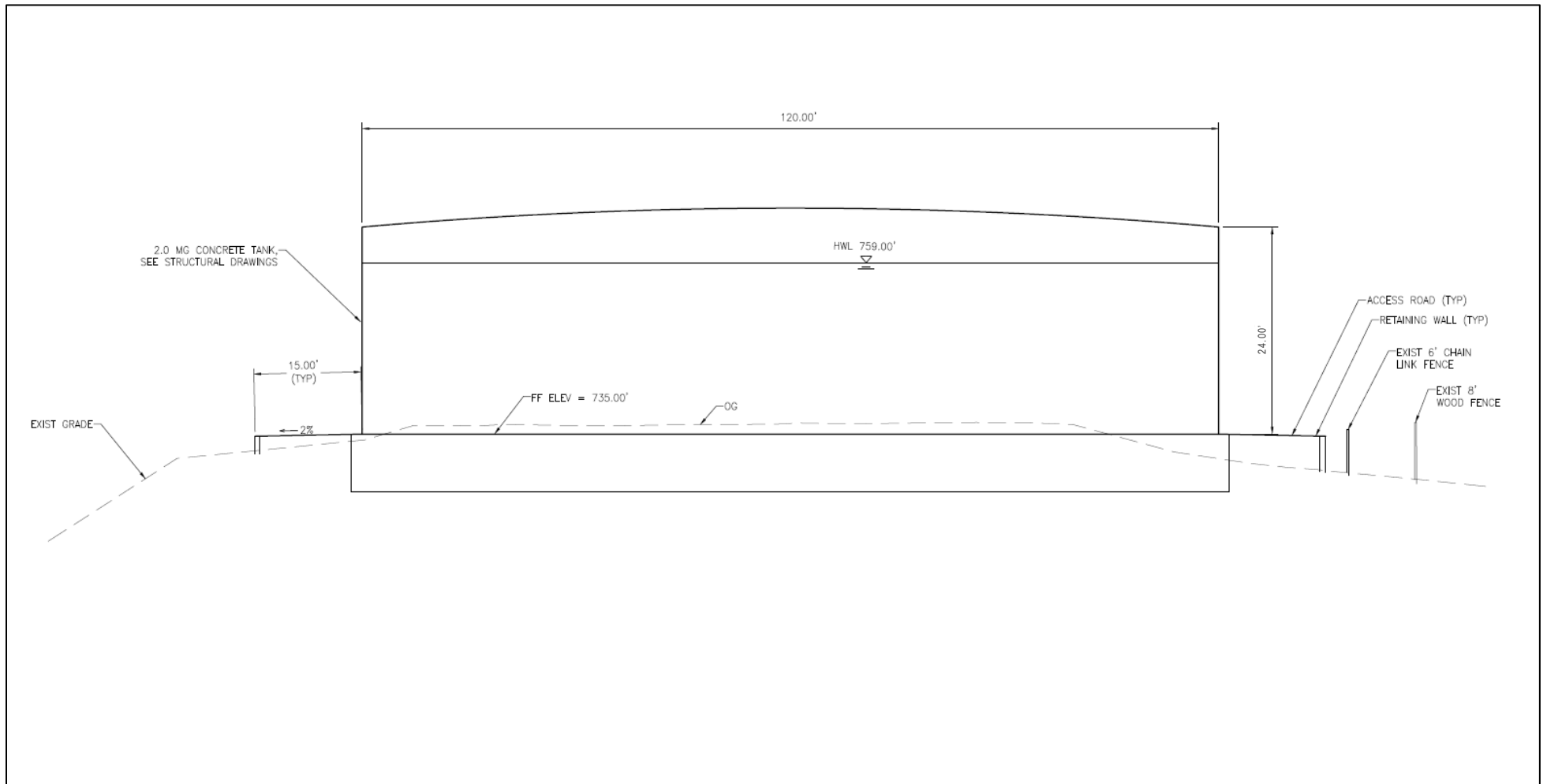
The following discretionary permits are needed for the Project:

- California Department of Public Health Domestic Water Supply Permit Amendment.



Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 3. Proposed Site Plan



Darrell Water Tanks Replacement Project
Town of Hillsborough

LOOKING NORTH

Not to Scale

Figure 4. Proposed Tank Cross Section

76 Trees on Project Site

○ 9 Removals Recommended due to Poor Condition

○ 13 Removals Required for Project

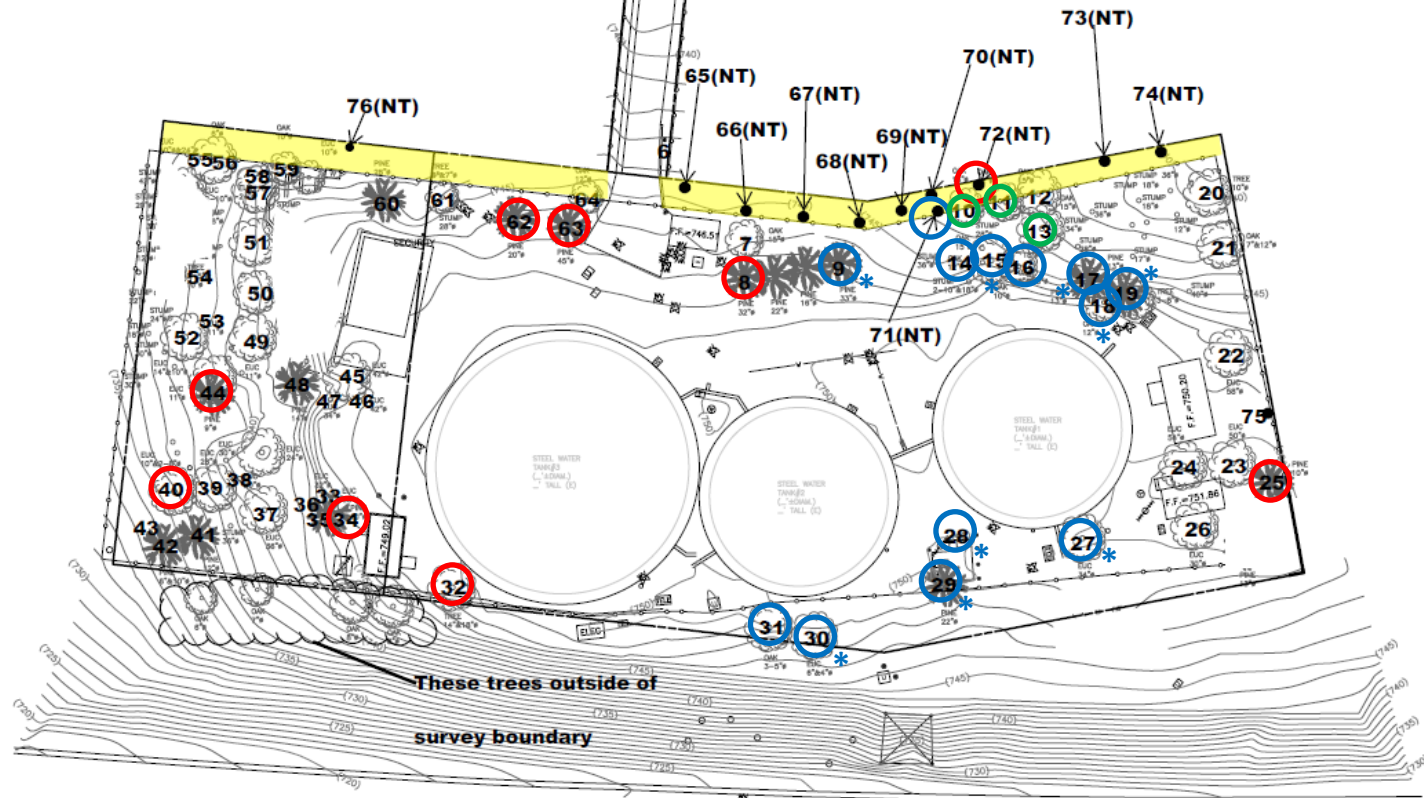
* = Poor or Very Poor Health (9 of 13)

○ 3 Impacted – Protect in Place

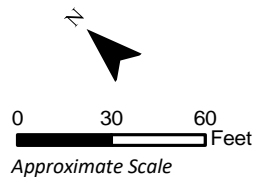
54 Trees Retained

Note: Only trees 4" diameter or greater and located within the property line areas were included in this survey.

Yellow Zones = Trees Surveyed from Afar (Inaccessible) due to Barbed Wire Boundary Fencing and noted as "NT" (Not Tagged)



Source: Walter Levison, Consulting Arborist 10/18/2020



Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 5. Tree Removal Plan

PLANT LEGEND



Quercus agrifolia
Coast Live Oak



Myrica californica
Pacific Wax Myrtle

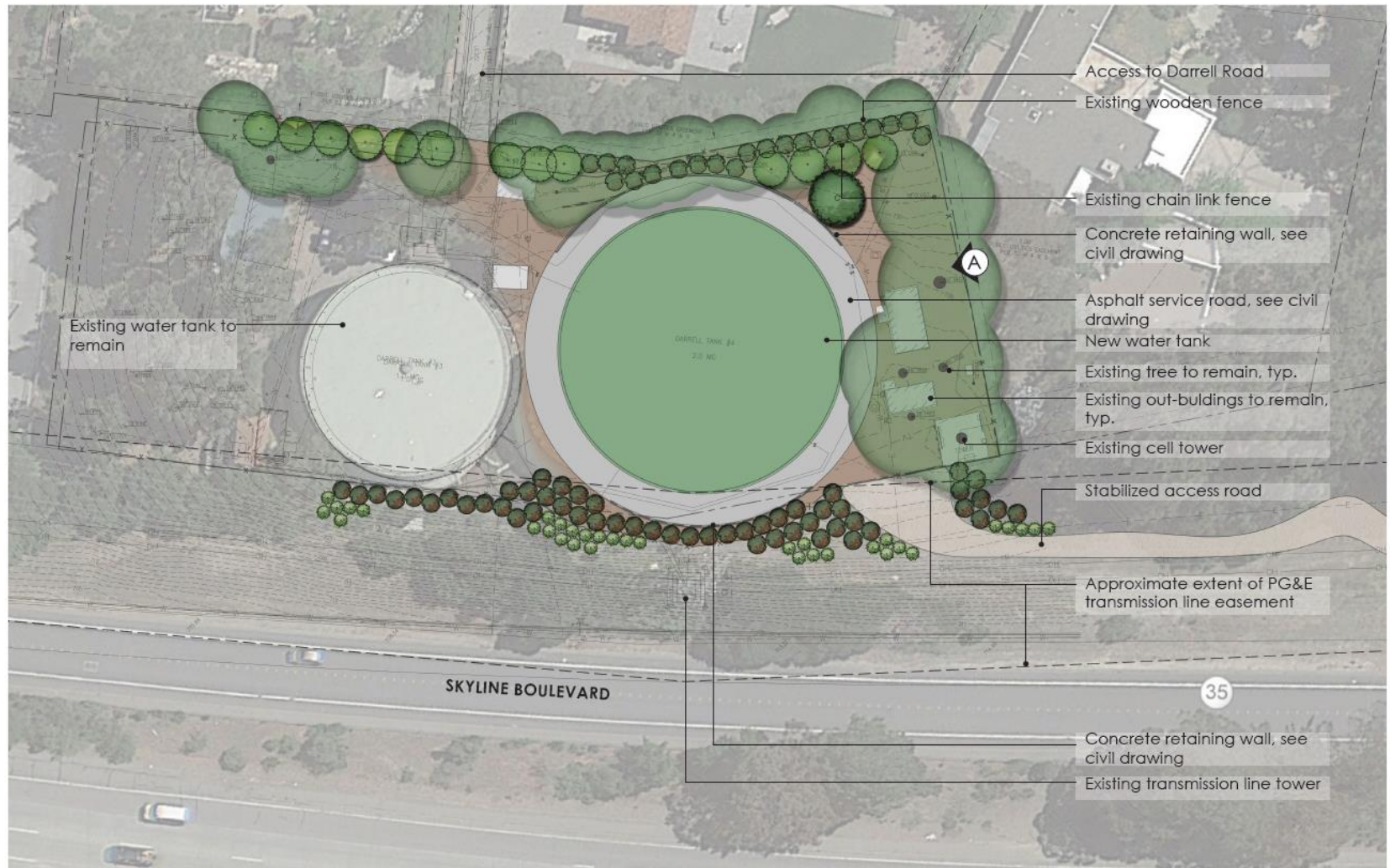


Heteromeles arbutifolia
Toyon



Rhamnus californica
CoffeeBerry

NOTE:
SEE PLANTING PALETTE, PAGE 2, FOR
MORE INFORMATION



Source: Callander 2021



0 30 60
Feet

Approximate Scale

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 6. Conceptual Landscape Plan

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

Project Site

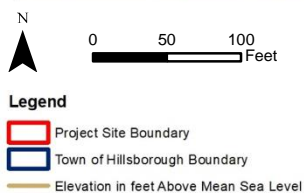
The Project will be constructed on the developed parcel of land located at 549 Darrell Road, Town of Hillsborough, San Mateo County, California. This parcel is hereafter referred to as the Project Site and is also known as Assessor's Parcel Number 030-041-100. The Project Site consists of 1.34 acres built out with three existing 24-foot-tall ground-level water tanks (Darrell Tanks #1, #2, and #3), five ancillary structures (one-story) for storage and electrical enclosures, three wireless cell sites, ground-mounted equipment, 76 mature trees, gravel and paved surfaces, a perimeter fence and gated entry and underground utilities. Darrell Tank #3 is 85-feet in diameter with a design capacity of 1 million gallons and is built on the northerly half of the Project Site. Darrell Tank #3 will remain unchanged with the Project except for minimal modification of the underground service pipelines to and from this tank. Darrell Tanks #1 and #2 are both 60 feet in diameter with design capacities of 0.5 million gallons each and are located on the southerly half of the Project Site at elevation 735 feet above mean sea level (MSL). This southerly portion of the site where Darrell Tanks #1 and #2 are currently located will be where most of the proposed construction activity will occur during an approximate 18-month period.

Vehicular access to the Project is from an approximate 12-foot-wide existing paved driveway at Darrell Road. On-site circulation consists of gravel and paved accessways. There is a dirt access road from SR-35 to the Project Site. This secondary dirt access road will be used as the main access for construction of the Project. This dirt access traverses the shoulder of the northbound lanes of Skyline Boulevard and is currently used by PG&E as maintenance access via a gate near the southwesterly property corner of the Project Site. The Project Site is approximately 1,800 linear feet northeast of the Hayne Road and Skyline Boulevard intersection.

Project Vicinity

The Project Site is bordered on the southwest by an approximate 35-foot slope down to SR-35 that is a utility easement partially developed with utility towers and partially landscaped. The SR-35 street elevation is approximately 700 feet above MSL at the northbound SR-35 lanes west of the Project Site. Junipero Sierra Freeway (I-280) runs parallel and adjacent with SR-35 (to the west) and is at approximately 695 feet above MSL near the Project. Crystal Springs Golf Course is located at slightly lower elevations west of southbound lanes of I-280. The parcels closest to the east and south boundaries of the Project Site consist of one and two-story low-density single-family residences. Existing ground elevations of Darrell Tanks #1 and #2 are up to 35 feet higher than the adjacent SR-35 pavement and are approximately 25 feet higher than the closest residential building pads on parcels to the east and south. The variable ground elevations and closest structures in the Project Vicinity are highlighted in Figure 7, Existing Topography and Pad Elevations, and Figure 8, Nearest Structures and Related Infrastructure.

Variable topography within the Project Vicinity makes the existing tank site a visible feature in the Project Vicinity from many vantage points, especially areas to the west where lower ground elevations occur, including some vantage points along I-280, which is designated as a Scenic Highway by Caltrans, as well as from Golf Course Drive, Crystal Springs Golf Course, within the County of San Mateo Scenic Corridor. Existing views of the Darrell Tanks occur throughout the Project Vicinity from adjacent lands and are partially buffered by development, variable terrain, and the mature trees that have been planted along the perimeter of the Project Site and in the Project Vicinity (See Figure 9, Photo Key Map and Figures 9a through 9e, Site Photos).



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 Town of Hillsborough

Figure 7. Existing Topography and Pad Elevations



Legend

- Project Site Boundary
- Town of Hillsborough Boundary
- Elevation in feet Above Mean Sea Level

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 8. Nearest Structures and Related Infrastructure



Source: ESRI World Imagery 2020

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 9. Photo Key Map



Photo 1. Driveway at Darrell Road looking west toward Tank #3



Photo 2. Driveway at tanks looking east toward Darrell Road



Photo 3. Driveway at tanks looking southeast toward Darrell Road

Photo credits: Walter Levison, 2020

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Town of Hillsborough

Figure 9a. Site Photos of Interior Project Site



Photo 4. Looking east from the west side of the tank site at Tanks #1 and #2



Photo 5. Looking southeast from Tank #1



Photo 6. Looking southwest from Tank #1



Photo 7. Western edge of tank site looking south toward cell tower designed as a pine tree located near fence

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Town of Hillsborough

Figure 9b. Site Photos of Interior Project Site



Photo 8. Looking south from the north side of the tank site at Tank #3, Tank #2, and Tank #1



Photo 9. Looking west from the east side of the tank site at Tank #2 and Tank #3



Photo 10. Looking west from the north side of the tank site at Tank #3 and ancillary structure

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 9c. Site Photos of Interior Project Site



Photo 11. View from Golf Course Drive looking Southeast



Photo 12. View from Golf Course Drive looking Southeast

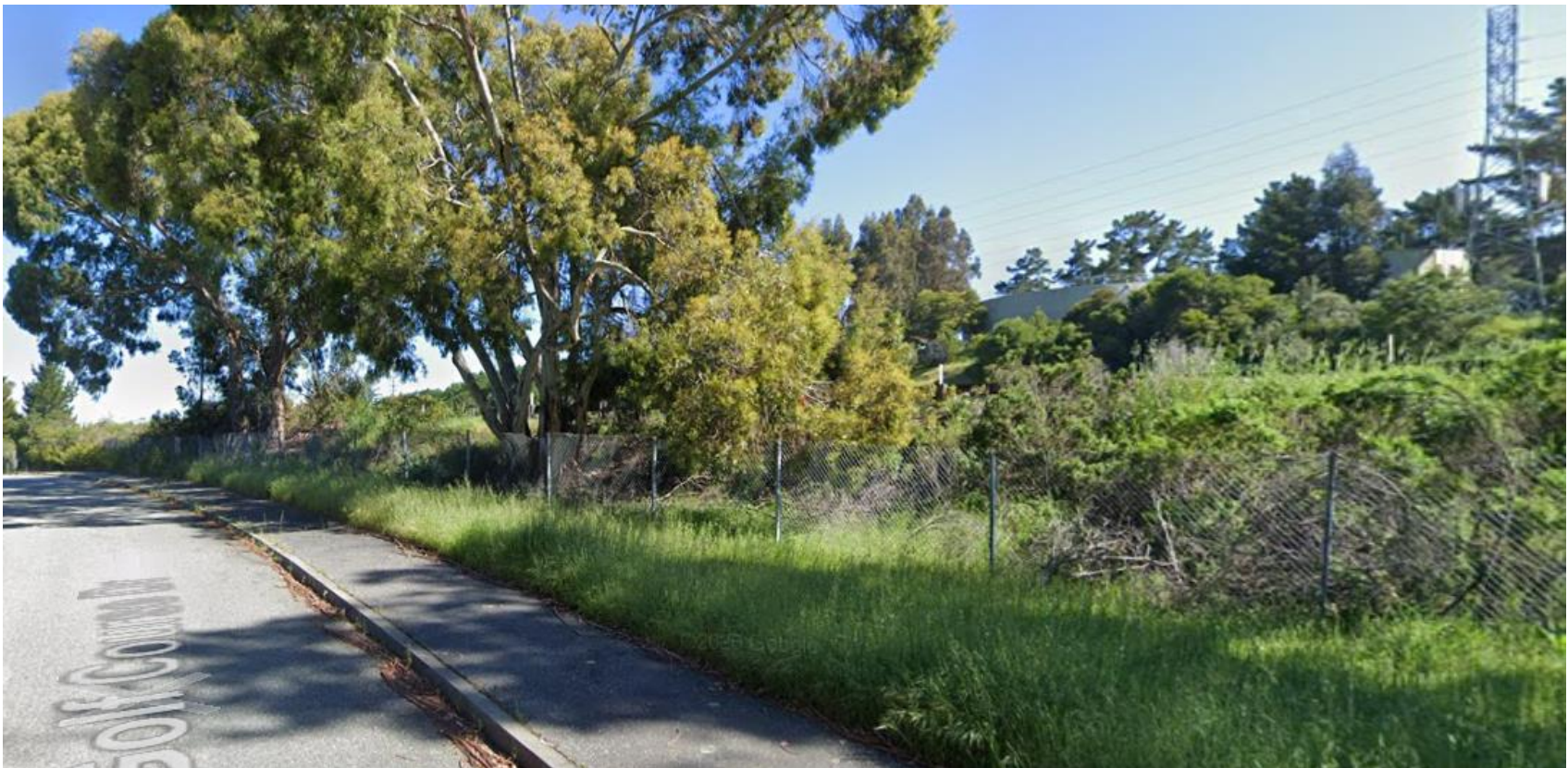


Photo 13. View from Golf Course Drive Looking Northeast



Photo 14. Looking northwest at Skyline Blvd/SR-35 at entrance to temporary access road



Photo 15. Looking northwest at temporary access road



Photo 16. Looking northeast at temporary access road

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 9e. Site Photos from Off-site – Views of SR-35 Construction Access



EXISTING VIEW



VISUAL SIMULATION

Source: Callander, March 23, 2021

KEY MAP



View point: I-280
North-bound

Darrell Water Tanks Replacement Project

Town of Hillsborough

Figure 10. Visual Simulation

Surrounding land uses in the Project Vicinity consist of the following:

- **North:** PG&E electrical substation and low-density residences
- **South:** Low-density Residential
- **East:** Low-density Residential
- **West:** SFPUC Property and Public rights-of-way for Skyline Boulevard and Highway 280 (Junipero Serra Highway) and Crystal Springs Golf Course.

Ground elevation changes of the Project Site and in the “Project Vicinity” are as follows:

Table 1. Elevations in Project Vicinity

Location	Approximate Elevation <i>(feet above MSL)</i>
Darrell Tank #1	735 (floor level)
Darrell Tank #2	735 (floor level)
Skyline Boulevard	700
I-280	695
Adjacent Parcels:	
555 Darrell Road (Northeast)	710
545 Darrell Road (East)	710
535 Darrell Road (Southeast)	710
Vicinity (East Across Darrell Road):	
575 Darrell Road (North)	705
560 Darrell Road (Northeast)	690
550 Darrell Road (East)	690
540 Darrell Road (East)	690
530 Darrell Road (Southeast)	685

Additional non-residential land use closest to the Project within the Town of Hillsborough are listed as follows:

Table 2. Additional Land Use in the Project Vicinity

Name	Location from Project	Approximate Distance
Central County Fire Department, Hillsborough Station 33	Northwest at 835 Chateau Drive	1,300 linear feet
The Nueva School, Hillsborough Campus	Northwest at 6565 CA-32	3,500 linear feet
Carolands Chateau	Northeast at 565 Remillard Drive	1,500 linear feet
West Hillsborough Elementary & Preschool	Southeast at 376 Barbara Way	2,300 linear feet
Caltrans Park and Ride	South off Hayne Road at Golf Course Drive west of the southbound I-280 lanes	2,000 linear feet

Darrell Tanks and other utilities developed on the Project Site and in the utility easement on the west facing slope adjacent and west of the Project Site are highly visible from many nearby vantage points located within the Scenic Corridor and along the Scenic Highway in the Project Vicinity. Darrell Tanks is situated on the easterly edge of the Scenic Corridor at the top of the highest ridge and is part of the existing landscape of this area referred to as public views from the Scenic Corridor to the west of the Project. Public views from a distance of the existing tank site include partial views of the tops and sides of Darrell Tanks and other utilities that are currently available through direct lines of sight from westerly vantage points where there are significantly lower ground elevations and gaps in the perimeter landscaping (mainly trees) adjacent to the site. These westerly vantage points are located at ground elevations close to 100 feet lower than the Project Site and are views of the entire landscape of the western edge of the Town, including the Project Site and existing tanks. Portions of the tanks are also currently partially visible from closer vantage points: From the west (from SR-35) up slope and through gaps in perimeter landscaping and up slope from adjacent parcels located to the east of the tank site. There are no existing scenic views or direct lines of the Scenic Corridor from vantage points on private parcels east of the Project Site. The slightly lower elevations on parcels to the east, topography and existing tank development block direct lines of sight to the open space west of the Project from private to the east.

Most direct lines of site to the existing tanks and utilities on the Project Site are public views from the Scenic Highway and roadways (Golf Course Drive, I-280 and SR-35) within the Scenic Corridor as well as public views from the golf course. There are no private lots to the west with scenic views of the Project Site. The public view of the Project Site, from westerly vantage points, is on the expanse of rolling hills and the numerous trees in the area, which all blend together with partial views of the existing tanks to comprise the landscape. The public view of the tanks and utilities associated with the Project Site blend with the overall landscape of this area with the view of the Project Site and tanks partially obscured by the combination of elevation changes, distance, and the existing trees planted on the Project Site and on nearby properties.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

- State Water Resources Control Board, Division of Drinking Water, Domestic Water Supply Permit Amendment,
- SFPUC Property Agreement for access off Skyline,
- Temporary and Permanent Easements for facilities on the west side of the site,
- County of San Mateo

11. California Native Tribes

Pursuant to Public Resources Code section 21080.3.1 the Town of Hillsborough requested consultation from California Native American tribes traditionally and culturally affiliated with the Project area. The consultation includes determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc. A certified mail was sent to the following tribal contacts:

1. Amah Mutsun Tribal Band of Mission San Juan Bautista – Irenne Zwierlein, Chairperson
2. Costanoan Rumsen Carmel Tribe – Tony Cerda, Chairperson
3. Indian Canyon Mutsun Band of Costanoan – Ann Marie Sayers, Chairperson
4. Indian Canyon Mutsun Band of Costanoan – Kanyon Sayers-Roods, MLD Contact
5. Muwekma Ohlone Indian Tribe of the SF Bay Area – Charlene Nijmeh, Chairperson
6. Muwekma Ohlone Indian Tribe of the SF Bay Area – Monica Arellano
7. Ohlone Indian Tribe – Andrew Galvan

12. Purpose

This Initial Study Mitigated Negative Declaration (ISMND) is written to satisfy current requirements set forth in the California Environmental Quality Act (CEQA), Public Resources Code (Sections 21000–21189) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387). This ISMND consists of the completed CEQA Initial Study (IS), including the Environmental Checklist Form, CEQA Findings for a Mitigated Negative Declaration and a list of reference materials used to document baseline conditions and Project impacts. In addition, there is an Appendix (Appendices A through H), which includes technical studies prepared for the Project. This ISMND provides a due diligence environmental review for findings of fact, for use by the Town of Hillsborough, the Lead Agency and decision makers, concerning discretionary approvals and permits required for implementation of the Project.

This ISMND documents and fully identifies reasonably anticipated potential environmental effects that may arise from the implementation of the Darrell Water Tanks Replacement Project, hereafter referred to as the Project, as proposed by the Town of Hillsborough, Department of Public Works (Town). This Project is identified as a needed future capital improvement in the Town of Hillsborough, Water Master Plan – Phase I Inventory and Assessment, Alternative Capital Improvement Programs, prepared by CSG Consultants (CSG, 2011). The Town stores water in 17 active storage tanks and one reservoir located at 10 sites located throughout the Town. A Water Master Plan completed in 2011 and with an update done in 2013 (CSG Consultants, Inc., April 2011 and December 2013) identified several storage system deficiencies and a number of capital improvement projects for correction of those deficiencies, including the Project at Darrell Tanks Site. The Town operates the Darrell Tank Site, which currently has three tanks and 2.0 million gallons (MG) of gross water storage and is an important part of the Town's water system, having the ability to supply a large portion of the customer base. The purpose of the Project is to replace two (2) existing 0.5 MG potable water reservoirs located on the Darrell Tank Site with one (1) 2.0 MG prestressed concrete reservoir. Replacement of the existing tanks with the new tank will increase the overall storage at the site from 2.0 MG to 3.0 MG. Construction of the new tank will require demolition of the existing tanks and construction of the new tank in the same location as the previous tanks.

The tank replacement will achieve the following specific goals from the Town of Hillsborough Water Master Plan:

- **Improved Reliability in the Town's Water System:** Facilitate abandonment of down-gradient substandard facilities and enhance overall system efficiency and performance with increased storage at a higher elevation. The new larger tank will reduce risk from corrosion failure and susceptibility to earthquake damage.
- **Increased Fire Suppression Capability:** Provide increased storage capacity and water pressure within specific water zones known to operate below current municipal standards. This will allow water distribution over an extended period in an emergency.
- **Decrease Operating Cost:** Upgrade supervisory control and data acquisition (SCADA) to enhance communication and allow remote adjustments from staff in response to emergencies based on real-time conditions. This will facilitate full and efficient utilization of the Town's water system. Removal of degraded surfaces from the water system will reduce maintenance costs of achieving drinking water quality standards. Removal of a pump and more reliance on gravity flow will reduce energy consumption and operating costs.
- **Adequate Water Pressure:** Relocate and increase water storage at an elevation that will support adequate water pressure utilizing gravity flow.

- **Maintain Potable Water Quality:** Removal of degraded coatings from the Town's water system will reduce the amount of Biofilm and treatment requirements for water quality compliance with state drinking water standards. The Project will increase water turnover rate and reduce ageing and corrosion in water tanks.
- **Provide Safer Conditions for Town Staff:** Seismic upgrades will be incorporated into new tank design to reduce risk of failure during an earthquake and will also include safety appurtenances according to current Cal/OSHA standards promoting staff safety.
- **Enhanced Security:** The Project will include electronic feedback for tank conditions to facilitate system adjustments remotely and to provide adequate service when and where it is needed.
- **Simplify the Water System:** The Project will facilitate abandonment and removal of several inefficient components of the Town's water system and will make these locations available for other land use.
- **Extend Life of Facilities:** The Project will enhance the overall operation and efficiency of the Town's water delivery system.

The Project is subject to review under CEQA pursuant to Public Resources Code Section 21065, because it will require discretionary approval by the Town and will result in changes to the physical environment. The Town, as the Lead Agency for the Project pursuant to CEQA, is responsible for CEQA compliance.

13. Environmental Factors Potentially Affected

The Project would not affect any environmental factors resulting in a Potentially Significant Impact after mitigation. A summary of the environmental factors potentially affected by this Project, involving at least one impact that is “Less Than Significant Impact with Mitigation Incorporated”, include:

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture / Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

ENVIRONMENTAL CHECKLIST

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I. AESTHETICS

The analysis for aesthetics questions is based on site photos, aerial photos, topographic maps, General Plans for the County of San Mateo and Town of Hillsborough, and the Project plans including Tree Removal Plan (Figure 5) and Conceptual Landscape Plan (Figure 6) and a Visual Simulation (Figure 10) for the Project prepared by Callander Associates (Callander, 2021). The Initial Assessment of and Recommendations for Seventy-Six (76) Trees at Town of Hillsborough Water Tanks, prepared for the Project by Walter Levison, consulting arborist was used to complete this section and can be found in Appendix F.

Environmental Setting

The Town of Hillsborough's visual resources are generally characterized by low-density residential land use developed in an area of variable topography. The local visual resources are primarily influenced by densely landscaped meandering streets, one- and two-story single-family residential structures with large street setbacks, mature trees, parks/open space, schools and supporting utility systems. The environmental setting of the Project Site is depicted in site photos (Figures 9 and 9a through 9e) and includes the developed tank site and surrounding area where direct lines of sight provide visibility of the existing tanks, utilities and perimeter landscaping including many trees. The area surrounding the tank site consists of residential areas to the east and open space, roadways and a utility easement to the west. The Project is bordered on the southwest and west by a manmade slope down to the northbound lanes of SR-35. This is a County slope along the western boundary of the Project Site that is partially landscaped and extends down approximately 35 feet to the northbound lanes of SR-35; the slope has been developed with some utility towers and is partially landscaped. This partial landscaping buffers full direct views of the existing tanks from SR-35 and still allows partial views. Site photos show Darrell Tanks #1, #2 and #3 are all partially visible from off-site vantage points in the Local Vicinity to the west due to significantly

lower ground elevations to the west. I-280 and SR-35 provide regional north/south access to the San Francisco Peninsula. I-280 is a designated Scenic Highway by California Department of Transportation (Caltrans). Both I-280 and SR-35 are within an area designated by the County of San Mateo General Plan as a Scenic Corridor. Crystal Springs Golf Course is open to the public and appears to also be included in the County-designated Scenic Corridor. Portions of the upper edges and sides of the three existing 24-foot-tall tanks are all partially visible from various vantage points located at the golf course and along I-280 and SR-35. Due to lower ground elevations on residential lots to the east of the Project Site, there are no scenic views from vantage points east of the Project Site (See Figure 9a). Due to topography and adjacent trees, the most visible features of the tank site from adjacent areas are the perimeter fencing, partial upper edges and some sides of the tanks, gates, and landscaping including many trees.

Darrell Tanks site is developed along the western boundary of the Town and is a relatively flat utility lot located at a highpoint in the topography. The tank site has a 12-foot-wide gated driveway from Darrell Road. The Project is proposed for the southern half of the tank site. Darrell Tank #3 is located on the northern half of the tank site, which will remain unchanged with the Project except for below grade piping modifications and six tree removals recommended by the Arborist due to very poor tree health (See Figure 5). Darrell Tanks #1 and #2 are constructed on the southerly half of the Project Site with approximately 20 feet between them. Due to this close distance, views of both tanks together give an illusion of structural massing from certain vantage points that is larger than the individual massing of each of these structures: north or south views may appear 135 feet wide; east or west views appear 100 feet wide from some vantage points. Existing tanks are set back from Darrell Road approximately 200-feet to the west of the Darrell Road public right-of-way and the tanks are not visible from Darrell Road.

Approximate structural setback distances in linear feet (LF) to the closest surrounding structures and land uses in the Project Vicinity are listed in Table I-1 as follows:

Table I-1. Darrell Tank Adjacent Land Use

Direction	Structure	Approximate Distance (Linear Feet)
North	PG&E electrical substation	200 LF from Tank #2
	Low-density Residential	160 LF from Tank #2
East	Low-density Residential	120 LF from Tank #1 115 LF from Tank #2
Southeast	Low-density Residential	75 LF from Tank #1
West	SFPUC Property and Public rights-of-way for SR-35	50 LF from Tank #2
	I-280 northbound lanes	160 LF from Tank #2
	Crystal Springs Golf Course, eastern edge	300 LF from Tank #2

Numerous trees are growing on the Project Site and provide a nearly continuous canopy which includes 76 larger trees subject to the Town's Tree Ordinance. The Tree Ordinance designates trees with a 12-inch diameter or greater as "Protected" and removals of larger trees are subject to tree removal permit requirements. The arborist report (Appendix F) assesses existing tree health ranging from very poor to good and 37 of these trees are in poor or very poor health requiring treatment or removal with the Project for safety; seven of the 37 trees proposed for removal are Coast Live Oak, a native species. All other species on the tank site are exotic:

Table I-2. Existing Tree Health on Project Site

Overall Condition Rating	Number of Trees
Good	16
Fair	23
Poor	34
Very Poor	3
Total Trees: 76	

The existing mature landscaping and variable topography of the Project Site and surrounding area currently block most direct full views of existing structures on the tank site from nearby and distant off-site vantage points and the tank site is not considered an open ridgeline. Site photos, (Figures 9d through 9e), show partial views of existing tanks and utilities structures from distant vantage points mainly consist of top edges and partial sides of existing tanks and the other various existing utilities as well as the perimeter fence. The entire outline of the existing tanks cannot be seen from distant off-site vantage points. Since access to the Project Site is exclusively for Town staff and utility purveyors, the existing developed conditions on-site at ground level are not included in public views.

Due to topography and location, and siting of existing structures and landscaping (including perimeter fencing, the cell tower, trees) and as shown in the site photos in Figure 9a, there are no existing scenic views from the single-family residences adjacent to the east looking west. Gaps in landscaping, trees above the perimeter fences provide limited direct line of site and visual corridors to upper portions of the existing utility structures and tanks from the Local Vicinity, which have been part of the general landscape of this area since the mid 1950's. There are no other views in the Project Vicinity.

Regulatory Setting

County of San Mateo

The County of San Mateo General Plan designates the area along I-280 and SR-35 and the open space west of these roadways in the vicinity of the Project as a Scenic Corridor. The County's Visual Quality Element provides Goals and Objectives which are intended to implement visual resource protection related to the State Scenic Highway Designation of I-280 and strive to regulate adjacent landform, vegetation, and built environment to protect scenic views. The County defines Scenic Corridor as "land

adjacent to a scenic road right-of-way which, when seen from the road, provides outstanding views of natural landscapes and attractive man-made development.” I-280 has been designated as a Scenic Highway in the vicinity of the Project since April 1980. California’s Scenic Highway Program was established in 1963; California Department of Transportation (Caltrans) is the trustee agency, and the program is implemented through local agency regulations. Caltrans’ list of scenic highways closest to the Project include the following:

- Junipero Serra Freeway – I-280 (from Millbrae to Santa Clara County)
- Skyline Boulevard – SR-35 (from State Route No. 92 to Santa Clara County)

Some related goals and objectives from the County’s General Plan pertaining to the Project are listed in Table I-5:

Town of Hillsborough General Plan and Municipal Code of Ordinances

The purpose of the Land Use Element is to plan for and shape the future physical development of Hillsborough and to preserve and enhance the current quality of life, so that the Town can remain a low-density residential community with a unique character. Policies applicable to aesthetics for the proposed Project follow:

- Policy LU-1.1: Maintain the character of the Town’s neighborhoods.
- Policy LU-1.2: Promote property and landscape improvements and maintenance.
- Policy LU-1.4: Ensure that lighting on private and public property is designed to avoid illuminating adjacent properties and public rights-of-way and does not contribute to an overall increase in the ambient lighting level of the community.
- Policy LU-2.4: Ensure that construction projects are completed in a timely manner with minimal impact on surrounding residences, including minimizing the visual impacts related to the on-site location of sanitary facilities, construction materials and debris, and recycling materials.

The Town’s Open Space and Conservation Element of the General Plan indicates that trees are important features of Hillsborough and that they contribute to the existing character of the community and are important visual resources. The Town’s Zoning Code provides regulations for tree removals. For these reasons, trees, especially larger mature trees and tree groves are considered significant visual resources in the Town of Hillsborough. The Open Space and Conservation element outlines programs to conserve, develop, and enhance the natural and historical resources of the community. Policies and actions applicable to aesthetics for the Project are listed in Table I-6:

Discussion

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact with Mitigation Incorporated. A scenic vista is defined in the San Mateo General Plan as a publicly accessible viewpoint that provides expansive views of a highly valued landscape with public view being the range of vision from a public road or other public facility. County of San Mateo General Plan policies are intended to protect a scenic vista in this regard by managing

topographic modification from grading, retention of native plant species, and structural appearance. In addition, the Town's General Plan attributes visual quality to trees within the Town and enforces policies related to preservation of open space, natural species retention, tree removals, and landscaping, which contributes to the scenic vista.

Open space and the scenic highway west of the Project Site is within a Scenic Corridor designated by the County of San Mateo. The Project Site is on the edge of the Scenic Corridor and views of the western boundary of the Town and the Project Site are part of the scenic vista and public view from portions of I-280 and Crystal Springs Golf Course, which are distant views. Specifically, the western boundary of the Project Site is part of the general landscape, scenic vista, view from the Scenic Corridor looking east due to higher AMSL ground elevation of 735 feet at the Project Site. Views from SR-35 and of the county slope are not visible from these distant vantage points. Localized public views of the utility easement and county slope along the western edge of the Project include the perimeter fence, upper tank, cell tower, utilities and enclosures, and trees on the tank site which are currently visible and part of the public view from I-280 northbound lanes west of the Project, as shown in Figure 10, but are not visible within the context of distant views comprising the scenic vista.

Changes proposed with the Project are included on Figure 3, Proposed Site Plan, which shows a retaining wall southwest of the new tank along the county slope, approximately 130 feet long and curved with varying heights up to maximum height of 5-feet tall. The height of the retaining wall complies with height restrictions of the Town's Municipal Code. A curved retaining wall is also proposed southeast of the new tank, approximately 92 feet along an opposite curve and varying up to 3-feet tall. These retaining walls arc in the same direction as the new circular tank to provide a larger flat pad that accommodates the larger circumference tank foundation, inlet/outlet piping, maintenance access, and increased storage of the new 24-foot-tall tank that will make the Town's water system more efficient. Plans indicate views of the retaining walls will be buffered with existing and proposed landscaping. Tank Sections shown in Figure 4 show Project consistency between existing and proposed tank elevations: That the ground elevation of the new tank pad will remain at elevation 735 AMSL after earthwork and construction for the Project is complete and that the height of the tank measured from the ground up to the outer top edges will be 24-feet high.

As shown in Figure 5, the Project will require a total of 10 tree removals immediately west and southwest of the new tank. There will also be a total of 12 tree removals to east and northeast of the new tank. Of the 22 trees that will be removed with the Project, all are in documented poor or very poor condition with the exception of one Coast Live Oak in fair condition and two Coast Live Oak in good condition. Landscape replacements shown in Figure 6, Conceptual Landscape Plan, will be with native species and include one multi-stem 24-inch box *Quercus agrifolia* (Coast Live Oak) east of the tank and a total of 26 small trees along the perimeter of the tank site. Due to existing canopy size and locations of the remaining trees, plant replacements with native species listed in Table I-2 are the largest container size that the Project Site could feasibly accommodate. Anticipated growth rates of these species will all be moderate, approximately 12 inches to 24 inches per year (Callander 2021). Temporary landscape irrigation will be provided during the first year for establishment of the new

plantings. Proposed landscaping is anticipated to grow to mature sizes indicated in Table 1-3 with no need for permanent irrigation. Native species plantings are intended to enhance the existing visual buffer provided by existing landscaping close to ground level and buffer public views of the new tank and retaining wall looking up slope and northeasterly from I-280 and SR-35.

The visual simulation of the Project provided by Callander (See Figure 10, Visual Simulation) reveals I-280 northbound highway views with slightly overall increased tank width showing along the top edge of the new tank visible above the existing trees with the new, larger, green tank and fewer tall trees in front of the tank extending into the skyline. All remaining Project Site structures and fencing remain unchanged in the visual simulation. Review of Project plans indicates compliance with the San Mateo County Scenic Corridor as outlined in Table I-3 below as well as compliance with the Town's Aesthetic Policies in Table I-4. Project landscaping will buffer views from close vantage points, which are immediately up slope along I-280. For the reasons stated above, the Project will have less than significant impacts on distant views of the scenic vista. If exterior lighting is incorporated into final plans, lighting will comply with the Town's Codes and Ordinances pursuant to Mitigation Measure AES-1. Exterior coating on the Project will be pursuant to AES-2 to reduce light and glare and would be in an earth tone (green) that blends with the existing taller perimeter trees. For these reasons, the Project will not have significant impacts on a scenic vista with the incorporation of mitigation measures for the Project.

Table I-3. Trees for Removal

Tag Number	Species	Height (feet)	Canopy Width (feet)	Health Condition*
Western Site Boundary				
<i>Removals Recommended Due to Poor Condition**</i>				
25	Monterey Pine	25	4	Very Poor
32	Blackwood Acacia	28	30	Very Poor
34	Tasmanian Blue Gum	80	25	Very Poor
40	Monterey Pine	55	13	Poor
44	Monterey Pine	35	18	Poor
<i>Removals Required for Project</i>				
27	Tasmanian Blue Gum	50	30	Poor
28	Monterey Pine	65	40	Poor
29	Tasmanian Blue Gum	25	9	Poor
30	Monterey Pine	45	30	Poor
31	Coast Live Oak	18	16	Fair
Eastern Site Boundary				
<i>Removals Recommended Due to Poor Condition**</i>				
8	Monterey Pine	70	60	Poor
62	Monterey Pine	65	30	Poor
63	Monterey Pine	75	90	Poor
72	Coast Live Oak	35	25	Poor
<i>Removals Required for Project</i>				
9	Monterey pine	65	55	Poor
14	Coast Live Oak	40	25	Good
15	Coast Live Oak	40	30	Poor
16	Coast Live Oak	40	25	Fair
17	Monterey Pine	60	25	Poor
18	Coast Live Oak	16	16	Poor
19	Monterey Pine	25	25	Poor
71	Coast Live Oak	40	30	Good

* Overall Health Condition - Average of Health & Structural Ratings (0-100% each)

** Remove tree due to tree condition of roughly 25% overall condition rating or less, and/or elevated risk of tree part failure and impact with ground targets within 1 year per TRAQ risk rating protocols.

Table I-4. Replacement Landscaping

Quantity	Species	Type	Planted Size	Mature Size*
East Side of Project				
1	California Live Oak, Multi-Trunk Oak Tree <i>Quercus agrifolia</i>	tree	24" box	35-60'h x 25-70'w
14	Holly Leaf Cherry <i>Prunus ilicifolia</i>	large shrub/ small tree	5 Gallon	10-30'h x 10-25'w
8	California Coffee Berry <i>Rhamnus californica</i>	shrub	5 Gallon	6-10'h x 6-10'w
11	Toyon <i>Heteromeles arbutifolia</i>	large shrub/ small tree	5 Gallon	10-20'h x 8-15'w
West Side of Project				
3	Holly Leaf Cherry <i>Prunus ilicifolia</i>	large shrub/ small tree	5 Gallon	10-30'h x 10-25'w
10	California Coffee Berry <i>Rhamnus californica</i>	shrub	5 Gallon	6-10'h x 6-10'w
13	Toyon <i>Heteromeles arbutifolia</i>	large shrub/ small tree	5 Gallon	10-20'h x 8-15'w

* Growth rates will all be moderate: assume 12-24" per year.

Table I-5. County of San Mateo Scenic Corridor Policies and Project Commitments

Policy Number	Policy Statement	Project Commitment
4.1a Protection of Visual Quality	Protect and enhance the natural visual quality of San Mateo County	The Project design will incorporate several methods to protect and enhance the natural visual quality. Landscaping plans will thoughtfully and effectively replace exotic species with native trees and shrubbery that will easily adapt to site conditions and successfully achieve mature size to provide a visual buffer of proposed structures from vantage points at lower elevations. Proposed landscaping along the western edge of the Project closest to the scenic corridor will buffer structure edges and smooth transitions to surrounding vegetated areas. AES-2: Exterior coatings will be applied to minimize light and glare and painted an earth tone color (green) so that the Project blends with the surrounding area.
4.3 Protection of Vegetation	Minimize the removal of visually significant trees and vegetation to accommodate structural development	10 of the 76 trees on site are proposed for removal along the western boundary of the Project. Half of these are recommended for removal for safety due to very poor health and only one is in fair condition as recommended by the arborist report (Appendix F). Proposed landscaping with native species will result in a visually significant buffer along the western edge of the Project. Mitigation (See Section IV Biological Resources Mitigation Measures) will be in place to protect remaining trees and tree removals will be implemented

		pursuant to requirements of the Town's established process for Tree Removal Permits.
4.21 Utility Structures	Minimize the adverse visual quality of utility structures, including roads, roadway and building signs, overhead wires, utility poles, T.V. antennae, distributed energy resources, solar water heaters, and satellite dishes.	The fenced primary access road to the Project Site is located on Darrell Road and is not seen from the scenic corridors. A temporary dirt access road will be groomed and utilized for the Project from SR-35 during construction and restored to pre-project conditions after Project completion. No new signage is proposed. Visibility of the new tank will increase however this increase is not considered significant because the proposed tank height will not increase. No utility structures are proposed. Water tanks at the Project Site will remain visible from the scenic corridors. The proposed retaining walls will include landscape buffers between these structure and adjacent properties and easements.
4.22 Scenic Corridors	Protect and enhance the visual quality of scenic corridors by managing the location and appearance of structural development.	With the Project in place, the tank site will remain similar to existing conditions in regard to visibility of the tanks and partial views of the new tank and ancillary structures through gaps in perimeter landscaping. Project design will incorporate several methods to blend the new tank with the existing view of the public landscape visible from the Scenic Corridor: Existing and proposed pad elevations will remain the same and there is no proposed change in height for the new tank. Landscaping plans will be thoughtfully and effectively incorporate trees and shrubbery on the Project Site and in areas visible from the scenic corridor to buffer the edges of the tank and retaining walls from lower elevations and smooth transitions to surrounding vegetated areas. Mitigation Measure AES-2: Exterior coatings will be applied to minimize light and glare and painted an earth tone color (green) so that the Project blends with the surrounding area.
4.26 Earthwork Operations	Keep grading or earth-moving operations to a minimum. Where grading is necessary, make graded areas blend with adjacent landforms through the use of contour grading rather than harsh cutting or terracing of the site.	The Project design for the new tank will incorporate the flat footprint on the developed site from the two existing tanks to be removed. The proposed pad elevation will remain consistent with the existing pad elevations to minimize impacts associated with grading and impacts to existing landscaping. Site soils will require on-site amendment for stabilization and there will be no change in existing AMSL elevations. Lower profile native plant species will be planted to buffer views of proposed retaining walls and blend these areas with the adjacent slope and existing landscaping.
4.28 Ridgelines and Skyline	Discourage structures on open ridgelines and skylines, when seen as part of a public view in order to preserve visual integrity. Allow structures on open ridgelines and skylines as part of a public view when no alternative building site exists. Require structures on ridgelines in forested areas,	The Project would not substantively change public views of an open ridgeline or significantly change public views of the skyline associated with the Project Site. Portions of the tops and sides of the existing Darrell Tanks are visible through existing perimeter vegetation from surrounding locations. Existing perimeter vegetation buffers views of the tanks. Tree removals will primarily

	which are part of a public view to: (1) blend with the existing silhouette; (2) not break or cause gaps within the ridgeline silhouette by removing tree masses; and relate to the ridgeline form. Define public view as a range of vision from a public road or other public facility.	consist of existing trees in poor and very poor condition. A The ground elevation of the tank is required for the continued use of the site for water storage and to provide adequate water pressure for fire flow because the Darrell Tanks rely on gravity to move water downslope through pipes. The existing and proposed tanks are not located on an open ridgeline and do not obstruct views from the scenic corridor. The Project design will incorporate several methods to blend the tanks with the silhouette of the surrounding residential area.
4.29 Trees and Vegetation	Preserve trees and natural vegetation except where removal is required for approved development or safety. Replace vegetation and trees removed during construction wherever possible. Use native plant materials or vegetation compatible with the surrounding vegetation, climate, soil, ecological characteristics of the region and acceptable to the California Department of Forestry. Provide special protection to large and native trees.	An arborist report for the Project is provided in Appendix F with recommendations for tree removals and protections for the remaining trees, the Town's permit requirements will be implemented for tree removal, and native trees and landscaping will be incorporated into the finished Project.
4.30 Landscaping and Screening	Provide a smooth transition between development and adjacent forested or open space areas through the use of landscaping. Limit landscaping in open grasslands to areas immediately surrounding structures. Where it is appropriate to screen uses from view, use natural vegetation rather than solid fencing. Install existing overhead distribution lines underground where they are required to be relocated in conjunction with street improvements, new utility construction, etc. Consider exceptions where it is not physically practical due to topographic features; however, utilities should not be substantially visible from any public road or developed public trail.	Landscaping plans will thoughtfully and effectively incorporate trees and shrubbery on the Project Site and in areas near scenic corridors to smooth transitions to surrounding vegetated areas.
4.48 Topography and Vegetation	Design structures which conform to the natural topography and blend rather than conflict with the natural vegetation.	Ground elevation will be returned to pre-project AMSL elevation. Replacement trees will be planted.
4.49 Scale	Design structures which are compatible in size and scale with their building site and surrounding environment, including adjacent man-made or natural features.	Overall scale of structures will remain similar with each of the two existing tanks to be removed measuring 60 feet in diameter and the single new Project tank measuring 120 feet in diameter. Tank height will remain at 24-feet high.
4.52 Colors and Materials	Depending on the design problems of the site, use colors and materials which: (1) blend with or complement the surrounding natural environment, (2) do not dominate or overpower the site, (3) are compatible	Mitigation Measure AES-2: Exterior coatings will be applied to minimize light and glare and painted an earth tone color (green) so that the Project blends with the surrounding area.

	with the size, scale, and architectural style of the structure, and (4) with the exception of greenhouses, are not highly reflective	
4.53 Height	Limit the height of structures or appurtenances in forested areas so as not to exceed the height of the forest canopy. Limit the height of structures in grassland areas in order to maintain a low horizontal profile. Allow distributed energy resources, and chimneys to extend beyond these height limits where required for safety or efficient operation	Height of the new tank is limited to that of the existing tanks – 24 feet.
4.54 Accessory Structures	Design accessory structures to be: Architecturally compatible with main structures; and Where feasible, located in the immediate vicinity of main structures.	The plans for the Project show appurtenances will be constructed immediately adjacent to the new tank.
4.56 Building Setbacks	Prevent the obstruction of important views by setting buildings in rural scenic corridors back from the road right-of-way, unless topographic features or the size of the site makes it infeasible or unnecessary.	The existing tanks and Project site are not located in a rural area do not obstruct views from the scenic corridor. The new tank placement will be similar to Tanks #1 and #2 and significant structural setbacks from public ROW will be retained with the Project; therefore, substantive impact on view is not anticipated.
4.58 Tree and Vegetation Removal	Allow the removal of trees and natural vegetation when done in accordance with existing regulations. Prohibit the removal of more than 50% of the tree coverage except as allowed by permit.	The existing 76 trees on site provide a continuous canopy. The Project proposes removal of 22 trees and will not remove more than 50% of tree coverage, the Town's Tree Ordinance will be implemented, and trees and landscaping will be incorporated into the finished Project.
4.59 Views	To the extent practicable, locate development in scenic corridors so it does not obstruct views from scenic roads or disrupt the visual harmony of the natural landscape.	The new tank is located on a site that is currently developed with three water tanks. The tanks on the Project site do not obstruct views from the scenic highway and visual harmony will not be altered from existing conditions with the finished Project.
4.60 Outdoor Lighting	Minimize exterior lighting in scenic corridors and, where used, employ warm colors rather than cool tones and shield the scenic corridor from glare.	If lighting is installed with the Project, Mitigation Measure AES-1: Project design shall incorporate minimal exterior lighting with warm tones that is downlit.
4.61 Roads and Driveways	Design and construct new roads, road improvements and driveways to be sensitive to the visual qualities and character of the scenic corridor, including such factors as width, alignment, grade, slope, grading and drainage facilities. Limit number of access roads connecting to a scenic road to the greatest extent possible. Share driveways where possible to reduce the number of entries onto scenic roads.	The fenced primary access road to the Project Site is located on Darrell Road and is not seen from the scenic corridors. A temporary dirt access road will be utilized for the Project from SR-35 during construction and returned to pre-project conditions upon completion of the Project. Substantive changes to the dirt access are not proposed.
4.62 Parking and Paved Areas	Integrate paved areas with their site, encourage the use of alternative paving technologies that minimize hardscape, and landscape and/or screen them to reduce visual impact from the scenic corridor.	Parking and paved areas will not be visible from the scenic corridor due to topography. Permeable paved surfaces will be installed with the Project to the greatest extent feasible.

4.63 Storage Areas	Screen areas used for the storage of equipment, supplies or debris by fencing, landscaping or other means so they are not visible from scenic roadways, trails, parks, and neighborhoods.	Implement General Plan Policy LU-2.4: Ensure that construction projects are completed in a timely manner with minimal impact on surrounding residences, including minimizing the visual impacts related to the on-site location of sanitary facilities, construction materials and debris, and recycling materials.
4.64 Utilities in State Scenic Corridors	Install new distribution lines underground. Install existing overhead distribution lines underground where they are required to be relocated in conjunction with street improvements, new utility construction, etc. Consider exceptions where it is not physically practical due to topographic features; however, utilities should not be substantially visible from any public road or developed public trail.	Pipes and infrastructure related to the new tank will not be visible from the scenic corridor. Changes are not proposed to other existing on-site utilities.
4.65 Utilities in County Scenic Corridors	Install new distribution lines underground. Consider exceptions for certain circumstances including, but not limited to, financial hardship, topographic conditions or land use conflicts.	Pipes and infrastructure related to the new tank will not be visible from the scenic corridor. Changes are not proposed to other existing on-site utilities.
4.67 Fences	Encourage fences which minimize visual impact.	Permanent fencing installed at the completion of the Project will be returned to pre-project conditions.

Table I-6 - Town of Hillsborough Aesthetic Policies and Project Commitments

Policy Number	Policy Statement	Project Commitment
The Open Space and Conservation element outlines programs to conserve, develop, and enhance the natural and historical resources of the community. Policies and actions applicable to aesthetics for the proposed Project follow:		
Policy OSC-3.3:	Continue to preserve and protect valuable native tree life, such as redwoods, oaks and bays, while recognizing the need to allow for the gradual replacement of trees to provide for on-going natural renewal.	The Project will strive to preserve and protect native trees at the site with the implementation of the Tree Removal plan, Tree Protection Measures MM BIO-9 and the Landscaping and Irrigation plans.
Policy OSC-3.4:	Enforce the Tree Removal Ordinance and require development proposals to provide adequate information to all Town staff to assess the project's impact on tree removal.	Information for assessment of the Project's impact on tree removal is included in the aesthetics section of the ISMND for the Darrell Tank Project and the Arborist report prepared for the Project.
Policy OSC-3.5:	Require property owners to replace removed native trees in a manner that maintains the visual character of the property and takes neighboring properties into consideration. The replacement trees may be located on other parts of the lot, as approved by the Town.	The landscaping plan will be designed to maintain the visual character of the property and take neighboring properties into consideration.
Policy OSC-3.7:	Encourage the removal of non-native tree species, such as eucalyptus and acacia trees, that increase hazards for the community. Removed non-native trees should be replaced with native trees.	Trees in poor condition at the site will be removed.
Policy OSC-3.8:	Continue to preserve the quality of trees in open space areas and in public landscaped areas.	Project will incorporate Tree Removal plan, Tree Protection Measures and Landscaping plan
Action OSC-3.2:	The Public Works Department will be responsible for maintaining the health of trees on public property as necessary. When necessary, the Department will employ the services of a registered forester or arborist. Trees on private properties should be maintained by property owners so that the long-term health and welfare of all the trees in the Town can be assured.	<p>BIO-9: The following tree protection measures shall be implemented during Project construction:</p> <ul style="list-style-type: none"> • All necessary pruning shall be performed by an ISA Certified Arborist using ANSI A300 pruning standards to perform branch and limb removal, and/or branch and limb reduction pruning on trees being retained to reduce endweight and provide clearance between canopies and proposed work airspace. • Install chain link fencing with signage around tree root zones shall be installed as specified by the Arborist to establish tree protection zones or root protection zones to prevent injury to trees. • No substances, materials, tools, supplies, liquids, wastes, etc. are to be dumped or stored within the tree protection zones, even temporarily. • Wrap trunk buffers as specified by the Arborist for each tree being protected in place on site and located in very close proximity to the chain link root protection zones fencing routes. • Damage to any tree during construction shall be reported to the Arborist, and Project contractors shall treat the tree for damage in the manner specified by the Arborist. • Establish and maintain offsets of at least 25 to 30 horizontal feet, where possible, between all trench route edges and all tree trunk edges of trees being retained (e.g., storm drain, area drain boxes, gas, water, sewer, cable, electrical, etc., including irrigation piping). • The Arborist shall inspect the perimeter of the area of ground disturbance and pipeline alignments within the site to determine whether construction could damage the roots of retained trees. The Arborist shall make

		<p>appropriate recommendations to ensure the roots of retained trees are not significantly damaged.</p> <ul style="list-style-type: none"> • Spray off foliage of all trees being retained on a once per month basis using water through a high-power garden hose to wash both the upper and lower surfaces of the foliage to keep the gas portals (stomata) unclogged for better gas exchange, which is crucial for normal tree function. • Arborist shall determine temporary areas of irrigation for tree retention and replacements
Municipal Code of Ordinances applicable to aesthetics for the proposed project follow:		
<p>Chapter 14.04 - TREE REMOVAL</p> <p>14.04.040 - Procedure—Improved land other than subdivisions.</p>	<p>A. No clearing for the construction of any improvement on lands other than for subdivision or division of lands shall be permitted or building permit issued without the site plan having first been approved by the city engineer or his authorized representative. Tree removal shall be planned and accomplished so as to preserve trees and other desirable plant life native to the area. Trees shall not be destroyed or removed solely for the sake of ease of construction. Only those trees may be removed which the city engineer deems necessary or desirable for the construction of improvements and the economic enjoyment of the property and the preservation of its natural setting.</p> <p>B. Tree removal on improved land, not described in subsection A of this section, shall comply with the provisions of Chapter 17.56.</p> <p>C. Any additional planting proposed or required by the city engineer shall meet all the provisions of this code.</p> <p>D. Notwithstanding the provisions of subsection A of Section 17.56.050, the city engineer may issue a permit for the removal of a tree described in such subsection A, without review by the architecture and design review board, if the owner or occupant of the real property on which the tree is located presents a written opinion from a certified arborist that, because of disease or damage or danger to persons or property, the tree needs to be removed within the next thirty days.</p>	<p>The site plan will be approved by the city engineer or authorized representative prior to clearing for construction. A tree removal plan has been prepared by an arborist following analysis of the 76 onsite trees. 13 trees are recommended for removal for Project construction and 9 trees are recommended for removal due to poor health conditions.</p> <p>BIO-8: Prior to removal of regulated trees, obtain Town of Hillsborough tree removal permission. Prior to Project grading all areas of disturbance shall be surveyed and staked and a field count performed to confirm the exact number of trees to be removed. Removed trees shall be replaced pursuant to the approved landscape plan for the Project at a minimum ratio of 1:1 utilizing 30-inch box containers.</p>
<p>Chapter 17.56 – LANDSCAPING</p> <p>17.56.050 - Landscaping projects subject to review and permitting.</p>	<p>A. Removing a tree that has a trunk (or multiple trunks) with a total diameter of thirty-six inches or more measured at four feet, six inches above natural grade. (Such tree removal shall also comply with Title 14.)</p> <p>B. Adding or moving fifty cubic yards or more of dirt or soil.</p> <p>C. Rehabilitating more than ten thousand square feet of landscaped area.</p>	<p>See previous response</p>
<p>Chapter 17.56 – LANDSCAPING</p> <p>17.56.060 - Design review</p>	<p>The applicant shall obtain design review approval of the landscaping plan prior to the issuance of any building permit for the construction, reconstruction, or remodel of any structure being built in connection with the installation of the landscaping.</p>	<p>SC AEC-3: Landscaping and temporary irrigation system plans will be submitted for design review and approval.</p>
<p>Chapter 17.56 – LANDSCAPING</p>	<p>After securing design review approval as set forth in Section 17.56.060, the applicant shall file a written</p>	<p>SC AEC-3: Landscaping and temporary irrigation system plans will be submitted for design review and approval.</p>

17.56.070 - Permit(s) for landscaping	application with the building department to obtain the appropriate permit(s) required for the installation of the landscaping. The application for permit(s) shall also include an irrigation system plan that provides for efficient use of irrigation by grouping high water use plants together. Approved landscape permits associated with construction projects subject to a building permit are required prior to the granting of a final approval on a construction permit. When a permit for removal is issued the entire tree must be removed to within twelve inches of grade.	
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b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact with Mitigation Incorporated. Refer to I a. Project plans indicate that 10 tree removals are proposed between the Project Site and I-280, the state scenic highway. The arborist report on existing landscaping indicates all but one of these trees closest to the perimeter on site are in poor or very poor condition and will be removed. The Project will not impact rock outcroppings or historic buildings within a state scenic highway. The Project will implement replacement landscaping including 16 small trees along the western boundary.

Proposed replacement landscaping is shown in Figure 6, Conceptual Landscape Plan and includes a total of 16 small trees, one Coast Live Oak and 10 large shrubs to be planted to fill in landscape setbacks and enhance visual buffers blocking local lines of sight from the ground level on adjacent land: The existing landscaping within adjacent easements and on private lots will not be disturbed. Project plans show that the height of the Project will not exceed existing tank heights and there will be no substantial change the skyline associated with the Project Site. The proposed tank has a larger diameter and has more mass than each of the two individual tanks. However, the separation between the two existing tanks is 20 feet and the existing tanks appear as one continuous tank from many vantage points. For this reason, proposed mass of the Project is not substantially larger than the length and width measurements of the existing development of the site from North/South and East/West. Tank setbacks from the east and west property lines will be reduced. This will reduce the distance between the new water tank and existing residential structures; approximate proposed distances between the Project and existing adjacent structures will remain substantial with the Project and are shown on Figure 7 and listed as follows:

- North: PG&E electrical substation (200 LF) and low-density residences (120 LF)
- Southeast: Low-density Residential (75 LF)
- East: Low-density Residential (50 LF)
- West: SFPUC Property and Public rights-of-way for SR-35 (40 LF); I-280 northbound lanes (150 LF) and eastern edge of Crystal Springs Golf Course (300 LF).

Perimeter landscaping will be enhanced close to ground level will be placed to buffer the views of the retaining wall and new tank from SR-35 and I-280 direct lines of sight and is not considered a significant impact. Implementation of Standard Condition AEC-3 will require Town design review approval of the landscaping plan prior to the implementation of the Project. With these measures and standard conditions, plans and policies, Project impacts to scenic resources would be reduced to less than significant.

- c) **In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Less Than Significant Impact with Mitigation Incorporated. Refer to I, a-b. The Project will be built in compliance with the County's Scenic Corridor policies and the Town's Aesthetic policies. Therefore, will not substantially degrade the existing visual character or quality of views from publicly accessible vantage points offsite; the replacement tank will remain partially buffered and direct full views of the new tank will not occur with existing and proposed landscaping. The Project will not result in substantially modified land use. With the incorporation of proposed mitigation measures, the Project will not conflict with land use regulations, such as zoning, resulting in significant impacts on scenic quality. The Project will reduce structural setbacks to the easterly and westerly property lines; however, setbacks between the proposed tank and existing adjacent structures will remain substantial. The Project will not increase structural height and will enhance site landscaping to buffer views from off-site vantage points. Table I-5 above outlines Project compliance with the San Mateo County Scenic Resources Ordinance and Table I-6 outlines Project compliance with Aesthetic Policies. Mitigation measure AES-1 and AES-2 will reduce potential impacts from light and glare to less than significance. For these reasons, impacts to scenic quality would be less than significant with mitigation incorporated.

- d) **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

Less Than Significant Impact with Mitigation Incorporated. The Town of Hillsborough reviews all Project plans for compliance with the local municipal code as well as building and safety code that must be implemented with all new construction. Title 12, Chapter 12.04, Section 12.12.050 of the Municipal Code pertains to exterior lighting, retaining walls and exterior treatment for projects that are visible from public right-of-way and implemented by the Town and states:

"Any outdoor fixture constructed by the Town or by another governmental entity on public property shall not be required to meet the requirements of this chapter but shall be designed, constructed and located as the director of public works or the director's designee, in consultation with the town's planning, engineering, public works and public safety staff, determines is appropriate in order to safeguard the health, safety and welfare of the residents of the town."

The municipal code states that light fixtures shall not exceed 8 feet in height. Mitigation Measure AES-1 requires that all exterior lighting be downlit if installed with the Project. Exterior coatings will be applied to minimize light and glare and in an earth tone so that the Project blends with the surrounding area pursuant to Mitigation Measure MM AES-2. For the reasons above, the standard application of the Town's plan check and inspection process and mitigation measures would reduce Project impacts from new lighting with the Project to less than significant.

Mitigation Measures

AES-1: Project design shall incorporate minimal exterior lighting with warm tones that is downlit.

AES-2: Exterior coatings will be applied to the new concrete tank during one of the final steps of construction to minimize light and glare from its surface and it will be painted in an earth tone color (green) so that the Project blends with the surrounding area.

See **BIO-8** and **BIO-9** for mitigation measures related to trees.

Standard Condition Plans, Programs, and Policies

AEC-3: Pursuant to Chapter 17.56 of the Town Municipal Code, design review and approval of the landscaping plan is required prior to final Project approval. The plans shall also include a temporary irrigation system plan and specifications plant monitoring until the new landscaping is established.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

II. AGRICULTURE AND FORESTRY RESOURCES

Environmental Setting

There are currently no areas mapped or in use for agricultural such as Prime Farmland, Unique Farmland or Farmland of Statewide Importance within the Town according to the General Plan. Likewise, there are no lands within the Town Plan Area that are designated Forest Land used for growing and harvesting timber. The Project Site has been developed with water tanks and utilities since the 1950's and the surrounding land within the Town of Hillsborough have been in use as low-density residential land use beginning in the late 18th Century. The Project is identified in the Water Master Plan and Capital Improvement Program (CIP) as a replacement tank needed for overall water system maintenance that will not increase the capacity of the Town's water system or result in indirect conversion of land from agriculture or forestry.

Regulatory Setting

The Farmland Mapping and Monitoring Program was established 1982 and administered by the State Department of Conservation, Division of Land Resource Protection for the purpose of conserving important agricultural resources in California. The program maps agricultural land as Prime Farmland,

Unique Farmland or Farmland of Statewide Importance. These designations are based on soil quality, growing season, location, and available water supply for growing crops. There are no areas mapped within the Town of Hillsborough Plan Area under FMMP. The General Plan and Zoning Code for the Town identifies open space within the Plan Area that is deed restricted as natural open space or will remain as open space under management of the Town. There is no Timberland Production Zone or designated Forest Land within the Town of Hillsborough Codes and Ordinances. Most of the Town's Plan Area is designated in the General Plan and Zoning Code for Low-density Residential land use and for Public Facilities and Services supporting residential land use. The Town's infrastructure has been developed specifically for low-density residential development. Farming and Forestry would be incompatible with the existing General Plan and Zoning of the Town and also incompatible with the existing development patterns.

Discussion

Would the project:

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

No Impact. The Project Site and surrounding area are designated by the Town of Hillsborough General Plan as Public Facilities and Services and is zoned as Residential. Implementation of the Project will increase the efficiency and reliability of the City's existing potable water system and no expansion is proposed. The Project will not indirectly result in increased density or conversion of any type of farmland. According to the California Department of Conservation Farmland Mapping and Monitoring Program, the Project Site and the Town of Hillsborough are identified as Urban and Built-up Land (CDC 2018). The residential land use designation and public facilities associated with the site are included in the definition of Urban and Built-up Land. The Town of Hillsborough General Plan indicates that portions of the Town were in use for agriculture, dairy and equestrian uses in the 18th century before the Town was incorporated and occupied by full-time residents. The Town resulted from the incorporation of estates situated in the countryside outside of the City of San Francisco in 1910 and was never mapped as Farmland - Prime Farmland, Unique Farmland or Farmland of Statewide Importance.

For the reasons above, there are no impacts on Farmland from the Project.

- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

No Impact. Refer to Response II a. The Project Site is not under a Williamson Act Contract (San Mateo County GIS Open Data, 2016). The California Land Conservation Act (Williamson Act) established a government program to protect agricultural resources, preserve open space land, and promote efficient urban growth patterns by establishing 10-year contracts with individual property owners to prevent rapid urbanization and conversion of agricultural land throughout California. The Town was incorporated with low-density residential development and has preserved 250 acres of land of which some is under deed restriction and can only be used for preservation. The General Plan indicates that

the Town is dedicated to preserving and managing open space. Any use of open space areas would be for recreation purposes.

For the reasons above, the Project will not conflict with existing zoning or agricultural use or a Williamson Act Contract and no impacts are anticipated.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The Project Site is not zoned for forest land, timberland or for Timberland Production as defined in PRC 12220 (g), PRC 4526 or Government Code Section 51104 (g). Public Resources Code Section 12220 (g) defines a forest as land that can support 10 percent cover of native tree species and allows management of one or more forest resources. The Project Site is fully developed with public utilities and has been in use with water tanks beginning in 1952. The site does not contain forest resources. Both the site and surrounding area are fully developed with urban uses. Public Resources Code Section 4526 defines timberland as land capable of growing a crop of trees for commercial purposes such as Christmas trees. The Project Site is not located in an area that would be compatible with commercial growing or where commercial growing would be allowed. Government Code Section 51104(g) defines timberland zoned for Timberland Production as land that is devoted to growing and harvesting timber and compatible uses.

The Project is consistent with the established zoning in the Town's Municipal Code and existing and planned land use patterns approved in the General Plan. The Project is proposed to accommodate water for existing and planned residences, schools, golf courses, and fire suppression needs that are identified in the Town's General Plan. The General Plan indicates that only residential, school, and recreational growth is expected to occur within the Town in the foreseeable future.

For the reasons above, the Project will not create significant additional demand for construction materials, or conflict with existing zoning leading to rezoning of forest land, timberland, or timberland zoned for Timberland Production.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. Refer to Responses II a, b, and c. The Project is intended to serve existing and planned growth identified in the General Plan as well as improve overall efficiency in the existing water system with no substantive increase in capacity. The General Plan indicates that the Town is mostly built out and a low rate of growth is anticipated into the future. Goals and policies of the General Plan promote preservation and maintenance of open space. Some of the Town's open space is restricted for preservation only.

For the reasons above, the Project will not result in the loss of forest land or conversion of forest land to non-forest use.

- e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

No Impact. See Responses II a through II e. The Project is a replacement tank proposed for construction within an urbanized area and does not involve changes to the existing environment resulting in the conversion of Farmland or forest land to other land use. The Project would not increase the capacity of the Town's water system or facilitate intensity or rate development that would result in conversion of Farmland or forest land.

For the reasons above, the Project would not involve changes to the existing environment resulting in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

III. AIR QUALITY

The analysis for Air Quality discussion questions is based on the Darrell Water Tank Replacement Project Air Quality, Greenhouse Gas and Energy Analysis Technical Memorandum provided by Ganddini Group, Inc. dated March 26, 2021 and included as Appendix A.

Environmental Setting

The Project Site is located in a residential area in the Town of Hillsborough in northern San Mateo County, which is part of the nine-county San Francisco Bay Air Basin (SFBAB). This part of the San Francisco Peninsula experiences persistent ocean breezes off the Pacific Ocean, circulating and pushing out many air pollutants, but Hillsborough is somewhat sheltered by higher terrain and, during stagnant air conditions, has degraded air quality along with the rest of the Bay Area. Primary nearby air pollutant sources include outdoor lawn equipment and vehicles traveling along adjacent regional thoroughfares, county streets, and the Town's circulation system in the Project's vicinity (General Plan Public Safety Element, 2005).

Regulatory Setting

Under the authority of the Federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (US EPA) establishes National Ambient Air Quality Standards (NAAQS), or maximum allowable concentrations, for six common air pollutants (also known as "criteria pollutants", because they are the only air pollutants for which specific air quality criteria have been set). The six criteria air pollutants under the CAA are ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), lead (Pb), and particulate matter of 10 and 2.5 microns in size (PM₁₀ and PM_{2.5}).

The Bay Area Air Quality Management District (BAAQMD) has jurisdiction over air quality in the SFBAB in accordance with the CAA and under the delegation of the California Air Resource Board (CARB) and the

US EPA. BAAQMD regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review activities involving all sources of air emissions. BAAQMD monitors air quality at numerous sites within the nine-county District, although not within Hillsborough. The closest air monitoring stations are in San Francisco to the north and Redwood City to the south.

Table III-1 shows the BAAQMD Air Quality California Environmental Quality Act (CEQA) Significance Thresholds for project-level analyses. For construction period air emissions impacts, the significance threshold for construction dust is based on using BAAQMD-prescribed construction dust controls. If these construction dust controls are implemented, then air pollutant emissions for construction activities would be considered by BAAQMD to be mitigated to a less-than-significant level.

Table III-1. BAAQMD Project-Level Air Quality CEQA Thresholds of Significance

Pollutant	Construction-Related	Operational-Related	
		Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)
Criteria Air Pollutants and Precursors (Regional)	Average Daily Emissions (lb/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NOx	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs - Projects other than Stationary Sources	None	Compliance with Qualified GHG Reduction Strategy OR 1,100 MT of CO ₂ e/yr OR 4.6 MT CO ₂ e/SP/yr (residents+employees)	
GHGs - Stationary Sources	None	10,000 MT/yr	
Risk and Hazards for new sources and receptors (Individual Project) *	Same as Operational Thresholds**	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million increased non-cancer risk of >1.0 Hazard Index (Chronic or Acute) Ambient PM _{2.5} increase > 0.3 ug/M ³ annual average <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor.	
Risk and Hazards for new sources and receptors (Cumulative Threshold) *	Same as Operational Thresholds**	Compliance with Qualified Community Risk Reduction Plan OR Cancer: >100 in a million (from all local sources) Non-cancer: >10.0 Hazard Index (from all local sources) (Chronic) PM _{2.5} : > 0.8 ug/M ³ annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor.	
Accidental Release of Acutely Hazardous Air Pollutants*	None	Storage or use of acutely hazardous materials locating near receptors or new receptors locating near stored or used acutely hazardous materials considered significant	
Odors*	None	5 confirmed complaints per year averaged over three years	

Notes:

Source: Bay Area Air Quality Management District California Environmental Quality Act Air Quality Guidelines, May 2017.

ROG = reactive organic gases; NOX = oxides of nitrogen; PM10 = respirable particulate matter of 10 micrometers or less in diameter; PM2.5 = fine particulate matter of 2.5 micrometers or less in diameter; CO = carbon monoxide; lb/day = pounds per day; ppm = parts per million

- * The receptor thresholds were the subject of litigation in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369. In their decision, the California Supreme Court held that: "CEQA generally does not require an analysis of how existing environmental conditions will impact a project's future users or residents . . ." but upheld "evaluating a project's potentially significant exacerbating effects on existing environmental hazards . . ." The Supreme Court also determined that CEQA requires an analysis of exposing new receptors to existing environmental hazards in some specific cases (i.e., certain airport and school construction projects, and some housing development projects) but that these "constitute specific exceptions to CEQA's general rule requiring consideration only of a project's effect on the environment, not the environment's effects on project users." However, the Supreme Court also indicated that nothing in CEQA prevents local agencies from considering the impact of locating new development in areas subject to existing environmental hazards.
- ** The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

BAAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources, and it has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs), with the most recent issued in April 2017 (the 2017 Clean Air Plan). AQMPs are prepared with the cooperation of the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). The 2017 Clean Air Plan strives to improve Bay Area air quality and protect public health by defining a control strategy to reduce emissions and ambient concentrations of air pollutants, reducing exposure to air pollutants the pose the greatest health risk, and reducing greenhouse gas emissions to protect the climate.

Projects that are consistent with the population forecasts identified by ABAG are considered consistent with the 2017 Clean Air Plan's transportation and growth-related goals and policies, since ABAG's projections form the basis of the land use and transportation control strategies of the Plan. The Plan also assumes that general development projects will include feasible strategies (i.e., mitigation measures) to reduce emissions generated during construction and operation and bases estimates of future emissions taking into account State policies and regulations already adopted or likely to be adopted and implemented over the next 10-15 years.

Discussion

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant with Mitigation Incorporation. BAAQMD has developed preliminary screening criteria to provide lead agencies with a way to identify whether a proposed project could result in potentially significant air quality impacts. The screening levels generally represent new development on undeveloped sites without any form of mitigation measures taken into consideration. If a proposed project meets all of the screening criteria, then the lead agency would not need to perform a detailed air quality assessment of project air pollutant emissions, and the construction of the project would result in a less-than-significant impact from criteria air pollutant and precursor emissions.

The following are the BAAQMD screening criteria:

1. The project is below the construction and operational screening size.
2. The project design and implementation include all BAAQMD Basic Construction Mitigation Measures.
3. Construction-related activities would not include any of the following:
 - a. Demolition.
 - b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously).
 - c. Simultaneous construction of more than one land use type (e.g., the project would develop residential and commercial uses on the same site).
 - d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
 - e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

The Project includes demolition of two existing water tanks and would be expected to exceed screening criterion 3.a. Therefore, the Project would not meet all BAAQMD screening criteria, and an air quality analysis was prepared. Construction-related emissions are estimated using the CalEEMod (Version 2016.3.2) software, which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The CalEEMod output is available in Appendix A.

As shown in Table III-2, potential construction emissions would be below all BAAQMD significance thresholds for construction equipment exhaust emissions. However, BAAQMD considers dust from construction activities to be a criteria air pollutant. In order to minimize construction period dust impacts, BAAQMD construction-period BMPs would need to be implemented. In addition, the Project will implement an ADMP, including BMPs for dust control, approved by BAAQMD in response to serpentinite found on the site as discussed in Section VII Geology and Soils.

Table III-2. Construction-Related Maximum Daily Pollutant Emissions

Source	Pollutant Emissions (pounds/day)						
	ROG	NOx	CO	PM10		PM2.5	
				Dust	Exhaust	Dust	Exhaust
2021	1.68	16.77	14.75	5.41	0.82	2.93	0.75
2022	1.41	13.82	12.81	5.52	0.66	2.96	0.61
2023	0.60	5.76	6.62	0.38	0.25	0.63	0.23
BAAQMD Thresholds	54	54	-	-	82	-	54
Exceeds Thresholds?	No	No	No	No	No	No	No

Notes: (1) Source: CalEEMod Version 2016.3.2

These BMPs shall be incorporated into a construction management plan (Plans and Specifications for the Project), per Town Municipal Code (chapter 15.26), as Mitigation Measure AIR-1, and shall be subject to Town approval prior to issuance of a grading permit or commencement of construction. Implementation of these dust control BMPs and the ADMP would reduce localized PM10 impacts due to fugitive dust and would be consistent with BAAQMD CEQA Guidelines; therefore, Project air quality impacts related to construction-period activities would be less-than-significant with mitigation.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant with Incorporation of Mitigation Measures. See Response III, a. The Project will not exceed criteria pollutant thresholds during the 18-month construction period. Since the Project will replace a similar land use no substantive long-term changes are proposed. BAAQMD considers dust from construction activities to be a criteria air pollutant. In order to minimize construction period dust impacts, BAAQMD construction-period BMPs would need to be implemented. For all Project-related demolition, site preparation or construction activity, construction contractors shall implement Mitigation Measure AIR-1 which incorporate BAAQMD-recommended best management practices, where applicable. These BMPs shall be incorporated into a construction management plan, per Town Municipal Code (chapter 15.26), and shall be subject to Town approval prior to issuance of a grading permit. Implementation of these measures would reduce localized PM10 impacts due to fugitive dust and would be consistent with BAAQMD CEQA Guidelines; therefore, Project air quality impacts related to construction-period activities would be less-than-significant with mitigation.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant with Incorporation of Mitigation Measures. See Responses III a. and b. The Project will incorporate BMPs to reduce emissions and would not emit substantive levels of other criteria pollutants. A sensitive receptor is generally defined as a location where human populations,

especially children, seniors, and sick persons, are located where there is reasonable expectation of continuous human exposure to air pollutants. These typically include residences, hospitals, and schools. Single-family residences are directly adjacent to the Project Site and generally surround the Project Site. The Project will create construction emissions during portions of weekdays (8 AM to 5 PM) during the 18-month construction period and would not represent continuous exposure for sensitive receptors to substantial pollutant concentrations.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant With Mitigation Incorporation. Odors associated with the Project would be from activities such as vehicle engine idling and paving operations that would be intermittent and localized in nature and would disperse quickly. BMPs for the Project provided in mitigation measure AIR-1, 6 include reduced idling times. Distances between the Project and the closest sensitive receptors are anticipated to remain large enough to reduce significant impacts. Therefore, the Project would not create objectionable odors affecting a substantial number of people and impacts would be less than significant.

Mitigation Measures

MM AIR-1: For all Project-related demolition, site preparation or construction activity, construction contractors shall implement the following BAAQMD-recommended best management practices, where applicable:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action

within 48 hours. The Air District 's phone number shall also be visible to help ensure compliance with applicable regulations.

9. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
10. All excavation, grading/site preparation, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
11. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
12. The simultaneous occurrence of excavation, grading/site preparation, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the number of disturbed surfaces at any one time.
13. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12-inch compacted layer of wood chips, mulch, or gravel.
14. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
15. Minimize the idling time of diesel-powered construction equipment to two minutes.
16. The Project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after- treatment products, add-on devices such as particulate filters, and/or other options as such become available.
17. Use low VOC (i.e., ROG) coatings beyond the local requirement (i.e., Regulation 8, Rule 3: Architectural Coatings).
18. Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emissions reductions of NOx and PM.
19. Require all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines.

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IV. BIOLOGICAL RESOURCES

The analysis for Biological Resources discussion questions is based on two reports prepared for the Darrell Water Tanks Replacement Project:

1. Biological Habitat Evaluation Report dated January 2021, which was completed for the Project Site by Vollmar Natural Lands Consulting (VNLC). This habitat evaluation was conducted to identify and characterize existing conditions, as well as to assess the potential for special-status species, sensitive habitats, and jurisdictional features to occur within the Project disturbance areas. The report is attached as Appendix B.
2. Initial Assessment of and Recommendations for Seventy-Six (76) Trees, dated February 10, 2021, was completed for the Project Site by Walter Levison, Consulting Arborist (WLCA). The initial assignment was to tag, map, photograph, and assess the 76 tree specimens measuring 4 inches of diameter or greater and include them in a formalized Excel tree data spreadsheet and PDF map markup. This report also includes maintenance and protection recommendations, and digital images of existing pre-project tree conditions. The report is attached as Appendix F.

Environmental Setting

The Project site straddles the boundary of the San Mateo and Montara Mountain 7.5' United States Geological Survey (USGS) topographic quadrangles, within the San Mateo land grant (no township, range, or section designations). The site is located along a prominent ridge crest where Hillsborough gives way to extensive open space within the northern Santa Cruz Mountains. The three existing water tanks are situated along leveled highly altered terrain which dips down on all sides outward from the tanks. Most vegetation within and immediately surrounding the study area is planted or otherwise highly altered by the influence of altered soils, topography and development. Areas to the west of the Project Site feature open space and expanses of natural habitats.

The existing site has many physical barriers which separate the site from natural habitats and open space. A chain link fence surrounds the parcel and study area and there is a locked gate at the entrance from Darrell Road and a secondary locked access gate near the southwest property corner. All adjacent parcels to the north, east, and south are developed with urban land use. SR-35 and I-280, regional four and eight-lane vehicular access, are contiguous with a sloped utility easement adjacent to the west of the site. To the west beyond the highways is the Crystal Springs Golf Course (approximately 300 LF West) and beyond that is Crystal Springs Reservoir (approximately 2,700 LF Southwest) and its associated watershed lands. The hill slopes surrounding the reservoir are preserved as open space to protect water quality. Natural habitats surrounding the reservoir and watershed lands include conifer forest, oak woodlands, shrublands, and grasslands—including sensitive serpentine grasslands are separated from the Project Site by considerable distance and physical barriers. A majority of the undeveloped watershed lands are designated by the USFWS as critical habitat for endangered species.

A habitat assessment survey was conducted within the study area on October 7, 2020 by VNLC Senior Ecologist Jake Schweitzer and VNLC Wildlife Biologist Linnea Neuhaus. During the survey, the ecologists traversed the entire study area on foot and recorded dominant plant species and common animal species, along with general ecological conditions and notable habitat features. The habitat conditions were assessed for potential to support special-status plants and animals. This included a search for habitat elements such as mammal burrow complexes, nesting potential for birds, and sheltering habitat for special-status amphibians and reptiles. The field survey also included a search for potential Jurisdictional Waters of the United States and/or the State of California. The reconnaissance-level survey was not followed up with a formal wetland delineation survey because no potentially jurisdictional features occur within the study area. There are no drainages, no springs, seeps, or other hydrographic features.

Prior to conducting field surveys, the Project ecologists compiled and reviewed existing information pertaining to the study area. Specifically, the ecologists compiled and reviewed the latest version of the California Natural Diversity Database (CNDDB) (CDFW 2020), the California Native Plant Society (CNPS) Inventory of Rare Plants (CNPS 2020), and a U.S. Fish and Wildlife Service (USFWS) Information Planning and Consultation System (IPaC) list (USFWS 2020). A map of CNDDB occurrence locations and designated critical habitat areas was prepared in order to analyze the proximity and habitat conditions of special-

status species with respect to the study area location and habitat types. Site aerial imagery, geology and soil maps, Project description, and general regional conditions were also reviewed prior to the site survey.

Regulatory Setting

Federal and State Regulations

Animal Species

Special-status animal species are defined as species listed by the USFWS and/or California Department of Fish and Wildlife (CDFW) as threatened or endangered, as well as those proposed for listing or that are candidates for listing as threatened or endangered. The listing of “Endangered, Rare, or Threatened” is defined in Section 15380 of the California Environmental Quality Act (CEQA) Guidelines. Section 15380(b) states that a species of animal or plant is “endangered” when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. A species is “rare” when either “(A) although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or (B) the species is likely to become endangered within the foreseeable future throughout all or a portion of its range and may be considered ‘threatened’ as that term is used in the Federal Endangered Species Act” (ESA).

Animal species are designated as “Species of Special Concern” or “Fully Protected” by the CDFW. Although these species have no legal status under the California Endangered Species Act (CESA), the CDFW recommends their protection as their populations are generally declining and they could be listed as threatened or endangered (under CESA) in the future. “Fully Protected” species generally may not be taken or possessed at any time. The CDFW may only authorize take for necessary scientific research and may authorize live capture and relocation of “fully protected” birds to protect livestock.

Birds

Birds are designated by the USFWS as “Birds of Conservation Concern.” Although these species have no legal status under ESA, the USFWS recommends their protection as their populations are generally declining, and they could be listed as threatened or endangered (under ESA) in the future.

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits “take” of protected migratory birds and any “harassment” of protected migratory bird nests which are active. The MBTA protects most birds and active bird nests found within this region.

Plants

Special-status plants include species, sub-species, and varieties that are designated rare, threatened, or endangered as well as candidate species for listing by the USFWS. Special-status plants also include those that are considered rare or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as plant species identified by the CNPS as California Rare Plant Rank (CRPR) 1A, 1B, and 2 in the Inventory of Rare and Endangered Vascular Plants of California by the CNPS. Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution

or lack of adequate information to permit listing or rejection for state or federal status, such as those included as CRPR List 3 or List 4 in the CNPS Inventory.

For the purposes of this analysis, ‘sensitive plant communities’ include those designated as such by state and local governmental agencies. Sensitive plant communities are designated by the CDFW, either in the CNDDDB, the list of California Sensitive Natural Communities (CDFW 2020), or as sensitive alliances classified in the Manual of California Vegetation (MCV) (Sawyer et al. 2009, CNPS MCV Online 2020). Alliances included within the MCV that are designated as global or state rank (“G” or “S”) 1-3 are considered “rare or threatened” at the global and/or state level and are therefore considered sensitive.

Sensitive Biological Communities

Sensitive biological communities include habitats that fulfill special functions or have special values, such as habitat that supports endangered or special status species, wetlands, streams, or riparian habitat. These habitats are protected under federal and state regulations such as the Endangered Species Acts, Clean Water Act (CWA); state regulations such as the Porter-Cologne Act, the California Fish and Game Code (CFGC), and the California Environmental Quality Act (CEQA); or local ordinances and policies such as Town or County Tree Ordinances, Special Habitat Management Areas, General Plans, and Habitat Conservation Plans.

Wetland and Riparian Habitats

Wetlands and riparian habitats, regardless of MCV status, are considered sensitive. Wetlands, streams, and permanent and intermittent drainages are regulated by U.S. Army Corps of Engineers (ACOE) under Section 404 of the Federal Clean Water Act (CWA). The CDFW also generally has jurisdiction over these resources, together with other aquatic features that provide an existing fish and wildlife resource pursuant to Sections 1602-1603 of the California Fish and Game Code. The CDFW asserts jurisdiction to the outer edge of vegetation associated with a riparian corridor. The Regional Water Quality Control Board (RWQCB) also generally has jurisdiction over streams and wetlands. Any grading, excavation, or filling of jurisdictional drainage corridors or wetlands would require a Section 404 permit and will require mitigation.

Local Regulations

The Town of Hillsborough has developed and oversees tree protection and tree removal guidelines (Municipal Code Chapter 14.04 - TREE REMOVAL) for projects taking place within the Town limits. Because the Project does not involve tree removal within an incorporated area of San Mateo County, county-level tree protection measures do not apply to the Project.

Town of Hillsborough General Plan

The Open Space and Conservation element in the General Plan outlines programs to conserve, develop, and enhance the natural and historical resources of the community. Policies and actions applicable to biological resources for the proposed Project follow:

- Policy OSC-3.3: Continue to preserve and protect valuable native tree life, such as redwoods, oaks and bays, while recognizing the need to allow for the gradual replacement of trees to provide for on-going natural renewal.
- Policy OSC-3.4: Enforce the Tree Removal Ordinance and require development proposals to provide adequate information to all Town staff to assess the Project's impact on tree removal.
- Policy OSC-3.5: Require property owners to replace removed native trees in a manner that maintains the visual character of the property and takes neighboring properties into consideration. The replacement trees may be located on other parts of the lot, as approved by the Town.
- Policy OSC-3.7: Encourage the removal of non-native tree species, such as eucalyptus and acacia trees, that increase hazards for the community. Removed non-native trees should be replaced with native trees.
- Policy OSC-3.11: Preserve and protect rare and endangered species, and their habitats.
- Policy OSC-3.12: When appropriate, require proponents of projects to complete biological surveys necessary to ensure compliance with all local, regional, State, and federal regulations in regard to biological resources. When negative impacts to biological resources are unavoidable, mitigation measures, such as conservation easements, will be required to reduce them.
- Action OSC-3.2: The Public Works Department will be responsible for maintaining the health of trees on public property as necessary. When necessary, the Department will employ the services of a registered forester or arborist. Trees on private properties should be maintained by property owners so that the long-term health and welfare of all the trees in the Town can be assured.

Discussion

Would the project:

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Less Than Significant Impact with Mitigation Incorporated. The Project Site and study area are developed with three large water tanks and ancillary structures that have been installed on imported fill soils. Vegetation surrounding the tanks consists of planted trees, many of which are exotic, along with mostly weedy grasses and forbs. Many of the trees on site are large and provide potentially suitable habitat for special-status winged animals including birds, raptors, and bats. In addition, the area of the Project Site is documented as a dispersal area for the endangered California red-legged frog. In the absence of minimization and avoidance measures, the Project could result in disturbance to the following regulated biological resources, which are known from the region and have some potential to occur within the study area; disturbance of these resources is considered potentially significant impacts unless mitigated:

- One federally listed animal species: California red-legged frog (*Rana draytonii*).

- Three non-listed special-status animal species: white-tailed kite (*Elanus leucurus*), pallid bat (*Antrozous pallidus*), and hoary bat (*Lasiurus cinereus*); and
- Active nests of bird species protected by the Migratory Bird Treaty Act and California Fish and Game Code.

Mitigation Measure BIO-1 will require a pre-construction tailgate training for the construction crew shall be conducted by a qualified biologist for special status, endangered and protected species that could be found on the site, including but not limited to: Raptors and birds, California red legged frog, and bats. Implementation of BIO-1 will reduce potentially significant impacts on special status species to less than significance.

Plants

CRPR designated plant taxa known from the vicinity of the study area were compiled from a CNPS 9-quadrangle search by Vollmar. There is no habitat with potential to support any of the included CRPR plant species within the study area. The soils consist largely of artificial fill soils and habitats are generally disturbed and dominated by exotics, including many invasive weed species.

Botanical resources within the study area are primarily composed of exotic plant species, none of which are classified as special-status or form sensitive plant communities. There are 76 trees, forming a nearly contiguous canopy surrounding the water tanks. Many of the trees are large and mature, but all of them appear to have been planted, and most of them are species that are not native to California or to the study area. The most common tree species in the study area include Tasmanian blue gum (*Eucalyptus globulus*), Monterey pine (*Pinus radiata*), blackwood acacia (*Acacia melanoxylon*), and coast live oak (*Quercus agrifolia*). Of these, only coast live oak is native to both California and to the study area. This species may have been planted, or the onsite population may be descended from a historical population. In any case, it continues to reproduce on the site. Monterey pine is native to California, but not to the study area, and is in fact considered to be invasive in San Mateo County. Both Tasmanian blue gum and blackwood acacia are considered to be invasive by the California Invasive Plant Council (Cal-IPC). The shrub/vine and herb strata below the tree canopy likewise consist of primarily exotic species, but with a few native species scattered throughout the study area. Shrubs and vines occurring throughout the site include the highly invasive French broom (*Genista monspessulana*) and English ivy (*Hedera helix*). The only native species observed within this stratum is toyon (*Heteromeles arbutifolia*). Most of the herb species observed are introduced annual species, with common species consisting of slender wild oat (*Avena barbata*), soft chess (*Bromus hordeaceus*), dogtail grass (*Cynosurus echinatus*), rough cats-ear (*Hypochaeris radicata*), and Italian thistle (*Carduus pycnocephalus*). Perennial species observed include the invasive smilo grass (*Stipa miliacea*) as well as the native blue wild rye (*Elymus glaucus*). Portions of the site are devoid of such grasses and forbs, especially around the tanks (where vegetation is likely more intensively managed) and under the Monterey pines, where accumulated pine needles reduce the growth of other plants.

There are numerous special-status plants known from the vicinity of the study area, but there is no habitat within the study area that is likely to support any special-status or otherwise sensitive plant species. The soils consist largely of artificial fill soils and habitats are generally disturbed and dominated by exotic plants, including many invasive weed species. Mature trees, including native coast live oaks (*Quercus agrifolia*), represent the only sensitive botanical resource within the study area. Trees and groves of trees are afforded protection by the Town of Hillsborough and the arborist report that was prepared for the Project includes details pertaining to trees documented within the study area.

Birds

There are not federally or state listed birds in the Project Vicinity. The Project Site may offer suitable habitat for birds protected by the Migratory Bird Treaty Act (MBTA). It is recommended that all work occur at a time during which impacts to nesting bird species would be negligible (i.e., September 2 to February 28). A nesting bird survey can be conducted prior to start of construction to check the site and surrounding area for active bird nests; if active nests are found, a nest protection plan would be developed and implemented during construction. Implementation of Mitigation Measure BIO-2 will reduce potentially significant Project impacts on migratory birds to less than significance.

One special-status species bird, white-tailed kite (*Elanus leucurus*), is documented in the vicinity of the study area, and has some potential to be impacted by Project related activities. White-tailed kite is classified as CDFW Fully Protected. In California, white-tailed kites rely on populations of California voles (*Microtus californicus*), with habitat quality largely dependent on abundance and availability of California voles. Alfalfa, hay, and irrigated pasture agricultural areas are preferred foraging grounds, with lightly grazed or un-grazed fields generally supporting larger prey populations. Wetlands or marshes, where California voles tend to be more abundant, are also important habitats. The study area provides suitable foraging and nesting habitat for white-tailed kite. Mitigation Measure BIO-2 would mitigate potential Project impacts to white-tailed kite to less than significant levels.

Animals

The Project is not within any designated critical habitat for endangered species. In the vicinity of the Project Site, there is designated critical habitat for the federally threatened marbled murrelet and Bay checkerspot butterfly, although no suitable habitat for these species exists within the Project site and significant distance and physical barriers existing between the Project Site and this designated critical habitat.

Less than one-half mile west of the Project Site, critical habitat areas are mapped for the federally threatened California red-legged frog (CRF). The potential for CRF to traverse the Project Site is considered remote due to distance between critical habitat and the Project Site as well as substantial barriers to species dispersal on the Project Site related to SR-35 and I-280. These two

major thoroughfares represent a total of 12 lanes and associated minor barriers (e.g., curbs, steep slopes, fencing) separate the Project Site from breeding habitat and more optimal upland habitat for CRF. Although the site itself does not provide suitable habitat for CRF, transient individuals could disperse from aquatic habitat areas in the vicinity of the study area and move through the site. With implementation of Mitigation Measures BIO 4 through BIO 7, impacts to the California red-legged frog (CRF) would be less than significant.

Two special-status species bats are documented in the vicinity of the study area and have some potential to be impacted by Project related activities: Pallid bat (*Antrozous pallidus*), and hoary bat (*Lasiurus cinereus*). Pallid bat is a California Species of Special Concern and is listed as “high” priority by the Western Bat Working Group (WBWG). Hoary bat is listed by the WBWG as “medium” priority. Pallid bats occupy a wide variety of habitats including grasslands, shrublands, woodlands, and forests, and use dry, rocky areas for roosting (Harris 1988b). Hoary bats are found in most places in California, preferring habitats with access to dense foliage of trees for roosting and open areas for feeding (Harris 1988a). These bat species could roost in trees or structures within or adjacent to the study area that have suitable cavities, crevices, and exfoliating bark and/or bark fissures. While these species are not State or federally listed as endangered or threatened, their designation as special-status species by CDFW warrants consideration, and avoidance and minimization measures are recommended. Mitigation Measure BIO-3 will require a preconstruction survey for maternity (March 1 to August 1) or colony bat roosts (year-round) to be conducted by a qualified biologist and done within 14 days prior to activities that remove trees, vegetation, or structures.

For these reasons, adverse effects on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service would be less than significant impact with mitigation incorporated.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. Refer to IV a. Wetland and riparian habitats and other sensitive natural communities are those identified in local or regional plans, policies, or regulations, or those designated by the USFWS and CDFW. Wetlands, streams, and permanent and intermittent drainages are subject to the jurisdiction of the U.S. Army Corps of Engineers (ACOE) under Section 404 of the Federal Clean Water Act (CWA). The CDFW has jurisdiction over these resources, together with other aquatic features that provide fish and wildlife habitat pursuant to Sections 1602-1603 of the California Fish and Game Code. The Regional Water Quality Control Board (RWQCB) is responsible for implementing water quality standards in surface water, streams, and wetlands.

There are no sensitive plant communities or jurisdictional waters within the Project Site; therefore, the Project will not have direct impacts on riparian habitat or other sensitive natural communities. On-site Vegetation consists of planted, mostly exotic trees and an understory of exotic or commonly occurring native shrubs and herbs, including numerous species classified as invasive by the Cal-IPC. Likewise, there are no potentially jurisdictional Waters of the United States or State of California on site. The Project Site does have potential to convey storm water runoff to tributary areas located off-site which do contain sensitive natural communities and riparian habitat.

Project implementation has the potential to increase pollutant loads due to earthwork and construction and permanent increased area of impervious surfaces. Low Impact Development source control will be incorporated into site design and BMPs will be implemented during construction as discussed in Section X Hydrology and Water Quality.

For the reasons above, the proposed Project would have a less than significant impact to sensitive natural communities.

- c) **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Less Than Significant Impact. Refer to IV b. The study area straddles the boundary of two local watersheds (Hydrologic Unit Cataloging [HUC] 12), namely the Colmar Creek Watershed to the east, and the San Mateo Creek Watershed to the west (USGS 2013). Both of these are part of the Frontal San Francisco Bay Estuaries Watershed, as all water in the area ultimately flows toward San Francisco Bay. The drainage nearest to the study area is Sanchez Creek, which is 0.38 mile to the north. At a local level, water flowing east off of the study area likely ends up within Sanchez Creek, while waters flowing west likely end up either in Crystal Spring Reservoir or in San Mateo Creek, the headwaters of which wrap around the hill slope and conduct water to the south and then eastward.

No wetlands or other Waters were identified within the study area, therefore there are no potentially significant direct impacts on jurisdictional Waters of the United States and/or State of California will occur with the Project. Likewise, there are no drainages, natural or artificial, and no seeps, springs, or ponds and no related impacts are anticipated. Any surface flow across the site is presumed to be directed underground via a network of storm drains and constructed subsurface channels toward the hydrographic features noted above. Since the Project must implement NPDES requirements for LID in compliance with The San Mateo Water Pollution Prevention Program (SMCWPPP), significant adverse impacts on protected wetlands would be a less than significant.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Less Than Significant Impact with Mitigation Incorporated. Refer to IV a. The Migratory Bird Treaty Act (16 U.S.C. 704) and the California Fish and Game Code (Section 3503) prohibit the take of migratory birds as well as disturbance to the active nests of most native birds. The trees and scrub in the study area could support nests of multiple migratory bird species, including raptors and birds with state and federal listing status. Tree or vegetation removal could result in direct loss of birds protected by the MBTA. Additionally, construction-related noise could result in the abandonment of an active nest in trees adjacent to the study area, including potential nests of special-status bird species. It is recommended that all work occur at a time during which impacts to nesting bird species would be negligible. Mitigation Measure BIO-2 would implement a pre-construction bird survey for tree/vegetation removal and start of construction if these activities occur within the bird nesting season of February 1 - August 31.

Less than one-half mile west of the Project Site, critical habitat areas are mapped for the federally threatened California red-legged frog (CRF). The potential for CRF to traverse the Project Site is considered remote due to distance between this critical habitat and the Project Site as well as substantial barriers to species dispersal on the Project Site related to existing fencing, and highway right-of-way for SR-35 and I-280. Since the Project Site is currently fenced and separated from critical habitat for CRF by significant physical barriers and distance, Project impacts to CRF dispersal are considered less than significant with the implementation of mitigation measures which require construction crew training and daily monitoring for this species. The Project Site is not located in an established native resident or migratory wildlife corridor, nor native wildlife nursery sites. For these reasons, Project impacts would be less than significant with mitigation incorporated.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Less Than Significant Impact with Mitigation Incorporated. The Town of Hillsborough has developed and oversees tree protection and tree removal guidelines for projects taking place within the Town limits: Section 14.04.040 of the municipal code outlines tree removal regulations. There are a total of 76 trees mapped within the study area (Levison 2021). The surveyed trees include only those with a diameter of breast height (DBH) of at least four inches. While not considered sensitive at the taxonomic level, trees with a DBH of 12 inches or greater are protected by the Town of Hillsborough. Of the 76 mapped trees, 60 have a DBH of at least 12 inches.

Project plans call for the removal of a total of 22 trees from the Project Site. Tree removals would be consistent with Town's tree removal regulations. Three of these trees are in very poor condition, 15 are in poor condition, two are in fair condition and two are in good condition

according to the arborist report in Appendix F. The Project would not remove trees solely for the ease of construction, but rather the proposed tree removal is necessary for safety and to install the larger water storage tank, which will improve the overall reliability of the water service system and result in public benefits such as improved fire flows and seismic resiliency. The Town would protect 54 existing trees in place at the site in accordance with arborist recommendations (see Appendix F) Three of the trees would require implementation of Mitigation Measure BIO-9 to protect in place. The Project would replant 42 trees and 28 large shrubs (See Table I-3 and Figure 6, Conceptual Landscape Plan). Mitigation Measure BIO-8 requires Project compliance with the Town's tree removal ordinance regarding tree removals and replacements pursuant to approved arborist and landscape plans. Mitigation Measure BIO-9 requires existing trees on the Project Site are properly cared for and protected from damage during construction. For these reasons, conflicts to biological resource policies or ordinances would be less than significant with mitigation incorporated. For the reasons above, Project impacts are less than significant with mitigation.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project is not proposed within an HCP or NCCP or other approved local, regional, or state HCP. Federal and state laws that protect threatened and endangered species each provide planning procedures for the protection of species and habitat in these areas. The federal law offers the Habitat Conservation Plan (HCP) and The California Natural Community Conservation Planning Act (NCCPA) for the Natural Community Conservation Plans (NCCP). There are no existing or planned HCP/NCCPs or other approved conservation plans that have been adopted on or adjacent to the Project Site (CDFW, <https://wildlife.ca.gov/Conservation/Planning/NCCP/Plans>). For the reasons above, the Project would have no impact on provisions of adopted conservation plans.

Mitigation Measures

BIO 1: A pre-construction tailgate training for the construction crew shall be conducted by a qualified biologist provided by the Town or the Town's designated representative for special status, endangered and protected species that could be found on the site, including but not limited to: Raptors and birds, California red legged frog, and bats.

BIO-2: A pre-construction bird survey shall be conducted by a qualified biologist not more than 5 days prior to construction if any tree/vegetation removals or construction starts during the bird nesting season (February 1 – August 31). The purpose of this survey is to confirm there are no active nests that could be impacted by the Project. If there is a delay longer than 7 days in construction activities occurs, the pre-construction bird survey shall be done with no active nests confirmed by the Project biologist prior to restarting construction. Pre-construction bird surveys shall include surveys of all trees and shrubs within 250 feet of the work area for raptors, and all trees and shrubs within 50 feet of the work area shall be

surveyed for other birds. If an active bird nest is found on site, the biologist, shall, in consultation with the California Department of Fish and Wildlife (CDFW), designate a construction-free buffer zone (typically 250 feet for raptors and 50 feet for other birds) around the nest to remain in place until the young have fledged, as determined by a qualified biologist. For tree/vegetation removal and start of construction outside of the bird nesting season (September 1 to January 31), a pre-construction survey for nesting birds would not be needed.

BIO-3: A preconstruction survey for maternity (March 1 to August 1) or colony bat roosts (year-round) shall be conducted by a qualified biologist and done within 14 days prior to activities that remove trees, vegetation, or structures. If an occupied maternity or colony roost is detected, the biologist shall contact CDFW to determine the appropriate buffer relative to the:

- Proximity and noise level of Project activities
- Distance and amount of vegetation or screening between the roost and construction activities
- Any other species-specific needs.

Due to restrictions of the California Health Department, direct contact by workers with any bat is not allowed. The qualified bat biologist will be contacted immediately if a bat roost is discovered during Project construction.

The buffer shall remain in place until construction is completed. If the roost is in vegetation or a structure that is planned to be removed, the qualified biologist shall work with CDFW to devise a plan to exclude the bats if removal of the roost cannot be avoided.

BIO-4: If initial ground-disturbing activities cannot be scheduled outside of November 1 and March 31, the period when California red-legged frogs are most likely to be moving through the Project area, the following shall be implemented.

- (1) Not more than twenty-four (24) hours before initial ground disturbance on the Project Site and staging areas, a qualified biologist shall conduct a pre-construction site survey for California red-legged frog. If any California red-legged frogs are found, the qualified biologist will coordinate with the USFWS, to implement protection procedures with the intent to avoid direct impacts on this species within the limits of construction and staging:
 - a. Prior to the initial ground disturbance, the Project biologist will obtain approval of the relocation plan from the USFWS and CDFW, which shall be implemented if a California red-legged frog is encountered and needs to be moved. The plan shall be reviewed with the construction crew during tailgate training. California red-legged frog shall be released in appropriate habitat nearby on the EBMUD watershed. The designated biologist will limit the duration of the handling and captivity of the California red-legged frog to the minimum amount of time necessary to complete the task. The applicant will immediately notify the USFWS and CDFW once the California red-legged frog is relocated, and the site is secure.
 - b. The frog will not be disturbed if it is not in danger: When a California red-legged frog is encountered in the Project area, all activities which have the potential to result in the harassment, injury, or death of the individual shall be immediately halted. The designated biologist will then advise the contractor on a course of action that will avoid or minimize

adverse effects to the animal pursuant to USFS standards. To the maximum extent possible, contact with the animal will be avoided and the applicant will allow it to move out of the potentially hazardous situation to a secure location on its own volition. This procedure applies to situations where a California red-legged frog is encountered while it is moving to another location and is actively dispersing. It does not apply to animals that are uncovered or otherwise exposed or in areas where the individual is not expected to move on its own and may be in danger within Project construction and staging areas.

- c. *The frog will be moved to a secure location if it is in any danger:* California red-legged frogs that are in danger (e.g., animals that are uncovered or otherwise exposed or within construction and staging areas where the individual is not expected to move on its own) shall be relocated and released by the Project biologist outside the construction area within the same habitat.
- d. *Documentation and Reporting to USFWS:* The date and time of direct contact with California red-legged frogs within the boundaries of Project construction and staging areas shall be documented by the construction manager or his designee and reported immediately to USFWS.

BIO-5: Monitoring and a report is required prior to the start of construction at the beginning of each day and implemented by the field construction manager or designated field monitor who has been trained by the biologist, if temporary exclusion fencing is not implemented. The daily report shall state the numbers and types of species present and confirm that USFS and CDFW protocol were followed. Otherwise, temporary exclusion fencing shall be installed around the limits of work areas and access routes to ensure California red-legged frogs cannot enter the work area according to the following:

- a. The fencing shall be checked at the beginning of each day by the construction manager.
- b. Installation of exclusion fencing shall occur under the supervision of a qualified biologist and immediately following a clearance survey of the area.
- c. The exclusion fencing shall have a minimum aboveground height of 30 inches, and the bottom of the fence should be keyed in at least 4 inches deep and backfilled with soil to prevent California red-legged frogs from passing under the fencing.
- d. Exclusion fencing shall be installed to prevent species entry into active work areas and to mark the limits of construction disturbance at equipment staging areas, site access routes, construction equipment and personnel parking areas, debris storage areas, and any other areas that may be disturbed.
- e. Plastic monofilament netting (erosion control matting), loosely woven netting, or similar material in any form shall not be used at the Project site because California red-legged frogs can become entangled and trapped in them.
- f. Materials utilizing fixed weaves (strands cannot move), polypropylene, polymer, or other synthetic materials shall not be used. Any such materials found on-site shall be immediately removed.

BIO-6: No construction activities shall occur during rain events or within 24-hours following a rain event. Prior to construction activities resuming, a designated biologist will inspect the Project area and all equipment/materials for the presence of California red-legged frogs.

BIO-7: A litter control program shall be instituted at the Project Site for uneaten human food and other refuse that could attract crows, ravens, coyotes, raccoons, and other predators of the California red-legged frog consisting of disposal in covered containers and daily disposal off site. All workers shall ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed garbage containers. The garbage containers shall be removed from the Project Site at the end of each working day.

BIO-8: Prior to removal of regulated trees, obtain a valid Town of Hillsborough tree removal permit. Prior to Project grading all areas of disturbance shall be surveyed and staked and a field count performed to confirm the exact number of trees to be removed. Removed trees shall be replaced pursuant to the approved landscape plan for the Project at a minimum ratio of 1:1 utilizing 30-inch box containers.

BIO-9: The following tree protection measures shall be implemented during Project construction:

- All necessary pruning shall be performed by an ISA Certified Arborist using ANSI A300 pruning standards to perform branch and limb removal, and/or branch and limb reduction pruning on trees being retained to reduce endweight and provide clearance between canopies and proposed work airspace.
- Install chain link fencing with signage around tree root zones shall be installed as specified by the Arborist to establish tree protection zones or root protection zones to prevent injury to trees.
- No substances, materials, tools, supplies, liquids, wastes, etc. are to be dumped or stored within the tree protection zones, even temporarily.
- Wrap trunk buffers as specified by the Arborist for each tree being protected in place on site and located in very close proximity to the chain link root protection zones fencing routes.
- Damage to any tree during construction shall be reported to the Arborist, and Project contractors shall treat the tree for damage in the manner specified by the Arborist.
- Establish and maintain offsets of at least 25 to 30 horizontal feet, where possible, between all trench route edges and all tree trunk edges of trees being retained (e.g., storm drain, area drain boxes, gas, water, sewer, cable, electrical, etc., including irrigation piping).
- The Arborist shall inspect the perimeter of the area of ground disturbance and pipeline alignments within the site to determine whether construction could damage the roots of retained trees. The Arborist shall make appropriate recommendations to ensure the roots of retained trees are not significantly damaged.
- Spray off foliage of all trees being retained on a once per month basis using water through a high-power garden hose to wash both the upper and lower surfaces of the foliage to keep the gas portals (stomata) unclogged for better gas exchange, which is crucial for normal tree function.
- Arborist shall determine temporary areas of irrigation for tree retention and replacements.

- Minimize watering in areas of native oak trees to avoid overly moist conditions that favor the growth of soil-born advancement of wood decay fungi into roots and trunks.

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

V. CULTURAL RESOURCES

The analysis for Cultural Resources discussion questions is based on information obtained from the Town of Hillsborough Open Space Element (<https://www.hillsborough.net/267/General-Plan-Housing-Element#:~:text=The%20Town's%20general%20plan%20includes%20the%20following%20elements;by%20the%20City%20Council%20on%20March%2014,%202005>) and the Phase I Cultural Resources Inventory of the Darrell Tank Site in the Town of Hillsborough, California, dated March 2021. This report was completed for the Project Site by Albion Environmental, Inc (Albion, 2021). Albion's cultural resource investigation included a background records search at the California Historical Resources Information System's Northwest Information Center at Sonoma State University (NWIC), native American outreach, a field investigation entailing pedestrian survey, and a report of findings. The paleontological assessment was prepared by Cogstone Resource Management, Inc. (Cogstone, 2021), based on a records review from the University of California Museum of Paleontology (UCMP), a surface survey of the Project Area, and a report of findings and recommendations. These reports are attached as Appendix C.

Environmental Setting

The Project Site is at a natural high point. Due to varied topography, existing development and heavy landscaping in the vicinity, the Project Site is only partially visible off-site. Aerial photos show undeveloped land on site and immediately adjacent prior to 1952 with most of the area remaining undeveloped until the 1980s. A record search and field survey of above ground features of the Project Site indicates one historic resource within ¼ mile of the Project.

No fossils have been found within ¼ mile of the Project Site, which are mapped as part of the Merced Formation, a geologic formation stretching across California, Oregon, and Washington state. The site consists of mainly fill soils with very low potential for cultural resource deposits; however, fossils associated with the Merced Formation in California are documented to include extinct Pleistocene megafauna, such as ground sloth and Columbian mammoth, as well as baleen whale, numerous marine invertebrate fossils, and conifer fossils. Paleontological sensitivity for the Project Area ranges between very low to moderate and does not warrant mitigation for earthwork proposed with the Project.

A review of records at the NWIC (NWIC File No.: 20-0872) indicated that no archaeological resources were recorded at the Project Site. The site visit and walk over survey of the surface of the Project Site by Albion on December 3, 2020 revealed no evidence of intact precolonial or historic-era archaeological deposits. The land within the limits of the Town of Hillsborough was inhabited by the Ohlone who were also named “Costanoan” by Spanish Explorers. Additional information on tribal resources can be found in Section XVIII. The Spanish Crown established the mission system which led to establishment of Rancho San Mateo encompassing 6,439 acres in present-day San Mateo County. Beginning in 1856, Rancho San Mateo was subdivided into various estates, which were later subdivided into tracts. Early ownership within the Town of Hillsborough consisted mainly of second homes for families with primary residences in San Francisco. The Town Plat was developed in 1876 by William Sharon and land use from this timeframe consisted mainly of summer homes, agriculture, dairy farms, and racehorse breeding. There are no structures from this timeframe existing within the Town currently.

In the late 1800’s Francis G. Newland created the Burlingame Country Club (currently located approximately 1 ½ miles northeast of the Project Site) and developed cottages for sale within Hillsborough. There are two of structures from this era still existing within the Town; one is on Floribunda and the other is on Kammerer Court. In 1896, El Cerrito Park Subdivisions were developed for year-round occupancy in Hillsborough; these subdivisions are not recognizable today due to further subdivisions and subsequent redevelopment. By the turn of the century, both San Mateo and Burlingame city officials sought to annex Hillsborough. Town of Hillsborough residents incorporated on May 5, 1910 to prevent annexation. The Town’s founders wanted to retain the rural character of the area and created municipal ordinances banning sidewalks, street grid patterns and business/commercial land use. Maps from the 1800’s indicate the location of the Project Site within Rancho San Mateo, immediately northeast of San Andreas Creek (present-day Lower Crystal Springs Reservoir) with no other landmarks depicted. An 1892 USGS topographic map shows the Project Site on one of the highest points of the ridgetop running along San Andreas Creek; the map also depicts the Crystal Springs Reservoir along the course of San Andreas Creek, the Lower (northern) portion being created in 1888 with the construction of the Crystal Springs Dam.

Between 1900 and 1930 many mansions were designed and constructed under the management of notable architects and commissioned by well-known estate owners. There have been many extensive building renovations and continuous subdivisions within the Town with each subsequent landowner. Numerous subdivisions occurred between 1916 and 1970 and the Town’s water system was expanded as needed to supply new residential development with potable water. The two estates of this era closest to the Project are the Carolands, built in 1914 approximately 1500 LF east of the Project Site and Skyfarm built in 1930 approximately 3500 LF north of the Project Site. The Carolands estate was subdivided around 1930 and the Skyfarm estate was subdivided around 1977. A 1927 plat map shows the Project Site near the boundary of the parcel owned by Harriet Pullman Carolan and depicts no other unique topographic features where Darrell Tanks are currently built. The Carolands mansion (California Historic Landmark No. 886) is located at 565 Remillard Drive and is listed on the National Register of Historic Places (Ref #75000478). It is within ¼ mile of the Project. Since 1990 there has been little growth and the Town is now considered essentially built out around the Project Site. Extensive low-density development with

heavy landscaping exists between the Project Site and both the Carolands structure and Skyfarm structures. Due to new development, distance and topography between the Project and these structures within the local vicinity, the Project Site is not highly visible from either Carolands or Skyfarm mansions.

A 1943 aerial photograph of the Project Site shows no structures and coverage with trees and vegetation, within the surrounding area; dirt paths and a building are visible to the northeast, and a dirt road is visible running along the southwestern boundary of the Project Site, beyond which is the old alignment of SR-35. Currently this area is significantly altered, with the construction of I-280 immediately to the southwest of the Project Site and substantial land subdivisions with residential development in the surrounding area. The Darrell Tanks themselves were built in the 1950s, with Tanks #1 and #2 constructed in 1952 and Tank #3 built in 1958. Although the tanks were constructed at a high point in the topography, the tanks do not appear to be highly visible from vantage points located to the north, east and south due to rolling terrain and heavy landscaping both off site and on site. The closest structures to the Project are shown in Figure 11 and do not have views of the Project Site.

In addition to the private historic homes, there are also publicly owned historic structures in the community. These include the historic gates that remain from the former entrances to now subdivided estates, or in the case of the Carolands Gates at Ralston and Eucalyptus Avenues, gates that were installed at the time of subdivision to control access. The Town owns the Gate House, also located at the intersection of Ralston and Eucalyptus Avenues, which, according to the historic building survey, is thought to have served as the sales office for the subdivision. The Town will continue to enforce its adopted Historic Preservation Ordinance, as well as require development proposals subject to environmental review to survey for important historic and prehistoric resources.

Regulatory Setting

National Historic Preservation Act (NHPA)

The NHPA of 1966 (54 USC 300101 et seq.), as amended, establishes a national program for historic preservation. It sets forth a general policy of preserving historic properties by the federal government for the benefit and education of the public. The NHPA directs the creation and maintaining of the NRHP; a national listing of districts, buildings, sites, structures, and objects considered to be of local, state, or national significance for their contributions to American history, architecture, archeology, engineering, and/or culture. The NHPA also establishes a State Historic Preservation Officer (SHPO) responsible for the identification of historic properties within each state. SHPO ensures that properties listed in or determined eligible for listing in the NRHP are reviewed during planning and development. Section 106 of NHPA serves as the regulatory basis for most of the fieldwork conducted by federal agencies.

California Code of Regulations, California Environmental Quality Act (CEQA) - Section 15064.5

CEQA Guidelines, as defined in Section 15064.5(a), establish the basis for determining the significance of historical resources in California. The California Register of Historic Resources (CRHR) was established to identify the state's historical resources and indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.

Town of Hillsborough Historic Preservation Ordinance

The Town of Hillsborough has adopted a Historic Preservation Ordinance that allows it to have some control over the demolition of all or part of identified historic structures. There are five privately owned structures subject to this Ordinance listed below with the corresponding distance and direction from the Project as shown in Figure 11:

The Carolands (565 Remillard Drive) is located approximately 0.26 miles to the East.

La Dophine (1761 Manor Drive) is located approximately 1.9 miles to the Northeast.

Skyfarm – The Nueva School (6565 Skyline Boulevard) is located 0.74 miles to the Northwest.

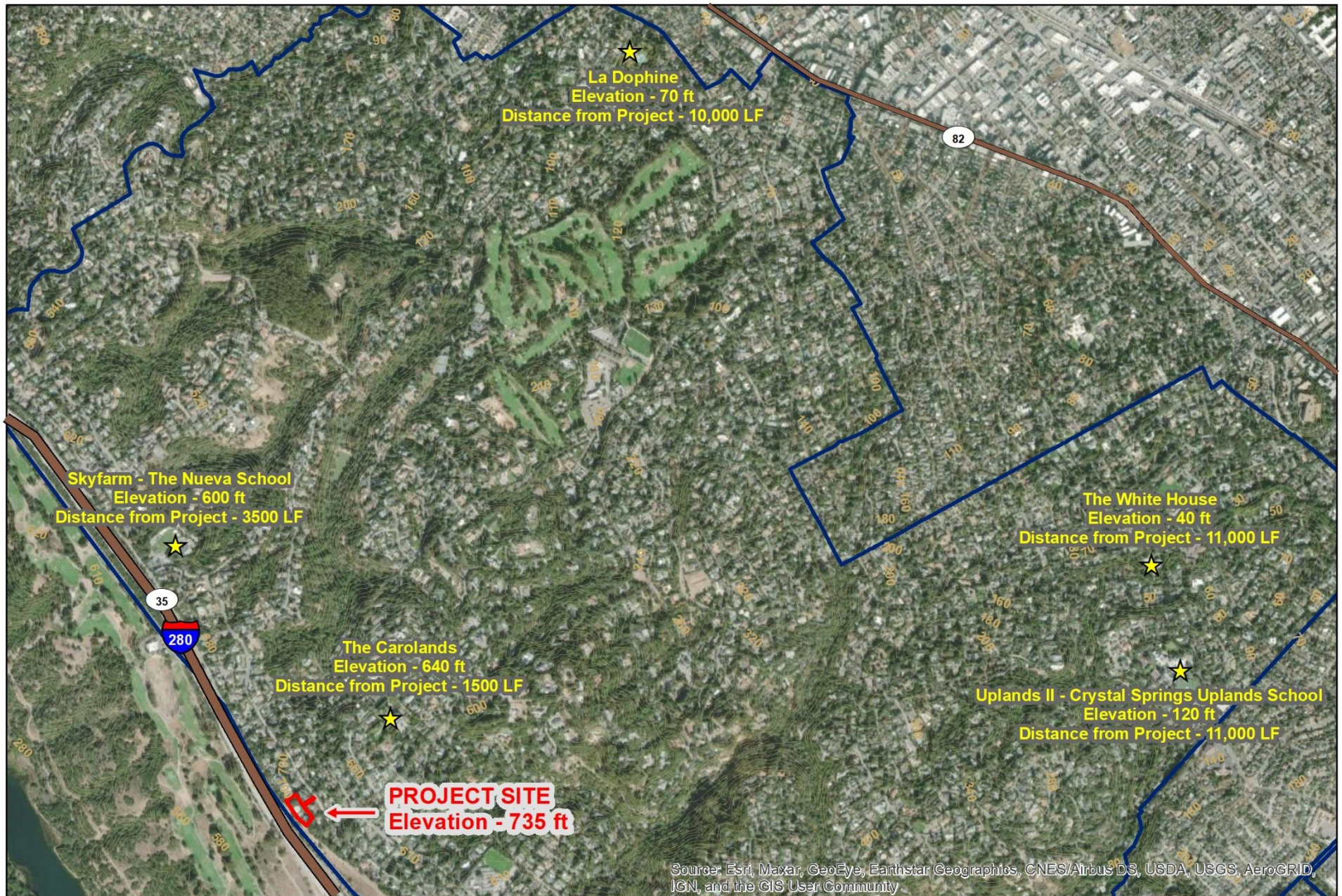
Uplands II – Crystal Springs Uplands School (400 Uplands Drive) is located approximately 2 miles to the East.

The White House (401 El Cerrito Road) is located approximately 3 miles to the East.

Town of Hillsborough General Plan

The Open Space and Conservation element in the General Plan outlines programs to conserve, develop, and enhance the natural and historical resources of the community. Goal OSC-4 is to support the preservation of important cultural resources found within the community. The following policies and actions are applicable to cultural resources for the proposed Project:

- Policy OSC-5.1: Preserve Town-owned historical resources when practical and involve the public in the determination of which resources should be preserved.
- Action OSC-5.2: The Town will require projects subject to the California Environmental Quality Act (CEQA) to analyze impacts to cultural resources per State law. When necessary, the Town will require the projects to incorporate mitigation measures to reduce adverse impacts to identified cultural resources.
- Action OSC-5.3: The Town will require construction projects to stop if archaeological or paleontological resources are uncovered during grading or other on-site excavation activities. Once the resources are assessed for importance, appropriate mitigation compliant with State law will be determined.



Legend

- Project Boundary
- Town of Hillsborough Boundary
- Elevation in feet above Mean Sea Level

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 11. Historic Resources

Discussion

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Less Than Significant Impact with Mitigation Incorporated. CEQA § 15064.5 pertains physical to changes from a Project affecting the significance of archaeological and historical resources. These resources include: an object, building, structure, area, a place, record or manuscript listed or determined to be eligible by the State Historical Resources Commission for listing in the California Register; a resource included in a local register of historical resources; any object, building, structure, area determined by the lead agency to be significant.

Jessika Akmenkalns, PhD, Researcher for the (Northwest Information Center) NWIC, provided the results of a records search for resources within a 1/4-mile radius of the Project and studies within a 300-foot radius of the Project on November 13, 2020. A review of records at the NWIC indicated that one cultural resource has been previously recorded within a 1/4-mile radius of the Project Area (P-41-000538). This resource consists of A Beaux Art mansion of European architecture and design also known as the Carolands and is listed in both the NRHP (Ref. # 75000478) and the CRHR.

On December 3, 2020, Albion archaeologist John Ellison conducted a pedestrian survey over the entire Project Site, which included a driveway that extends east from Darrell Road that is used to access the Darrell Tank Site as well as the proposed primary construction access road from SR-35 to the Project Site. Since the tank site is comprised of fill soils, the field survey was not expected to produce cultural resources. The field survey was conducted using 10-meter wide (or less) transects across the entire site while closely inspecting the surface for cultural materials. Survey efforts identified modern refuse but did not locate any precolonial or historic-era resources. In the northeast portion of the Project Site, an octagon-shaped foundation comprising wood-formed cement footings was identified, likely associated with the water tanks themselves. The water tanks are considered historic structures under CEQA based on the documented date of construction. Tanks #1 and # 2 are 69 years old and Tank #3 is 63 years old making them eligible for listing on the California Register of Historical Resources (CRHR) as historic resources over 50 years of age under California Code of Regulation- CCR 4852. Structures of this age are determined to be historically significant based on association with important events to California history and heritage, important persons, distinctive characteristics of a period, region or method of construction or work of a creative individual with high artistic value, or if they contain important information about prehistory or history. Due to recorded dates of construction for Darrell Tanks #1 and #2 and the location of the Darrell Tanks site, the tanks appear to be constructed in response to additional demand for potable water associated with modern land subdivisions and residential development occurring during the middle to late 20th Century. The Town's Water Master Plan and Condition reports for the tanks indicate that replacement is the best course of action. The Town indicates that the tanks are not locally significant. For the tanks to be eligible for inclusion on the CRHR, the following three criteria must be met:

1. A property must be significant at the local, state, or national level, under one or more of the following four criteria of significance (these are essentially the same as National Register criteria with more emphasis on California history):

- a) The resource is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States.
- b) The resource is associated with the lives of persons important to the nation or to California's past.
- c) The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.
- d) The resource has the potential to yield information important to the prehistory or history of the state or the nation (this criterion applies primarily to archaeological sites).

2. the resource retains historic integrity; and,

3. it is 50 years old or older (except for rare cases of structures of exceptional significance).

It is not likely that the tanks could meet all three of these criteria and would likely be considered potentially not eligible for inclusion in the CRHR even though the structures are over 50 years of age. Only SHPO can determine eligibility of the structures based on evaluation and report by a qualified cultural historian. Darrell Tanks #1 and #2 are important to the overall function of the Town's potable water delivery system. It has been determined that the rehabilitation of these structures is infeasible, and replacement is needed. For these reasons Mitigation Measure CUL-1 is recommended to implement the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation to reduce Project impacts of tank demolition and replacement to less than significance in the unlikely circumstance that the tanks are deemed eligible for the CRHR.

The top edge of the replacement tank is proposed at the same overall elevation as with existing conditions and there is considerable distance between the Project and other historic or potentially historic resources in the Town (See Figure 11). Landscape revegetation of the Project will thicken the visual buffer between the Project and the surrounding area. For these reasons, the Project will not substantively change views from or have other indirect impacts on other historic resources within the Town or directly impact known historic resources. Project impacts are considered less than significant with mitigation.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less Than Significant Impact with Mitigation Incorporated. Refer to V a. Visual inspection of the Project Area surface revealed no evidence of intact precolonial or historic-era archaeological deposits.

Geological maps indicate there is a low potential for buried deposits due to the site soils being comprised of fill. According to the review of historical images, the Project Area has remained undeveloped until the construction of the water tanks in the 1950s. Although there appears to be a low probability of encountering significant intact features or deposits within the Project Site, there always remains the potential to encounter buried cultural materials during Project implementation.

Albion initiated tribal consultation by contacting the Native American Heritage Commission (NAHC). Sarah Fonseca of the NAHC provided the results of a Sacred Lands File search and a list of tribal stakeholders to Albion on November 3, 2020. The result of the Sacred Lands File search was positive indicating an important tribal resource is in the general area of the Project. As a result, all NAHC listed stakeholders, consisting of groups or individuals who may have knowledge of the cultural resources in the area, were contacted by certified letter, phone, and email. This outreach effort documented concerns that a trained archaeologist and qualified Native American monitor be present during ground disturbing activities. This suggests that tribal cultural resources may exist within and immediately adjacent to the Project. The Town as the lead agency for CEQA is required by Assembly Bill 52 to complete the formal tribal consultation process with Native stakeholders. This is discussed in more detail in Section XVIII herein. Mitigation Measure MM CUL-2, CUL-3 and SC CUL-4 are included to require training and avoidance in regard to buried cultural resources and will reduce any potential impact to historic, archaeological and tribal resources to less than significant.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. The cultural resources literature search did not note the existence of any known burials or formal cemeteries in the Project Vicinity. There is a low likelihood of uncovering unknown buried human remains with construction activities because the Project Site was previously disturbed during installation of the existing facilities. In the event any human remains are inadvertently discovered, the Town would stop all work and follow the procedures as outlined in California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the state CEQA Guidelines (14 CCR §15064.5(e)). There would be a potentially significant impact if human bone or bone of unknown origin were uncovered during Project construction; however, implementation of Mitigation Measures CUL-4 and SC TRI-1 would reduce potential impacts to a less than significant level.

Mitigation Measures

CUL-1: Prior to tank demolition, a qualified architectural historian shall evaluate Darrell Water Tanks #1 and #2 to document potential CRHR ineligibility under § 15064.5. If the architectural historian concludes that the tanks are potentially eligible for inclusion on CRHR, the Town of Hillsborough shall prepare the following documents according to Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation for eligible structures inclusion in the Historic American Buildings Survey

(HABS), Historic American Engineering Record (HAER) and Historic American Landscapes Survey (HALS) collection at the Library of Congress: Measured drawings, large-format black-and-white photographs, large-format color transparencies, written histories and descriptions, and field records. Prior to tank demolition said documentation: 1) Shall adequately explicate and illustrate what is significant or valuable about the historic structure; 2) Shall be prepared accurately from reliable sources with limitations clearly stated to permit independent verification of the information; 3) Shall be prepared on materials that are readily reproducible, durable, and in standard sizes; and, 4) Shall be clearly and concisely produced. HABS/HAER/HALS are US federal government programs administered by the Heritage Documentation Programs Department of the National Park Service to archive the architectural plans, reports and photographs of historically significant structures for the public in perpetuity.

CUL-2: If buried cultural materials are unearthed during construction, work within that area shall be halted until a qualified archaeologist can evaluate the nature and significance of the find and determine appropriate next steps and timeframe for restarting construction in proximity of the find.

CUL-3: Prior to initiating ground-disturbing activities, all construction personnel should attend a cultural resource awareness training sponsored by the contractor and provided by a qualified archaeologist to educate the crew about the possibility of encountering buried cultural materials (i.e., prehistoric and/or historic period resources). Personnel should be instructed that, upon discovery of buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be contacted immediately. Once the find has been identified, it should be evaluated. If the find is determined to be significant (i.e., eligible for listing on the CRHR and/or the NRHP), it should be avoided by the Project proponent or subject to appropriate mitigation measures. Prehistoric or historic period cultural materials that may be encountered within the Project vicinity include the following:

- Historic period artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery shards, and other metal objects.
- Historic period structural or building foundations, walkways, cisterns, pipes, and other structural elements.
- Flaked stone artifacts and debitage of obsidian, basalt, chert or other silicates.
- Groundstone artifacts such as mortars, pestles, and milling slabs or milling features such as bedrock mortars; and
- Dark, almost black soil with a “greasy” texture that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire-affected rock.

CUL-4: If human remains are encountered during ground disturbing activities, work in that area must cease and the San Mateo County Coroner must be notified immediately. If the remains are determined to be Native American, then the NAHC must be notified within 24 hours as required by Public Resources Code 5097. The NAHC will contact the designated Most Likely Descendant who will provide recommendations for the treatment of the remains within 24 hours.

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

VI. ENERGY

The analysis for Energy discussion questions is based on Town of Hillsborough General Plan goals and policies, and results of the CalEEMod (Version 2016.3.2) Software modeling from the Darrell Water Tank Replacement Project Air Quality, Greenhouse Gas and Energy Analysis Technical Memorandum provided by Ganddini Group, Inc. dated March 26, 2021 and included as Appendix A.

Environmental Setting

The Project Site consists of a three water tanks and a gravity flow water system, perimeter landscaping including 76 trees, which do not require permanent landscape irrigation. The on-site facilities are supported by off-site pumps. Due to reliance gravity flow, energy consumption of the existing tank site is considered minimal. The Project is proposed in the Town's Water Master Plan and Capital Improvement Program to increase efficiency in the potable water delivery system overall and would allow an existing pump station and tank to be retired.

Regulatory Setting

Federal Regulations

Energy Act of 2020

The Energy Policy Act was first passed by Congress in July 2005 and includes a comprehensive set of provisions to address energy issues. The updated Energy Act of 2020 establishes and funds programs that promote energy efficiency, carbon reduction, and grid modernization; supports research and development of new energy technologies, renewable energy, and electric vehicles; funds research and development for carbon capture, utilization, and sequestration; and includes initiatives that promote nuclear energy, reductions in industrial emissions, and other innovations through the US Department of Energy (DOE).

Energy Independence and Security Act of 2007

Signed into law in December 2007, this broad energy bill included an increase in auto mileage standards, and also addressed biofuels, conservation measures, and building efficiency. The U.S. EPA administers the Corporate Average Fuel Economy (CAFE) program, which determines vehicle manufacturers'

compliance with existing fuel economy standards. By 2025, passenger cars and light-duty trucks must meet CAFE fleet standards of 54.5 miles per gallon (MPG). Additionally, between 2017 and 2025, vehicle manufacturers are required to achieve annual efficiency gains of 5% and 3.5% respectively.

State Regulations

The California Energy Commission's goal is to make energy public policy recommendations based on relevant and objective information, forecasting, and analyses to the governor, legislature, and other federal, state, and local decision makers that promote affordable energy supplies, improve energy reliability, and enhance health, economic well-being, and environmental quality.

The California Air Resources Board (CARB) is charged with protecting the public from the harmful effects of air pollution and developing programs and actions to fight climate change. CARB's mission is to promote and protect public health, welfare, and ecological resources through effective reduction of air pollutants while recognizing and considering effects on the economy. CARB is the lead agency for climate change programs and oversees all air pollution control efforts in California to attain and maintain health-based air quality standards.

Title 24 (California Energy Code) California's energy code is designed to reduce wasteful and unnecessary energy consumption in newly constructed and existing buildings. The California Energy Commission updates the Building Energy Efficiency Standards (Title 24, Parts 6 and 11) every three years by working with stakeholders in a public and transparent process.

Regional Regulations

The Bay Area Air Quality Management District (Air District) has been preparing plans to fulfill State and federal air pollution reduction requirements since 1982 some of which target energy efficiency and carbon-free energy. The most recent, the 2017 Clean Air Plan, was developed as a multi-pollutant plan - an integrated control strategy to reduce ozone, particulate matter, toxic air contaminants, and greenhouse gases (GHG). The 2017 Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health & Safety Code. To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—reactive organic gases (ROG) and nitrogen oxides (NOx)—and reduce transport of ozone and its precursors to neighboring air basins. In addition, the Plan builds upon and enhances the Air District's efforts to reduce emissions of fine particulate matter and toxic air contaminants. The proposed control strategy is based on four key priorities:

- Reduce emissions of criteria air pollutants and toxic air contaminants from all key sources.
- Reduce emissions of “super-GHGs” such as methane, black carbon, and fluorinated gases.
- Decrease demand for fossil fuels (gasoline, diesel, and natural gas).
 - Increase efficiency of our industrial processes, energy, and transportation systems.
 - Reduce demand for vehicle travel, and high-carbon goods and services.
- Decarbonize our energy system.
 - Make the electricity supply carbon-free.

- Electrify the transportation and building sectors.

San Mateo County Energy Watch (SMCEW) is a local government partnership between PG&E and the City/County Association of Governments of San Mateo County (C/CAG) and is administered by the County of San Mateo Office of Sustainability. SMCEW assists local governments, schools, non-profits, and small businesses in accessing energy efficiency programs, trade professionals, and financing opportunities. The Regionally Integrated Climate Action Planning Suite (RICAPS), is a set of tools and a collaboration of all 20 incorporated cities, including Hillsborough, and the County in climate action planning and implementation.

Local Regulations

Town of Hillsborough Municipal Code

Chapter 15.10 - ENERGY CODE The rules, regulations, and standards printed in the California Energy Code, 2019 Edition, as contained in the California Building Standards Code (California Code of Regulations, Title 24 part 6), 2019 Edition, are adopted as the rules, regulations, and standards for the Town of Hillsborough as to all matters contained therein, except as otherwise provided.

Chapter 15.19 - GREEN BUILDING REGULATIONS The rules, regulations, and standards printed in the California Green Building Standards Code, 2019 Edition, as contained in the California Building Standards Code (California Code of Regulations, Title 24 part 11), 2019 Edition are adopted as the rules, regulations, and standards for the Town of Hillsborough as to all matters contained therein, except as otherwise provided.

Town of Hillsborough General Plan

The Public Safety Element in the General Plan provides policy guidance for human created hazards related to hazardous materials and air pollution generated by energy usage. Goal PS-5 is to protect the community from human-caused hazards, such as criminal activity, air pollution and hazardous materials. The following action is applicable to energy for the Project:

- Action PS-5.3: The Town will continue to promote energy conservation by the public and private sectors. New development and re-modeling will be encouraged to incorporate features that minimize energy use, such as planting trees along the south and west-facing sides of buildings; using solar heating; installing energy efficient lighting and heating/cooling systems, as well as increased insulation; and replacing older appliances with energy efficient models. The Town will also incorporate energy saving design features and devices in Town property, when appropriate.

Town of Hillsborough Climate Action Plan

The Town of Hillsborough 's Climate Action Plan serves as a guiding document to identify methods that the Town and community can implement to significantly reduce greenhouse gas emissions to meet the requirements of California legislation Assembly Bill 32, California's Global Warming Solutions Act of 2006. The Town has control over several important decisions that impact emissions, including green building, energy efficiency, renewable energy, expansion of recycling/composting programs and

transportation/land use issues. The Plan establishes a framework of action that the Town can implement and provides a statement of intent for priorities and policies.

Discussion

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The Project is a tank replacement proposed to increase the efficiency in the existing potable water system would not increase the capacity of the existing water system or result in permanent changes in the consumption of energy resources. Alteration and intensification of existing land use is not an anticipated indirect impact and the Project is within the context of planned population projections for the Town and the region as well as the approved Town CIP. One large water tank will replace two smaller tanks and is anticipated to reduce the energy use of the water system by allowing retirement of an off-site pump.

The Project would utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with these measures would result in a more efficient use of construction-related energy and would minimize or eliminate wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

The Project would require the use of diesel and other fuels for trucks and equipment during construction, but these activities would be short-term and completed as efficiently as possible for practical and financial reasons, among other considerations. The Project will incorporate temporary irrigation from an existing 2-inch gravity flow water pipe located near the eastern boundary of the site. There would be no ongoing energy consumption in the operational phase of the Project in excess of the current baseline condition. Given the importance of replacing the corroded water tanks for public health and safety reasons, the minor and temporary amount of energy used for construction is not wasteful, inefficient, or unnecessary. Impacts in this regard would be less than significant.

Therefore, construction would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. Notwithstanding, the Project proposes water tank replacement and will not have any

long-term effects on an energy provider's future energy development or future energy conservation strategies. For these reasons, there would be a less than significant impact.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. Refer to VI a. The Project would comply with state regulations, San Mateo County Energy Watch (SMCEW), and the Town of Hillsborough 's Climate Action Plan. The Project would not result in an environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources or conflict with a state or local plan for renewable energy or energy efficiency, therefore, there would be a less than significant impact.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII. GEOLOGY AND SOILS

The analysis for Geology and Soils discussion are based on two reports compiled for the Darrell Water Tanks Replacement Project:

1. Updated Geotechnical Investigation, dated January 21, 2021, was completed for the Project Site by Cornerstone Earth Group. The report incorporates information from prior field explorations in 2007 and 2008; borings from September 29 and 30, 2020; test pits from November 12, 2020; and laboratory testing programs. The report is attached as Appendix D.
2. Phase I Cultural Resources Inventory of the Darrell Tank Site in the Town of Hillsborough, California, dated February 2021, was completed for the Project Site by Albion Environmental, Inc. The report includes information regarding the cultural resources and paleontological assessment. The report is attached as Appendix C.

Environmental Setting

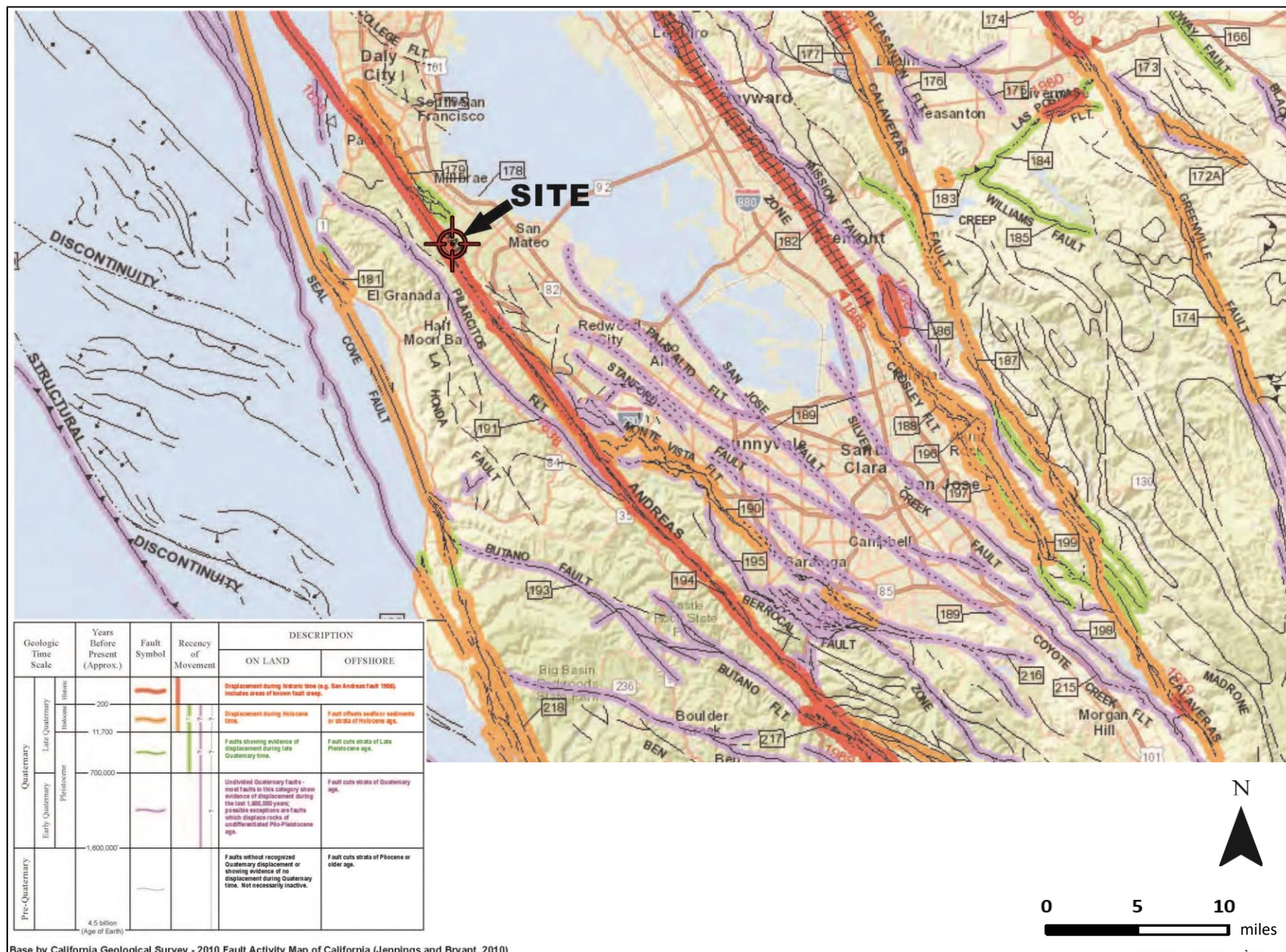
The Project is located in the San Francisco Bay Region on the edge of the Coast Range Geomorphic Province in the eastern foothills of the Santa Cruz Mountains in an area with many faults as shown in Figure 12. The local topography is dominated by a series of west- to southwest-trending spur ridges

separated by broad swales. The Project Site is located on a graded horizontal pad at the crest of a prominent northwesterly trending ridge (known as “Buri Ridge”), which separates the upper San Mateo Creek drainage from the eastern foothills of the Peninsular range and the San Francisco Bay Plain.

Site soils and bedrock were characterized by field sampling, visual inspection, and laboratory testing. Subsurface soils samples from a total of 10 borings and test pits were taken from depths of 3 ½ feet to 39 ¾ feet below ground surface. The sampling locations are shown on Figure 13. Core samples were visually inspected and laboratory testing included classification of samples as well as laboratory tests conducted for the Project foundation design and slope stability analysis, which included moisture contents, dry densities, grain size analyses, washed sieve analyses, Plasticity Index tests, remolded triaxial compression tests, a one-dimensional consolidation test, lime stability tests, and soil corrosion screening. Analysis of soil samples indicates the Project is in an area underlain by Franciscan Complex which is late Mesozoic bedrock terrane consisting of a mixture of rocks commonly found throughout the California Coast Ranges and particularly on the San Francisco Peninsula. Merced Formation sediments overlay and cap the bedrock in the vicinity of the Project Site and are prone to localized weak zones and sloughing along slopes. The surface soils of the Project Site are mostly granular fill and include an area mapped for serpentinite rock, which was found underlying the central portion of the site and, along the southeastern edge of the proposed tank at approximately ½ to 13 feet below ground surface as shown in Figure 13. Groundwater is expected at a depth of greater than 50 feet and will vary with precipitation but was not found in core samples drilled down to 40 feet below ground surface.

The serpentinite was found near ground surface and at deeper locations at the Project Site due to the location of a fault where displacement has occurred. During recent subsurface exploration at the Project Site (Cornerstone, 2021), it was determined that this is a discontinuous, unnamed fault that trends through the central portion of the site at a shallow angle of 34 degrees. The short length of this fault indicates that it is not capable of generating its own earthquake. The presence of undisturbed Pleistocene soil overlying this fault suggests that the fault has a very low geologic slip rate and that the recurrence interval between triggered slip events may be spaced thousands of years to tens of thousands of years apart. Cornerstone concluded that this fault poses a low level of hazard for the Project. Project design features (Mitigation Measures) are provided in this section to reduce impacts to less than significant levels due to a seismic event resulting in changes onsite at this fault.

The existing tank pads were constructed with both cuts and fills, although the existing ground surface of the Project Site consists of imported aggregate base rock, concrete, and asphalt. The deepest fills are to the northeast of Tank 1 and north of Tank 3. The Project Site is surrounded by adjacent slopes down to the north, east and south which range between 4 and 14 degrees and are covered with vegetation. The existing slope to the west, between the Project Site and SR-35 is cut at 1.5:1 (horizontal: vertical) and was measured at was measured as 35 and 36 degrees in the field. Several shallow landslides were observed in the cut slope. The numerous mature trees onsite are estimated to have root balls extending to depths of 2 to 4 feet, depending on the tree size. Significant root zones are anticipated to extend to the diameter of the tree canopies.

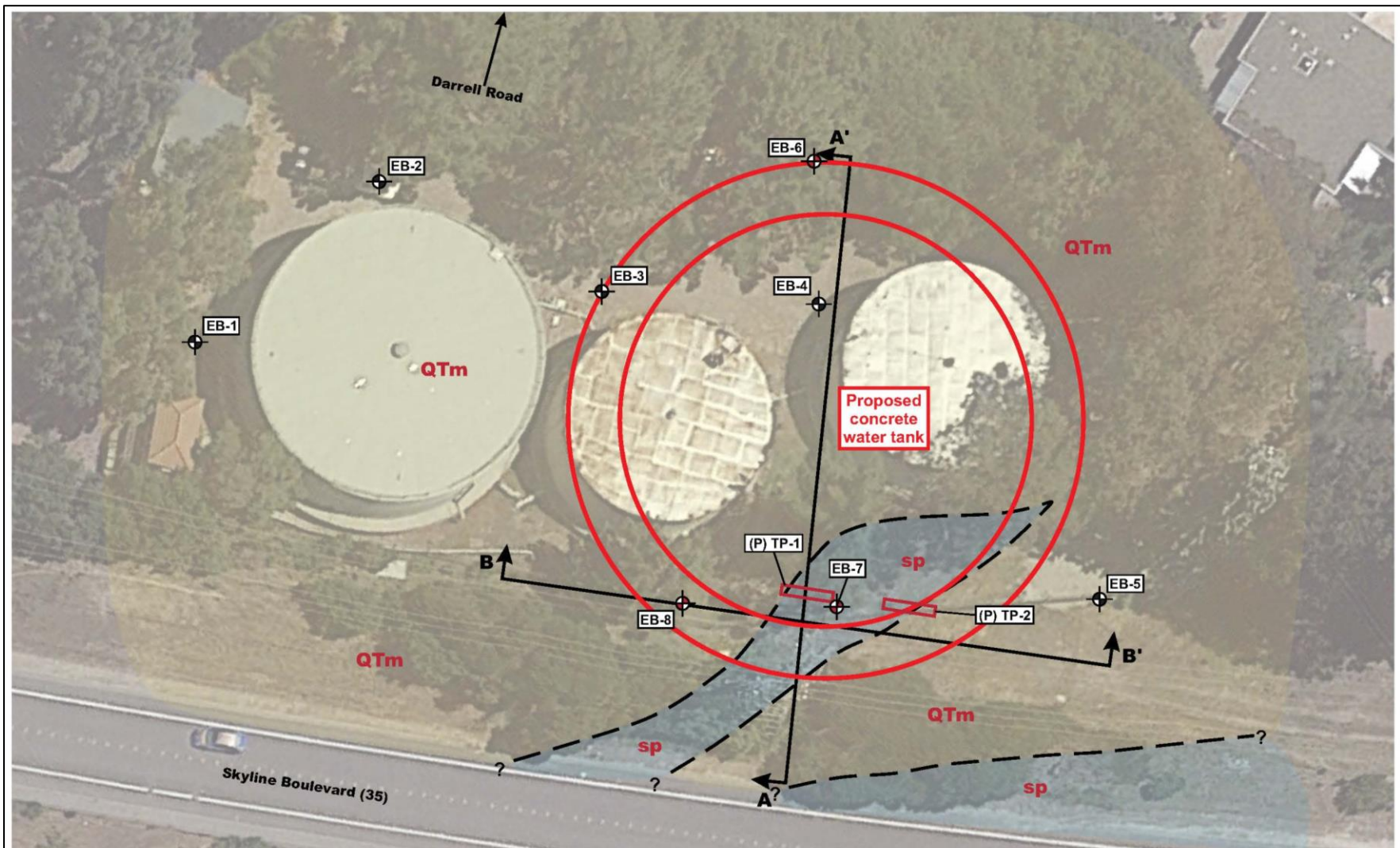


Base by California Geological Survey - 2010 Fault Activity Map of California (Jennings and Bryant, 2010)

Source: Cornerstone Earth Group, October 2020

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 12. Regional Fault Map



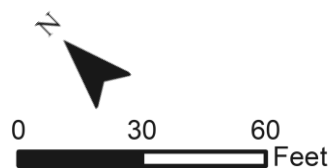
Source: Cornerstone Earth Group, October 2020

Geologic Units
sp Serpentine
QTm Merced Formation

Legend
 Approximate location of exploratory boring (EB) (Cornerstone, current investigation)
 Approximate location of exploratory boring (EB) (Cornerstone, 2008)
 Approximate location of proposed test pit (TP)
 Approximate location of cross section

Base by Google Earth, dated 05/10/2018

Reference: CSG Consultants Inc., Topographic Survey/Existing Utilities - Sheet 2, dated 02/23/2008



Darrell Water Tanks Replacement Project
 Town of Hillsborough

Figure 13. Exploratory Testing and Geology

Regional Seismicity

Northern California and the San Francisco Bay area is one of the most seismically active areas in the Country. The faults in the region are shown in Figure 12 with the highest estimated probability of generating damaging earthquakes between 2014 and 2043 are the Hayward (33%), Calaveras (26%), and San Andreas Faults (22%). In this 30-year period, the probability of an earthquake of magnitude 6.7 or larger occurring is 22 percent along the San Andreas Fault and 33 percent for the Hayward Fault. The closest faults to the Project are listed as follows:

Fault Name	Distance from Project
San Andreas 1906	0.4 miles
San Gregorio	6.0 miles
Monte Vista-Shannon	9.0 miles

Regulatory Setting

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act regulates development in California near known active faults due to hazards associated with surface fault ruptures. The Project Site is not within an Alquist-Priolo Zone; thus, the project is not subject to regulation under the Alquist-Priolo Earthquake Fault Zoning Act (California Geologic Survey, 2021).

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act was passed in 1990 following the Loma Prieta earthquake to reduce threats to public health and safety and to minimize property damage caused by earthquakes. The act directs the U.S. Department of Conservation to identify and map areas prone to the earthquake hazards of liquefaction, earthquake-induced landslides, and amplified ground shaking. The act requires site-specific geotechnical investigations to identify potential seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy within the Zones of Required Investigation.

California Building Code

Hillsborough enforces the 2019 California Building Codes (CBC) and requires all development within the Town to comply with the most current CBC standards. The CBC covers grading and other geotechnical issues, building specifications, and non-building structures. The CBC requires that a foundation and soil investigations report be prepared by a registered professional for seismic design and provide measures to be incorporated into the design of the foundation and structure which will mitigate significant hazards from seismic activity including surface fault ruptures, ground shaking, liquefaction, and seismically induced slope failures and settlement. In addition, the site-specific geotechnical report(s) shall provide measures to reduce potentially significant geologic hazards, such as expansive and corrosive soils, differential settlement, and slope stability. The conclusions and recommendations of the engineering geology and soil engineering reports would be incorporated into project plans and specifications and approved by Town staff prior to approval of final Project plans.

The American Water Works Association (AWWA) provides criteria for the seismic design of prestressed concrete tanks in ANSI/AWWA D110-17, such as the Project. This standard indicates seismic design and

parameters to be determined in accordance with procedures outlined in ASCE 7 Standard Minimum Design Loads for Buildings and Other Structures. The Project structural engineer will confirm which standard applies for seismic design.

California Public Resources Code

Section 5097.5: No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, “public lands” means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

California Administrative Code, Title 14, Section 4307

This section states that “No person shall remove, injure, deface, or destroy any object of paleontological, archeological, or historical interest or value.”

Town of Hillsborough

The Town of Hillsborough has the following goal and action to protect scientifically significant paleontological resources (Town of Hillsborough 2005):

Goal OSC-5 Support the preservation of important cultural resources found within the community.

Action OSC-5.3: The Town will require construction projects to stop if archaeological or paleontological resources are uncovered during grading or other on-site excavation activities. Once the resources are assessed for importance, appropriate mitigation compliant with State law will be determined.

Discussion

Would the project:

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
 - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Less Than Significant with Mitigation Incorporated. The Project is a tank replacement that would not directly or indirectly increase risk of loss, injury, or death related to soils, geology or seismicity. The Project does not involve the construction of or provision for additional habitable structures and will be designed to be consistent with current design standards and building standards applicable to the Project and Project Site. The standard application of the current Uniform Building Code, American Water Works Association design criteria, and Town procedures for plan

check, Project approval and inspection will result in a tank that is superior to the existing tanks that are currently located on site in regard to adverse effects and risk of loss, injury or death involving rupture of a known earthquake fault. The Project is within a seismically active area and is not located in a State-designated Alquist-Priolo Zone. According to the California Department of Conservation, California Geologic Survey (2021), the Project Site is not located within an Earthquake Fault Zone, a Liquefaction Zone, nor a Landslide Zone. A review of available published geologic and fault-themed maps by Cornerstone Earth Group indicates no faults had previously been mapped through or adjacent to the Project Site. The Town of Hillsborough enforces the 2019 California Building Codes (CBC) and requires all development within the Town to comply with current CBC standards, including site-specific geotechnical measures. Design features and Mitigation Measures) for the Project would decrease the potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of known earthquake fault to Less Than Significant with Mitigation Incorporated.

ii) Strong seismic ground shaking?

Less Than Significant with Mitigation Incorporated. Refer to VII ai. The Project Site as with the entire San Francisco Bay Area are in a seismically active area. Significant earthquakes have occurred in this area and can be expected in the future from a major earthquake on one of the faults shown in Figure 12. Significant Impacts from strong seismic ground shaking, such as differential settlement and structural damage, are not anticipated with the Project due to proposed reworked engineered fill that will be implemented during site preparation for structural foundations. Therefore, the potential for significant impacts (differential seismic settlement) affecting the proposed tank improvements is very low and Project impacts are considered less than significant with mitigation (Cornerstone, 2021).

The Darrell Tank site would be subjected to considerable ground motion during a moderate to severe earthquake from the San Andreas or other major faults in the San Francisco Bay Area. However, the Project will update the tank facility to meet current seismic standards and would reduce the potential risk associated with seismic shaking. A site-specific soil engineering report and an engineering geology report have been prepared for incorporation in the Project design and approval. The new tank and associated piping would be designed in accordance with report recommendations to reduce the seismic hazard risks to acceptable levels according to peak ground acceleration (PGAM) that was estimated following the ground motion hazard analysis procedure presented in Chapter 21, Section 21.2 of ASCE 7-16 and Supplement No.1 (See Appendix D). Design features (or Mitigation Measures) for the Project would decrease the potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking to less than significant with mitigation measures incorporated.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant with Mitigation Incorporated. Refer to VII ai-ii. The term ground failure is a general reference to landslides, liquefaction, lateral spreads, and any other consequence of shaking that affects the stability of the ground which are related to soil characteristics.

Liquefaction is the conversion of soil into a fluidlike mass during an earthquake or other seismic event that is attributed to a combination of high groundwater levels and granular unconsolidated soils. The site is not located within a State-designated Liquefaction Hazard Zone (CGS, San Mateo Quadrangle, 2018) and has a very low to low liquefaction potential according to the Association of Bay Area Governments (ABAG, 2020). The site is underlain by well consolidated and stiff pre-Quaternary geologic formations and is in area that is characterized on published maps as having a very low potential for liquefaction (San Mateo County, 2007; U.S. Geological Survey and California Geological Survey, 2007). Soils tests for the Project Site conducted by Cornerstone indicate primarily stiff cohesive and dense granular soils underlain by bedrock. In addition, the design groundwater level is anticipated to be below any granular soils. Based on the above, screening of the site for liquefaction indicates a very low potential for liquefaction and is in general agreement with local mapping for the site by ABAG.

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction. The potential for liquefaction to occur at the site negligible. Project construction will incorporate temporary shoring within trenches during construction pursuant to Mitigation Measure GEO-3, 31; Mitigation Measures Geo-1 through GEO-3 will implement safety guidelines from the CBC, ANSI/AWWA and ASCE 7 standards for safety and stability. Therefore, the potential for lateral spreading to affect the site is very low. Design features or Mitigation Measures for the Project would decrease the potential substantial adverse effects, including the risk of loss, injury, or death involving seismic related ground failure to less than significant with mitigation incorporated.

iv) Landslides?

Less Than Significant with Mitigation Incorporated. Refer to VII ai-iii. A landslide is a movement of surface material down a slope. Available geologic maps do not indicate the presence of landslides in the vicinity of the site and the site is in an area interpreted as “least susceptible” to landsliding and/or debris flow occurrence (Cornerstone, 2021). The topography where the tank footprint is proposed is generally level and slopes downward slightly toward the property lines. Portions of the cut slope for SR- 35 to the west of the Project Site indicate past occurrences of slope creep and one small shallow slope failure not related to the Project Site. Project design features (or Mitigation Measures) will be implemented to address the potential instability of slopes; therefore, potential substantial adverse effects, including the risk of loss, injury, or death involving landslides would be less than significant with mitigation incorporated.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant with Mitigation Incorporated. Earthwork quantities are estimated at approximately 3,850 cubic yards for the Project. Site soils will be mixed on site with lime and cement to improve stability; import of base material is estimated at 1,000 cubic yards. Over excavation for tank foundations will be 3 feet to 5 feet below existing ground surface. Earth work is anticipated for 2 months and during this time the site will be exposed to erosion. Implementation of the ADMP dust control (see Section VIII) and erosion control measures with the SWPPP for the Project identified in the Hydrology section will reduce erosion to less than significance.

Slope areas disrupted during construction will require periodic maintenance after construction to reduce the potential for erosion and sloughing. At a minimum all slopes should be vegetated by hydroseeding or other landscape ground cover. The establishment of vegetation will help reduce runoff velocities, allow some infiltration and transpiration, trap sediment within runoff, and protect the soil from raindrop impact. Depending on the exposed material type and the slope inclination, more aggressive erosion control measures may be needed to protect slopes for one or more winter seasons while vegetation is establishing. Both construction and post-construction Storm Water Pollution Prevention Plans (SWPPPs) would be prepared for the Project-specific requirements. With the implementation of these measures, the soil erosion and loss of topsoil impacts would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant with Mitigation Incorporated. Refer to VII a-b. The Project Site is located in a dynamic geographical area and has been developed with three water storage tanks and several ancillary structures. As reported by Cornerstone, the site contains several types of geologic units: artificial fill, residual soil, Merced Formation (shallow marine sediments including pebble conglomerate, sandstone, siltstone and claystone) and Serpentinite (soft greenish gray sheared matrix material surrounding blocks of hard, strong, gray unsheared igneous rocks).

To prevent soil instability that could potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, the Project design includes mixing site soils with stabilizers (lime or lime and concrete), maintaining approximate 2 percent slope away from structures to prevent ponding near structures, foundations and retaining walls, diverting flows to on-site landscaping and detention basins, and installation of a permanent subsurface drainage system to carry significant storm water flows off site. The new tank will be constructed on compacted engineered fills and supported on a perimeter “ring” foundation with interior columns and a membrane concrete slab-on-grade. A foundation loads analysis shows between 1/3 and 1 1/3 inches of static settlement. The underlying bedrock and engineered fills would create a strong foundation for the new tank, preventing instability that would contribute to subsidence and collapse of the soils and geologic units

below. For the reasons above, the probability of liquefaction or lateral spreading occurring at the Project Site is low and less than significant impacts with mitigation are anticipated.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant with Mitigation Incorporated. Expansive soils are typically associated with clay soils that expand when water is added and shrink when they dry out. Plasticity Index (PI) test results were used by Cornerstone Earth Group to evaluate expansion potential of surficial soils. The results of the surficial PI tests indicated PIs ranging from 27 to 29, indicating moderate to high expansion potential to wetting and drying cycles. Laboratory testing indicated the in-situ moisture contents within the fill range from 0 to 5 percent over the estimated laboratory optimum moisture. Geotechnical evaluations at the Project Site by Cornerstone determined there is claystone bedrock present, which is highly expansive and sensitive to moisture and stress changes. Significant changes in loading or moisture conditions within this claystone layer may cause significant volume changes due to shrink and swell. Swell caused by unloading or moisture changes could cause differential movement beneath tank foundations due to variations in the claystone thickness or due to material transitions across the tank foundations. Expansive soils and bedrock, if encountered during grading, would be chemically treated (e.g., lime treated) prior to placement as engineered fill. The Town would adhere to geotechnical design recommendations for proper compaction, drainage, and foundation design as well as mitigation measures in GEO-03. These measures would render site risk impacts from expansive soils and materials to less than significant with mitigation incorporated.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

No Impact. No wastewater or septic tank systems are proposed as part of the Darrell Tank Project. Therefore, the Project would have no impact on soils supporting the disposal of wastewater.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. The Project surface is mapped as late Pliocene to early Pleistocene Merced Formation deposited 3.6 to 1.8 million years ago (Ma), and Jurassic to Cretaceous serpentinite ranging in age from 201.3 to 66 Ma (Albion, 2021). The record search for the Project revealed no fossil localities within the vicinity of the Project; however, the Merced Formation has produced extinct Pleistocene megafauna, including ground sloth and Columbian mammoth, as well as baleen whale, numerous marine invertebrate fossils, and conifer fossils.

A survey of the Project Site on December 3, 2020 indicates visible sediments onsite are consistent with mapping by Pampeyan (1994) and Brabb et al. (1998), although modern artificial fill was visible at the surface in some areas. Paleontological sensitivity for the Project Site ranges between very low to moderate and impacts to the late Pliocene to early Pleistocene Merced Formation will be low to very low. Due to the low potential for impacts to the Merced Formation, no mitigation measures are

currently recommended. No mitigation is required for any excavation into the serpentinite and artificial fill. However, if unanticipated discoveries of paleontological resources occur during construction, all work within 25 feet of the discovery should be halted until the find has been evaluated by a qualified paleontologist.

Mitigation Measures

GEO-1: The contractor shall be responsible for conducting a tailgate training prior to initiation of Project construction.

GEO-2: If unanticipated discoveries of paleontological resources occur during construction, all work within 25 feet of the discovery should be halted until the find has been evaluated by a qualified paleontologist.

GEO-3: Prior to final Town approval of Plans, Specifications and Estimates, the Town of Hillsborough shall confirm that plans shall show accommodation for soil stability and reduced potential for triggered slip or creep (i.e., movement) of the fault, settlement, expansive soils, slope failure and erosion with notes on the plans for the following. Plans are to be implemented by licensed professionals and inspections shall be accompanied by the Project geologist:

Cut/Fill and Stability:

- 1) Placement of at least 2 feet of engineered fill beneath the new tank (3 feet is recommended for cut/fill transitions).
- 2) All fill and colluvium should be removed within the new tank pad area down to native, undisturbed bedrock.
- 3) The claystone layer beneath the new tank pad should be over-excavated and replaced with engineered fill to provide a more uniform condition beneath the pad and perimeter footing.
- 4) Non-expansive fill should have a Plasticity Index (PI) of 15 or less.
- 5) Alternative to importing non-expansive fill, on-site chemical treatment can be considered to create non-expansive fill. Based on preliminary testing of the high PI clayey soil material, it will likely need to be mixed with at least 5 percent quicklime (CaO) or approved equivalent to adequately reduce the PI of the on-site soils to 15 or less. If this option is considered, additional laboratory tests should be performed during initial site grading to further evaluate the optimum percentage of quicklime required.
- 6) The depth of over-excavation below pad grade should be equal to at least 3 feet below the bottom of foundations to provide a uniform engineered fill pad. The final depth of the over-excavation will depend on the type of material exposed and will be determined in the field during construction. In general, over-excavation should extend to at least 5 feet beyond the building footprint. Adjustments to the depth and lateral limits of the over-excavation may need to be made at the time of construction depending on the actual conditions encountered during grading.

- 7) Cut/fill transitions should be over-excavated and shallow tank foundations should bear uniformly on similar, undisturbed native bedrock, or a relatively uniform section of engineered fill of at least 3 feet over undisturbed native bedrock.
- 8) Provided the fills meet the "Material for Fill" requirements, the fills may be reused when backfilling the excavations. Based on review of the samples collected from our borings, the fill may be reused. However, expansive soils and bedrock, if encountered during grading, should be chemically treated (e.g., lime treated) prior to placement as engineered fill.
- 9) Temporary shoring, bracing, and cuts/fills should be performed in accordance with the strictest government safety standards. On a preliminary basis, the bedrock and the artificial fill and residual soil at the site may be classified as OSHA Soil Types B and C materials, respectively. A Cornerstone representative should be retained to confirm the preliminary site classification.
- 10) Excavations performed during site demolition and fill removal should be sloped at 3:1 (horizontal: vertical) within the upper 5 feet below building subgrade. Excavations extending more than 5 feet below building subgrade and excavations in pavement and flatwork areas should be slope at a 1:1 inclination unless the OSHA soil classification indicates the slope should not exceed 1.5:1.
- 11) All permanent cut and fill slopes in soil should have a maximum inclination of 2:1 (horizontal: vertical) for slopes up to 10 feet high; slopes greater than 10 feet should be inclined at no greater than 2.5:1. All permanent cuts in competent bedrock may have a maximum inclination of 1½:1. Fill slopes should be overbuilt and trimmed back, exposing engineered fill when complete.
- 12) Fill placed on existing ground inclined at 6:1 or greater should be benched into the existing slope and a keyway constructed at the toe of the fill. Benches should be angled slightly into the slope and be spaced vertically at no greater than 4 feet between benches and be at least 6 feet wide. Depending on the thickness of any colluvial/residual soil layer that blankets the bedrock, the benches may need to be widened beyond the minimum width to extend into competent bedrock. The keyway should also be angled slightly into the slope (minimum 2 percent inclination), extend at least 2 feet into competent bedrock, and be at least 3 feet wide.
- 13) Temporary shoring should support adjacent improvements without distress and should be the contractor's responsibility.
- 14) Based on the site conditions, the cuts may be supported by soldier beams and tiebacks, braced excavations, soil nailing, or potentially other methods. Where shoring will extend more than about 10 feet, restrained shoring will most likely be required to limit detrimental lateral deflections and settlement behind the shoring. In addition to soil earth pressures, the shoring system will need to support adjacent loads such as construction vehicles and incidental loading, existing structure foundation loads, and street loading. We recommend that heavy construction loads (cranes, etc.) and material stockpiles be kept at least 15 feet behind the shoring. Where this loading cannot be set back, the shoring will need to be designed to support the loading. The shoring designer should provide for timely and uniform mobilization of soil pressures that will not result in excessive lateral deflections.

- 15) After site clearing and demolition is complete, and prior to backfilling any excavations resulting from fill removal or demolition, the excavation subgrade and subgrade within areas to receive additional site fills, slabs-on-grade and/or pavements should be scarified to a depth of 6 inches, moisture conditioned, and compacted in accordance with the "Compaction" section below.
- 16) All fills, and subgrade areas where fill, slabs-on-grade, and pavements are planned, should be placed in loose lifts 8 inches thick or less and compacted in accordance with ASTM D1557.(latest version) requirements. Each lift of fill and all subgrades should be firm and unyielding under construction equipment loading in addition to meeting the compaction requirements to be approved. The contractor (with input from a Cornerstone representative) should evaluate the in-situ moisture conditions, as the use of vibratory equipment on soils with high moistures can cause unstable conditions.

Plan Check and Monitoring:

- 17) Plans and specifications shall include a note to the Contractors clearly indicating the likely need to provide for appropriate excavating equipment to excavate to the required depths in the anticipated subsurface conditions.
- 18) Plans and specifications shall include a note to the Contractors clearly indicating special requirements for corrosion control will likely be required to protect metal pipes and fittings. Engagement of a corrosion engineer is suggested to provide recommendations for corrosion protection of metal pipes, if used on this Project.
- 19) The Town of Hillsborough shall retain plan check professionals for structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with any comments prior to issuing the plans for construction.
- 20) The Town of Hillsborough and the contractor shall provide 48-hour notice to the geotechnical engineer to ensure that the geotechnical engineer for the Project is present during site preparation to provide geotechnical observation and testing during earthwork and foundation construction for the purpose of:
 - 1) Providing a letter at the end of construction regarding contractor compliance with Project plans and specifications, and with the recommendations of the Project geotechnical report.
 - 2) Evaluating any conditions differing from those encountered during our investigation and provide supplemental recommendations, as necessary.
- 21) The geotechnical engineer for the Project should be notified prior to the start of demolition and should be present on at least a part-time basis during all backfill and mass grading as a result of demolition.
- 22) The geotechnical engineer for the Project shall be contacted to address buried structures, should they be found, on a case-by-case basis.
- 23) Suitable environmental laboratory data to the planned import quantity should be provided to the Project environmental consultant; additional laboratory testing may be required based on the Project environmental consultant's review. The potential import source should

also not be more corrosive than the on-site soils, based on pH, saturated resistivity, and soluble sulfate and chloride testing.

- 24) The geotechnical Engineer shall review and approve the conceptual grading and sub-drainage plans for the Project and will provide specific input regarding the subsurface treatment where keyways and fill are located.
- 25) The geotechnical engineer for the Project shall be on site during keyway and fill slope construction. Field modifications to the planned keyway and benching may be required based on encountered field conditions.
- 26) The engineering geologist for the Project shall observe the condition of all cut slopes and evaluate the potential for localized adverse materials or bedding orientation.
- 27) The Project civil engineer or land surveyor be retained to survey in place all keyways, sub-drainage lines, solid pipes, and cleanouts, and create an as-built plan. This plan will be of use for any future maintenance or repair work.

Utilities:

- 28) All utilities should be completely removed from within planned building areas. The geotechnical engineer shall make the final determination for any utility line to be considered acceptable to remain within building areas, the utility line must be completely backfilled with grout or sand-cement slurry (sand slurry is not acceptable), the ends outside the building area capped with concrete, and the trench fills either removed and replaced as engineered fill with the trench side slopes flattened to at least 1:1, or the trench fills are determined not to be a risk to the structure.
- 29) The contractor should assume that all utilities will be removed from within building areas unless provided written confirmation from both the owner and the geotechnical engineer.
- 30) Utility lines constructed within public right-of-way should be trenched, bedded and shaded, and backfilled in accordance with the Town of Hillsborough Standard Trench Detail C16. Utility lines in private improvement areas should be constructed in accordance with the requirements outlined in the report, unless superseded by other governing requirements.

Expansive Soils/Materials:

- 31) The contractor should keep all exposed expansive soil subgrade (and also trench excavation side walls) moist until protected by overlying improvements (or trenches are backfilled).
- 32) If expansive soils are allowed to dry out significantly, re-moisture conditioning may require several days of re-wetting (flooding is not recommended), or deep scarification, moisture conditioning, and re-compaction.
- 33) As the Plasticity Index (PI) of the surficial soils ranges up to 29, the proposed mat/slabs proposed for the tank structure should be supported on at least 12 inches of non-expansive fill (NEF) to reduce the potential for mat/slab damage due to soil heave, which should extend to at least 3 feet outside the tank footprint. The NEF layer should be constructed over subgrade prepared in accordance with the recommendations in the "Earthwork" section of this report.

- 34) If significant time elapses between initial subgrade preparation and non-expansive fill construction, the subgrade should be proof rolled to confirm subgrade stability, and if the soil has been allowed to dry out, the subgrade should be re-moisture conditioned to at least 3 percent over the optimum moisture content.
- 35) Imported and non-expansive material should be inorganic with a Plasticity Index (PI) of 15 or less, and not contain recycled asphalt concrete where it will be used within the building areas. Information regarding the import source should be provided, such as any site geotechnical reports. If current data is not available, specification testing will need to be completed prior to approval. Environmental and soil corrosion characterization should also be considered by the Project team prior to acceptance.
- 36) Non-expansive fill should have a Plasticity Index (PI) of 15 or less. Due to the high clay content and PI of the on-site soil and bedrock materials, it is not likely that sufficient quantities of non-expansive fill would be generated from cut materials. As an alternative to importing non-expansive fill, chemical treatment can be considered to create non-expansive fill.
- 37) Controlled Low-Strength Material (CLSM) may be used as engineered fill. As with all engineered fill, CLSM should be placed on bedrock and subgrade soils prepared in accordance with Section 6.5. CLSM should have a minimum 28-day unconfined compressive strength of 75 pounds per square inch (psi). Unconfined compression testing should be performed in accordance with ASTM D4832.

Drainage, Erosion Control and Water Quality:

- 38) Surface runoff should not be allowed to flow over the top of or pond at the top or toe of engineered slopes or retaining walls.
- 39) A permanent subsurface drainage system consisting of a series of perforated gravity pipes or drainage strips should be constructed between engineered fill placed against a bedrock slope and within all keyways.
- 40) Ponding should also not be allowed on or adjacent to building foundations, slabs-on-grade, or pavements.
- 41) Hardscape surfaces should slope at least 2 percent towards suitable discharge facilities; landscape areas should slope at least 3 percent towards suitable discharge facilities. Roof runoff should be directed away from building areas in closed conduits, to approved infiltration facilities, or on to hardscaped surfaces that drain to suitable facilities.
- 42) Retention, detention or infiltration facilities should be spaced at least 10 feet from buildings, and preferably at least 5 feet from slabs-on-grade or pavements. These facilities are not recommended where stormwater infiltration may Affect slopes at lower elevations on or adjacent to the site. However, if slopes are not present at lower elevations that could potentially be Affected, and if retention, detention or infiltration facilities are located within these zones, we recommend that these treatment facilities meet the requirements in the Storm Water Treatment Design Considerations section of this report.
- 43) Lined v-ditches should be included at the top of slopes and intermediate benches, and at the toe of slopes or behind retaining walls adjacent to planned or existing development. All v-

- ditches and drain inlets should be sized to accommodate the design storm events for the upslope tributary area. Concrete-lined v-ditches should be reinforced as required and have adequate control and construction joints and should be constructed neat in excavations; backfill around formed ditches should not be allowed.
- 44) If upslope irrigation of is present or planned, additional surface and subsurface drainage, or construction of drained buttress fills may be needed to protect site improvements pursuant to recommendations by the Project geotechnical engineer.
 - 45) Adequate drainage should be provided by a subdrain system behind all walls. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). The pipe should be bedded and backfilled with Class 2 Permeable Material per Caltrans Standard Specifications, latest edition.
 - 46) Subsurface drainage improvements should be installed as part of earthwork for fill construction. These improvements should include positive surface gradients for keyways and benches and the installation of a subdrain system consisting of perforated pipe and permeable gravel or drain rock. If drain rock is used, the rock and pipe should be entirely wrapped with a permeable geotextile fabric. Subdrains should also be installed at the toe of any proposed cut slopes depending on the actual conditions observed during construction. As previously discussed, a conceptual subdrain plan should be prepared once preliminary grading plans are finalized. The actual location of subdrains should be determined in the field at the time of construction.
 - 47) Reduce the amount of surface water infiltrating surface soils near foundations and exterior slabs-on-grade by:
 - 1) Using drip irrigation.
 - 2) Avoiding open planting within 3 feet of the building perimeter or near the top of existing slopes.
 - 3) Regulating the amount of water distributed to lawns or planter areas by using irrigation timers.
 - 4) Selecting landscaping that requires little or no watering, especially near foundations.
 - 5) Maintain surface grades away from structures and foundations.
 - 48) Both construction and post-construction Storm Water Pollution Prevention Plans (SWPPPs) should be prepared for the Project-specific requirements.
 - 49) Hillside grading will require periodic maintenance after construction to reduce the potential for erosion and sloughing. At a minimum all slopes should be vegetated by hydroseeding or other landscape ground cover to reduce runoff velocities, allow some infiltration and transpiration, trap sediment. Depending on the exposed material type and the slope inclination, more aggressive erosion control measures may be needed to protect slopes for one or more winter seasons while vegetation is establishing. For slopes with inclinations of 2:1 (horizontal: vertical) or greater, erosion control may consist of jute netting, straw matting, or erosion control blankets used in combination with hydroseeding.

Fault and Foundations:

- 50) Consult with PG&E on supplemental recommendations to the design team generally based on mitigation methods employed by PG&E to reduce the potential for damage due to fault movement.
- 51) The 2019 CBC states that lateral pressures from earthquakes should be considered in the design of basements and retaining walls.
- 52) Where surface improvements will be located over the retaining wall backfill, backfill placed behind the walls should be compacted to at least 95 percent relative compaction using light.
- 53) compaction equipment. Where no surface improvements are planned, backfill should be compacted to at least 90 percent. If heavy compaction equipment is used, the walls should be temporarily braced.
- 54) Retaining walls may be supported on a continuous spread footing designed in accordance with the recommendations presented in the "Foundations" section of this report. However, supporting the walls on deep foundations may be considered to resist the estimated seismic loads discussed above.
- 55) Based on the provided structural loads and reported settlement tolerance, the proposed water tank structure may be supported on shallow foundations supported on ground improvement provided the recommendations are followed. As an alternative to shallow foundations and ground improvement, the tank structure may be supported on deep foundations (e.g., drilled concrete piers).
- 56) The structural design of any site retaining wall should include resistance to lateral earth pressures that develop from the soil behind the wall, any undrained water pressure, and surcharge loads acting behind the wall. If adequate drainage cannot be provided behind the wall, an additional equivalent fluid pressure of 40 pcf should be added to the values above for both restrained and unrestrained walls for the portion of the wall that will not have drainage. Damp proofing or waterproofing of the walls may be considered where moisture penetration and/or efflorescence are not desired.

Demolition and Tree Removals:

- 57) Surface vegetation and topsoil shall be stripped to a sufficient depth to remove all material greater than 3 percent organic content by weight. Based on our site observations, surficial stripping should extend about 3 to 4 inches below existing grade in vegetated areas.
- 58) Grade depressions resulting from root ball removal should be cleaned of loose material and backfilled.
- 59) On-site soils with an organic content less than 3 percent by weight and bedrock may be reused as general fill. General fill should not have lumps, clods or cobble pieces larger than 6 inches in diameter; 85 percent of the fill should be smaller than 2½ inches in diameter.

GEO-4: Prior to the Town's final approval of the Plans, Specifications and Estimates for the Project, geotechnical engineer shall evaluate potential installation of ground improvement and/or potentially deep foundations.

GEO-5: Hillside grading will require vegetation by hydroseed or other landscape ground cover and periodic maintenance after construction to reduce the potential for erosion and sloughing. For slopes with inclinations of 2:1 (horizontal: vertical) or greater, erosion control may consist of jute netting, straw matting, or erosion control blankets used in combination with hydroseeding.

GEO-6: The geotechnical engineer for the Project must be present during earthwork to provide geotechnical observation and testing during earthwork and foundation construction and shall provide supplemental recommendations on any conditions differing from those encountered during the investigation and provide supplemental recommendations, as necessary. A letter will be prepared at the end of construction regarding contractor compliance with Project plans and specifications.

GEO-7: Drip irrigation shall be installed for temporary landscape irrigation; avoiding open planting within 3 feet of the building perimeter or near the top of existing slopes; regulating the amount of water distributed to lawns or planter areas by using irrigation timers; selecting landscaping that requires little or no watering, especially near foundations.

GEO-8: The claystone layer beneath the new tank pad will be over-excavated and replaced with engineered fill to provide a more uniform condition beneath the pad and perimeter footing.

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

VIII. GREENHOUSE GAS EMISSIONS

The analysis for greenhouse gas emissions discussion questions is based on the Darrell Water Tank Replacement Project Air Quality, Greenhouse Gas and Energy Analysis Technical Memorandum provided by Ganddini Group, Inc. dated March 26, 2021 and included as Appendix A.

Environmental Setting

Greenhouse gases (GHGs) result from chemical emissions that combine with molecules within the earth's atmosphere to change the composition of the atmosphere. When emitted to the earth's atmosphere, GHG creates a greenhouse effect and traps heat near the surface of the earth. The principal greenhouse gases that contribute to global warming and climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), as well as black carbon and fluorinated gases (F-gases): hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆). After increasing rapidly in past decades, GHG emissions throughout California and the Bay Area have leveled off (Bay Area Air Quality Management District, 2021). GHGs are expressed in terms of CO₂ equivalents (CO₂e) based on their global warming potential.

Regulatory Setting

State Regulations

California Global Warming Solutions Act of 2006, Assembly Bill 32

In September 2006, the governor signed AB 32, the Global Warming Solutions Act of 2006. The act directs the California EPA to work with state agencies to implement a cap on GHG emissions (primarily carbon dioxide) from stationary sources of such as electric power generation facilities, and industrial, commercial, and waste-disposal sectors. Specifically, AB 32 directs the California EPA to work with other state agencies to accomplish the following: 1) promulgate and implement GHG emissions cap for the electric power, industrial, and commercial sectors through regulations in an economically efficient manner; 2) institute a schedule of greenhouse gas reductions; 3) develop an enforcement mechanism for reducing GHG; 4) establish a program to track and report GHG emissions.

Senate Bill 97

Senate Bill 97, adopted in 2007, required the Governor's Office of Planning and Research to develop CEQA guidelines for the mitigation of greenhouse gas emissions, and the Resources Agency certified and adopted the amendments to the guidelines on December 30, 2009. According to CEQA Guidelines Section 15064.4, the lead agency may quantitatively or qualitatively assess the proposed Project's impact on GHGs. The lead agency should consider the proposed Project's reasonably foreseeable incremental contribution to the effects of climate change using evolving scientific knowledge, state regulatory schemes, and an appropriate timeframe for the proposed Project.

Senate Bill 32 and Assembly Bill 197

Enacted in 2016, Senate Bill 32 codifies the 2030 GHG emissions reduction goal of Executive Order B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. Similar to AB 32, a reduction in GHG emissions typically corresponds with a reduction in energy usage as the bulk of GHGs result from the combustion of fossil fuel.

SB 32 was coupled with a companion bill: AB 197. Designed to improve the transparency of CARB's regulatory and policy-oriented processes, AB 197 created the Joint Legislative Committee on Climate Change Policies, a committee with the responsibility to ascertain facts and make recommendations to the Legislature concerning statewide programs, policies and investments related to climate change. AB 197 also requires CARB to make certain GHG emissions inventory data publicly available on its website; consider the social costs of GHG emissions when adopting rules and regulations designed to achieve GHG emission reductions; and include specified information in all Scoping Plan updates for the emission reduction measures contained therein.

California Air Resources Board (CARB) has a role in the development and oversight of California's main greenhouse gas reduction programs including cap-and-trade, the Low Carbon Fuel Standard, and the zero-emission vehicle (ZEV) programs. CARB is mapping out how these programs and others can help California reduce greenhouse gas emissions an additional 40 percent below 1990 levels by 2030. The ultimate goal for California is to reduce greenhouse gases 80 percent below 1990 levels by 2050.

Regional Regulations

The Bay Area Air Quality Management District (Air District or BAAQMD) has been preparing plans to fulfill State and federal air pollution reduction requirements since 1982. The 2017 Clean Air Plan was developed as a multi-pollutant plan - an integrated control strategy to reduce ozone, particulate matter, toxic air contaminants, and greenhouse gases (GHG). Consistent with the GHG reduction targets adopted by the state of California, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

Local Regulations

The Town of Hillsborough adopted a Climate Action Plan (CAP) in 2010. The CAP is the Town's primary guidance document on attaining AB 32 standards. The CAP outlines goals, strategies, and next steps to attain the Town's GHG reduction goals as well as providing background information pertinent to these

efforts. According to the CAP, residential and transportation emissions comprise the large majority of the Town's emissions (55% and 39%, respectively, as of 2005). As of 2005, the Town emitted approximately 82,724 metric tons CO₂e per year. Pursuant to the requirements of AB 32, the CAP targets a 15% reduction from this quantity by 2020. The Town therefore aims to annually emit no more than 70,316 metric tons CO₂e by 2020. Most GHG reduction efforts recommended by the CAP target residential development, landscaping, and energy efficiency.

Discussion

Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less Than Significant Impact. The proposed Project would not directly or indirectly generate a permanent increase in GHG emissions in the long-term. The proposed Project is a replacement tank that will function via gravity flow supplemented with off-site pumps as with the existing tanks. Maintenance will remain consistent with the Project implementing yearly inspection conducted by a diver. Project landscaping will be temporary utilizing gravity flow. Operational emissions related to the Project would include motor vehicles driven by employees, but this would not change from the current conditions. In the future, the Project will allow an existing pump station to be decommissioned and will improve water system efficiency. Construction of the Project would result in a temporary and short-term increase of GHG emissions with activities such as grooming the access road at SR-35, demolition of tanks and foundations, tree removals, hauling of waste, earthwork, construction of supports and retaining walls, and building the tank. Construction activities will require the use of gasoline and/or diesel-powered equipment including backhoe, service trucks, Cat 235 Excavator with demolition hammer attachment, Front End Loader, 15 cubic-yard dump trucks, crane, chain saws, stump grinder, Pug Mill Mixer, Bulldozer, haulers, Concrete Trucks, and motor vehicles used by the construction workers. Short-term GHG emissions during construction are anticipated to be offset by permanently improved overall efficiency in the Town's water system. Consequently, there would be no significant impacts related to generation of GHGs at the Project Site in the short-term or long-term.

The BAAQMD has not adopted thresholds for evaluating GHG emissions from construction activities. However, the BAAQMD recommends that the lead agency quantify and disclose GHG emissions that would occur during construction and make a determination on the significance of these construction generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals. The CalEEMod Version 2016.3.2 was used to calculate the GHG emissions from the construction of the proposed Project. The construction related GHG emissions were based on a 30-year amortization rate as recommended by BAAQMD. It is estimated that approximately 0.3 acres of trees will be removed; therefore, the loss in CO₂ sequestration from removal of those trees was also factored into the analysis. The proposed Project's construction related GHG emissions have been calculated with the CalEEMod model based on the parameters detailed above. A summary of the results is shown in Table VIII-1 and CalEEMod model run for the proposed Project are provided in Appendix A.

Table VIII-1. Project-Related Greenhouse Gas Emissions

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO ₂	NonBio-CO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Total Emissions	0.00	235.00	235.00	0.07	0.00	236.66
30-Year Amortization	0.00	7.83	7.83	0.00	0.00	9.72

Notes: (1) Source: CalEEMod Version 2016.3.2 Annual Output (includes 36.63 MTCO₂/20 years for loss of trees).

The data provided in Table VIII-1 shows that the proposed Project's total construction-related emissions would be 9.72 MTCO₂e per year, which is well below the BAAQMD's Project Level GHG threshold of 1,100 MTCO₂e per year. For these reasons, the Project would not generate significant GHGs, therefore impacts on the environment would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. Refer to VIII a. The proposed Project would not have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. In 2010, the Town of Hillsborough adopted a Climate Action Plan (CAP) to identify methods to reduce GHG emissions in an effort to meet the requirements of AB 32. The CAP includes an emissions reduction target of reducing GHG emissions 15 percent below 2005 levels by 2020, consistent with AB 32, and 80 percent by 2050. To meet this goal, the Town selected four major strategies in the areas of energy efficiency, water conservation, and green building; waste reduction and recycling; education and promotion; and municipal operations.

As shown in Table VIII-1, the proposed Project's GHG emissions would be 9.72 MTCO₂e per year, which is substantially below the BAAQMD's Project Level threshold of significance of 1,100 MTCO₂e per year. This threshold was developed to ensure compliance with GHG reduction goals outlined in AB 32 and CARB's Climate Change Scoping Plan. The Project is not subject to any GHG reporting regulation (as it does not include any stationary sources) and would comply with the Town's construction recycling and demolition waste requirements as well as the Town's Climate Action Plan (whose programs are generally geared toward existing development and sustainable practices/workshops). The Project will replace exotic trees with native trees and will not result in land use changes that would increase GHG emissions. Therefore, the Project would not conflict with AB 32, nor have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases and impacts are considered to be less than significant.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XIV. HAZARDS AND HAZARDOUS MATERIALS

The analysis for Hazards and Hazardous Materials discussion questions is based on two reports prepared for the Darrell Water Tanks Replacement Project:

1. Phase I Environmental Site Assessment (ESA) and Soil Quality Evaluation, dated October 29, 2020, was completed for the Project Site by Cornerstone Earth Group. This report incorporates information obtained from a government records search, permit search, interviews with persons knowledgeable of existing and prior site uses, review of aerial photographs, information obtained from regulatory agencies, site inspection, and collection of near surface soil samples for laboratory analysis. The report is attached as Appendix E and was prepared according to the requirements and procedures included within 40 CFR §312 et al and ASTM E 1527-13 pertaining to hazardous materials.
2. Darrell Water Tank #1 and #2 Paint Sample Analysis, dated October 16, 2020, was completed by CSI Services. This report includes analysis results for eight paint samples obtained from the designated area. Each of the paint samples was analyzed for the heavy metals lead (Pb), chromium (Cr), and cadmium (Cd). A certified laboratory tested each paint sample in accordance with EPA 3050B/Method 6010B. The report is attached as Appendix E.

Environmental Setting

Existing tanks on site do not require use or storage or handling of hazardous materials. The portion of the site that is developed with a cell tower includes Lead-acid battery storage and will be protected in place during Project construction and will not be impacted by the Project. There were no reported spills and no other hazardous materials observed during the site visit that would indicate contaminated soils, soil vapor or ground water at the Project Site. Existing tank coatings are considered potentially hazardous due to documented Chromium and Lead content. Site soils sampling results document weathering and flaking of the tank coatings has not resulted in elevated Lead levels in site soils. The single-family residences adjacent to the Project Site and the contractor's crews are considered potential sensitive receptors to hazardous materials impacts. Residences are located within proximity from the location of the hazardous materials. (See Figure 2 Project Vicinity and Figure 7 Existing Topography and Pad Elevations).

Serpentine rock observed on the Project Site was detected in a soil sample up to 10 feet below ground surface. Serpentine is an ultramafic rock that is associated with naturally occurring asbestos, which can become airborne during earthwork. The Project is subject to regulation by the Bay Area Air Quality Management District during earthwork to reduce airborne emissions pursuant to ATCM (17CCR § 93105). In soil samples, the serpentine was underlain by sandy claystone and overlain with fill consisting of 2 feet of sandy lean clay soil topped with 2 ½ feet of silty sandstone fill. The soil sample containing serpentine rock tested positive for heavy metals primarily Chromium and Nickel; Asbestos was not found in the sample. All upper surface site soils consist of imported fill. Soils samples of the upper ½ to 1 foot on the eastern portion of the tank site generally consist of clayey sand fill. Tests on soil samples taken from the Project site indicate petroleum, hydrocarbons, volatile organic compounds (VOCs), semi volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs) and organochlorine pesticides (OCP) in the following types and concentrations regulated by California Department of Toxic Substances Control (DTSC) and the Environmental Protection Agency (EPA):

Lead – detected in soils at concentrations up to 48 milligrams/kilogram (mg/kg) is below residential DTSC threshold of 80 mg/kg and determined not to be from tank coatings.

Nickel – detected in some soil samples at concentrations between 2,400 mg/kg and 2,800 mg/kg and exceeds the 2,000 mg/kg threshold. May be considered as non-RCRA hazardous waste.

Chromium – detected in concentrations between 1,300 mg/kg and 1,500 mg/kg and is below the DTSC-SL threshold for non-RCRA and RCRA hazardous waste.

VOC 4 Isopropyl toluene – was detected. There is no screening level established for this VOC. No other VOCs were detected.

PCB compound Aroclor 1260 - was detected in the upper ½ foot and does not exceed residential DTSC-SL thresholds.

PAH Compound benzo (a) Pyrene was detected at 0.41 mg/kg and is above the residential DTSC-SL threshold of 0.1 mg/kg and below the commercial DTSC-SL of 1.3 mg/kg.

Activities associated with demolition of Darrell Tanks #1 and #2 and the construction of the Project will involve the temporary use, handling, transport, and storage of materials typically used in demolition and construction and listed as hazardous materials in state and federal statutes. Examples of materials that may be used during construction include adhesives, solvents, cleaning fluids, petroleum products used for gas powered saws and cranes for tree removal/replacements. Tank removal and disposal will involve Lead paint and coatings, grading, over excavation and subgrade preparation for structural tank floor slab and foundation in areas where serpentinite rock and naturally occurring asbestos are found. Piping, valves, utilities relocations, replacement of paved and gravel surfaces, and the temporary access from SR-35 for equipment and truck access, staging and laydown will also involve use of polyvinyl chloride, adhesives, paving, silica, fiberglass, and volatile organic compounds.

Regulatory Setting

Hazardous materials and hazardous waste must be managed in accordance with federal and state laws and regulations, and/or local ordinances. Waste classified as hazardous shall be managed by the contractor, conforming to applicable Cal/OSHA worker health and safety requirements standards for the construction industry and according to safe and protective handling for storage, transportation, treatment, and disposal.

Federal and State Regulations

The US Environmental Protection Agency (US EPA) regulates the disposal of hazardous wastes under the Resource Conservation and Recovery Act (RCRA). The US EPA maintains lists of federally regulated hazardous wastes which are generally characterized as ignitable, corrosive liquid, reactive, and toxic at specific exposure levels. The California Department of Toxic Substances Control regulates the disposal of non-RCRA hazardous wastes in California (22 CCR §66261 et. al). California has adopted hazardous waste listings similar to the RCRA hazardous waste lists. Temporary ID numbers are issued to generators who do not typically generate hazardous waste and are valid for 90 days. Hazardous waste ID numbers are issued by the Department of Toxic Substances Control (DTSC) through their website: dtsc.ca.gov/IDManifest/index.cfm Construction or demolition Projects can be temporary generators of hazardous waste but based on the duration of the Project they may become routine generators

County and Local Regulations

Sites that routinely generate hazardous waste are required to obtain a Certified Unified Program Agency (CUPA) Permit from San Mateo County Environmental Health Services and a permanent hazardous waste ID number. The Town of Hillsborough Municipal Fire Code 15.20.095 states that the Central County Fire Department is authorized to clean up or abate the effects of any hazardous material deposited upon or into property or facilities of the town; and any person or persons who intentionally or negligently caused

such deposit shall be liable for the payment of all costs incurred by the fire department as a result of such cleanup or abatement activity.

Discussion

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant with Mitigation Incorporated. Project implementation involves temporary and intermittent use, disposal, storage, transport, and handling of hazardous materials during short-term demolition and construction. The Project will require demolition and disposal of existing tanks with coatings containing hazardous substances and earthwork involving potentially contaminated soils some of which may be disposed of off-site at a nearby landfill. Construction of the replacement tank, piping, and valves as well as site preparation including tree removals and replacements; subgrade preparation for structural foundations; utilities relocations; and replacement of paved and gravel surfaces involve temporary transport, use and disposal of hazardous materials. Existing and proposed tank operations do not require ongoing transport, use, or disposal of hazardous materials.

According to the Phase 1 Environmental Assessment for the Project (Cornerstone, 2021), Darrell Tanks #1 and #2 are coated in Lead-based paint containing heavy metals. Results of site soil samples at Boring EB-7 show total Nickel concentrations that exceed the state hazardous waste threshold (Cornerstone, 2020). Therefore, the two steel tanks and soils are classified as California non-RCRA hazardous waste requiring disposal at a landfill facility that is permitted to accept California non-RCRA hazardous waste if removed from the site. Site preparation for Project construction will require the removal and disposal of existing structures, grading, trenching and application of stabilizers to Project soils. Any materials exported from the Project Site for disposal will need to be tested for contamination and disposed of at a landfill that is licensed to accept the quantities, levels and types of potentially contaminated refuse generated.

The County of San Mateo requires hazardous materials in excess of 100 kilograms per month be handled by an appropriate commercial hazardous waste management company (San Mateo County Health, 2021). The disposal of the non-RCRA hazardous soil may be accepted by Waste Solutions Group in San Francisco located at 100 Cargo Way, San Francisco, CA 94124, approximately 20 miles from the Project Site. The non-hazardous soil can be accepted at local landfills through South Bay Waste Management Authority (SBWMA), Rethink Waste. According to the County of San Mateo (<https://www.smchealth.org/solidwaste>), there is one active landfill in the county; Ox Mountain, owned and operated by Republic Services and located near Half Moon Bay in unincorporated San Mateo County. Ox Mountain is a Class III Municipal Solid Waste Landfill which accepts all types of solid waste and is prohibited from accepting hazardous waste. The landfill is located at 12310 San Mateo Rd (Hwy 92), Half Moon Bay, CA 94019, approximately 9 miles from the Project Site. The Shoreway Environmental Center Transfer Station accepts certain trash and recyclables such as

construction & demolition debris, dirt, and concrete/asphalt (<http://www.sbrecycling.net/about/>). It is located at 333 Shoreway Road, San Carlos, CA 94070, approximately 10 miles from the Project Site.

The Project is within a mapped serpentinite unit which likely contains naturally occurring asbestos. The Project is therefore subject to the requirements of the Asbestos Airborne Toxic Control Measure (ATCM) codified in 17 California Code of Regulations (CCR) Section 93105. Enforcement of the ATCM ensures less than significant impacts from exposure to airborne asbestos containing materials (ACM). Dust emissions involving ACM are regulated by the Bay Area Air Quality Management District (BAAQMD) through development, implementation, and monitoring of an Asbestos Dust Mitigation Plan (ADMP). ADMP include BMPs to ensure emissions are at less than significant criteria pollutant levels that are established for safety and health as thresholds of significance for airborne naturally occurring asbestos. Ground disturbance over an acre requires an ADMP submitted to the BAAQMD for review and approval. The ADMP involves implementation of source control emission reduction BMPs, air emissions testing, monitoring, record keeping and reporting for compliance. Projects that disturb less than one acre are still required to implement dust control measures but are not required to submit an ADMP to the BAAQMD. An ADMP is recommended for the Project (Cornerstone, 2020) and is required pursuant to Mitigation Measure HAZ-01. Some examples of source control BMPs that could be implemented with the ADMP for the Project include maintaining soil moisture during earthwork to reduce airborne dust, covered haul loads, stabilize the surface of stockpiles, air monitoring during earthwork, regular cleaning of track out areas and cease operations during high winds. All of these measures are effective in reducing airborne dust generated during earthwork for compliance with BAAQMD standards.

Due to existing site conditions, demolition, earthwork, and construction proposed with project implementation have the potential to expose people and the environment to potentially hazardous materials and the contractor will be required to implement an ADMP pursuant to HAZ-01, Cal/OSHA standards, and the recommended Health and Safety and Soil Management Plans pursuant to HAZ-02 and HAZ-03 will reduce potential impacts to less than significant levels. Examples of strategies to reduce exposure for Cal/OSHA compliance include wrapping or applying chemical stabilizers to tank coatings prior to tank dismantling and disposal.

Construction will involve the use of hazardous materials that require special handling and are typically used in construction. Contractor compliance with all Cal/OSHA regulations and guidance on worker training, safety and proper storage and handling of potentially hazardous materials reduces worker exposure to acceptable levels through source stabilization/control, containment/contingency planning, training and record keeping. Implementation of Cal/OSHA regulations reduce the closest exposure, worker exposure, to less than significant levels. Therefore, exposure levels from materials typically used in construction at adjacent residences and outlying areas are anticipated to be less than significant with the implementation of Cal/OSHA standards.

The ADMP for the Project will include BMPs for erosion control and source reduction of dust emissions such as maintaining and monitoring soil moisture, keeping track-out areas clean, tarping truck loads,

covering stockpiles, and applying erosion control measures for water quality during the earthwork, excavation, removal, and transport of soils in connection with Project implementation and implementation of the ADMP required as Mitigation Measure HAZ-01.

A Health and Safety Plan (HSP) and a Soil Management Plan (SMP) are also recommended to establish management practices for handling impacted materials and soil during construction. These documents should include: Site control procedures for: flow of personnel, vehicles and materials in/out of the site; measures to minimize dust generation, pollutants in storm water runoff and tracking of soil off site; worker training, proper materials handling and health/safety measures for earthwork where impacted soils is present/suspected; if buried structures, wells, debris or additional areas of impacted soil are encountered during construction; evaluation of soil suspected to be contaminated for mitigation, reuse or disposal; and, procedures for evaluating the quality of import soils (soils containing chemicals exceeding residential screening levels or typical background concentrations of metals should not be accepted). These protocols would be implemented by the contractor for training, management and compliance record keeping. A Health and Safety Plan (HSP) may be implemented by the contractor for Cal/OSHA compliance which would establish policy and responsibility for implementing hazard prevention and control including worker training and compliance record keeping.

For the reasons above, impacts are considered less than significant with mitigation.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant with Mitigation Incorporated. Refer to Response XIV a. The operation of existing and proposed Darrell Water Tanks does not involve an ongoing transport, use, or disposal of hazardous materials. Construction activities at the Project Site will involve intermittent and temporary use and handling of potentially hazardous substances related to demolition of the existing tanks and preparation of the site for construction of the replacement tank. It is not anticipated that the quantities of hazardous materials used during construction would be large enough to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving release. The contractor will be required to develop and implement a contingency plan for use, handling and storage of hazardous materials. The contingency plan will include spill prevention and response measures in accordance with the plans and specifications for the Project.

Disturbance and hauling of materials and soils potentially contaminated with heavy metals and/or asbestos will be mitigated by implementing the ADMP and HS/SMP for the Project according to Mitigation Measures HAZ-1 through HAZ-3. With mitigation measures incorporated, risks to the public or the environment due to accident conditions releasing hazardous materials are reduced to less than significant levels.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Less Than Significant Impact. As described in Response XIV a and b, removal of the existing tanks and disturbance of the soil could result in airborne heavy metal and asbestos emissions; likewise, Project construction involves use of potentially hazardous materials. However, the contractor will be required to implement mitigation measures and standard conditions HAZ-01 through HAZ-03 to reduce the risk of hazardous risk exposure. The Project Site is not located within one-quarter mile of an existing or proposed school. The closest schools to the Project Site are The Nueva School (6565 SRS-35), approximately $\frac{3}{4}$ mile; and West Hillsborough Elementary & Preschool (376 Barbara Way), approximately $\frac{1}{3}$ mile. The most direct route to haul materials for disposal to the freeway (I-280) is via SR-35 $\frac{1}{2}$ mile southeast to Hayne Road southwest, which does not pass the two nearest schools. For these reasons, the Project would have a less than significant impact to schools.

- d) **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

No Impact. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials sites subject to voluntary or involuntary enforcement cleanup. This list can be found at: <https://calepa.ca.gov/SiteCleanup/CorteseList/>. Government Code section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. The Darrell Tanks Project Site is not listed pursuant to Government Code Section 65962.5 by the Department of Toxic Substances Control (CalEPA, 2021). For this reason, the Project would have no impact.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

Less Than Significant Impact. There are two airports in the vicinity of Hillsborough: the San Francisco International Airport (SFO) and the San Carlos Airport. SFO is a large, international airport located approximately 4 miles north of the Project Site. The establishment of airport-related noise standards and the definition of noise-impacted areas for SFO are established by the California Department of Transportation, in compliance with federal standards. The San Carlos Airport is a small, busy general aviation airport located approximately 10 miles south of Hillsborough. Residents of Hillsborough have not identified noise issues associated with the San Carlos Airport (General Plan, Noise Element, 2005). The Project is not located within any airport-related noise compatibility zone, nor does it involve new, noise-sensitive land uses. For these reasons, the Project would not expose persons to excessive airport-related noise.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact with Mitigation Incorporated. The Project will replace two water tanks that are inefficient and currently in unsatisfactory condition. The Darrell Tank replacement Project is identified in the Town's Water Master Plan as a needed capital improvement planned to enhance function of the Town's water system, water delivery, fire flow and provision of emergency water supplies. Water supply will remain continuous during Project construction. Construction would not affect the availability of adequate emergency water for fire protection crews responding to emergencies. The Project will not substantively increase capacity of the Town's overall water system resulting in a permanent change in land use beyond what is planned and approved in the Town's General Plan. Therefore, the Project will not permanently increase traffic or need for emergency response that could reduce emergency response times or interfere with an emergency evacuation plan. The Project will involve temporary increase of 66 passenger car equivalent trips on the circulation system during the morning (7 AM to 9 AM) and afternoon (4 PM to 6 PM) peak traffic hours during weekdays during construction. This anticipated temporary increase in traffic from the Project is not considered a significant impact and applies a 3:1 truck trip generation ratio to account for slower moving and larger trucks. Temporary Project traffic will include some slower moving trucks traveling between the Project Site and on/off-ramps to I-280 via SR-35, which is a minor arterial. Mitigation Measures TRAF-1 through TRAF-3 and Standard Condition TRAF-4 require the contractor to notify nearby residents, schools, and property owners of the construction schedule for the Project at least three weeks prior to commencement of construction to advise the public of the potential for traffic congestion during Project implementation and alternative routes. The contractor will obtain a Transportation Permit from the County of San Mateo authorizing operation of oversize and/or overweight vehicles on streets and/or roads within unincorporated territory. The standard application of this permit makes provisions for safety of "Other Traffic" and requires the Permittee, at all times, to give strict attention to the safety and rights of the traveling public. For the reasons above, Project impacts on an adopted emergency response or evacuation plan would be less than significant with mitigation incorporated.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. Refer to Wildfires, Section XX. The Darrell Tank Project Site is located in a low-density residential area intermixed heavily with mature trees; the Project is an area designated by the Town as Wildland Urban Interface Area. The nearest fire hydrant is located adjacent to the Project Site on the east side of Skyline Boulevard, about 60 feet from Existing Darrell Tank #2. The Project will replace existing water tanks and does not introduce new structures or permanently change the level of exposure to risk of loss, injury, or death from wildland fires. The proposed Project would permanently improve overall water system capabilities, fire flow and emergency response. During construction, the Project will temporarily increase level of activity and population at the Project Site. Likewise, Project implementation involves temporary use of materials and activities that could increase fire risk. Standard implementation of the City's plan check process

for Project plans specifications and estimates and the Town's standard application of the construction inspection process will ensure that the contractor implements a contingency plan and safety measures, such as the availability of fire extinguishers on the construction site for emergency response should an accident occur during construction. For these reasons, exposure of people or structures to significant risk due to wildland fires would be less than significant.

Mitigation Measures

Mitigation Measure HAZ-1: The Town and/or its Contractor shall, prior to the start of construction activities, develop and obtain approval of Asbestos Dust Mitigation Plan (ADMP) from the BAAQMD. The ADMP shall include measures deemed appropriate by BAAQMD, including procedures for monitoring, testing and reporting for compliance with BAAQMD standards.

Mitigation Measure HAZ-2: The Town and/or its Contractor shall, prior to the start of construction activities, develop and implement a waste management and disposal plan to control and prevent releases of heavy metals from paint and heavy metals-laden materials during construction activities that could pose a risk to human health and the environment. At a minimum, the plan shall:

- a) Specify that the existing tanks be dismantled without removing the paint on the tanks. During dismantling, handling, transporting the tank to the disposal facility, the tank surface should be stabilized by wrapping and securing the tank pieces in plastic sheeting or coating the outer tank surface with a stabilizer compound to mitigate the potential for friable paint to flake off during transport. The management and disposal of the tank debris will be conducted in accordance with the off-site facility receiving the dismantled tanks; or
- b) The paint on the tank will be removed prior to dismantling the tank. If the paint is to be removed from the tanks prior to tank removal, TCLP leaching tests shall be performed to determine if the paint is RCRA hazardous waste.
- c) Identify the receiving qualified landfill and present proof of waste acceptance to the Town of Hillsborough Public Works Department.
- d) Final plans for the Project shall include erosion control soil management and handling protocols, including a fugitive dust emissions control plan, that will be implemented to minimize airborne dust, eliminate dust migration across property lines, and protect construction workers and neighboring residents from exposure to hazardous material emissions during tank deconstruction and soil excavation/grading activities.
- e) Identify protocols to protect workers from exposure to chemicals above the applicable federal and state Occupational Safety and Health Administration's (OSHA) Permissible Exposure Limits (PELs), such as the use of personal protective equipment requirements, worker decontamination procedures, and air monitoring strategies to ensure that workers are adequately protected.

Impact HAZ-3: Disturbance, excavation, removal, and transport of soil containing heavy metal contamination from tank paint and/or naturally occurring chromium, nickel, and asbestos could result in airborne emissions and potentially expose workers, residents, or the environment to a hazardous material.

Mitigation Measure HAZ-3: The Town and/or its Contractor shall, prior to the start of construction activities, develop and implement a Soil Management Plan (SMP) and Health and Safety Plan (HSP) to establish appropriate management practices, training and reporting for handling impacted soil that may be encountered during construction activities. At a minimum, the plans shall include:

- Site control procedures to control the flow of personnel, vehicles, and materials in and out of the Site.
- Measures to minimize dust generation, storm water runoff, and tracking of soil off-Site.
- Protocols for testing and conducting earthwork activities in areas where impacted soil is present or suspected. Worker training requirements, health and safety measures, and soil handling procedures should be described.
- Protocols should be implemented if buried structures, wells, debris, or unidentified areas of impacted soil are encountered during construction activities.
- Protocols to evaluate the quality of soil suspected of being contaminated so that appropriate mitigation, disposal, or reuse alternatives, if necessary, can be determined.
- Procedures to evaluate and document the quality of any soil imported to the Site. Soil containing chemicals exceeding residential (unrestricted use) screening levels or typical background concentrations of metals should not be accepted.

Standard Condition Plans, Programs, and Policies

SC HAZ-3: Prior to construction the contractor shall obtain a Transportation Permit from the County of San Mateo Public Works Department.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) result in a substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

X. HYDROLOGY AND WATER QUALITY

Environmental Setting

Surface flows from the site currently sheet flow in a northerly and easterly direction and enter the Town's storm drain system in Darrell Road north and east of the Project Site. The Project Site is located in the Sanchez Creek watershed within the San Mateo Watershed management area. The Sanchez Creek watershed drains 1.8 square miles and is entirely within the jurisdictions of the Town of Hillsborough and City of Burlingame. The channel is relatively unmodified for about 3.3 miles upstream of El Camino Real and culverted downstream to its confluence with the Burlingame Lagoon. The creek has one small tributary that flows to the north of the Burlingame Country Club golf course and empties into Sanchez Creek downstream of Redington Road. There are no streams, ponds, or other surface water features located at the Project Site.

Groundwater was not encountered in any borings and test pits during exploratory drilling in 2020 by Cornerstone Earth Group. Based on their previous experience in the area, depth to groundwater maps, and CGS maps, it is anticipated the historic high groundwater level would be greater than 50 feet below ground surface at the Project Site. Fluctuations in groundwater levels occur due to many factors including seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors.

Regulatory Setting

The Town of Hillsborough seeks to comply with all provisions of federal, state, regional, county, and local legislation regarding hydrology and water quality.

Federal Clean Water Act

The Federal Clean Water Act (CWA) is the primary legislation governing water quality and forms the basis for several state and local laws. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”. Sections 303 and 304 provide for water quality standards, criteria, and guidelines, which are implemented through the State and Regional Water Resources Control Boards. Section 401 requires an applicant for any Federal permit that proposes an activity that may result in a discharge to “waters of the United States” to obtain certification from the State that the discharge will comply with other provisions of the Act. Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the United States. In California, the NPDES program is administered by the Regional Water Resources Control Boards.

State of California

The Sustainable Groundwater Management Act (SGMA) is the State of California framework for sustainable, groundwater management. SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California.

The Porter-Cologne Water Quality Control Act provides for protection of the quality of all waters of the State of California. It further provides that all activities which may affect the quality of waters of the state shall be regulated to obtain the highest reasonable water quality. The Act is administered on a local level with statewide oversight. Within this framework, the Act authorizes the State and Regional Water Resources Control Boards to oversee the coordination and control of water quality within California.

The State Water Resources Control Board (SWRCB) holds authority over water resources allocation and water quality protection within the State. The five-member SWRCB allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Resources Control Boards.

San Francisco Bay Regional Water Quality Control Board

A permit is required from the San Francisco Bay Regional Water Quality Control Board when proposed activities and discharges from a property could affect beneficial uses in receiving waters, California’s surface, coastal, or ground waters. Dischargers whose projects disturb one or more acres of soil (including all construction disturbance) are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity – the Construction General Permit. Construction

activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling or excavation. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must implement Best Management Practices (BMPs) to protect storm water runoff during construction. Furthermore, the SWPPP must contain a visual monitoring program, which is a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

San Mateo Countywide Water Pollution Prevention Plan

The Federal CWA and the California Porter-Cologne Water Quality Control Act require that large urban areas discharging storm water into the San Francisco Bay or the Pacific Ocean have a NPDES permit to prevent harmful pollutants from being dumped or washed by storm water runoff, into the storm water system, then discharged into local waterbodies. The San Mateo Countywide Water Pollution Prevention Program was established in 1990 as a collaboration between 22 member agencies comprised of the County of San Mateo and cities on the Peninsula, including the Town of Hillsborough. The Countywide Program holds a Municipal Regional Permit (MRP) that covers countywide stormwater discharges pursuant to the NPDES program under the Clean Water Act. The MRP is part of NPDES permit CAS612008, administered by the San Francisco Regional Water Quality Control Board. MRP implementation programs include water quality monitoring and pesticide, mercury, polychlorinated biphenyl, and copper controls. The NPDES permit requires both construction and post-construction storm water control including erosion control, run-on and run-off control, sediment control, active treatment systems, and non-stormwater management.

Town of Hillsborough

The Town has adopted a Stormwater Management and Discharge Control ordinance (Chapter 13.50 of the Hillsborough Municipal Code) implementing the NPDES SWPPP as mandated by federal law (NPDES Permit No. CA 0029921). The Town of Hillsborough's Public Works Division oversees NPDES compliance for public and private Projects. The Town's Storm Water Management and Discharge Control Ordinance requires that applicants for all Projects develop a stormwater drainage plan that produces no net increase in flooding on-site or off-site due to exceedance of stormwater drainage system capacity. The ordinance further requires integration of stormwater BMPs into landscape and grading design plans to minimize runoff and increase on-site retention and infiltration.

The Open Space and Conservation element in the General Plan outlines programs to conserve, develop, and enhance the natural and historical resources of the community. Goal OSC-4 is to minimize the impact of urban development on creeks and maintain a high level of water quality. The following policies are relevant to hydrology and water quality for the proposed Project:

- Policy OSC-4.2: Encourage development to follow watershed-based planning and zoning by examining proposed development in the context of the entire watershed and sub watershed.
- Policy OSC-4.4: Require projects to reduce, to the extent feasible, potential sediment discharge, erosion, run-off flow and volume, and stormwater pollution, both during construction, as well as

post-construction. Require projects to incorporate mitigation measures, such as Best Management Practices (BMPs), to address these water quality impacts, especially if proposing construction during the wet season.

- Policy OSC-4.5: Reduce the number of hazardous wastes entering into the local and regional waterways by:
 - Prohibiting the illicit dumping of wastes into storm drains, creeks and other waterways.
 - Prohibiting the discharge of pollutants to the maximum extent practicable.
 - Encouraging the use of naturally pest-resistant landscaping and design features that reduce the need for chemical treatments, and incorporate stormwater detention and retention into their design, when appropriate.
- Policy OSC-4.6: Reduce surface run-off by minimizing impervious surfaces associated with motorized vehicles, as well as requiring projects to include site designs that minimize impervious surfaces and maximize on-site filtration.
- Policy OSC-4.7: Require property owners to work with the natural topography and drainages to the extent feasible when designing development projects to reduce the amount of grading necessary and limit the disturbances to natural water bodies and drainage systems.
- Action OSC-4.2: As co-permittee, the Town will continue to participate in the San Mateo Stormwater Pollution Prevention Program (STOPPP) or equal program. New development and Town activities will be reviewed for compliance with STOPPP as part of project approval. The Town will also monitor construction to ensure compliance with any required mitigation.
- Action OSC-4.3: The Town will encourage property owners to incorporate water conservation techniques into their landscaping to reduce water usage.

Discussion

Would the project:

- a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Less Than Significant. Construction activities with the Project could indirectly cause degradation of surface and/or ground water quality due to potential spills or erosion and transport of fine sediments downstream of the construction area. With Standard Condition HYD-2, the Town's Contractor would be required to implement and monitor the effectiveness of standard engineering BMPs for erosion control during construction and will be required to implement dust control measures in the ADMP to prevent erosion and sedimentation from entering storm drains and receiving waters. BMPs would reduce the potential for short-term impacts to storm water quality. The Project will implement an appropriate National Pollutant Discharge Elimination System (NPDES) construction general permit. Construction and post-construction Storm Water Pollution Prevention Plans (SWPPPs) will be prepared for the Project. The standard application of the Town's plan check and inspection process will ensure that the Project will substantively contribute to pollutants in surface or ground water waters and that quality standards and waste discharge requirements are complied with. For the reasons above, impacts from the Project are less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. There may be a small, temporary increase in on-site water use during construction. The groundwater level at the Project Site is estimated at greater than 50 feet below current grades and is not managed with a California SGMA Groundwater Sustainability Plan. The nearest groundwater basin requiring management by a local Groundwater Sustainability Agency is Santa Clara Valley - San Mateo Plain (2-009.03), located approximately 1.5 miles to the east in a separate watershed from the Project with a 'very low priority' ranking by California Department of Water Resources.

Additionally, the Project will install water efficient native landscaping and temporary irrigation details shall be incorporated into development Plans and Specifications for the Project. Compliance Chapter 13.50 of the Hillsborough Municipal Code requires integration of stormwater BMPs into landscape and grading design plans to minimize runoff and increase on-site retention and infiltration (Standard Condition HYD-3). For these reasons, the Project would have a less than significant impact on sustainable groundwater recharge of the basin.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in a substantial erosion or siltation on- or off-site.

Less Than Significant with Mitigation Incorporated. Refer to X a. The Project will not disturb a stream or river directly and will include final drainage that is designed to complement the Town's existing storm drain capacity in Darrell Road. Therefore, no impacts to downstream watercourses will occur. The Project requires 3,850 cubic yards of earthwork and will increase impervious surfaces of the site. The Project will implement BMPs in compliance with Chapter 13.50 of the Town's Municipal Code related to stormwater management and discharge control. The Contractor shall implement earthmoving best management practices as recommended by the San Mateo Countywide Water Pollution Prevention Program to prevent erosion and siltation during construction (Standard Condition HYD-4). The contractor will implement an ADMP to reduce airborne dust (MM HAZ-1 through HAZ-3) and the standard application of the Town's plan check and inspection process will ensure that the Project will not result in substantial erosion or siltation on- or off-site.

Area disturbed by the construction access from SR-35 will require periodic maintenance after construction to reduce the potential for erosion and sloughing. At a minimum all slopes should be vegetated by hydroseeding or other landscape ground cover upon completion of the Project pursuant to mitigation measure HYD-1. The establishment of vegetation will help reduce runoff velocities, allow some infiltration and transpiration, trap sediment within runoff, and protect the soil from raindrop impact. Depending on the exposed material type and the slope inclination, more aggressive

erosion control measures may be needed to protect slopes for one or more winter seasons while vegetation is establishing. For slopes with inclinations of 2:1 (horizontal: vertical) or greater, erosion control may consist of jute netting, straw matting, or erosion control blankets used in combination with hydroseeding. Mitigation Measure HYD-1 will require provisions for re-establishment of vegetative cover and stabilization of slopes and disturbed surfaces that were exposed during Project construction and earthwork. For these reasons, impacts to drainage patterns resulting in substantial erosion or siltation on- or off-site would be less than significant with mitigation incorporated.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

Less Than Significant. Refer to X ci. The Project increases the volume and velocity of surface flow due to increased impervious surfaces from the new tank. Project plans will show the following: Minimize grades of impervious surfaces (2 percent away from structures); maximize pervious surfaces and infiltration on-site with permeable pavement in on-site accessways; surface flows will be directed toward on-site landscaping and pervious areas on-site to the greatest extent feasible to allow storm water infiltration prior to discharge off site and reduce the volume of storm water entering the Town's storm drain system from the Project. The closest Town storm drain is located in Darrell Road approximately 150 feet northeast of the tank site (see Figure 7) of the permanent driveway to the Project Site.

The Project will incorporate drainage retention and filtering features on site for compliance with C.3 BMPs that are required by the County of San Mateo's storm water quality program. The Town of Hillsborough is a co-permittee to the "San Mateo County Storm Water Management Plan, 1993-1998" dated June 21, 1993 and the Town's Municipal Code Chapter 13.5 and has agreed to implement detailed requirements for complying with the County's Storm Water Management Plan including filtering stormwater flows prior to discharge off-site into the Town's storm water system. Title 15.44 of the Town's Municipal Code regulates flooding for health, safety and welfare and it is the primary responsibility of the Town stated under the General Provisions of the Town's Municipal Code to design and maintain the storm water system to avoid flooding and ponding to protect structures. On-site surface flows from the Project will be directed away from structures and, if necessary, retained in a stormwater detention basin on-site then discharged in a manner consistent with the existing design capacity of the receiving storm drain in Darrell Road. For the reasons stated above, Project impacts are less than significant.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less Than Significant Impact. Refer to X a, ci-ii. NPDES compliance will be enforced through the standard application of the Town's plan check and inspection process and will also implement compliance with Town codes and ordinances for managing stormwater to prevent flooding. The tank

replacement would not introduce new types of pollution. For these reasons, impacts would be less than significant.

iv) impede or redirect flood flows?

Less than Significant Impact. Refer to X a, ci-iii, d. The Project Site is located on a graded horizontal pad on top of a ridge and does not experience flood flows. The Project is not in a flood zone and for these reasons would have a less than significant impact to impede or redirect flood flows.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. According to the Association of Bay Area Governments Hazard Viewer Map, the Project is not located in a FEMA flood hazard zone nor a tsunami inundation area. The nearest Dam Inundation Area is more than ½ mile north of the Project as shown in The Town of Hillsborough General Plan. Lower Crystal Springs Reservoir is the nearest waterbody where seiche is of potential concern and is located approximately ½ mile west of the Project with an elevation 500 feet below the Project Site. Additionally, the Project would improve the seismic safety and resiliency of the Town's existing Darrell Water Tanks storage facilities, resulting in a public health and safety benefit. The contractor for the Project will be required to implement a spill contingency plan and an erosion control plan during construction to reduce risk of release of pollutants to less than significant levels. The long-term operation of the Project will not be a source of pollutants. For these reasons, the Project is not at risk of inundation during flood, tsunami, or seiche that would risk release of pollutants; there would be no impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. Refer to X b. The standard application of the Town's plan check and inspection process will ensure compliance with applicable water quality control plans and sustainable groundwater management plans. The San Mateo County Stormwater Resource Plan (SRP), San Mateo Stormwater Pollution Prevention Program (STOPPP), and the Bay Area Integrated Regional Water Management Plan (IRWMP) are systematically implemented through the Town's association with the Countywide Water Pollution Prevention Program. The Project Site is not located in a groundwater basin area requiring a sustainable groundwater management plan. For these reasons, the Project would have a less than significant impact to water quality control and sustainable groundwater management plans.

Mitigation Measures

HYD-1: Prior to plan approval, the plans and specifications for the Project shall include provisions for re-establishment of vegetative cover and stabilization of slopes and disturbed surfaces that were exposed during Project construction and earthwork. These measures shall be implemented prior to final certification of the Project and monitored for success by the Town of Hillsborough.

Standard Condition Plans, Programs, and Policies

HYD-2: The Town's Contractor is required to implement and monitor the effectiveness of standard engineering BMPs for erosion control during construction and will be required to implement dust control measures in the ADMP to prevent erosion and sedimentation from entering storm drains and receiving waters. NPDES and SWPPP BMPs would reduce the potential for impacts to storm water quality from Project construction activity. The standard application of the Town's plan check and inspection process will ensure that the Project will substantively contribute to pollutants in surface or ground water waters and that quality standards and waste discharge requirements are complied with.

HYD-3: Prior to issuance of permits for the Project, water efficient landscaping and temporary irrigation details shall be incorporated into development plans and specifications for the project. There will be integration of stormwater BMPs into landscape and grading design plans to minimize runoff and increase on-site retention and infiltration.

HYD-4: The Contractor shall implement earthmoving best management practices as recommended by the San Mateo Countywide Water Pollution Prevention Program to prevent erosion and siltation during construction. Compliance shall be verified by the Town of Hillsborough through at minimum, one construction site inspection. These measures include, but are not necessarily limited to:

- Grading and excavation work shall occur during dry weather.
- All denuded areas shall be stabilized through installation of temporary erosion controls such as erosion control fabric or bonded fiber matrix. These controls shall be maintained until vegetation is established.
- Sediment shall be prevented from migrating off-site and storm drain inlets shall be protected by installing and maintenance appropriate BMPs such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- Excavated soil shall be stored and transferred on-site to the extent feasible.
- Stockpiled landscaping materials shall be protected from wind and rain through storage under tarps; and
- Any erodible landscape material shall not be applied within two days prior to a forecasted rain event.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XI. LAND USE AND PLANNING

Environmental Setting

The Town of Hillsborough is a low-density single-family home community with no commercial or industrial uses. The Town’s infrastructure and in particular the potable water system has been developed to serve the existing land use patterns of low-density residences and supporting municipal and institutional uses. The only non-residential uses within the Town are public facilities, parks and open space land, private and public schools, the Burlingame Country Club, and the Hillsborough Racquet Club. The Hillsborough Municipal Code allows residences to be utilized for home businesses, second units, family day care homes and other compatible uses. According to the General Plan, the Town is mainly built out and has had relatively stable growth since 1990. The Town has recently included provisions in the Municipal Code for second units; therefore, it is anticipated that most of the new development will be second units on existing residential lots with emphasis is placed on maintaining community character. The Town of Hillsborough Land Use and Housing Elements state that the major residential development opportunities in addition to second unit development are the two remaining large estate properties, 49-acre Regan Property and 47-acre De Guigne Property, which would accommodate about 20 new lots total. Additionally, the construction of homes on smaller subdividable areas and on non-residential properties have the potential for about 144 new units.

Regulatory Setting

The Town of Hillsborough is a “General Law City” and subject to the requirements of the Planning, Zoning and Development Laws of the State of California, Government Code §§65000–66301, Amended 2019. The Town’s Municipal Code Titles 1 through 17 outline regulations and standards implemented by the Town pursuant to authority granted through Sections 50022.1 through 50022.10 of the Government Code of the state for the purpose of protecting public health, safety and welfare.

Discussion

Would the project:

- a) **Physically divide an established community?**

Less Than Significant Impact. The Darrell Tanks Site has been developed with three water tanks since the 1950's and the Project will be consistent with the existing and planned land use patterns in the area. Properties adjacent to the Project Site to the north, east and south are within the Town of Hillsborough and zoned by the General Plan as Residential. The area to the west is under County of San Mateo jurisdiction with the areas west of SR-35 designated as Resource Management District (RM) by County of San Mateo Zoning Regulations, October 2020 – https://planning.smcgov.org/sites/planning.smcgov.org/files/SMC_Zoning_Regulations.pdf. Truck traffic related to the Project could temporarily reduce traffic speeds near the Project Site and a traffic control plan and a County Transportation Permit will be implemented to keep traffic moving at acceptable rates. Temporary impacts would be reduced to less than Significant and there will be no permanent impacts.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact with Mitigation Incorporated. See Response XI a. The Project does not involve a change of land use and is consistent with the Public Facilities and Services General Plan land use designation and the Town's Water Master Plan and CIP. The Darrell Tanks Project Site is depicted in Figure 2 and shows Darrell Tank #3 is 85-feet in diameter, which will remain unchanged with the Project except for minimal modification of the service pipeline. Darrell Tanks #1 and #2 are both 60 feet in diameter on the southerly half of the Project Site with setbacks exceeding 20 feet from the adjacent property lines of the Project site. The three existing water tanks are each 24-feet tall.

The Project plans show a 120-foot diameter tank with the maximum height for the new tank not exceeding existing conditions (24 feet in height). Project plans will undergo plan check and design review by the Town and are subject to Council approval. The Project will reduce structural setbacks shown in Figures 7 and 8 between the new tank (replacing Darrell Tanks #1 and #2) and existing adjacent residential structures to the east. Approximately 22 trees are planned for removal at the Project Site, requiring compliance with Tree Removal Permit standards pursuant to Title 14 of the Town of Hillsborough Municipal Code. Tree removal shall be planned and accomplished to preserve trees and other desirable plant life and to implement landscape replacements of native species including 27 native trees and 60 native shrubs. The Project will replace existing trees that are in very poor or poor health with native species. Existing trees shall not be destroyed or removed solely for the sake of ease of construction.

Town Municipal Code Chapter 17.24 states that required minimum interior setback areas are twenty feet and existing site development is in compliance with this structural setback requirement. The proposed new, larger tank would be setback approximately 5 feet from the easterly property line and would reduce the distance between the proposed water tank and the closest existing residential structure from approximately 115 to approximately 40 feet. The neighboring residential home to the south is located about 75 feet from the nearest existing water tank and would sustain this same

approximate distance to the new tank that is planned for construction. This is considered a potentially significant impact.

Additional native landscaping will be provided along the south and southeasterly property lines as a buffer for decreased setback of the replacement tank. The tank coating will be applied, as one of the final steps in the construction process, in a color that blends (in a medium to dark green) with perimeter landscaping. Pursuant to Title 17.40 of the Town's Municipal Code, variances to the development code, including structural setback requirements, are allowed according to hardship attributed to the land such as size, shape or topography of the parcel. The Project Site is an irregular and has topography sloping down from the tank pads in all directions that limits the use of the parcel. The Project will replace trees and will enhance landscaping in the easterly and southerly setbacks to create a buffer. The adjacent parcels to the south and east of the Project are 15 feet to 20 feet lower than the pad elevation of the tank site and have heavily landscaped sloped setbacks adjacent to the Project Site which will contribute to the visual landscape buffer. The proposed building setback is not intensifying developed land use and would not conflict in this regard with the requirements outlined in the Town's Municipal Code that are established to promote the low-density character and environmental quality, Mitigation Measures LAND-1 is recommended to reduce potential impacts on residents to the east to less than significant levels.

Mitigation Measures

LAND-1: Prior to final plan approval, the Public Works Department of the Town of Hillsborough shall obtain adjoining affected property owner(s) (i.e., the owner(s) whose property is adjacent to the east of the proposed tank) written confirmation that the affected owners have no objection to the Project.

Standard Condition Plans, Programs, and Policies

None

Issues		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:					
a)	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XII. MINERAL RESOURCES

Environmental Setting

The Town of Hillsborough, including the project site, does not contain any designated important mineral resources that need to be protected per State law according to the General Plan Open Space and Conservation Element.

Regulatory Setting

California Mineral Resources Program

The Mineral Resources Program provides data about California's varied non-fuel mineral resources (such as metals and industrial minerals) and information about active and historic mining activities throughout the state. Program reports and maps are shared with governmental agencies, universities, repository libraries and are available for purchase from CGS. The Mineral Resources Project provides objective geologic expertise and information about California's diverse non-fuel mineral resources. Non-fuel mineral resources fall into three categories: metals, industrial minerals and construction aggregate. The primary focus of the Mineral Resources Project is to classify lands throughout the state that contain regionally significant mineral resources as mandated by the Surface Mining and Reclamation Act of 1975 (SMARA).

Discussion

Would the project:

- a) **Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?**

No Impact. The United States Geological Survey publishes information on the location of metallic and non-metallic mineral resources throughout the world at <https://mrdata.usgs.gov/#mineral-resources>. A search for mineral resources within the County of San Mateo on this USGS website indicates that there are recorded gold, silver, and mercury deposits and mines within the county. According to the Town of Hillsborough 2005 General Plan, the Town does not contain any mineral resources. The geotechnical report prepared for the Project (Cornerstone 2021) indicates that site soils consist mainly of fill.

For the reasons above, the Project would have no impact on a known mineral resource of value to the region and residents of the state.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact (See Response XII a). No locally important mineral resources are designated at this site in the Town of Hillsborough 2005 General Plan or by the USGS. This was confirmed by the Cornerstone report (Appendix D) indicating no mineral resources were found at the Project Site. The Town's General Plan, Zoning and Municipal Code does not allow mining within its jurisdictional limits. The site is designated by the Town for Public Services and Facilities use and was developed with Darrell Tank 1 since 1952. Since then, Darrell Tanks 2 and 3, underground water pipes, a cell tower, and ancillary structures have been added and have resulted in soil consisting of artificial fill on the Project Site. The ground surface around the tanks consists of aggregate base and fill is mapped across most of the site surface and abutting concrete ring foundations for the three existing water tanks. For the reasons stated above, the Project would not affect any known mineral resources of regional or local importance. Therefore, the Project Site has no potential for use in resource recovery and would have no impact on mineral resources.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XIII. NOISE

The analysis for noise discussion questions is based on the following report compiled for the Darrell Water Tanks Replacement Project: Darrell Water Tank Replacement Project Noise Technical Memorandum Prepared by Ganddini Group and dated March 25, 2021. This report can be found in its entirety in Appendix G.

Environmental Setting

Hillsborough is generally a quiet, primarily residential community. However, there are several noise generators that impact Hillsborough residents, including vehicular noise from I-280, arterials, and aircraft noise from the San Francisco International Airport (SFO). While a portion of the Town is within the San Carlos Airport's Area of Influence Boundary A, as discussed in the General Plan Circulation Element, noise from aircraft operations at this airport does not affect Hillsborough (Town of Hillsborough 2005).

Existing noise levels at the Project Site were documented with an American National Standards Institute (ANSI Section S14 1979, Type 1) Larson Davis model LxT sound level meter. Two 10-minute daytime noise measurements between 9:14 AM and 9:48 AM on October 7, 2020 were taken and one long-term 24- hour noise measurement from October 7, 2020 to October 8, 2020 was taken. As shown on Figure 14, the noise measurements were taken near the single-family residential uses located northeast (STNM1), east and southeast (STNM2 and LTNM1) of the Project Site.

Short-term ambient noise levels were measured between 54.9 and 55 dBA Leq. Long-term hourly noise measurement ambient noise levels ranged from 41.5 to 58 dBA Leq. The dominant noise sources were from vehicles traveling along I-280 and aircraft noise associated with San Francisco International Airport. Field worksheets and noise measurement output data are included in Appendix G.

Regulatory Setting

Town of Hillsborough General Plan: The Noise Element includes a Land Use and Noise Compatibility Table (Table 3 of the Noise Element) that is to be used to assist in planning and development decisions. The Noise Element also includes the following goals and policies that are applicable to the Project.

Goal N-1 Minimize noise levels within neighborhoods so that residents may enjoy the benefits normally associated with residential communities.

Policy N-1.2 Eliminate excessive noise within the community to the extent feasible. When noise cannot be eliminated completely, regulate noise generation to minimize impacts.

Policy N-1.3 Continue to enforce local and State noise regulations to minimize noise impacts associated with construction and public and private activities.

Town of Hillsborough Municipal Code: Chapter 8.32 of the City's Municipal Code establishes definitions and base ambient noise levels and maximum noise level limits for stationary noise sources as presented below.

Section 8.32.020 Definitions: The Town's Ordinance defines a "Noise level" as the maximum continuous sound level or repetitive peak sound level, produced by a source or group of sources as measured with a sound level meter.

Section 8.32.030 Normal noise and discretionary noise: "Normal noise" consists of the noises of vehicular traffic, household appliances usually used within the living areas of a residential dwelling and similar articles used indoors, human voices, domestic pets, wildlife, weather and other forces of nature, and the other inevitable and ordinary noises of living. "Discretionary noise" consists of the noises of construction heavy machinery, gas-powered gardening devices, electric-powered gardening devices, residential power equipment, and other powered outdoor equipment, and the noises of other activities and devices not included in normal noise.

Section 8.32.040 When Allowed: A. Normal noise shall be allowed at any time all seven days of the week. B. Discretionary noise shall be allowed only as follows (or as allowed under the exceptions set forth in Section 8.32.050)

1. Monday through Friday (except holidays observed by the town, meaning that the city clerk's office is closed for observance of the weekday holiday):

a. Between 8:00 AM and 5:00 PM anyone may perform construction, alteration, demolition or repair, and anyone may operate residential power equipment provided that the noise level from all sources combined (whatever the sources are), as measured twenty-five feet outside the property line, shall not exceed 100 hundred dBA. This standard is the "property plane standard."

b. Between 5:00 PM and 8:00 PM property owners and residents (and family members of either) may operate (on the owner's or resident's property) residential power equipment if the property plane standard is met.

c. Between 9:00 AM and 5:00 PM anyone may operate gas-powered or electric powered gardening devices that do not produce a total combined noise level in excess of 70 dBA when measured from a distance of 25 feet from the loudest operating motor.

2. Saturday:

a. No leaf blowers at any time;

b. Between 10:00 AM and 5:00 PM owners and residents (and family members of either) may operate (on the owner's or resident's property) devices, equipment and machines, other than leaf blowers, that do not produce, singly or in combination, a total combined noise level of more than 70 dBA outside of the property plane.

Anyone may perform construction, alteration, demolition or repair pursuant to a valid building or other applicable permit issued by the town so long as the activities do not produce, singly or in combination, a total combined noise level of more than 70 dBA outside of the property plane; provided, however, that the building permit or other applicable permit may contain restrictions beyond those in this section, in which case, such greater restrictions shall control.

3. Sunday and weekday holiday: no discretionary noise of any kind.

Discussion

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. Construction noise associated with the proposed Project was calculated utilizing methodology presented in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (2018) together with several key construction parameters including: distance to each sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the Project Site. Construction noise levels were calculated for each phase of construction.

Existing single-family detached residential dwelling units to the north, south and east may be affected by demolition and construction noise based on the type of equipment being operated and the distance between active construction and the sensitive receptor. Section 8.32.040 of the Town's Municipal Code states that construction activities are permitted Monday through Friday between 8:00 AM and 5:00 PM provided that the noise level as measured twenty-five feet outside the property line does not exceed 100 dBA. In addition, if a building or other applicable permit is issued by the town

construction activities are also permitted on Saturday between 10:00 AM and 5:00 PM so long as the activities do not produce a noise level of more than 70 dBA outside twenty-five feet outside the property line. Point noise sources increase by 6 dB with each halving of distance between the noise source and the receptor. Maximum noise levels of all of the proposed equipment at a distance of 25 feet from the property line ranging between 80 and 96 dBA Lmax are presented in Table XIII-1.

Table XIII-1
CA/T Equipment Noise Emissions and Acoustical Usage Factor Database

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec. Lmax @ 50ft (dBA, slow)	Actual Measured Lmax @ 50ft (dBA, slow)	Calculated Noise Measurements @ 25 ft (dBA, slow) ⁴
All Other Equipment > 5 HP	No	50	85	-N/A-	79
Auger Drill Rig	No	20	85	84	78
Backhoe	No	40	80	78	72
Bar Bender	No	20	80	-N/A-	74
Blasting	Yes	-N/A-	94	-N/A-	88
Boring Jack Power Unit	No	50	80	83	77
Chain Saw	No	20	85	84	78
Clam Shovel (dropping)	Yes	20	93	87	81
Compactor (ground)	No	20	80	83	77
Compressor (air)	No	40	80	78	72
Concrete Batch Plant	No	15	83	-N/A-	77
Concrete Mixer Truck	No	40	85	79	73
Concrete Pump Truck	No	20	82	81	75
Concrete Saw	No	20	90	90	84
Crane	No	16	85	81	75
Dozer	No	40	85	82	76
Drill Rig Truck	No	20	84	79	73
Drum Mixer	No	50	80	80	74
Dump Truck	No	40	84	76	70
Excavator	No	40	85	81	75
Flat Bed Truck	No	40	84	74	68
Forklift ^{2,3}	No	50	n/a	61	55
Front End Loader	No	40	80	79	73
Generator	No	50	82	81	75
Generator (<25KVA, VMS signs)	No	50	70	73	67
Gradall	No	40	85	83	77
Grader	No	40	85	-N/A-	79
Grapple (on backhoe)	No	40	85	87	81
Horizontal Boring Hydr. Jack	No	25	80	82	76
Hydra Break Ram	Yes	10	90	-N/A-	84
Impact Pile Driver	Yes	20	95	101	95
Jackhammer	Yes	20	85	89	83

Man Lift	No	20	85	75	69
Mounted Impact hammer (hoe ram)	Yes	20	90	90	84
Pavement Scarafier	No	20	85	90	84
Paver	No	50	85	77	71
Pickup Truck	No	50	85	77	71
Paving Equipment	No	50	85	77	71
Pneumatic Tools	No	50	85	85	79
Pumps	No	50	77	81	75
Refrigerator Unit	No	100	82	73	67
Rivit Buster/chipping gun	Yes	20	85	79	73
Rock Drill	No	20	85	81	75
Roller	No	20	85	80	74
Sand Blasting (Single Nozzle)	No	20	85	96	90
Scraper	No	40	85	84	78
Shears (on backhoe)	No	40	85	96	90
Slurry Plant	No	100	78	78	72
Slurry Trenching Machine	No	50	82	80	74
Soil Mix Drill Rig	No	50	80	-N/A-	74
Tractor	No	40	84	-N/A-	78
Vacuum Excavator (Vac-truck)	No	40	85	85	79
Vacuum Street Sweeper	No	10	80	82	76
Ventilation Fan	No	100	85	79	73
Vibrating Hopper	No	50	85	87	81
Vibratory Concrete Mixer	No	20	80	80	74
Vibratory Pile Driver	No	20	95	101	95
Warning Horn	No	5	85	83	77
Welder/Torch	No	40	73	74	68

Notes: (1) Source: FHWA Roadway Construction Noise Model User's Guide January 2006.

(2) Warehouse & Forklift Noise Exposure - NoiseTesting.info Carl Stautins, November 4, 2014, <http://www.noisetesting.info/blog/carl-strautins/page-3/>


(3) Data provided Leq as measured at the operator. Sound Level at 50 feet is calculated using Inverse Square Law.

(4) The actual measured volume was utilized where available.



Source: Ganddini 2021

Legend

-  Noise Measurement Location
- NM 1**
- ST NM** Short-Term Noise Measurement
- LT NM** Long-Term Noise Measurement

Darrell Water Tanks Replacement Project
Town of Hillsborough

Figure 14. Noise Measurement Locations

Vehicle and truck trips associated with Project construction will generate noise in the Project area and along the designated truck route. Noise levels associated with Project generated vehicular traffic were modeled utilizing a computer program that replicates the FHWA Traffic Noise Prediction Model FHWA-RD-77-108. The FHWA Traffic Noise Prediction Model arrives at a predicted noise level. Modeled Project construction traffic would result in noise levels of up to 46.5 dBA Leq (peak hour). The quietest measured daytime noise measurement in the Project vicinity was 54.0. When added together, Project peak hour traffic would result in a 1 dB increase in ambient noise levels from the Project. The low traffic volumes associated with Project demolition and construction activities are not anticipated to result readily noticeable increases in ambient noise levels. This impact would be less than significant. No mitigation is required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The proposed Project would not exceed the Town of Hillsborough's construction noise thresholds as identified in Section 8.32.040 of the Town's Municipal Code. Therefore, noise impacts are considered to be less than significant. Measures to reduce construction noise are provided, to reduce noise levels anticipated with pile driving however no mitigation is required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. Noise levels measured at the Project Site include airport noise from San Francisco International Airport but do not exceed 58 dBA Leq and are considered acceptable with no noise attenuation. The Project will not construct habitable structures and will therefore only expose the construction crew to noise at the Project Site. The Project will not subject the crew to excessive noise levels from the airport and would not result in significant impacts.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies

SC NOI-1: The following measures can be implemented to minimize construction noise:

1. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment.
2. During all Project Site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards.
3. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project Site.

4. Equipment shall be shut off and not left to idle when not in use.
5. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project Site during all Project construction.
6. Jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded and noise shall be directed away from sensitive receptors.
7. The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project Site during construction.
8. If additional sound attenuation is desired, temporary noise barriers can be erected. To be effective, the barrier must block the line of sight between the equipment noise source and the receiver. The barriers should be solid without and openings or cracks, extending completely to the ground surface.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIV. POPULATION AND HOUSING

Information in this section is from the Town of Hillsborough 2014 Housing Element covering the period 2014-2022.

<https://www.hillsborough.net/DocumentCenter/View/1339/2014-2022-Adopted-Housing-Element-October-13-2014?bidId=>

Environmental Setting

Town population is 11,447 residents based on 2019 census data. The last Housing Element of the Town's General Plan identifies a total Regional Housing Needs Assessment goal of 92 new units during an eight-year period between 2014 and 2022. The Housing Element reports growth within the Town is 4.2 new units per year. Since most of the Town is built out and growth identified in the General Plan is anticipated mostly from replacing existing structures and construction of new second units, substantial growth from Project implementation requiring rezoning from Project implementation is not anticipated.

The Town of Hillsborough is unique compared to other cities in California with single family residential as the only zoning district and one predominant land use, with the exception of schools and public facilities. The town has developed almost exclusively through the subdivision of land for construction of single-family houses since 1910. The Darrell Tank Project Site is municipal-owned and designated by the General Plan as Public Facilities and Services (PFS). Housing types permitted in Hillsborough include single-family dwellings; second units; and residential care facilities serving six or fewer persons, as provided by State law. Hillsborough Municipal Code Chapter 17.52 provides for second units while maintaining traditional Town limits on overall building size and external appearance and promoting preservation of the architectural and landscape character of the community.

Hillsborough's zoning ordinance requires that new lots at one-half acre minimum area. The purpose for the minimum lot size is to preserve the environmental stability and town character of Hillsborough. Because nearly all of the Town has been subdivided and built as low-density residences, a higher density cannot be achieved without drastic alterations to the existing street and utility systems, both of which were designed for lower volumes. The narrow streets follow the winding contours of the town's many

hills and canyons. Many homes and entire neighborhoods are served only by cul-de-sac. In these and other parts of the town, the steep terrain makes it highly challenging to widen streets or to construct connections between existing streets, and such changes would substantially alter the residential character of the community. For these reasons, it is not feasible in the time period of this Housing Element to increase density in already developed parts of town.

Regulatory Setting

The Town of Hillsborough is a “General Law City” and subject to the requirements of the Planning, Zoning and Development Laws of the State of California, Government Code §§65000–66301, Amended 2019. The Town’s Municipal Code also implements new ADU funding laws (California Health and Safety Code (HSC), Section 65583(c)(7)) that became effective January 1, 2021 requiring cities and counties to develop a plan that incentivizes and promotes the creation of ADUs that can be offered at affordable rent for very-low to moderate-income households. The Town of Hillsborough is planning to fulfill these requirements to add more housing.

The 2014 Housing Element in the General Plan is intended to plan for the housing needs of the Hillsborough community while meeting the State’s housing goals as set forth in Article 10.6 of the California Government Code. The Housing Element contains the following goals and policies:

Goal 1: Increased Housing Opportunities

- Policy 1A – Meet the community’s housing needs
- Policy 1B – Facilitate private development of housing
- Policy 1C – Continue to improve the land use entitlement process
- Policy 1D – Use vacant land on the periphery of Hillsborough to increase housing opportunities

Goal 2: Housing consistent with community character

- Policy 2A – Allow subdivision of lots larger than one acre
- Policy 2B – Promote more housing options while preserving the character of Hillsborough

Goal 3: Continuum of housing opportunities for all stages of life

- Policy 3A – Support seniors and other special needs populations
- Policy 3B – Allow the renting of rooms to single people
- Policy 3C – Encourage both attached and detached second units where currently permitted

Goal 4: Equal housing opportunities for all

- Policy 4A - Eliminate discrimination

Discussion

Would the project:

- a) **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

No Impact. The Project is a water tank replacement and does not directly or indirectly involve the construction of any housing or roads and infrastructure that would induce population growth. The

Project is consistent with the Town's General Plan goals and policies, Water Master Plan and CIP. In this regard it will increase overall tank storage capacity from 1 million gallons to 2 million gallons at the Project Site and will facilitate abandonment of downgradient and substandard water facilities. The Project will enhance overall water system efficiency and performance with increased storage at a higher elevation; and reduce risk from corrosion failure and susceptibility to failure. The Project would not increase the overall capacity of the Town's water system. Hillsborough is essentially built out with the exception of second units and the annexation and subdivision of the Town's sphere of influence and some larger parcels within the Town limits. For these reasons, increased water storage will not indirectly induce unplanned population growth.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project does not remove any existing housing nor does it displace any people, necessitating the construction of replacement housing elsewhere. The Project is designed and planned to avoid and minimize short-term impacts to the residential neighborhood; for example, the utilization of SR-35 for construction access. Also, the new tanks would increase water pressure and system controls for fire suppression and would reduce risk of tank failure, which would be an improvement over the existing conditions. Therefore, the Project would not have significant impacts to housing.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies:

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XV. PUBLIC SERVICES

The analysis for Public Services discussion questions is based information from the Town of Hillsborough General Plan (<https://www.hillsborough.net/267/General-Plan-Housing-Element>) and Town of Hillsborough website (<https://www.hillsborough.net/>).

Environmental Setting

Darrell Tanks #1, #2, and #3 have been important components of the Town's water system since the 1950's. Public service providers to the Project Site include the Central County Fire Department for fire protection and Hillsborough Police Department for police services. The site does not contribute additional demand for schools, parks, or other public facility services. During construction at the Project Site, Water Storage Tank 3 will remain in service.

Regulatory Setting

Town of Hillsborough General Plan

The Town of Hillsborough maintains planning documents which forecast future land use patterns, housing needs and public services and utilities needs based on population projections and regional housing needs established by the Bay Area Association of Governments (ABAG) and State Office of Planning and Research (OPR). In addition to periodic updates to the General Plan and Housing Element, the Town prepares public service master plans, which identify capital improvements that will be needed to serve future population, land use and housing in the Town. The Land Use Element in the General Plan outlines programs to plan for and shape the future physical development of Hillsborough and to preserve and enhance the current quality of life, so that the Town can remain a low-density residential community with a unique character. Goal LU-4 is to continue to provide high quality public services and recreational opportunities to maintain the character and quality of life in the Town.

Town of Hillsborough Municipal Code, Title 13 provides regulations pertaining to public services. The Project is included in the Town's Water Master Plan. Goals of the water master plan that pertain to the Project are to: Improve system reliability, increase fire suppression capability, provide adequate water pressure, maintain water quality, enhance safety and security, and simplify the system. Stated objectives (implementation methods) of the water master plan pertaining to the Project include: Moving storage uphill to new larger storage tanks; replacing aging facilities; implementing seismic upgrades; increasing storage volume to allow distribution to continue in the event of lengthy power outage or failure of a key system component. The Town's published 2007 Capital Improvement Program lists the Project (Project Number 31201) as a necessary capital improvement Project to be implemented prior to the year 2020.

During Project construction, existing tanks #1 and #2 will be removed from service. Darrell Tank #3 will remain in service until the new tank is ready to be added to the system and will be adequate in the short-term to provide water service.

Discussion

Would the project:

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

Fire protection? Refer to discussion in XV, a. The Project will be designed to permanently improve reliability and function of the Town's water system, which includes improving fire flow within the Town. Darrell Tank #3 will remain in service while the new tank is constructed; therefore, the Project will be implemented so that water delivery and fire flow will not be impacted in the short-term by the Project. The Town of Hillsborough and the Project Site are serviced by the Central County Fire Department. To ensure that there is adequate fire protection throughout San Mateo County, fire departments in the County cooperate on a county-level planning approach. The county fire protection system, which includes Hillsborough, is designed to provide an adequate level of service for urban areas with a minimum of 39 stations. Hillsborough is a participant in a County automatic aid agreement, which uses the County's mapping program to identify the closest station to a call for primary response. If the closest station is unable to respond, the system passes the call to the next closest station. A County Joint Powers Authority oversees the Advanced Life Support (ALS) program (paramedic program) and sets response standards for both the fire service agencies, which provide a highly trained paramedic as the first responder to a call, and American Medical Response (AMR) for the ambulance transportation. The nearest fire station is located at 835 Chateau Drive, approximately 0.25 mile northwest of the Project, and is minimally staffed by one captain, one fire fighter, and one paramedic. Fire Department review of the plans and specifications for the Project will include a review for adequate service during construction. The construction of the Project will be coordinated with the Fire Department and will be designed to improve fire service in the Town; therefore, no significant

impacts in the short-term during construction are anticipated. Likewise, the Project will replace existing tanks and not result in modified permanent demand for fire protection and will be designed to improve reliability and fire flow. For the reasons above, significant impacts on fire protection are not anticipated.

Police protection? The Project will not increase demand for police protection because it involves replacement of the same type of land use with no substantive change in operation or maintenance. Construction will occur during the day each weekday and the site will remain locked at night and on weekends. The contractor will be responsible for managing staging areas so that materials and equipment are secured when not in use pursuant to plans and specifications for the Project. Police service in Hillsborough is provided by the Hillsborough Police Department, which employs 37 officers. The Police Department maintains a close relationship with neighboring police departments, the FBI, Secret Service, other governmental law enforcement agencies and corporate security officers. The Department has a Memorandum of Understanding with the Hillsborough Police Officer's Association to maintain a minimum of three officers on the streets at all times. The Department also has a SWAT team that is a part of a larger regional team with Burlingame, San Mateo, and South San Francisco. Primary police-related concerns in the Town include traffic accidents, some criminal activity and noise. Police services are located at 1600 Floribunda Avenue approximately 2.5 miles northeast of the Project. For the reasons above, Project impacts on police protection will be less than significant.

Schools? Existing public and private educational opportunities in the Town contribute significantly to existing water demand. Commercial/Institutional water demand documented in the Town include six schools, two golf courses and municipal connections and represent the second highest demand for potable water in the Town. The Hillsborough City School District provides the public elementary and middle school education for the community. There are three elementary schools within the district, North School, South School and West School, as well as Crocker Middle School. Public school locations and distances to the Project Site are as follows: North School at 545 Eucalyptus Ave, about 1.8 miles; South School at 303 El Cerrito Ave, about 3 miles; West School at 376 Barbara Way, about ½ mile; and Crocker Middle School at 2600 Ralston Ave, about 1.5 miles away. Students continuing on to public high school transfer to the San Mateo Union High School District and attend one of the local public high schools, which include San Mateo, Aragon, Mills and Burlingame High Schools. There are three private schools in Hillsborough: Bridge School (located at North School), Crystal Springs Uplands School (located at 400 Uplands Dr, about 3.1 miles from the Project Site), and The Nueva School (located at 6565 CA-35/Skyline Blvd, about 1 mile from the Project Site). The Project will not significantly impact delivery of water during construction because Darrell Tank #3 will remain in service and will provide adequate water service during construction. After the replacement tank is completed, the Project is anticipated to enhance the function and reliability of the Town's water service system overall and will not substantively increase the capacity of the existing system.

Parks? Project implementation will not substantially change water service delivery to existing parks. The Project will not increase the overall capacity of the existing water system and will have less than significant impact on future park use and water demand because land use changes will not result from

Project implementation. The Town of Hillsborough currently provides public recreation space through its school sports facilities and three parks, which total about two acres. There are no recreational amenities or publicly available open spaces within or near the Project Site under Town jurisdiction: Vista Park is located at 1030 Vista Road, approximately 6 miles from the Project Site; Crossroads Park is located at Black Mountain Road and Hayne Road, approximately 5 miles from the Project Site; and Centennial Park is located on Floribunda Avenue, approximately 3 miles from the Project Site. In addition to these three parks, the Town manages 259 acres of protected open space, which is intended to be preserved in its natural state and is not open to the public. It is the goal of the Town to provide 3 acres of parkland for every 1,000 residents for a total park acreage of 34.3 acres. This is based on 2019 census data indicating a Town population of 11,447 residents.

Other public facilities? The Project will replace existing water tanks and Project would not result in substantive changes in system capacity or demand for potable water. The Project will enhance the reliability and efficiency of the Town's water system. The Project is consistent with the General Plan and Water Master Plan and is a planned Project from the CIP which will be built in substantial conformance with the Town's municipal codes and ordinances. For these reasons, Project impacts on other public facilities are anticipated to be less than significant. There are no library branches in Hillsborough; the Town pays the Cities of San Mateo and Burlingame monthly for library services. A Caltrans Park and Ride is located off Hayne Road at Golf Course Drive west of the southbound I-280 lanes, approximately ½ mile south of the Project Site within the County of San Mateo jurisdiction. Two recreational facilities within Hillsborough are operated for private use: the Burlingame Country Club and the Hillsborough Racquet Club. The Crystal Springs Golf Course is a semi-private golf course located 1/10 mile west of the Project Site at 6650 Golf Course Drive, Burlingame. The Project is anticipated to enhance water delivery to existing level of service provided by other public facilities.

Less Than Significant Impacts to fire protection, police protection, schools, parks and other public facilities. The proposed Project would not increase the capacity of the Town's existing water system or indirectly facilitate increases the number of units or square footage of commercial/institutional land use that already exists within the Town. Therefore, the Project would not involve the construction of any additional housing, infrastructure, or employment centers and would not induce population growth. The Project is a utility improvement that is intended to improve reliability and function of the existing water delivery system and would not substantively change water delivery for public services within the Town. The water tank Project is also designed improve fire flow will replace an aging component of the Town's water system and will allow other substandard components in the Town's water system to be decommissioned. The Project will promote high water quality, safety and increase fire suppression capability by providing increased storage capacity at a higher elevation and will improve water pressure within specific water zones known to operate below current municipal standards allowing water distribution over an extended period in an emergency. For these reasons, there would not be any significant impacts from the Project to the general public in regard to fire protection, police protection, schools, parks, or other public facilities.

There are no recreational amenities or publicly available open spaces within Town jurisdictional limits or near the Project Site that would be impacted directly by construction activities. While Crystal Springs Golf Course is in close proximity to the west of the proposed Project, it is within County jurisdiction and is physically separated from the Project Site by major roadways, several fences, tree lines and large bushes, and a slope. Project construction will result in a temporary and less than significant increase in traffic at the Hayne Road junction with I-280 and SR-35, which provides regional access to the golf course. Additionally, construction traffic would temporarily add slower moving vehicles to the circulation system that could delay traffic to and from nearby land use resulting in temporary indirect impacts; however, construction traffic is not expected to interfere significantly with golf course operations or school drop-offs and pick-ups, residential traffic, provision of other public services, or other roadway operations occurring within the Town during week days, when construction will take place, due to the size of the Project and the use of SR-35 for construction. Significant impacts to nearby Nueva School located on SR-35 are not anticipated because the Project will not generate significant amounts of traffic during construction and the contractor will obtain a Transportation Permit from the County of San Mateo for trucks and overweight vehicles accessing the Project Site via SR-35. Any Project-related increases in traffic would be limited to the approximately eighteen-month construction period and would be managed under the County Transportation Permit resulting in less than significant impacts existing level of service or access to these nearby land uses. For these reasons, the Project will not induce a need for new or substantially altered governmental facilities that would cause significant environmental impacts. The Town's Public Works Department will coordinate with the Fire Department, Police Department, Parks and Recreation Department and nearby schools and residents on the status and timing of construction to reduce impacts to less than significance.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVI. RECREATION

The analysis for Recreation discussion questions is based information from the Town of Hillsborough General Plan (<https://www.hillsborough.net/267/General-Plan-Housing-Element>) Land Use and Open Space and Conservation Elements.

Environmental Setting

The Town of Hillsborough currently provides public recreation space through its school sports facilities and three parks, which total about two acres. There are no recreational amenities or publicly available open spaces within the Project Site and the site is fenced and gated. Nearby open space and recreation use includes: Crystal Springs Golf Course, approximately 300 feet west of the Project Site; Vista Park is located at 1030 Vista Road, approximately 6 miles from the Project Site; Crossroads Park is located at Black Mountain Road and Hayne Road, approximately 5 miles from the Project Site; Centennial Park is located on Floribunda Avenue, approximately 3 miles from the Project Site. In addition to these three parks, the Town manages 259 acres of protected open space within its jurisdiction, which is intended to be preserved in its natural state and is not open to the public. The Town aims to provide three additional acres of parkland for every 1,000 new residents to meet future demand. Sawyer Camp Recreation Trail is a segment of the Crystal Springs Regional Trail that is located outside of Hillsborough, approximately ½ mile west of the Project Site. The trail is operated by San Mateo County Parks and its uses include walking, running, skating/rollerblading, bicycling and horseback riding.

Regulatory Setting

Town of Hillsborough General Plan

The Open Space and Conservation element in the General Plan includes the following programs to conserve, develop, and enhance community resources. Goal OSC-4 is to continue to identify new opportunities for recreational facilities, and maintain existing facilities. The following policies and actions are applicable to recreation for the proposed project:

- Policy OSC-1.1: Evaluate underutilized publicly-owned property for recreational reuse, working with other public agencies and private organizations when necessary.

- Policy OSC-1.3: Review future subdivision proposals for the opportunity to incorporate new recreational opportunities into the site design and/or require parkland in-lieu fees.
- Action OSC-1.2: The Town will adopt an ordinance in compliance with the Quimby Act to require new development to provide land dedication and/or in-lieu fees in the amount equal to three acres of parkland per 1,000 new residents. Due to the limited availability of land within Hillsborough for new parks, future additional parks will mainly consist of neighborhood parks of five acres or less and pocket parks of less than one acre. Larger parks will also be allowed.

Discussion

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No Impact. The Darrell Water Tanks Project not involve construction or expansion of any additional housing or businesses that would induce population growth and increase demand for recreational facilities in Hillsborough. The Project will not permanently increase population or use of parks within the Town. The construction crew will temporarily increase the daytime population by approximately 12 persons on-site during weekdays. If this temporary increase in population results in increased park use, it will not result in accelerated or substantial physical deterioration of park facilities due to the size of the crew. The nearest public recreation space in Town is greater than three miles from the Project Site. Therefore, the Project is not anticipated to impact existing recreational facilities.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

No Impact. Refer to XVI a. The Project does not include recreational facilities and will not directly require the expansion of recreational facilities because the Project will not result in permanent population increases. All work associated with the Project will be carried out on the Project Site and within the adjacent easements. Due to the size of the construction crew and duration of the Project, any temporary impacts are not expected to result in the need for expanded recreation facilities.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies

None

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

XVII. TRANSPORTATION

The analysis for transportation discussion is based on the Town of Hillsborough Circulation Element (Hillsborough 2005) and the Darrel Water Tank Replacement Project Traffic Assessment, dated March 12, 2021 prepared for the Project by Ganddini Associates (Ganddini 2021). The Traffic Assessment Report can be found in its entirety in Appendix H. The Circulation Element can be found on the Town's website (<https://www.hillsborough.net/267/General-Plan-Housing-Element#:~:text=The%20Town's%20general%20plan%20includes%20the%20following%20elements:,by%20the%20City%20Council%20on%20March%2014,%202005.>)

Environmental Setting

The Town's circulation system consists of Freeways, Arterials, Collectors, and Local Streets with some hiking trails, pedestrian access, and bicycle routes. The local street system in the Town is meandering and intentionally not on a grid with few direct through connections across town. Local streets are generally 40-foot wide with a speed limit of 25 miles per hour. Both dedicated pedestrian and bike facilities are limited within the Town. There is no public transit within the Town's Plan Area. SR-35 is designated as a Minor Arterial and consists of two travel lanes with painted bike trails running parallel to a portion of the Town's western boundary. I-280 is an eight-lane divided freeway running parallel to and west of SR-35 and the Project; both SR-35 and I-280 provide regional north/south vehicular access and are located west of the Project with limited connections to the Town's local street system via I-280 freeway on- and off-ramps at Hayne Road closest to the Project.

Direct vehicular access to the Project Site for construction will be from the east side of SR-35 (northbound lanes), via an existing gated dirt driveway approximately 500 feet south of the Project Site. This access serves as utility access from an existing dirt driveway at SR-35 and traverses up slope parallel with SR-35 to a gated access near the southwest property corner of the Project Site. Primary vehicular access to the Project Site for maintenance is from an existing developed curb cut and gated driveway on west side of Darrel Road, approximately 1,800 feet north Hayne Road. The existing driveway from Darrell Road is a 12-foot-wide, approximately 200 feet-long paved driveway. Darrell Road is a two-lane north/south

Collector Road serving the Project Site and the surrounding residences between Chateau Drive and Hayne Road in the local vicinity. Darrell Road, as with most roads in the Town of Hillsborough, is meandering and has many curb cuts for residential driveways within the vicinity of the Project. Darrell Road has minimal width to accommodate two-way traffic and has a developed shoulder that is used for street parking and pedestrian access. Skyfarm Drive, Chateau Drive, Pullman Road, Ralston Avenue, and Hayne Road are east/west collectors that provide similar access to Darrell Road and the Project Site from outlying areas within the Town.

Regulatory Setting

The Town's General Plan documents acceptable Levels of Service (LOS) A or B throughout the Town during most times and on most days; sometimes LOS C, D and F are experienced within the Town's Plan Area during morning and afternoon peak hours at some locations. LOS C on a Minor Arterial such as SR-35 represents 8,800 two-way trips per day and on a 2-lane Collector, such as Darrell Road, LOS C is quantified as 7,600 two-way trips per day. For comparison, LOS D on a Minor Arterial is quantified as 9,900 daily two-way trips and LOS E is 11,000. LOS D on a two-lane Collector is 8,500 with LOS E being 9,500 two-way daily trips. This comparison of daily trip volumes and LOS indicate that well over 1,000 daily trips would need to be added to the circulation system to substantively change LOS on a Minor Arterial or 2-lane collector within the Town's circulation system. Documented congestion in areas around public schools during peak hours, morning drop-offs and afternoon pick-ups, is temporary and considered acceptable during the week. The General Plan states intermittent traffic congestion at the Black Mountain Road/Hayne Road/SR-35 Intersection as an area of concern during morning and afternoon drop-offs and pick-ups and partially due to this location being a regional gateway to the Town. This intersection is partially under jurisdiction of the Town, County of San Mateo and Caltrans, which complicates implementation of improvements at this location. Black Mountain and Hayne are Town of Hillsborough Collectors, SR-35 is San Mateo County maintained road designated by the Town's General Plan as a Minor Arterial. I-280 is under Caltrans jurisdiction. The Town's Circulation Element includes goals and policies which place importance on safe multi-modal travel; reduced traffic congestion at schools and Town gateways; adequate and safe parking, vehicle access and emergency access; safe pedestrian routes; safe bicycle routes; and a well-maintained safe circulation system within Town Limits. Title 10 of the Town's Municipal Code provides regulations related to traffic control and weight restrictions on truck traffic. Title 12 of the Hillsborough Municipal Code provides regulation of right-of-way.

Discussion

Would the project:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Less Than Significant Impact with Mitigation Incorporated. The existing gated dirt driveway from Skyline Boulevard to the Project Site is proposed as the primary construction access for the Project and the main vehicular access for the site during site preparation, demolition, and construction. This

driveway will be planned to provide a level surface and smooth transition from SR-35 for trucks and construction equipment associated with the Project.

Project construction is anticipated to generate a total of 66 daily passenger car equivalent (PCE) trips each weekday between late 2021 and end in early 2023. This includes deliveries between 8:00 AM and 4:00 PM during weekdays and 12 cars from the contractor's crew arriving just prior to start and leaving just after end of construction each day during the week. The contractor's crew will be at the site between 8:00 AM and 5:00 PM and will park on site Monday through Friday. The Project would increase activity on the Project Site on a temporary basis during construction work hours between 8:00 AM to 5:00 PM, Monday through Friday. Arrival, tailgate training and plan for the day will occur in the morning at approximately 8:00 AM. Staging and materials laydown will occur on site. The Project Site will be cleaned up and locked up by 5:00 PM during the week and will be closed on the weekends.

As shown in Table XVII-1 construction traffic volumes would be similar for all construction phases. Traffic from the Project would not generate substantive increased traffic on the Town's circulation system. Of the 66 daily PCE trips from the Project, not more than 24 PCE trips would occur during the AM Peak Hour (7 AM to 9 AM) and not more than 24 PCE trips would occur during the PM Peak Hour (4 PM to 6 PM). PCE trips are used to estimate Project impacts instead of actual truck trips because trucks are slower moving and utilize more roadway area. The PCE factor is a conservative estimate of worst-case construction impact from the Project and assigns 3 passenger car trips per truck trip. This methodology is accepted as an appropriate estimate of maximum construction traffic by the Institute of Transportation Engineers (ITE). The volume of estimated traffic would not change operating conditions of the Town's circulation system. For these reasons, construction traffic estimated for the Project is considered below the threshold of significance and does not trigger the need for a detailed intersection operational analysis.

Due to larger and slower moving vehicles from the Project, there is potential to cause temporary traffic delays along the haul route. A County of San Mateo Traffic Permit will be required. The bicycle route along Skyline will likely be closed during construction during the week. The haul route, access for heavy equipment, and primary access for construction would be via SR-35 via I-280 as follows:

Inbound trucks from I-280 Northbound:

Exit 36 toward Black Mountain Road, Hayne Road

Turn Right onto Golf Course Drive

Turn Left onto Black Mountain Road

Continue Through onto SR-35

Turn Right into a dirt road through an existing gate on Skyline Boulevard (500 feet of the existing tanks).

Continue to Project Site

Inbound trucks from I-280 Southbound:

Exit 36 toward Black Mountain Road, Hayne Road

Turn Left onto Golf Course Drive

Turn Left onto Black Mountain Road

Continue Through onto SR-35

Turn Right into a dirt road through an existing gate on SR-35 (500 feet of the existing tanks).

Continue to Project Site

Table XVII-11. Trip Generation

Project				Weekday AM Peak			Weekday PM Peak			Daily	
No.	Vehicle Type	Unit	PCE ¹	In %	Out %	Total	In %	Out %	Total	Trip-Ends	
1	Passenger Car / Contractor's Crew	Cars ²	1.0	100%	0%	1.000	0%	100%	1.000	2.000	
2	Heavy Truck / Equipment	Trucks ³	3.0	50%	50%	0.500	50%	50%	0.500	2.000	
Trips Generated											
No.	Phase of Operation	Total Vehicle Trip in Phase	Working Days	Vehicles Per Day	Weekday AM Peak			Weekday PM Peak			Daily Trip-Ends
					In	Out	Total	In	Out	Total	
1	<u>Mobilization</u> (1 Week) ⁴										
	Passenger Car / Contractor's Crew			12 Cars	12	0	12	0	12	12	24
	Heavy Truck / Equipment	2 Trucks	5 Days	2 Trucks	1	1	2	1	1	2	4
	▪ Heavy Truck Traffic in PCE ¹				3	3	6	3	3	6	12
Total PCE Trips - Mobilization					15	3	18	3	15	18	36
2	<u>Demolition</u> (1 Month) ⁵										
	Passenger Car / Contractor's Crew			12 Cars	12	0	12	0	12	12	24
	Heavy Truck / Equipment	70 Trucks	20 Days	6 Trucks	2	2	4	2	2	4	12
	▪ Heavy Truck Traffic in PCE ¹				6	6	12	6	6	12	36
Total PCE Trips - Demolition					18	6	24	6	18	24	60
3	<u>Grading</u> (2 Months) ⁶										
	Passenger Car / Contractor's Crew			12 Cars	12	0	12	0	12	12	24
	Heavy Truck / Equipment	50 Trucks	40 Days	4 Trucks	1	1	2	1	1	2	8
	▪ Heavy Truck Traffic in PCE ¹				3	3	6	3	3	6	24
Total PCE Trips - Grading					15	3	18	3	15	18	48
4	<u>Tank Construction</u> (12 Months) ⁷										
	Passenger Car / Contractor's Crew			12 Cars	12	0	12	0	12	12	24
	Heavy Truck / Equipment	140 Trucks	240 Days	7 Trucks	2	2	4	2	2	4	14
	▪ Heavy Truck Traffic in PCE ¹				6	6	12	6	6	12	42
Total PCE Trips - Tank Construction					18	6	24	6	18	24	66

Source: Ganddini Associates

Notes/Assumptions:

- 1) Passenger Car Equivalence (PCE). Passenger car PCE factor = 1.0 per vehicle. Heavy truck PCE factor = 3.0 per vehicle.
- 2) Passenger Car Traffic: The contractor's crew will be 3 crews of 4 workers - total of 12 workers at the site. Each crew member drives a passenger car equaling one daily round trips/day (two trip-ends). All crew will arrive during the AM peak hour and depart during the PM peak hour. In the morning, 100% of the construction crew to arrive during the AM peak hour [1 vehicle x 100% = 1.000 AM trip per car] with a directional split of 100% AM Inbound and 0% AM Outbound. In the afternoon, 100% of the construction crew is anticipated to depart out of the site during the PM peak hour [1 vehicle x 100% = 1.000 PM tripper car] with a directional split of 0% PM Inbound and 100% PM Outbound.
- 3) Each heavy truck generates one daily round trips per day (two trip-ends). All the truck activity will occur during the peak hours with 50% enters and exits in the AM peak hour and 50% enters and exits during the PM peak hour. For the morning, 50% of the heavy truck traffic is anticipated to arrive in and depart out of the site during the AM peak hour [1 vehicle x 50% = 0.500AM trip per truck] with a directional split of 50% AM Inbound and 50% AM Outbound. For the afternoon, 50% of the heavy truck traffic is anticipated to arrive in and depart out of the site during the PM peak hour [1 vehicle x 50% = 0.500 PM trip per truck] with a directional split of 50% PM Inbound and 50% PM Outbound].
- 4) Mobilization: 2 service trucks per day.
- 5) 70 total truck trips for the one-month demolition (20 working days). Approx. 4 dump truck trips/day, plus 2 service trucks/day - total of 6 trucks/day.
- 6) 50 total import truck trips for the two-month grading (40 working days) is approx. 2 hauler trucks/day, plus 2 service trucks/day - total of 4 trucks/day.
- 7) Tank Construction: A maximum of 5 concrete trucks per day, plus 2 service trucks per day for a total 7 trucks per day. For the overall construction period, there will be approximately 140 truck trips delivering concrete.

The proposed Project would not generate a permanent increase in traffic on the Town's circulation system or permanently interfere with transportation plans and policies related to the circulation system. The Project would not permanently alter existing streets, sidewalks, transit, bicycle, or pedestrian facilities on- or off-site. Project construction would add temporary vehicle trips on SR-35 which may delay traffic and interrupt the use of the bike lanes during weekdays from construction traffic, such as crews, vehicles carrying extra wide and/or long loads (including crane, Cat 235 Excavator with demolition hammer attachment, front end loader, and backhoe), concrete trucks, service trucks, and dump trucks occurring during AM and PM Peak hours on the Town's circulation system. Mitigation Measures MM TRAF-1 through MM TRAF-3 and Standard Condition SC TRAF-4 include off-street parking and staging, traffic control measures and truck arrivals/departures during non-peak hours are recommended in these measures to reduce traffic delays and increase safety during construction and would result in less than significant levels of impacts.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less Than Significant Impact. Refer to XVII, a. Project construction will not result in a substantive increase in temporary traffic. State CEQA Guidelines Section 15064.3 describes methodology for evaluating a project's permanent transportation impacts. Vehicle miles traveled (VMT) is considered the most appropriate measure of transportation-related impacts for development projects, land use plans, and transportation projects because VMT represents the amount and distance of automobile travel generated by a project. Measuring project generated VMT encourages incorporation of design features that can improve a project's walking and biking environment and access to transit and reduce related emissions from vehicle use. In addition to VMT, the lead agency may use qualitative analysis of traffic if existing models and methods are not available to quantify VMT.

The Darrell Tank Project will replace existing water tanks and will temporarily increase construction activity and traffic. Mitigation measures are incorporated to reduce temporary Project impacts resulting in traffic delays on the circulation system from construction. The Project would not permanently increase the capacity of the Town's water system and will not encourage development beyond what is already approved by the General Plan. The Town is mostly built out and the Project will not result in modified land use, more intense land use plans or support transportation projects that would increase VMT. The Project is proposed in response to condition assessments of the tanks which document the need to replace Darrell Tanks #1 and #2 because they have reached the end of their useful lifespan. For the reasons above, the Project would not conflict or be inconsistent with CEQA transportation guidelines and Project impacts related to CEQA Guidelines Section 15064.3, Subdivision (b) would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. Refer to Section XVII a. The Project would not permanently alter the Town's circulation system or the existing driveway from Darrell Road. The Project will include permanent access driveways onsite for maintenance that will be designed and constructed according

to the Town's standards. Project implementation includes grooming the dirt access from SR-35 to the Project Site for safety and stability pursuant to Town of Hillsborough and County of San Mateo standards. Therefore, permanent access driveways for Project maintenance and the temporary dirt access would not introduce new design features or incompatible uses affecting vehicle travel. The standard application of the Town's plan check, permit, and inspection process would require a Transportation Permit and include a traffic control plan implemented during Project construction for safety and conforming with all design standards. For the reasons above, Project impacts related to hazards and incompatible uses would be less than significant.

d) Result in inadequate emergency access?

Less Than Significant Impact with Mitigation Incorporated. Refer to Section 17 a) through c). The Project would not permanently alter the existing street network or constructed modified emergency vehicle access to the Project Site or surrounding area. Project construction would temporarily increase the level of activity on the Project Site during construction and would increase truck traffic and transport of materials and heavy equipment using the Town's circulation system which could delay traffic and emergency access due to traffic delays. Project implementation will include mitigation measures which require on-site parking and materials storage, a traffic control plan and truck access controls to reduce delays on public streets and implement safety measures that will result in less than significant impacts on emergency access. The Town's construction traffic control plan will prohibit on-street worker parking and equipment staging off-site and will limit most truck trips between 8:00 AM to 4:00 PM to avoid generating additional traffic delays during afternoon peak hours during the week. For these reasons, the Project would have a less than significant impact on emergency access with mitigation.

Mitigation Measures

MM TRAF-1: Prior to plan approval, all construction-related vehicle access to the Project Site shall be noted on Plans and Specifications for the Project to occur via Skyline Road at the existing gate located approximately 500 feet south of the existing water tanks.

MM TRAF-2: During construction, the General Contractor shall provide off-street parking and staging as follows:

- a) Construction workers shall park on-site during the construction period.
- b) Material staging should be conducted entirely on site.
- c) All contractor staging, material delivery, storage and stockpiling should be planned for an on-site management area to minimizing traffic delays on the adjacent roadways.
- d) The General Contractor shall provide all construction contractors with written information on where their workers and subcontractors are permitted to park, including identification of clear consequences to violators for failure to following these regulations.
- e) The General Contractor shall be responsible for informing subcontractors and construction workers of these requirements and will monitor the compliance of the subcontractors during all phases of construction.

MM TRAF-3: During construction, the arrival and departure of construction trucks shall be managed and scheduled pursuant to a note on the Plans and Specifications for the Project requiring the following:

- a) Construction truck trips to occur outside of afternoon peak commute hours and shall be minimized when avoidance is not feasible.
- b) On weekdays, haul truck trips shall be scheduled by the contractor during the first seven hours (8:00 AM to 3:00 PM) of the permitted construction work period to avoid generating trips during the weekday afternoon peak period (operating conditions at intersections in this area are generally worse during the afternoon peak period than during the morning peak period).
- c) On Saturdays and Sundays, no construction is allowed.
- d) Equipment and material deliveries and pick-ups shall be coordinated to reduce the potential for trucks to wait to load or unload on public streets for protracted periods for time to ensure that trucks are not impeding traffic flow on the surrounding streets while waiting to enter the Project Site.

Standard Condition Plans, Programs, and Policies

SC TRAF-4: Prior to construction, the General Contractor will generate all worksite traffic control plans (TCP) and obtain prior Town approval for any lane closures, detours, on-street staging areas and/or temporary changes in street traffic control that may be required during construction. Temporary traffic control procedures will be employed to address circulation requirements in accordance with the standards in the latest edition of California Manual on Uniform Traffic Control Devices (California Department of Transportation) and/or the latest edition of Work Area Traffic Control Handbook (American Public Works. These procedures could include, but are not limited to:

- a) Placement and/or use of traffic cones, temporary signs, changeable message signs, and flagmen to achieve adequate level of service on the Town's circulation system.
- b) Replace any signs missing or damaged due to construction activities according to Caltrans or Town of Hillsborough specifications.
- c) Maintain for any proposed or existing roadway striping in good condition and visible. Any faded existing striping shall be repainted as directed by the Town of Hillsborough.
- d) Where necessary, flagmen with communication devices shall be used to coordinate hauling activities.
- e) Permits for oversized or overweight loads, if needed, will be obtained from the County of San Mateo (and Caltrans, if the oversized or overweight load will be traveling on a county or state highway) prior to start of construction. Such permit loads will be subject to the conditions of the permit and the time of issuance.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

XVIII. TRIBAL CULTURAL RESOURCES

The analysis for Tribal Cultural Resources discussion questions is based the following report prepared for the Darrell Water Tanks Replacement Project: Phase I Cultural Resources Inventory of the Darrell Tank Site in the Town of Hillsborough, California, dated March 2021, was completed for the Project Site by Albion Environmental, Inc (Albion, 2021). Albion’s cultural resource investigation included a background records search at the California Historical Resources Information System’s Northwest Information Center at Sonoma State University (NWIC), Native American outreach, a field investigation entailing pedestrian survey, and a report of findings. The paleontological assessment was conducted by Cogstone Resource Management, Inc. (Cogstone, 2021) and a records review from the University of California Museum of Paleontology (UCMP), a surface survey of the Project Site, and a report of findings and recommendations regarding paleontological resources was completed. These reports are attached as Appendix C. The Town sent letters to the Tribes asking them if they would like formal consultation under AB 52 and are attached as Appendix I.

Environmental Setting

The area including and surrounding the Project Site was inhabited by Ohlone populations. The Ohlone inhabited the San Francisco Peninsula, the East Bay to the Delta, and south past Santa Clara Valley to the coast of Monterey Bay and left records regarding important locations within this region that have tribal significance. At Spanish contact, the Ohlone were organized under a tribelet system where villages, thought to number around 50, were autonomous political units. The Ohlone exploited all the regional habitats including bay marshes, valley grasslands, mountainous uplands, and open coastal environs.

Resources exploited included elk, pronghorn, deer, sea mammals, salmon, trout, shellfish, ducks, geese, acorns, seeds, grasses, and roots. Beginning in 1769, the Spanish Crown established missions, presidios, and pueblos, as way of protecting northern Mexico while simultaneously dispersing Spanish culture and Christian faith. Interactions between Franciscan priests, diverse soldiers of the Crown, and local and non-local indigenous peoples took place under this economic and political regime for nearly sixty years, and under Spanish and later Mexican governments.

Movement of indigenous peoples to the Spanish Missions was one response to the many ways the Spanish and Mexican governments, and their supporters, controlled this region. Native peoples were moved into mission centers, strategically disassociating them from their homelands and the mythical landscapes, graves of their ancestors, and the named rocks and landmarks contained therein. The historical record tells us this practice created mission populations composed of peoples from variable ethnolinguistic groups and very distant polities.

After the Mexican War of Independence ended in 1822, the secularization of Mission lands began. The few neophytes who chose to remain in their ancestral territory did not have legal ownership of their homelands, although some did petition the Mexican government for land grants. Some indigenous peoples were given jobs as manual laborers or domestic servants on these Mexican Ranchos, which often were later purchased by American settlers and became American cattle ranches. Other California indigenous peoples lived near one of the pueblos, where work was easier to find as foreign settlers began to pour into the region. Others still migrated to the interior hoping to join kin already there or establish new sociopolitical connections.

Regulatory Setting

Tribal Cultural Resources (AB 52) Assembly Bill 52 (Chapter 532, Statutes 2014) required an update of the CEQA Guidelines to include questions related to impacts to tribal cultural resources.

- Establishes a consultation process with all California Native American Tribes on the Native American Heritage Commission List, Federal and Non-Federal Recognized Tribes
- New class of resources: Tribal Cultural Resources
 - Consideration of Tribal Cultural Values in determination of Project impacts and mitigation
 - Required Tribal notice and meaningful consultation.
- PRC 21080.3.2(b) Consultation ends when either.
 - Parties agree to MMs or avoid a significant effect on TCR.
 - A party, acting in good faith and after reasonable effort concludes that mutual agreement cannot be reached.

State of California Public Resources Codes:

Section 21074 defines historical resources related to tribal cultural resources.

- a) “Tribal cultural resources” are either of the following:
 - 1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- A. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - B. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
 - c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Section 5020.1(k) defines “Local register of historical resources” as a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

Section 5024.1 is the establishment of the California Register of Historical Resources.

Discussion

- a) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**
 - i) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**

Less Than Significant with Mitigation Incorporated. Above grade changes resulting from the Project are limited to the access road and gated Project Site that is already developed with water tanks and other utilities. The Project will replace Darrell Tanks #1 and #2 with a tank of comparable height and would not substantially alter the appearance of the site from adjacent and outlying areas. Town staff, other utilities purveyors and consultants are the only people with access to the site on a regular basis. The Project would be additionally buffered from adjacent properties and outlying areas with landscaping that will be installed with the Project. Site soils consist of fill and there is no evidence that they are likely to contain cultural resources. The construction of the Project will be implemented with a tree removal and protection plan to retain most of the existing trees on the Project Site.

As part of Native American outreach, Albion conducted a Sacred Lands File search with the California Native American Heritage Commission (NAHC) that was deemed positive. The names of seven tribal

representatives were provided to Albion and these tribal representatives were contacted through certified mail with follow-up with phone calls and emails. Albion was not able to confirm the exact location or description of the sensitive tribal resources identified in the Sacred Land File search, which is information that is treated as confidential and is managed by each tribe through formal tribal consultation (agency to agency) with the lead agency (Town of Hillsborough) under Assembly Bill 52 prior to release of the CEQA reports for 30-day public review. The Town sent letters to the Tribes on April 7, 2021 asking if they would like formal consultation, and are included as Appendix I. AB 52 consultation is an agency-to-agency consultation and the Town of Hillsborough is the lead agency and has initiated correspondence with the tribes to complete formal tribal consultation with the tribal contacts provided by the California Native American Heritage Commission regarding the location and nature of sensitive tribal resources in order to determine level of significance of Project impacts on tribal resources and mitigation measures that would reduce potentially significant impacts under AB 52 as well as the level of significance of impacts after mitigation measures for the Project are implemented.

Since many important cultural resources, such as Tribal Cultural Resources, do not necessarily leave an archaeological footprint or have physically identifiable manifestations, it is vital that information regarding the possible presence of tribal resources and their locations be obtained through consultation with local tribal members. Under the authority of Assembly Bill 52, the Town of Hillsborough may obtain information from interested Native American tribes or representatives concerning Tribal Cultural Resources that could be impacted by the Project. The Town is responsible for collecting and incorporating tribal information into the CEQA review process.

The positive result of the Sacred Lands Files Search conducted for the Project indicates important tribal cultural resources may exist within and immediately adjacent to the Project that may be considered important to the local tribal community. Therefore, mitigation measures and standard conditions related to tribal cultural resources should be implemented with the Project. This includes completion of the AB 52 consultation process by the Town: cultural resource training for the construction crew, and retention of a trained archaeologist and qualified Native American monitor for monitoring all ground disturbing activities during Project implementation. Additionally, if previously unidentified cultural materials are unearthed during construction, Project mitigation measures require that construction in the immediate area of the find be halted until a qualified archaeologist can evaluate the nature and significance of the find.

For the reasons above, and in the absence of information documenting sensitive cultural resources, the Project is not anticipated to result in a substantive adverse change to a tribal cultural resource as defined in Public Resources Code Section 21074. Implementation of Mitigation Measures MMTRI-1 and MMTRI-2 and Standard Condition SC TRI-3 have been incorporated into the Mitigation Monitoring and Reporting Program, to reduce Project impacts to reduce tribal cultural resources impact to less than significant levels.

- ii) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Less Than Significant with Mitigation Incorporated. Refer to XVIII (a. i. Jessika Akmenkalns, PhD, Researcher for the (Northwest Information Center) NWIC, provided the results of a records search for tribal resources within a 1/4-mile radius of the Project Site and for studies within a 300-foot radius of the Project Site on November 13, 2020, which included the Public Resource Code § 5024.1 California Register of Historical Resources (CRHR). The CRHR listed one cultural resource within a 1/4-mile radius of the Project Site consisting of a Beaux Art mansion of European architecture and design, also known as the Carolands, which would not be impacted by the Project as discussed in Section 5, Cultural resources. Carolands is not anticipated to be significant to a California Native American tribe. Implementation of Mitigation Measures TRI-1 and TRI-2 are intended to reduce Project impacts to tribal cultural resources to less than significant levels.

Mitigation Measures

TRI-1: Prior to the issuance of any permits for initial site clearing (such as pavement removal, grubbing, tree removals) or issuance of permits allowing ground disturbing activities that cause excavation to depths greater than artificial fill (including as boring, grading, excavation, drilling, potholing or auguring, and trenching), the Town of Hillsborough shall ensure that the contractor has retained qualified Native American Monitor. The monitor shall be approved by the tribal representatives and be present on-site during initial site clearing, construction access planning, and work that includes ground disturbing activities that cause excavation to depths greater than artificial fill documented as 16 feet below ground surface. See Section VII Geology and Soils. The monitor shall conduct a Native American Sensitivity Training for construction personnel. The training session includes a handout and focus on how to identify Native American resources encountered during earthmoving activities and the procedures followed if resources are discovered. The Native American monitor(s) shall complete monitoring logs on a daily basis, providing descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when grading and excavation activities are completed, or when the tribal representatives and monitor have indicated that the site has a low potential for tribal cultural resources, whichever occurs first.

TRI-2: In the event that tribal cultural resources are inadvertently discovered during ground disturbing activities, work must be halted within 50 feet of the find until it can be evaluated by a qualified archaeologist in cooperation with a Native American monitor to determine if the potential resource meets the CEQA definition of historical (State CEQA Guidelines 15064.5(a)) and/or unique resource (Public Resources Code 21083.2(g)). Construction activities could continue in other areas. If the find is considered an “archeological resource” the archaeologist, in cooperation with a Native American monitor shall pursue either protection in place or recovery, salvage and treatment of the deposits. Recovery, salvage, and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code

Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4. If unique a tribal cultural resource cannot be preserved in place or left in an undisturbed state, recovery, salvage, and treatment shall be required at the Project applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification.

Standard Condition Plans, Programs, and Policies

TRI-3: AB 52 requires a direct consulting relationship between Tribes and the lead agency. Tribes who wish to consult on a project and the lead agency bear the responsibility for compliance with AB 52. This responsibility cannot be assigned to a third party. Therefore, The Town of Hillsborough as the lead agency under CEQA shall conduct formal AB 52 consultation to determine the nature and locations of sensitive tribal resources referred to in the Sacred Lands File search. The five step process outlined by the Native American Heritage Commission to meet their obligation under AB 5 and CEQA to make a good faith effort to conduct Tribal consultation under State guidelines can be found at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XIX. UTILITIES AND SERVICE SYSTEMS

The analysis for Utilities and Service Systems discussion questions is based information from the Town of Hillsborough Municipal Code and General Plan (<https://www.hillsborough.net/267/General-Plan-Housing-Element>) Land Use and Open Space and Conservation Elements.

Environmental Setting

Water and Sewer

The Town provides water and sewer service to its residents. The Town receives its water supply from the San Francisco Public Utilities Commission (SFPUC). Approximately 85 percent of the SFPUC's water supply comes from the Hetch-Hetchy Reservoir, located in Yosemite National Park. Because the Hetch-Hetchy water supply meets all federal and State criteria for watershed protection, disinfection treatment, bacteriological quality and operation standards, the Hetch-Hetchy water source has been granted a filtration exemption so that the water does not require additional filtration in Hillsborough to ensure its safety. The remaining 15 percent of the SFPUC water supply is collected in the Alameda and Peninsula watersheds. Rainfall and runoff water is collected in reservoirs and limited groundwater is pumped from the Sunol Filter Galleries near the Town of Sunol. Both surface and groundwater sources are treated and filtered by the SFPUC before delivery. The Hillsborough water system includes 18 pressure zones, a total of 17 active ground-level steel tanks, 1 subterranean concrete reservoir, 116 miles of water mains, 14 active pump stations and 4,260 service connections. The Town also collects wastewater and transports the Town's sewage for treatment at the Cities of Burlingame and San Mateo sewer treatment facilities. The Town's wastewater management system has 116 miles of sewer pipe and four pump stations. The

system has an average daily flow of approximately 462-acre feet to the San Mateo Water Treatment Plant and 376 acre feet to the Burlingame Waste Water Treatment Plant.

Stormwater

The Town uses a stormwater collection system, in conjunction with the natural creek drainage system, to manage run-off. The Town has policies to reduce potential pollution associated with run-off in storm water flows which are intended to preserve the water quality of the creeks and the watershed as a whole. Most of the Town was built out prior to establishment of water quality requirements for stormwater under the Municipal Regional Stormwater Permit NPDES No. CAS612008 pursuant to State Water Quality Control Board Order No. R2-2009-0074. The Town of Hillsborough is one of the San Mateo Permittees under this NPDES permit and must implement Low Impact Development (LID) source control, site design, and stormwater treatment for new development and redevelopment.

Solid Waste/Recycling

Hillsborough contracts for waste and recycling collection and handling with South Bayside Waste Management Authority (Waste Management Authority), which owns the Shoreway Environmental Center. California law requires cities to divert a minimum of 50 percent of their waste to recycling instead of landfills. All solid waste from the Town is transported to the Shoreway Environmental Center, where it is transferred and sorted. Solid waste is subsequently disposed of at the Ox Mountain Landfill in Half Moon Bay. Ox Mountain has a projected closure date of January 1, 2034. Hillsborough has received recycling awards and is one of the few communities to exceed the State requirement, in part due to the inclusion of construction debris recycling. All project applicants for demolition and building permits in Hillsborough are required to submit a Waste Reduction Plan that indicates how much demolition and construction debris will be involved and where it will be transported, as well as a final summary showing that the debris was taken to appropriate facilities. The Town also encourages significant salvage efforts to be made before complete demolition takes place.

Other Service Providers

Cable TV and broadband services are available to residents through Comcast. Local landline phone service and DSL connections are provided by SBC Communications, while gas and electricity are provided to Hillsborough by Pacific Gas and Electric. Several companies have also installed mobile phone signal towers throughout the Town to provide reception to local customers. Verizon, T-Mobile (Sprint), and others have wireless facilities located on the project site.

Regulatory Setting

State Regulations

The California Integrated Waste Management Act of 1989 (Public Resources Code Sections 40000 through 49620), created by AB 939, declares that "the amount of solid waste generated in the state coupled with diminishing landfill space and potential adverse environmental impacts from landfilling constitutes an urgent need for state and local agencies to enact and implement an aggressive new integrated waste management program." The Town is required to divert fifty percent of all solid waste on and after January

1, 2000, through source reduction, recycling, and composting activities or may be fined up to ten thousand dollars per day.

Development compliance with the San Mateo Countywide Water Pollution Prevention Program is required under Municipal Regional Stormwater Permit NPDES No. CAS612008 and State Water Quality Control Board Order No. R2-2009-0074. Related requirements include erosion control and pollutant source reduction for development through the implementation of BMPs. Some examples of structural and non-structural BMPs that are applicable to site development are: Filter all surface flows prior to discharge off-site, implement dust control measures to reduce pollutant loads in surface waters, retain all surface flows on-site in drainage swales and/or a detention basin that will allow storm water to be filtered prior to discharge off site into the Town's storm drain system which is located on the west side of Darrell Road approximately 150 feet north of the driveway to the Project; keep track-out areas clean and free from loose soils by sweeping throughout each day during construction; cover haul loads with a tarp for dust control; provide covered trash receptacles during construction. The Town of Hillsborough maintains a system of storm drains that convey water to the San Francisco Bay and is responsible for implementation of water quality standards for storm water runoff within its jurisdiction to ensure that the water quality and beneficial uses of the San Francisco Bay are maintained.

Town of Hillsborough Municipal Code

The Town requires applicants for a demolition or building permit to develop and execute a Waste Reduction and Recycling Plan to facilitate the recycling and reuse of construction and demolition materials (Chapter 15.18 - RECYCLING OF CONSTRUCTION AND DEMOLITION DEBRIS). Per the Town's Waste Reduction Ordinance, these plans must be developed prior to issuance of a building or demolition permit and typically require the Permittee to maintain records of waste diversion and compliance throughout the construction process.

Town of Hillsborough General Plan

The Land Use element in the General Plan outlines programs to plan for and shape the future physical development of Hillsborough and to preserve and enhance the current quality of life, so that the Town can remain a low-density residential community with a unique character. Goal LU-4 is to continue to provide high quality public services and recreational opportunities to maintain the character and quality of life in the Town. The following policies and actions are applicable to Utilities and Service Systems for the proposed Project:

- Policy LU-4.5: Work with the San Francisco Public Utilities Commission and the cities of Burlingame and San Mateo to provide quality water and sewer service to Hillsborough.
- Policy LU-4.8: Work closely with providers of energy, communications and solid waste disposal in determining and meeting the needs of the community for energy, communications and solid waste disposal.
- Policy LU-4.9: Continue to promote energy conservation and recycling by the public and private sectors to reduce overall energy use and maintain at least a 50 percent diversion of solid waste from the landfill.

- Action LU-4.4: The Public Works Department will continue to monitor water and sewer distribution and collection lines to determine those needing repair and provide needed repair, as feasible. Sewer lines affecting natural drainage and creeks should receive first priority for maintenance.
- Action LU-4.5: The Town will continue to implement the Recycling of Construction and Demolition Ordinance to minimize the amount of construction debris disposed of in the landfill.

The following water quality actions from the Open Space and Conservation Element are applicable to Utilities and Service Systems for the proposed Project:

- Action OSC-4.1: The Town will adopt and implement a Creek Protection Ordinance to ensure that new development does not have a negative impact upon the hydrology and riparian habitat of existing creeks and streams as well as to protect the health of the watersheds, consistent with the goals and policies contained in this Element.
- Action OSC-4.2: As co-permittee, the Town will continue to participate in the San Mateo Stormwater Pollution Prevention Program (STOPPP) or equal program. New development and Town activities will be reviewed for compliance with STOPPP as part of Project approval. The Town will also monitor construction to ensure compliance with any required mitigation.
- Action OSC-4.3: The Town will encourage property owners to incorporate water conservation techniques into their landscaping to reduce water usage.

Discussion

Would the project:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Less Than Significant Impact. The Project is a replacement water storage tank which will not substantively increase the overall capacity of the Town's existing water system. During construction at the Project Site, Water Storage Tank #3 will be kept online and operational to provide water service to the surrounding community. Temporary construction access to the site for construction is anticipated to be from Skyline Drive via a SFPUC easement.

Connections for electrical, instrumentation, and SCADA will be made in the Utility Building located adjacent to the east driveway at the site. Electrical needs for the new tank are expected to be approximately the same as with the existing tanks, consisting of the electrically actuated seismic valve and level transmitter. The Project will not require a permanent increase of natural gas or telecommunications services.

Stormwater drainage will be incorporated into the Project design according to the Town's municipal code and design standards as well as the County's C.3 requirements for water quality. The storm drain features constructed with the Project will include a combination of drainage channels, catch basins, filtration devices, and storm drains to route flows around the tank and filter flows prior to discharge

off-site. The design intent will be to improve existing drainage and water quality in a manner that is consistent with the Town's existing storm drain facilities in Darrell Road and the adjacent properties. Onsite impervious surfaces will increase in area overall due to the larger circumference tank on the Project Site; however, the Project will incorporate design features such as: Direct runoff onto vegetated areas; conservation of natural areas (including existing trees and other vegetation and soil); construct driveways with permeable pavements; and minimize impervious surfaces. It is not anticipated that the Project will generate a significant volume of additional runoff requiring new or expanded offsite stormwater conveyance or treatment systems. The Project will improve water quality of storm water entering the Town's storm drains from existing conditions. The Project will not generate wastewater therefore modifications to wastewater treatment systems and facilities will not be required. For the reasons above, the Project would not significantly increase demand for water, wastewater, storm water, electric power, natural gas, or telecommunications facilities.

Electric, Comcast, and wireless service provider utilities are located in the Project Vicinity and may require relocation of onsite conduits. PG&E operates and maintains several high voltage towers and electric lines south of the Project Site. Coordination with PG&E may be required for temporary construction access and for realignments of power conduits onsite. Verizon, T-Mobile (Sprint), and a third unknown provider have wireless facilities located on the Project Site. While the new tank is being sited to avoid impacting the physical facilities (buildings and towers), electrical and communications conduits may need to be relocated as part of the Project as they are currently located within the footprint of the proposed tank. Relocations of utility conduits are not anticipated to cause significant environmental effects due to the small scope of these modifications on site; therefore, the Project would have a less than significant impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. The Project improves water storage capacity at an existing water facility. The Project would not create new demand for water and does not require new or expanded water entitlements. The improvements to Darrell Tank water storage are designed to meet the current and anticipated future demand on the system and are not proposed to accommodate future growth. Construction activities may temporarily increase water usage at the Project site. As the proposed, Project impacts on water use are anticipated to be temporary and small, there would be sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Therefore, a less than significant impact would occur to water supplies.

c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The Project improves water storage capacity at an existing water facility. The Project does not involve generation of wastewater from the expansion of land uses such as recreation, retail,

or residences. Overall water storage in the Town will remain the same, thus the Project will not drive growth that could require new demand for the wastewater treatment provider. For these reasons, the Project would not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve demand from the Project in addition to the provider's existing commitments. The Project would not result in substantive changes to wastewater treatment.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. During construction, some excavated soil and demolition debris would require disposal at an off-site location. Existing tanks and foundations for two steel tanks, approximately 100 cubic yards of material, will be removed from the site. Existing tank coatings contain lead (Cornerstone, 2021); therefore demolition of the existing steel tanks will be carefully handled by a certified lead abatement contractor to ensure hazardous coatings (i.e., Lead-based Paint) are removed from the site in a safe manner to protect workers as well as the surrounding community. Soil testing did not reveal the presence of lead due to weathering of existing coatings, but serpentinite containing naturally occurring asbestos may underlie the southwestern part of the tank pad area. The Town would dispose of these materials at an appropriate landfill facility as described in Section IX. Hazards and Hazardous Materials, ensuring the removal of these materials do not pose a risk to human health and the environment. Additionally, approximately 22 trees would be removed within the Project Site, which would be chipped and disposed of off-site. Once construction is complete, the Project would not generate solid waste or conflict with solid waste regulations. Given that the Project would generate solid waste on a temporary basis and that this temporary generation of solid waste would be small relative to the Town's solid waste disposal capacity, the Project would not generate solid waste in excess of local capacity. Furthermore, the small and temporary nature of solid waste generation associated with the Project ensure that solid waste reduction goals would not be impacted. Therefore, a less than significant impact would occur.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. The federal Environmental Protection Agency encourages solid waste reduction but does not enforce any requirements. The State of California has implemented goals for recycling, composting, and source reduction of solid waste, and the California Integrated Waste Management Act of 1989 requires 50 percent of solid waste to be diverted through source reduction, recycling, and composting activities. To meet this requirement, the Town of Hillsborough requires waste reduction plan and recycling during construction with provisions of Chapter 15 of the Hillsborough Municipal Code. Following construction, the Project would not generate any solid waste. As there would be no long-term impact and short-term impacts would be managed through compliance with the Hillsborough Municipal Code, the Project would comply with all applicable Federal, State, and local waste reduction requirements, and impacts would be less than significant.

Mitigation Measures

None

Standard Condition Plans, Programs, and Policies

Municipal Code Chapter 15.18 - RECYCLING OF CONSTRUCTION AND DEMOLITION DEBRIS

Municipal Regional Stormwater Permit NPDES No. CAS612008 and State Water Quality Control Board Order No. R2-2009-0074

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XX. WILDFIRE

Environmental Setting

The Town of Hillsborough has undeveloped land within its limits, such as rural canyons and open space preserves. The housing and other development constructed in proximity to these areas carries a high risk of wildland fires and is a concern (General Plan Public Safety Element, 2005). The often narrow and curvilinear patterns and hilly topography can make it difficult for emergency vehicles to travel from one side of the community to the other and access certain areas. The Darrell Tank Project Site is located in an area designated by the Town as Wildland Urban Interface Area – WUI (Town Ordinance No. 762, Jan 2020).

Regulatory Setting

According to the CalFire, Hillsborough is considered a Local Responsibility Area (LRA) with about half of the Town categorized as a Very High Fire Hazard Severity Zone (VHFHSZ). The Project Site is located in a low-density residential area intermixed heavily with mature trees, about 2/3 mile west of the mapped VHFHSZ. Approximately 100 feet west of the Project Site at SR-35, county jurisdiction is considered a State Responsibility Area (SRA) where the State has financial responsibility for fire protection and prevention and is categorized a Moderate Fire Hazard Severity Zone. There is an SRA VHFHSZ about ¼ mile to the southeast near I-290 and Hayne Road.

As an LRA, Hillsborough has a stringent fire enforcement program and building standards. The Town and Central County Fire Department apply a vegetation management program and ordinances associated with a wildland urban interface that are consistent with a VHFHSZ. The Town maintains at least a 30-foot vegetation fire break between Town-owned open space areas and private property. In addition, the Town requires new construction and substantial reconstruction to include design features to reduce the risk of fire, such as Class A roofs and siding, and automatic interior sprinklers. To minimize the threat of fires

caused by residential uses, the Town also requires that spark arrestors are installed in structures. Standard implementation of the City's plan check and construction inspection process will ensure that the contractor implements safety measures, such as the availability of fire extinguishers on the construction site for emergency response should an accident occur during construction.

The Central County Fire Department cooperates with regional fire protection activities to reduce the overall risk of wildfires within the County. While there are no adopted countywide fire plans or standards that apply to Hillsborough, the Central County Fire Department participates in the Fire Safe San Mateo County group, which includes members from various stakeholders involved in fire protection within the County or responsible for the management of open space areas. The nearest Central County Fire Department facility is Hillsborough Station 33, located at 835 Chateau Drive, approximately 1/4 mile from the Project Site. The nearest fire hydrant is located adjacent to the Project Site on the east side of SR-35.

As required by law, Hillsborough has established emergency preparedness procedures to respond to a variety of natural and man-made disasters that could occur within the area. The Town is included in the San Mateo County Operational Area Emergency Operations Plan (EOC) and the Town has a representative on the EOC Steering Committee. The Emergency Plan establishes the Standardized Emergency Management System (SEMS) as required by state law, and includes information on mutual aid agreements, hierarchies of command and different levels of response in emergency situations. Hillsborough citizens can receive alerts during urgent or emergency situations through the San Mateo County Alert System (SMC Alert). The Project is located in Evacuation Zone HB-E003; defined by I-280 in the West, Robin Road, and Ralston Avenue in the East, Chateau in the North, and Denise Drive and Hayne Road in the South.

Local Regulations

Town of Hillsborough Municipal Code

The Town implements ordinances for fire with the Adoption of the 2019 California Fire Code, the 2018 International Fire Code, and Public Resources Code, Division 4, Section 4291 (Chapter 15.20.0100). Wildfire is addressed in Chapter 15.21 with the adoption of the WILDLAND-URBAN INTERFACE CODE, 2018 EDITION.

Town of Hillsborough General Plan

The Public Safety element in the General Plan provides information about risks in Hillsborough due to natural and man-made hazards and contains policies designed to protect the community as much as possible from seismic, flood, geologic and wildfire hazards. The following policies and actions are applicable to wildfire for the Project and will be implemented during plan check for the Project:

- Goal PS-1 is to prevent and reduce risks to property and protect residents from urban and wildfire hazards.
 - Policy PS-1.1: Maintain safe building practices and require fire-safe building materials in all new development and substantial redevelopments.

- Action PS-1.1: The Central County Fire Department will review plans for all new buildings and major additions and make recommendations for modifications to reduce fire hazard.
- Action PS-1.4: The Town will continue to work with the Central County Fire Department to ensure that regional approaches to fire protection and suppression generated by the County, California Department of Forestry (CDF) and Fire Safe San Mateo County are implemented in Hillsborough.

Discussion

Would the project:

a) **Substantially impair an adopted emergency response plan or emergency evacuation plan?**

Less Than Significant Impact with Mitigation Incorporated. The Town has an emergency plan based on the Standardized Emergency Management System (SEMS) required by state law and explained in the Setting section above, which provides an effective flow of information and tracking of resources. The Town has designated a location for centralized management of coordinated emergency response by the Town's staff at Town Hall, located at 1600 Floribunda Ave, approximately 1 ½ miles from the Darrell Tank Project Site. In the event they are needed, schools are designated as emergency shelters. Central County Fire Department Hillsborough Station 33 is located at 835 Chateau Dr, approximately 1/4 mile from the Project Site.

During construction, parking and staging for the Project will occur onsite via SR-35 and would not impair traffic flow on Darrell Road in the case of an emergency response or evacuation in the residential neighborhood. TRAFFIC Mitigation Measures and standard conditions TRAF-1 through TRAF-4 would require notification of emergency service providers 72 hours prior to the start of construction and compliance with the Town of Hillsborough's recommended traffic BMPs during construction, minimizing the risk of obstructing emergency access. The proposed finished Project would be a water storage tank replacement on an existing developed public facilities and services parcel and would not lead to physical modification or obstruction of or any impacts on emergency response infrastructure such as communication systems or roadways. Therefore, with traffic mitigation the Project would have a less than significant impact to emergency response and evacuation plans.

b) **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

Less Than Significant Impact. The nearest Very High Fire Hazard Severity Zones are located in two jurisdictions: A State Responsibility Area about ¼ mile to the southeast, and a Local Responsibility Area about 2/3 mile to the east. The Project would replace existing water tanks and would not result in permanent changes to land use patterns or permanent intensified population on site or use of the site that would exacerbate wildfire risks, result in uncontrolled spread of wildfire, or increase exposure to pollutant concentrations from wildfire. The Project is located at a topographic high point and at the top of a slope that is surrounded by existing development and ornamental landscaping.

During construction, the Project will increase activity on the Project Site which will implement activities that require additional safety equipment such as fire extinguishers. The nearest fire hydrant is located adjacent to the Project Site on the east side of SR-35. In the long-term the Project would improve the Town's ability to prevent uncontrolled spread of wildfire. For these reasons, there would be a less than significant impact at the Project Site regarding wildfire and uncontrolled spread of wildfire.

- c) **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

Less Than Significant Impact. The Project will replace two existing water storage tanks and does not introduce infrastructure that may exacerbate fire risk or impact the environment. The Project would improve overall water system capabilities and fire flow. During construction, the contractor will provide additional fire suppression equipment. For these reasons, impacts would be less than significant.

- d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

Less Than Significant Impact. The Project is a tank replacement located at the top of an approximate 35-foot slope adjacent to SR-35 and would not result in changes to risk involving downslope or downstream flooding or landslides resulting from runoff, post-fire slope instability or drainage changes. The proposed tank would be constructed to current design standards and is designed to increase fire flow. For these reasons, there would be a less than significant impact from the Project exposing people or structures to these significant risks due to wildfire.

Mitigation Measures

See **Mitigation Measures TRAF-1 through TRAF-3 and Standard Condition TRAF-4** for mitigation measures related to traffic control.

Standard Condition Plans, Programs, and Policies

WF-01: Project compliance with Municipal Codes and policies shall be noted on Project Plans and Specifications: Chapter 15.21 – WILDLAND-URBAN INTERFACE CODE, 2018 EDITION; Chapter 15.20.0100 – Adoption of 2019 California Fire Code, the 2018 International Fire Code, and Public Resources Code, Division 4, Section 4291

General Plan Public Safety Element Policy PS 1.1 and Actions PS 1.1 and PS 1.4

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Discussion

- a) **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Less Than Significant with Mitigation Incorporation. Anticipated Project impacts are short-term, temporary, less than significant with mitigation, and are limited to the Project Site and adjacent land during construction.

The Project Site consists of fill soils with low probability of buried cultural and tribal resources that may be considered as important examples of major periods of California history or prehistory. The Project is not within proximity to other known cultural resources and includes mitigation measures to reduce potential impacts on unknown tribal cultural resources.

The Project will replace two existing deteriorated tanks and non-native perimeter trees with a new tank that is compliant with current safety and water quality standards and native California plants. Project plans show removal of a total of 22 non-native trees, of which 15 trees are in poor health and three are in very poor health. Revegetation will be with 42 native trees and 18 native shrubs which are anticipated to easily adapt to conditions at the Project Site.

Implementation of Mitigation Measures for the Project, BIO-1 through BIO-9, are included in this ISMND and the MMRP for the Project, to reduce potentially significant impacts on nesting migratory birds, roosting bats, and California red-legged frog that could occur during Project construction to less than significance.

With the incorporation of the recommended mitigation measures for aesthetics, biological resources, cultural resources, geology/soils, hazards and hazardous materials, land use, noise, transportation, and tribal resources, impacts from the Project would be reduced to less than significance and there are no anticipated significant permanent impacts on the environment, habitat, and wildlife populations. For the reasons stated above, the Project does not have the potential to substantially degrade the quality of the environment or substantially reduce habitat resulting in elimination of a plant or animal community or reduced numbers of rare or endangered plant or animal communities.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

Less Than Significant Impact. The Project is proposed to improve the Town’s emergency response capabilities and efficiency in the Town’s water system. The Project will not induce growth or substantively increase the capacity of the Town’s potable water system or facilitate land use modification off-site beyond what is already approved under existing local and regional plans or beyond what already exists under the Town of Hillsborough General Plan. Mitigation measures will be implemented with the Project as stated in XXI, a above to reduce project impacts to less than significant levels. Therefore, the Project would not have cumulatively considerable impacts and less than significant cumulative impacts are anticipated.

- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less Than Significant with Mitigation Incorporation. See Responses XXI a and b. The Project is consistent with existing plans and programs approved by the Town of Hillsborough, County of San Mateo, Association of Bay Area Governments, and State of California. The Project will improve seismic safety, water quality, emergency response, and water system efficiency. Potentially significant Project impacts that are anticipated are of limited scope and will be temporary and intermittent, mainly occurring during Project construction. The final Plans, Specifications and Estimates that will be used to implement the Project will incorporate mitigation measures and standard conditions outlined in this ISMND and the MMRP for the Project, to reduce significant construction and Project impacts to less than significance, and will be implemented for Project compliance with applicable regulations in the State of California. Therefore, the Project will not have environmental effects which will cause substantial adverse effects on human beings either directly or indirectly.

PREPARATION

Lori Trottier, AICP CEP, Project Manager, IEC

Leah Russell, Environmental Specialist I, IEC

Abdulkader Hashem, Associate Engineer, Town of Hillsborough

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Click here to enter text.

Paul Willis

Director of Public Works/ City Engineer

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Date

REFERENCES

- Association of Bay Area Governments. 2021. Hazard Viewer.
<https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8>. Accessed March 8, 2021.
- Association of Bay Area Governments. 2021. Housing. <https://abag.ca.gov/our-work/housing>. Accessed March 31, 2021.
- Bay Area Air Quality Management District. 2021. <https://www.baaqmd.gov/>. Accessed March 18, 2021.
- California Air Resources Board. 2021. <https://ww2.arb.ca.gov/about>. Accessed March 16, 2021.
- CalEPA. 2021. Cortese List: Section 65962.5(a). <https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>. Accessed February 23, 2021.
- CalFire. 2020. California Fire Hazard Severity Zone Viewer.
<https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>. Accessed January 26, 2021.
- California Department of Conservation. 2021. California Geologic Survey.
<https://maps.conservation.ca.gov/geologichazards/>. Accessed February 24, 2021
- California Department of Conservation. 2018. California Important Farmland Finder.
<https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed January 25, 2021.
- California Department of Conservation. 2021. California Mineral Resources Program.
<https://www.conservation.ca.gov/cgs/mrp>. Accessed March 31, 2021.
- California Department of Toxic Substances Control. 2021. Cortese List. <https://dtsc.ca.gov/dtscs-cortese-list/>. Accessed March 3, 2021.
- California Department of Water Resources. 2021. SGMA Basin Prioritization.
<https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization>. Accessed March 8, 2021.
- California Energy Commission. 2021. Programs and Topics. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards>. Accessed March 16, 2021.
- California Legislative Information. 2021. <https://leginfo.legislature.ca.gov/>. Accessed March 16, 2021.
- California Water Boards. 2015. California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2_2015_0049_amended.pdf. Accessed March 10, 2021.

City/County Association of Governments of San Mateo County. 2011. San Mateo County Comprehensive Bicycle and Pedestrian Plan. https://ccag.ca.gov/wp-content/uploads/2014/07/CBPP_Main-Report__Sept2011_FINAL.pdf. Accessed January 27, 2021.

Federal Energy Management Program (FEMP). 2021. Federal Energy Management Laws and Requirements. <https://www.energy.gov/eere/femp/federal-energy-management-program>. Accessed March 16, 2021.

San Mateo County Energy Watch. 2021. <https://smcenergywatch.org/>. Accessed March 16, 2021.

San Mateo County GIS Open Data. 2016. Williamson Act Parcels. <https://data-smcmaps.opendata.arcgis.com/datasets/smcmaps::williamson-act-parcels?geometry=-123.726%2C36.973%2C-120.941%2C37.737>. Accessed January 25, 2021.

San Mateo County Health. 2021. Management Of Hazardous Waste At Construction And Demolition Sites. https://www.smchealth.org/sites/main/files/file-attachments/20190214_hw_guidance_management_of_hw_at_construction_and_demo_sites_final.pdf?1552057477. Accessed March 3, 2021.

San Mateo County Health. 2021. Solid Waste. <https://www.smchealth.org/solidwaste>. Accessed March 2, 2021.

San Mateo County Planning and Building Department. Zoning Regulations. https://planning.smcgov.org/sites/planning.smcgov.org/files/SMC_Zoning_Regulations.pdf. Accessed March 2, 2021.

San Mateo County Transit District. 2021. SamTrans Interactive System Map. <https://www.samtrans.com/schedulesandmaps/maps.html>. Accessed January 26, 2021.

San Mateo Countywide Water Pollution Prevention Program. 2008. Unified Stream Assessment in Seven Watersheds in San Mateo County, California. <https://www.flowstobay.org/wp-content/uploads/2020/04/2008-08smcwpppusa-finalrpt.pdf>. Accessed March 9, 2021.

State of California Governor's Office of Planning and Research. 2021. AB 52: A CEQA Guidelines Update for Tribal Cultural Resources. https://opr.ca.gov/docs/OPR_AB_52_Presentation_Discussion_Draft.pdf. Accessed March 11, 2021.

Town of Hillsborough. 2021. Fire. <https://www.hillsborough.net/266/Fire>. Accessed January 25, 2021.

- Town of Hillsborough. 2014. General Plan and Housing Element.
<https://www.hillsborough.net/267/General-Plan-Housing-Element>. Accessed January 25, 2021.
- Town of Hillsborough. 2021. Parks. <https://www.hillsborough.net/210/Parks>. Accessed January 25, 2021.
- Town of Hillsborough. 2021. Police. <https://www.hillsborough.net/231/Police>. Accessed January 25, 2021.
- Town of Hillsborough Climate Action Plan. 2010.
<https://www.hillsborough.net/DocumentCenter/View/606/2010-Climate-Action-Plan?bidId=>.
Accessed March 18, 2021.
- Town of Hillsborough Urban Water Plan. 2015.
<https://www.hillsborough.net/DocumentCenter/View/2988/Final-2015-UWMP-with-Attachments?bidId=>. Accessed March 23, 2021.
- Town of Hillsborough, Water Master Plan – Phase I Inventory and Assessment, Alternative Capital Improvement Programs. 2011. CSG Consultants.

