



MORGAN HILL
California

EAST DUNNE HILLSIDE WATER SUPPLY RESERVOIR PROJECT

Fire Prevention Infrastructure Improvement Project

City of Morgan Hill/JOA Meeting
Jackson Oaks Meeting Hall
August 21, 2024 at 6:30pm

City of Morgan Hill

Water System Upgrades

- ▶ Objectives
 - Enhance Fire Fighting Capabilities
 - (Holiday Lakes, Jackson Oaks, Holiday 1, 2, & 3)
 - Enhance System Reliability
 - Minimize Outages
 - Sustainable Water Quality
 - Provide System Redundancy and Operations Flexibility.

City of Morgan Hill Old Water System



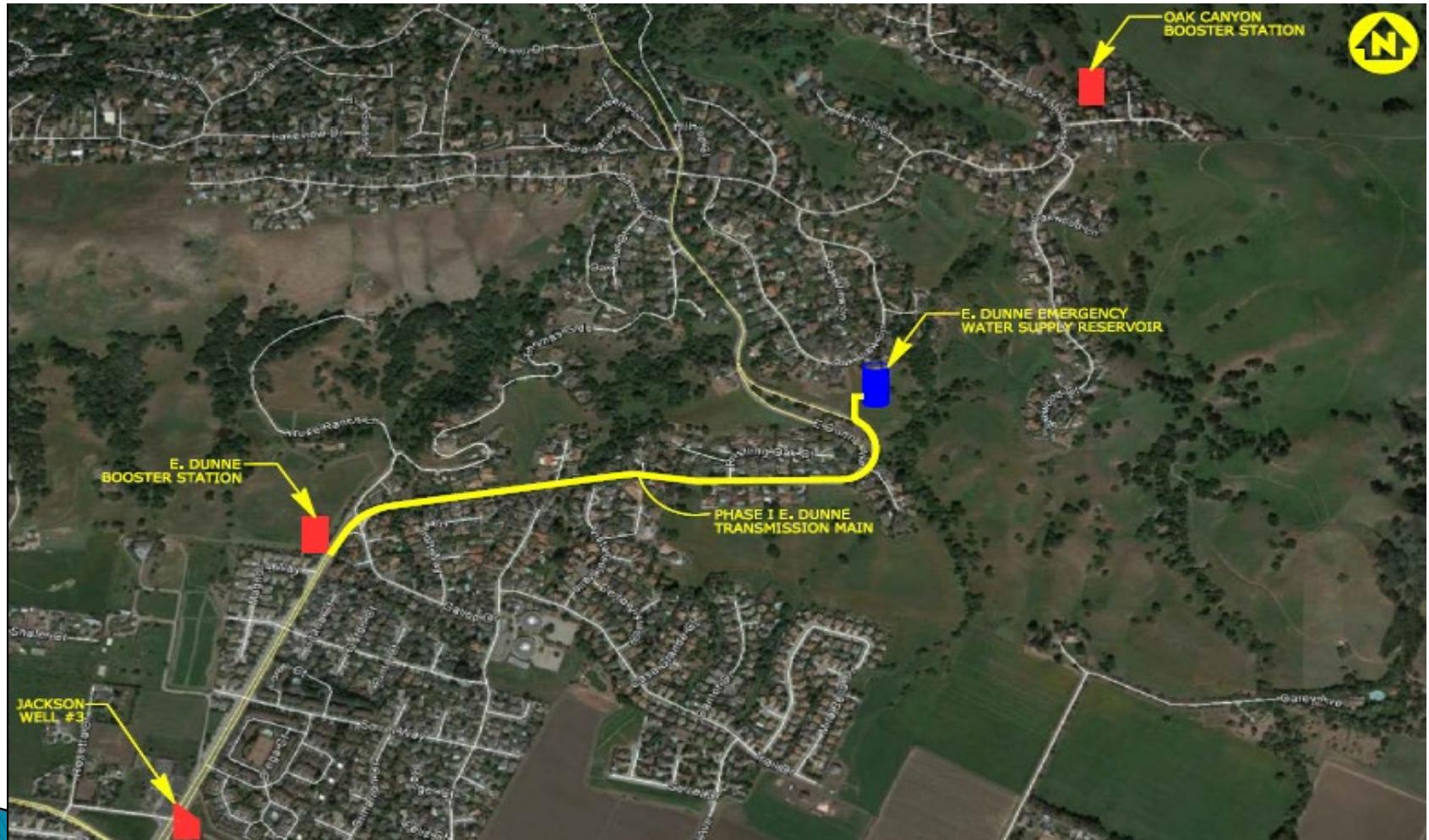
City of Morgan Hill

Water System Upgrades

- ▶ Improvements include:
 - Jackson Oaks Well Rehabilitation–**Complete 5/21**
 - Oak Canyon Booster Station Rebuild–**Complete 7/18**
 - E. Dunne Water Transmission Main Project–**Complete 3/17**
 - E. Dunne Water Reservoir–**Starting 9/24**
 - E. Dunne Booster Station Rehabilitation–**Starting 9/24**

Water System Upgrades

FY 2018/24 Improvements



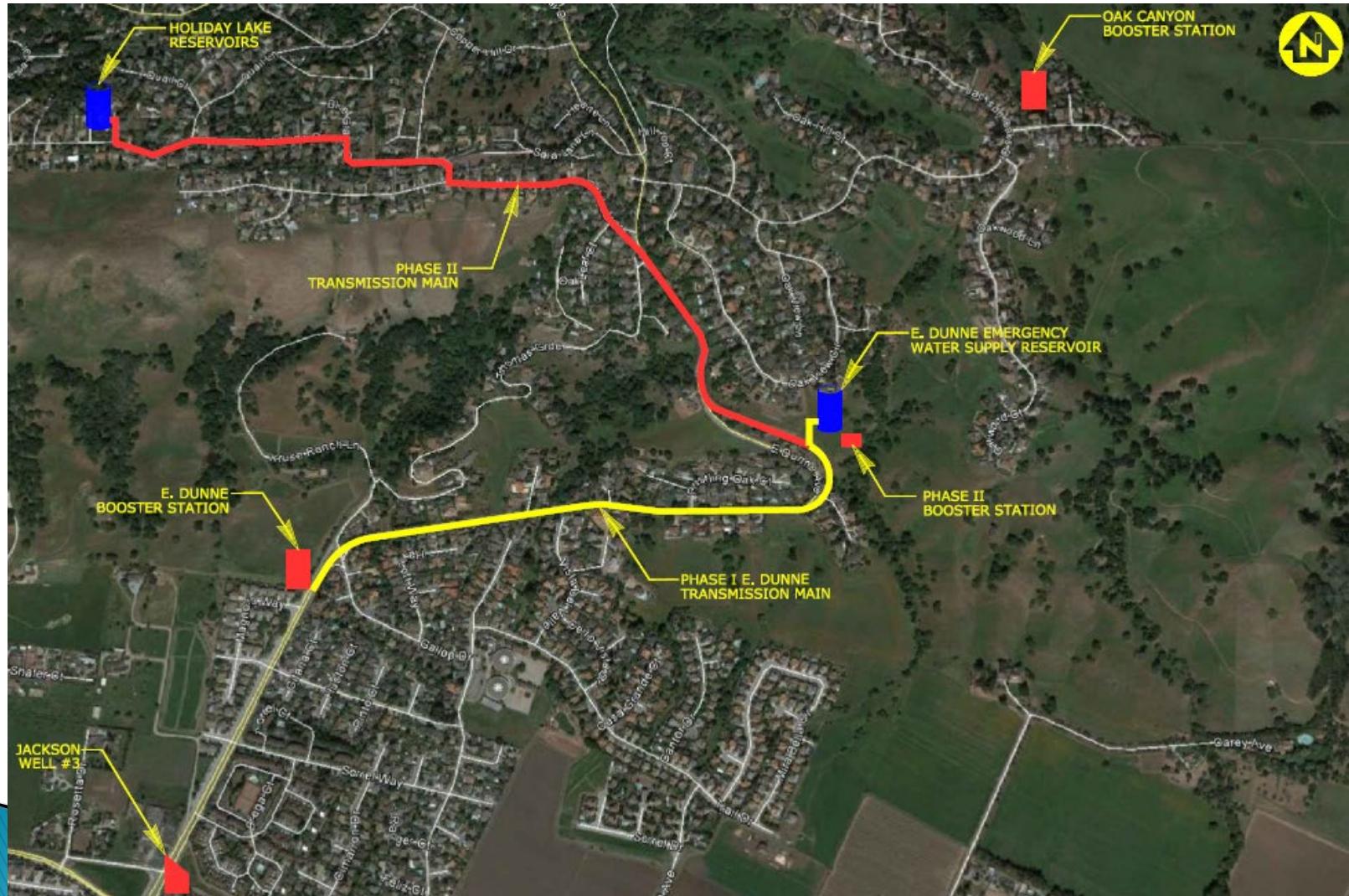
City of Morgan Hill

Future Water System Upgrades

- ▶ Future Phase II Improvements Include:
 - Construct New Transmission Main from Dunne Reservoir to Holiday Lake Reservoirs 1 & 2
 - Construct New Pump Station at E. Dunne Hillside Reservoir
 - Convert High Pressure Existing Piping to Holiday Lake 1 & 2 to back-up (Redundant) use only.

Water Capital Improvements

Future Improvements



Jackson Oaks Well Rehabilitation

(Online May 2021)



Oak Canyon Booster Station Rebuild

(Online July 2018)



E. Dunne Water Transmission Main Project

(Online in March 2017)



Water Capital Improvements

E. Dunne Booster Station



Water Capital Improvements

East Dunne Hillside Water Supply Reservoir

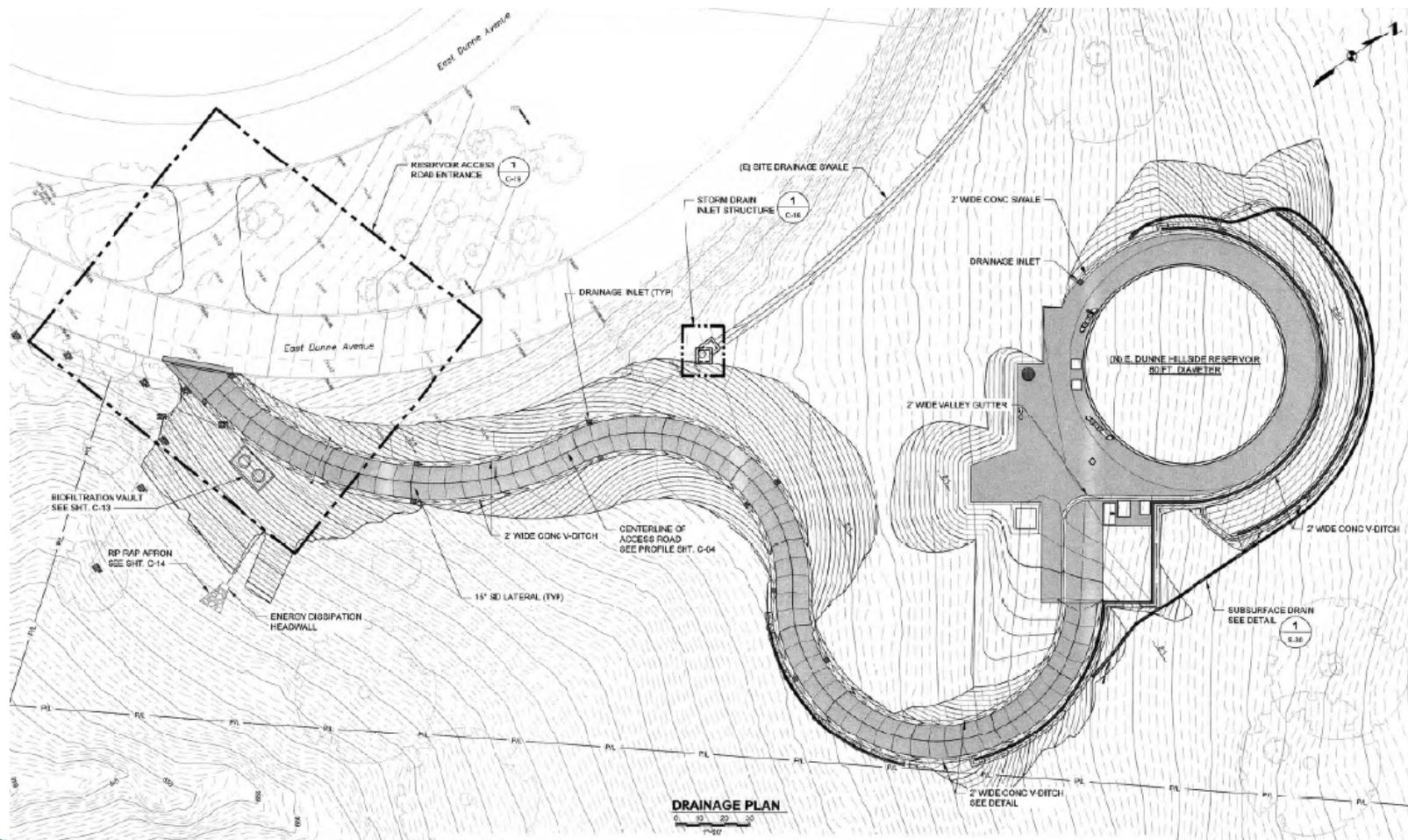


East Dunne Hillside Water Supply Reservoir

- ▶ Critical Functions:
 - Enhance Fire Protection.
 - Effectively Doubles Water Capacity.
 - Water Capacity Essential to Survive Major Earthquakes, Fires & Catastrophic Emergencies.
 - Adequate Water Supply Essential to Maintain Public Health and Safety.
 - Quick Access to Water Essential to Fire Fighting.
 - Maintaining Water Infrastructure is Essential.
 - Adequate Water Supply and Emergency Water Reserves Are Essential for Public Health and Safety.
 - Provides Critical Redundancies & Improves Reliability.

Reservoir Layout and Grading Plan

East Dunne Hillside Water Supply Reservoir

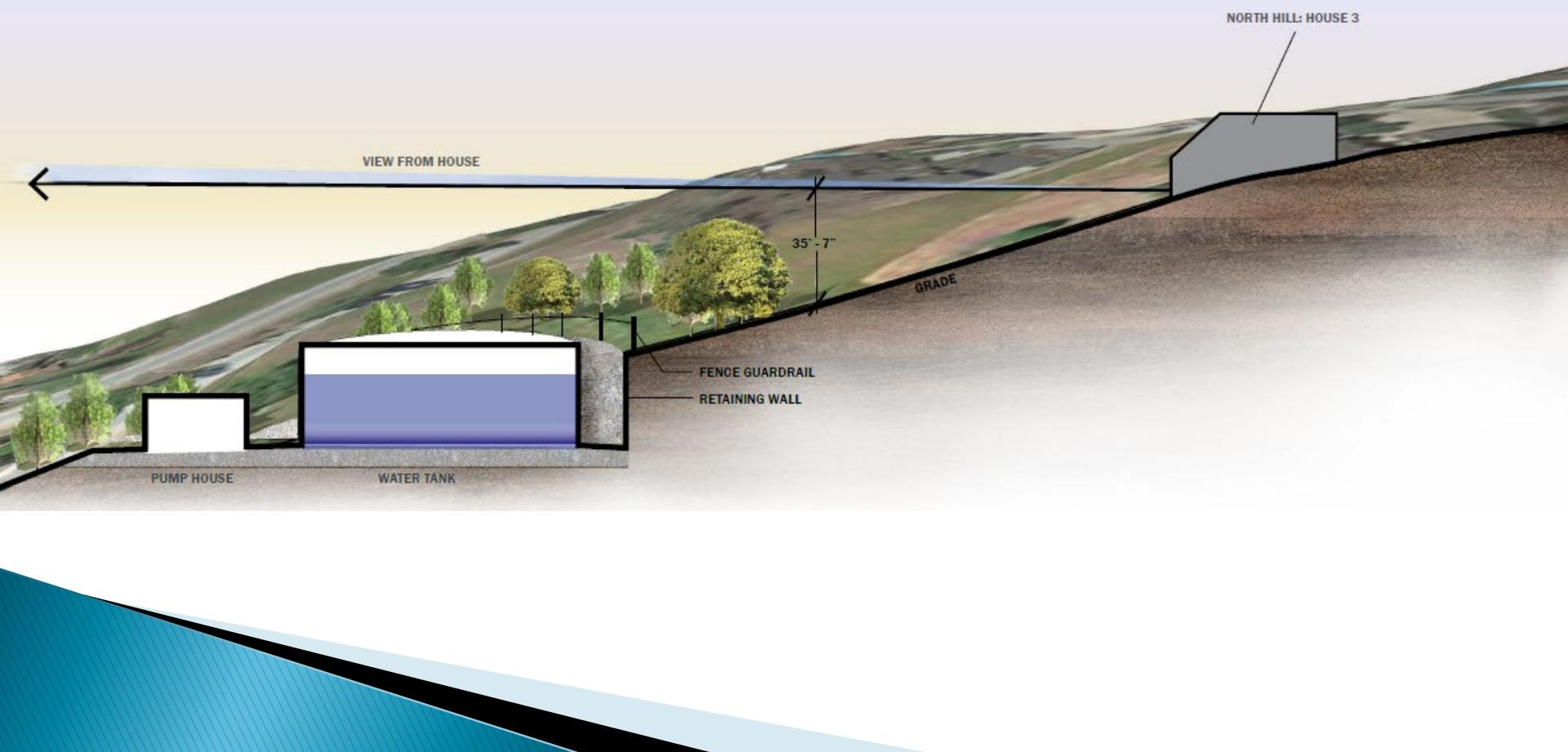


VIEWSHED STUDY

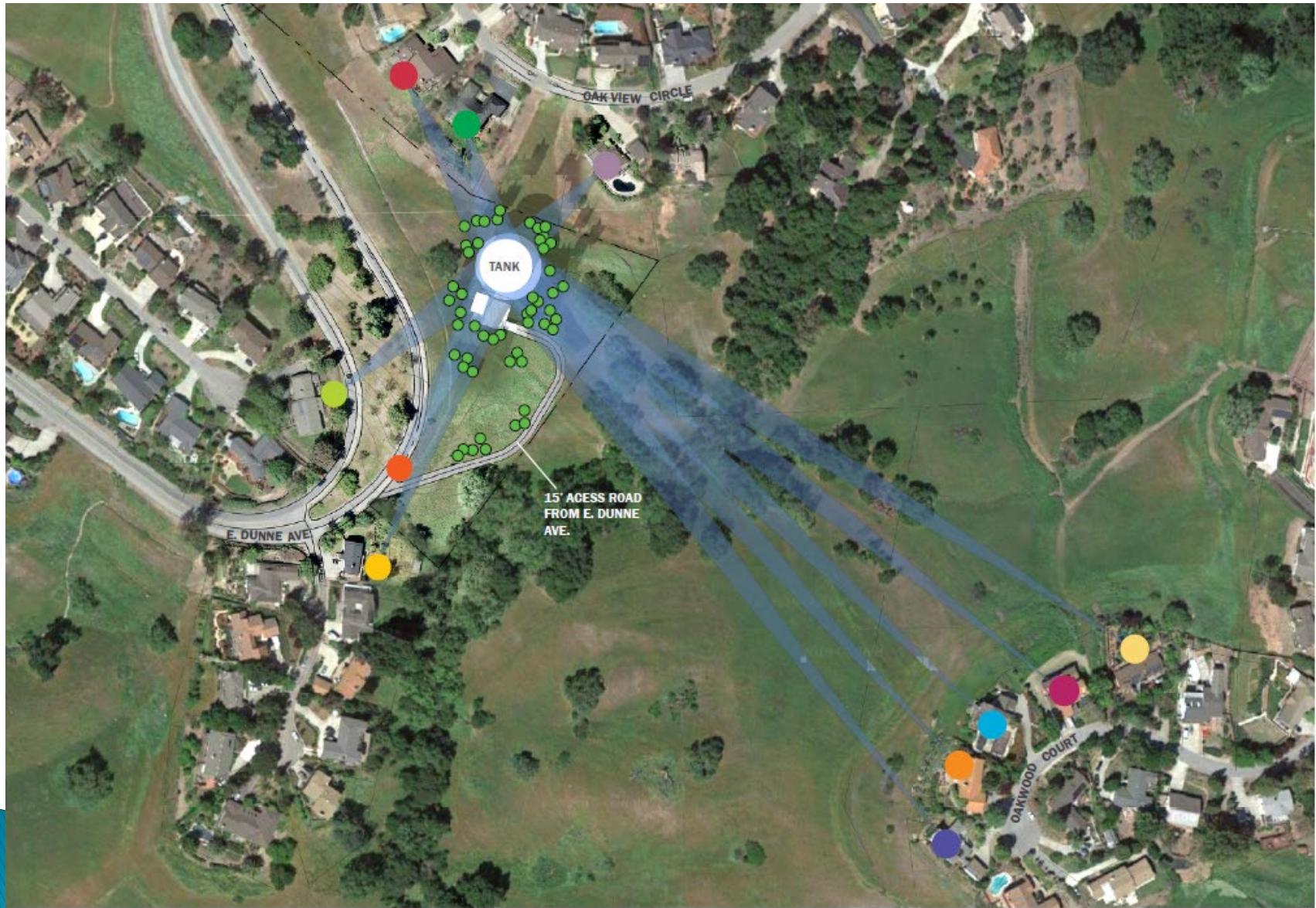
East Dunne Hillside Water Supply Reservoir



East Dunne Hillside Water Supply Reservoir

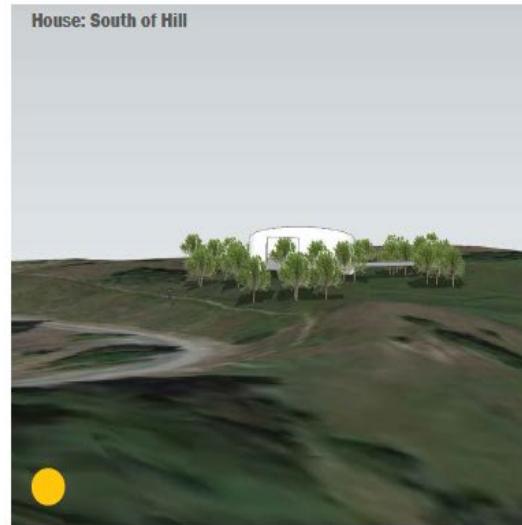


East Dunne Hillside Water Supply Reservoir

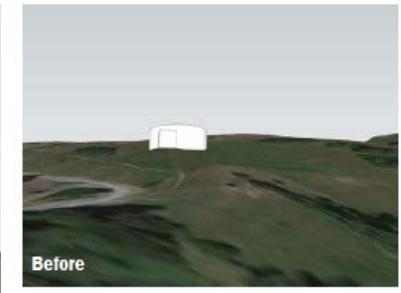




Viewshed - South Along the Road



House: South of Hill



Before



E. Dunne Road Avenue



House: Across E. Dunne Avenue

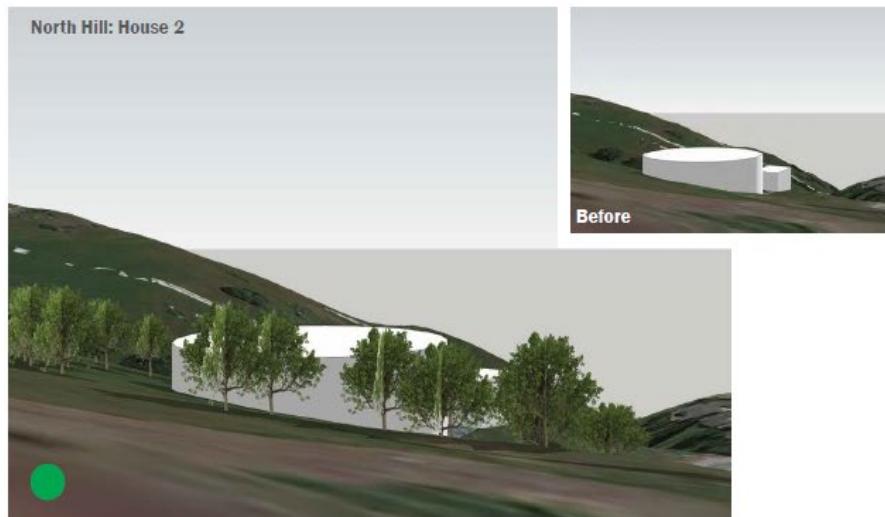


Before

Viewshed - North Hill Above Tank



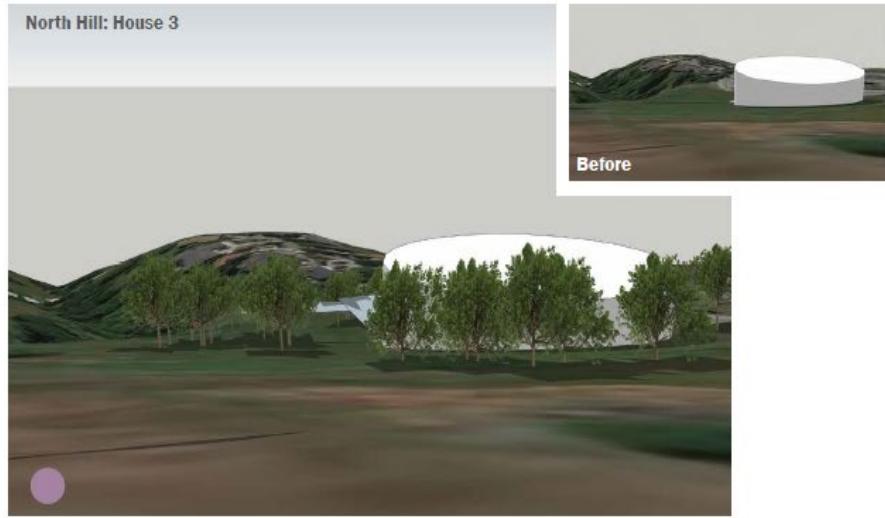
North Hill: House 2



North Hill: House 1



North Hill: House 3



Viewshed - East Hill



East Hill: House 1



East Hill: House 2



East Hill: House 3



East Hill: House 4



East Hill: House 5

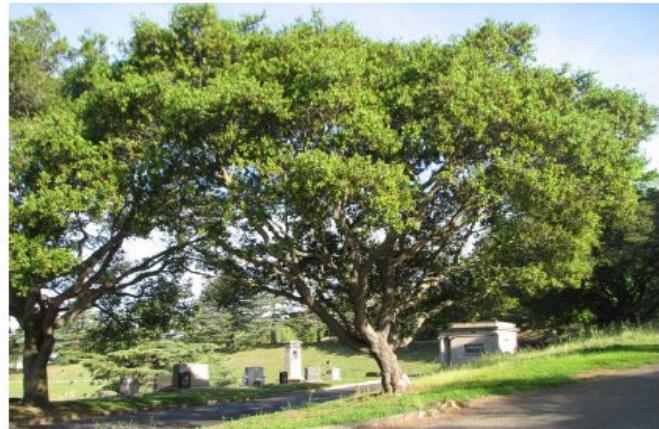


East Dunne Hillside Water Supply Reservoir

Trees



Quercus lobata / VALLEY OAK



Quercus agrifolia / COAST LIVE OAK

Shrubs



Heteromeles arbutifolia / TOYON



Prunus ilicifolia / HOLLYLEAF CHERRY

Grasses/Perennial

PACIFIC COAST SEED MIXES



HABITAT MIX

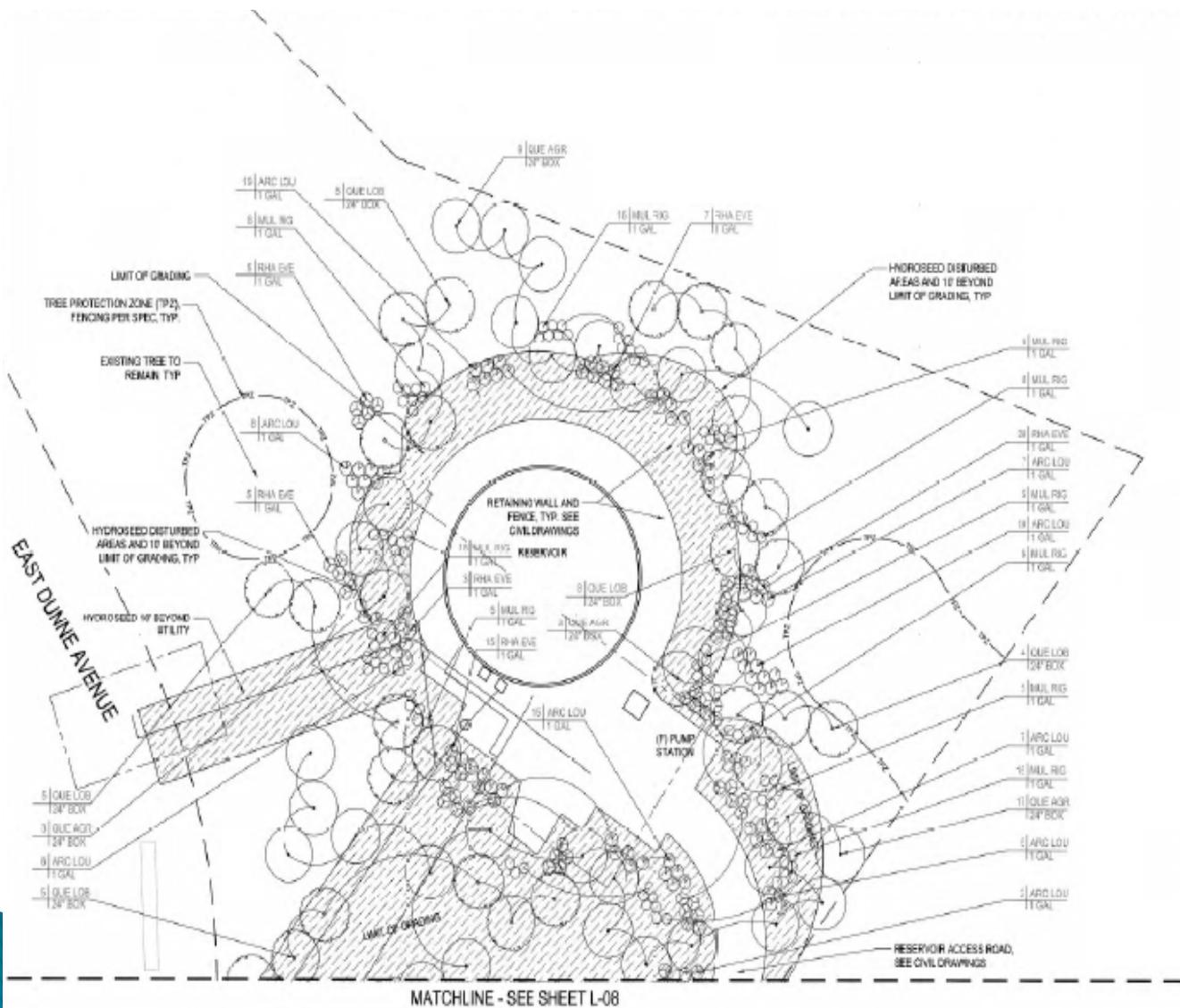
Bromus carinatus / Native California Brome
Elymus glaucus / Blue Wild Rye
Hordeum californicum / California Barley
Festuca idahoensis / Idaho Fescue
Nassella pulchra / Purple Needlegrass
Poa secunda / Native Pine Bluegrass



CALIFORNIA NATIVE WILDFLOWER MIX

Achillea millefolium / White Yarrow
Clarkia elegans / Elegant Clarkia
Collomia heterophylla / Chinese Houses
Eschscholzia californica / California Poppy
Gilia capitata / Globe Gilia
Lasthenia glabrata / Goldfields
Layia platyglossa / Tidy Tips
Linum lewisii / Blue Flax
Lupinus densiflorus / Golden Lupine
Lupinus succulentus / Arroyo Lupine
Nemophila menziesii / Baby-Blue Eyes
Phacelia campanularia / California Blue Bells
Triphysaria versicolor / Yellow Owl's Clover

Planting Plan



PLANT LIST

TREES						ZONES	
SPECIES	CITY	AGLR.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	WATER USE
	39	QUE AGR	<i>Quercus ilex</i>	COASTALINE OAK	34" BOC	AS SHOWN	L
	41	SUE LOB	<i>Quercus ilex</i>	VALLEY OAK	34" BOC	AS SHOWN	L

SHRIJES

SAMPLE	UV#	ASLAB	DESCRIPTOR NAME	DESCRIPTOR CODE	PPC	PPC STATUS	WATER USE
	146	ABC LOU	Acetosphaera barkeri Luis Edwards	LOUER EDWARDS AMAZONIA	1 GAL	80.0%	L
	142	BLU PRO	Microcoleus cyanus	BLUER GRASS	1 GAL	48.0%	L
	164	BLU PRO	Rhizobium leguminosarum Bio Diesel	CALIFORNIA CONFEDERACY	1 GAL	80.0%	L

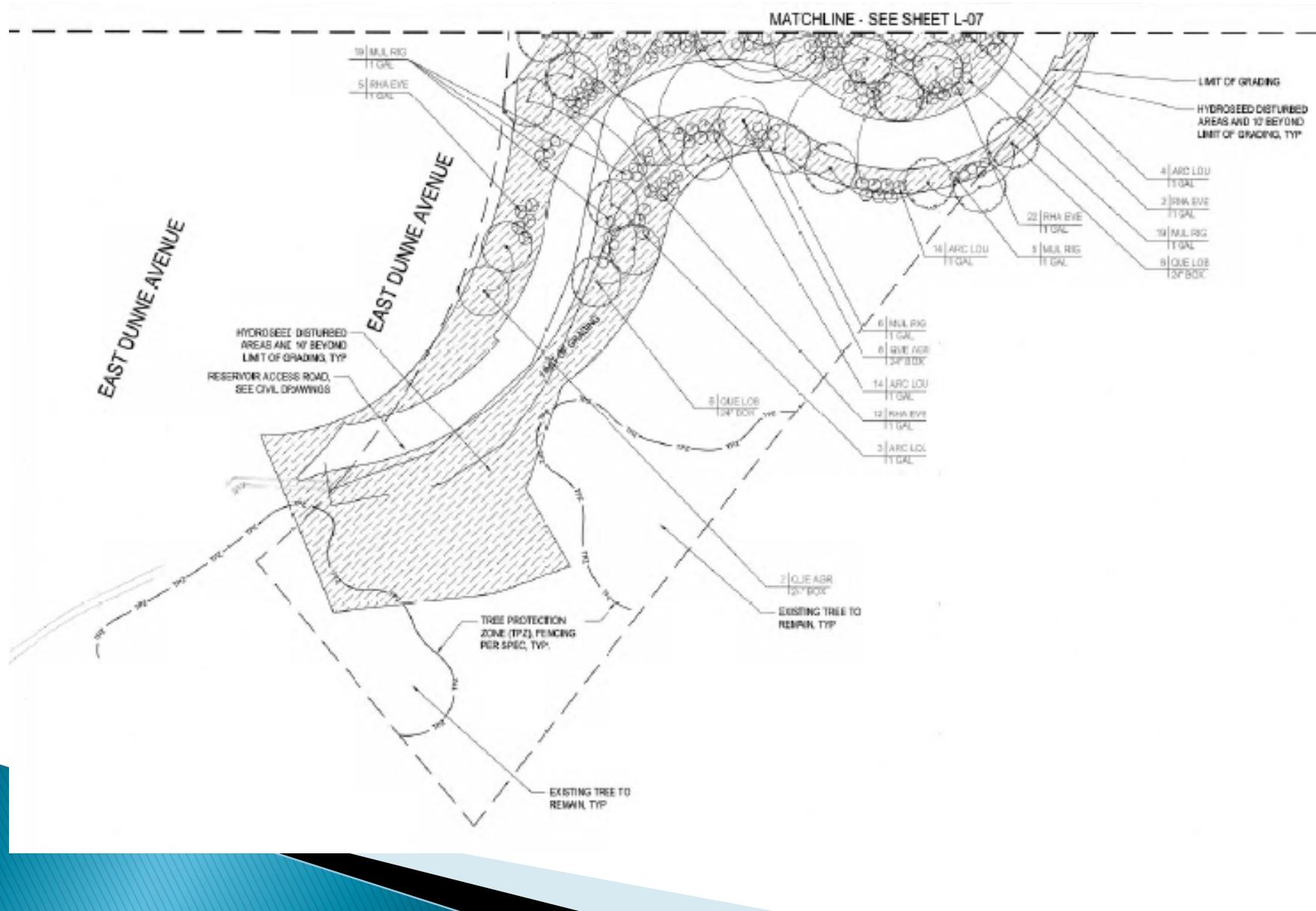
HYDROGEN

时间	GIF	开始	结束	开始时间	结束时间	类型	状态	操作
	44.82 8	SEE SP08						VL

WATER USE LEGEND:

1. REFER TO SPECIFICATIONS FOR SOIL PREPARATION, PLANTING, AND MAINTENANCE FORCS REQUIREMENTS.
2. CONTRACTOR TO REFER TO PLANT LIST FOR PLANT SIZE AND SPACING, USE TRIM DURANT SODING UNLESS OTHERWISE NOTE.
3. PLANT QUANTITIES ARE PROVIDED FOR CONTRACTORS CONSIDERATION. CONTRACTOR TO VERIFY ALL PLANT QUANTITIES DOWN IN PLANTING PLANS.
4. CONTRACTOR TO SUBMIT PLANT SAMPLES FOR APPROVAL BY LANDSCAPE ARCHITECT, WITHIN 10 DAYS.
5. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES, STRUCTURES, AND IRRIGATION LINES BEFORE DIGGING.
6. SPACE SHRUBS 4'-6' APART FROM TREES.
7. SEE DETAIL 1/14 FOR ROOT PLATE PROTECTOR (ROB).
8. SEE DETAIL 2/14 FOR ROOT PROTECTION ON (ROB EKT).
9. ALL (BURSTED) AREAS TO BE HYDROSEEDED.
10. EROSION CONTROL NETTING ON SLOPES 3:1 AND GREATER.
11. ALL TREED AND SHRUBBED TO HAVE CRUSHED ROCK MULCH EXCEPT WITHIN 6' OF STONE.

Planting Plan



Utility Safety Improvement Plan

Schedule

- ▶ Bid Opening – May 29, 2024
- ▶ Construction Start – September 2024
- ▶ Duration, 2.5–3 years
- ▶ Low Bid – \$8.3M (Azul Works)

FUNDING

\$4M from Urban Grant (Department of Water Resources)

Potential Impacts

- ▶ Construction Noise
 - Typical work hours: 7am to 3:30pm
- ▶ Roadway Impacts
 - Traffic Delays due to:
 1. Product/Material Deliveries
 2. Equipment Mobilization
 3. Daily Worker Vehicles
- ▶ Other Impacts
 - Dust from Excavation
 - Exhaust gas from Equipment
 - Lay down yard-corner of Thomas Grade/Dunne

Contacts and Updates

▶ Project Updates for all City Projects

www.morganhill.ca.gov/2327/The-Scoop



▶ Project Contacts

- General Contact

constructionconcerns@morganhill.ca.gov

- David Gittleson, Project Manager

david.Gittleson@morganhill.ca.gov - 408.779.7271

- Chris Ghione, Public Services Director

chris.ghione@morganhill.ca.gov - 408.782.9154