

V Appendices

Appendix A: Demographic Tables and Figures

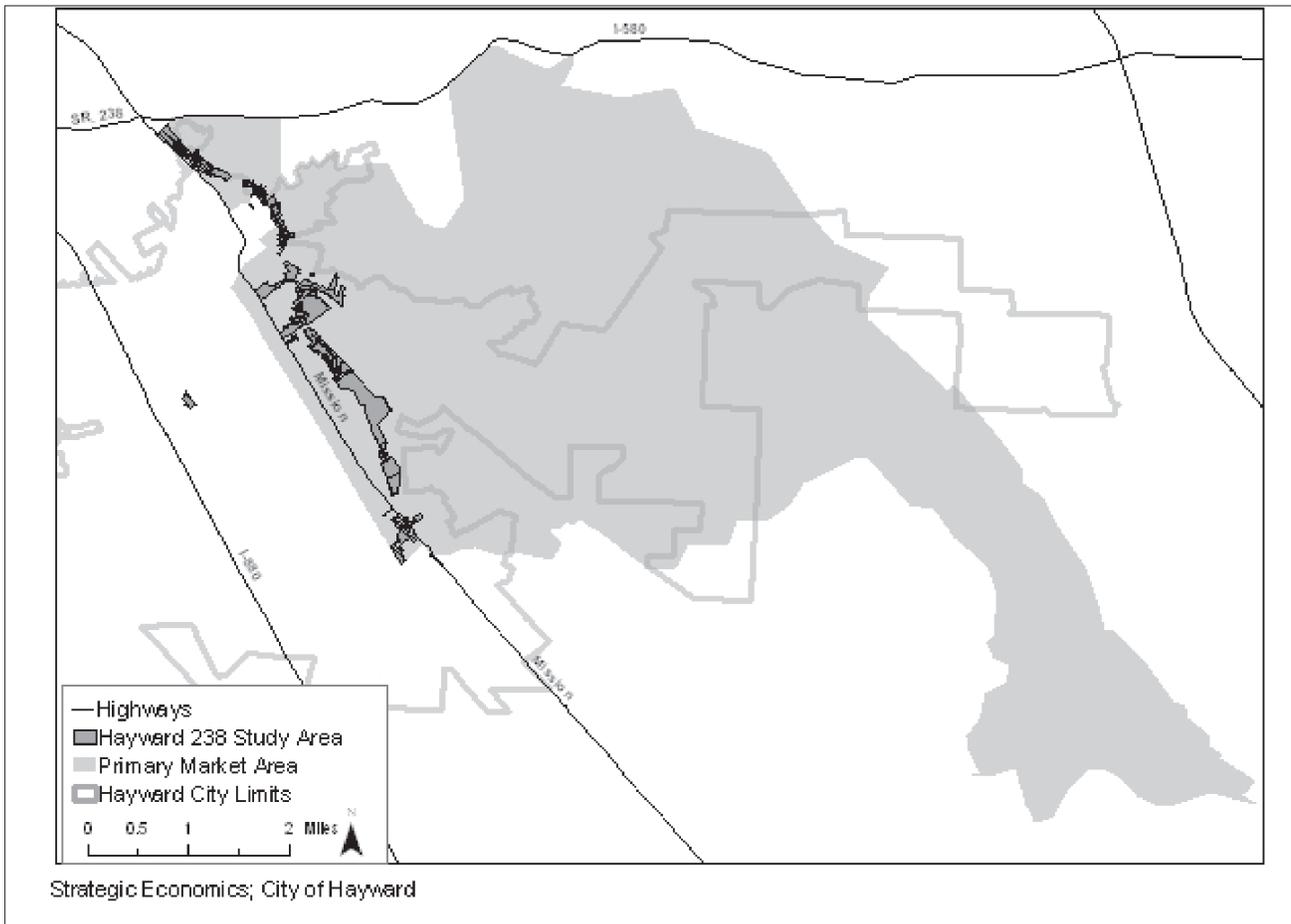


Figure A-1: Zoomed Out Map of Study Area and Primary Market Area Census Tracts

Table A-3: Commute to Work: Primary Market Area, Hayward, Alameda County, Bay Area MSA, 1990-2000

	Primary Market Area (a)				Hayward				Alameda County				Bay Area MSA			
	1990		2000		1990		2000		1990		2000		1990		2000	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Drove Alone	13,540	74%	15,971	73%	38,797	72%	42,622	69%	422,775	67%	450,496	66%	2,185,828	68%	2,335,785	68%
Carpooled	2,052	11%	2,977	14%	7,631	14%	11,248	18%	80,773	13%	93,652	14%	416,375	13%	444,410	13%
Bus	434	2%	281	1%	1,647	3%	1,504	2%	33,869	5%	30,291	4%	186,693	6%	182,944	5%
Rail (subway or elevated)	992	5%	1,164	5%	2,349	4%	2,359	4%	26,694	4%	36,239	5%	75,911	2%	98,739	3%
Walked	364	2%	594	3%	1,261	2%	1,325	2%	25,136	4%	21,919	3%	116,317	4%	111,662	3%
Worked at Home	507	3%	548	2%	969	2%	1,148	2%	24,886	4%	23,941	4%	111,565	3%	139,480	4%
Worked in Hayward	4622	25%	4371	20%	18,081	33%	17,057	28%								
Worked outside of Hayward	13456	74%	15,644	71%	35,931	67%	44,639	72%								
Total Workers	18,294	100%	22,006	100%	54,012	100%	61,696	100%	633,191	100%	678,910	100%	3,200,833	100%	3,432,157	100%
Vehicles per Household	1.90		1.83		1.78		1.83		1.68		1.69		1.83		1.83	

Sources: 1990 U.S. Census; 2000 U.S. Census
 Primary Market Area defined as Census tracts 4312; 4351.01; 4351.02; 4353; 4364.01; 4364.02; 4365; 4379
 Note: Numbers may not add to 100 percent as some categories have been omitted for summary purposes

	2000		2004		Annual Average % Growth	
	Census	City Estimate	City Estimate	% Growth	2000-2004	1990-2000
Primary Market Area	11,361	11,642	11,642	2%	0.6%	1.8%
City of Hayward	45,956	47,472	47,472	3%	0.8%	1.1%

Sources: 1990 U.S. Census; 2000 U.S. Census; City of Hayward. City data available at <http://www.hayward-ca.gov/departments/ced/documents/planning/HousingGrowth2000-04.pdf>
 Primary Market Area defined as Census tracts 4312; 4351.01; 4351.02; 4353; 4364.01; 4364.02; 4365; 4379
 Housing numbers are not consistent with Table A-2 as they are within the City Boundary only

Table A4: Estimated Housing Unit Growth, PMA and City, 2000-2004

Appendix B: Market Assessment Background Materials

Housing Demand Forecast Methodology

This section describes the methodology used to forecast total demand for housing units by new workers in the Hayward, Oakland, San Francisco, Fremont, and San Jose job centers.

Strategic Economics evaluated the expected job growth in the top five cities where Hayward residents work in order to estimate the new households that will be potentially attracted to Hayward due the strength of Bay Area job centers. According to the LEHD, the top five cities where Hayward residents work are Hayward, Oakland, San Francisco, Fremont, and San Jose. Using ABAG's *Projections 2007* data, Strategic Economics first determined the total number of jobs projected for these five cities during the two time periods analyzed. Next, because there is often more than one worker in a household and one new job does not equal one new household, Strategic Economics estimated the number of new households these jobs will generate based on ABAG's projected "workers per household number". Strategic Economics did this by dividing the number of workers per household in Hayward by the number of projected jobs for each city. This calculation generated the number of households that will be associated with new jobs projected for the five cities.

Neighborhood	Visibility/Access			Influence of Surrounding Uses					Parcel Characteristics					Development Opportunities
	Major Thoroughfare	Pedestrian/Transit Access	Highway/Noise/Traffic	Adjacent to Residential	Civic/Community/Parks	Trail/Open Space Potential	Existing Uses On-Site	Slope/Creek	Fault	Smaller Parcel Sizes	Larger Parcel Sizes			
<i>North Hayward</i>														
NH1	X	X	X				X				X			Highway Oriented Commercial Office Multifamily Residential
NH2	X			X		X		X				X		Single Family Townhomes Open Space/Trail Office
<i>Upper B Street</i>														
UB1		X		X	X	X		X				X		Civic Open Space Single Family Multifamily Townhomes Small Commercial on A Street
UB2		X		X	X		X						X	Single Family Multifamily Townhomes

Source: Strategic Economics, Community, Design + Architecture

Table B-1.1: Summary of Physical Evaluation by Subarea

Neighborhood	Visibility/Access			Influence of Surrounding Uses				Parcel Characteristics					Development Opportunities
	Major Thoroughfare	Pedestrian /Transit Access	Highway/ Noise/Traffic	Adjacent to Residential	Civic/Community/Parks	Trail/Open Space Potential	Existing Uses On-Site	Slope/Creek	Fault	Smaller Parcel Sizes	Larger Parcel Sizes		
<i>Mission/Foothill</i>													
MF1		X		X	X	X					X	Single Family Residential Multifamily Residential Townhomes Civic/Open Space	
MF2				X			X	X		X		Single Family Residential	
MF3				X		X		X			X	Single Family Residential Multifamily Residential Townhomes Civic/Open Space	
MF4	X	X	X	X				X	X	X		Retail Office Multifamily Residential	
MF5				X		X	X	X		X		Single Family Residential Open Space	

Source: Strategic Economics, Community, Design + Architecture

Table B-1.2: Summary of Physical Evaluation by Subarea

Neighborhood	Visibility/Access			Influence of Surrounding Uses					Parcel Characteristics					Development Opportunities
	Major Thoroughfare	Pedestrian/Transit Access	Highway/Noise/Traffic	Adjacent to Residential	Civic/Community/Parks	Trail/Open Space Potential	Existing Uses On-Site	Slope/Creek	Fault	Smaller Parcel Sizes	Larger Parcel Sizes			
<i>Mission/Garin</i>														
MG1					X	X		X	X		X			Open Space/Trail Single Family Residential Multifamily Residential Townhomes
MG2		X		X	X	X	X	X	X		X			Open Space/Trail Single Family Residential Multifamily Residential Townhomes
MG3	X	X	X	X	X	X					X			Civic Multifamily Residential Townhomes Retail Office

Source: Strategic Economics, Community, Design + Architecture
Table B-1.3: Summary of Physical Evaluation by Subarea

February 15, 2008

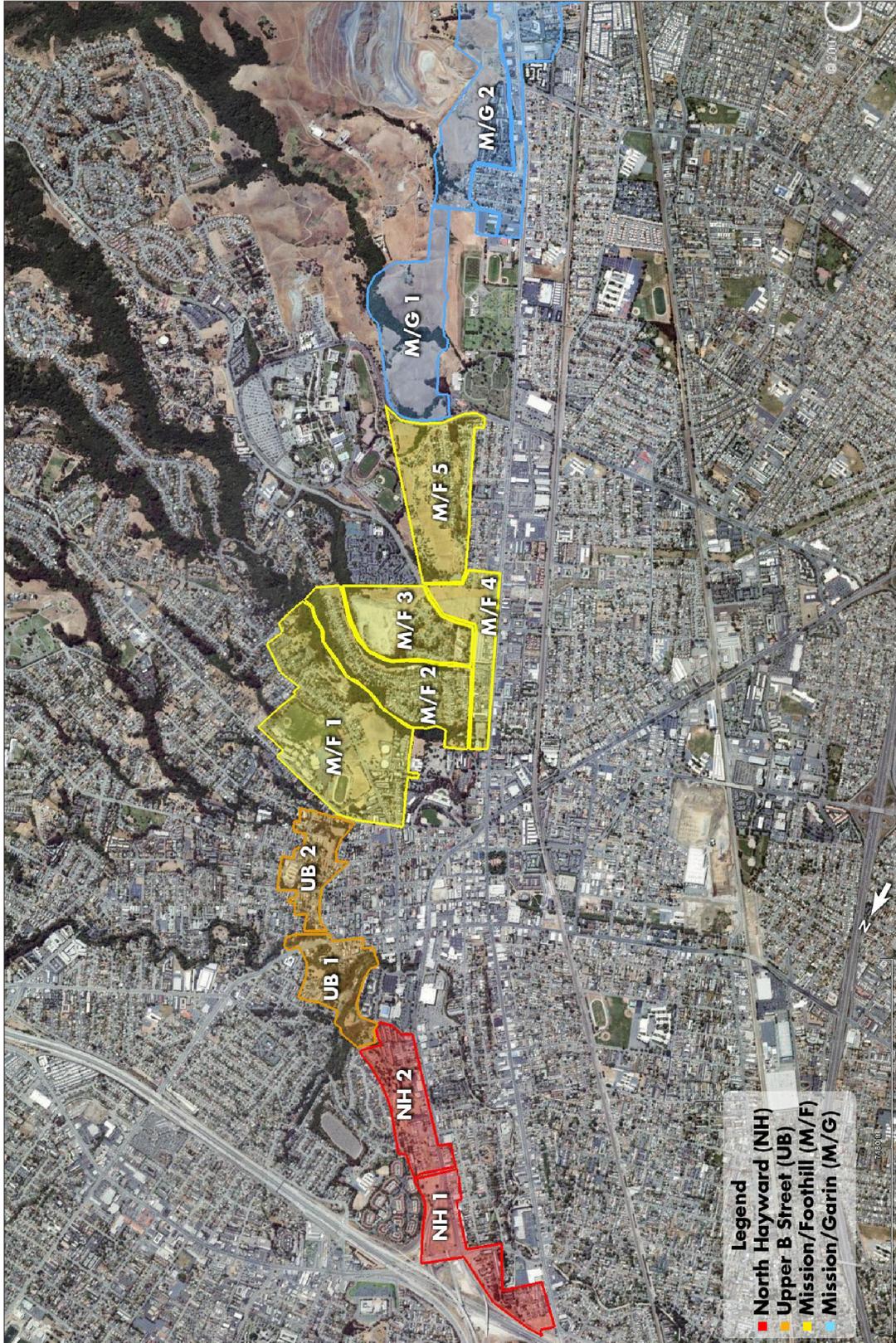


Figure B-1: Map of Study Area Subareas

	Yr Built	Rent / SF / Month	Terms	Avl. Square Feet	Vacancy Rate	Shopping Center Type	Target Market
Foothill Boulevard							
Plaza Center 22290 Foothill Blvd.	1981	\$2.75		None	0%	Neighborhood Shopping Center with grocery anchor, office building adjacent	both local residents and local office tenants
22211 Foothill Boulevard	1950	\$1.00		10,500	100%	Freestanding space for retail or office	
Mission Boulevard							
Mission Plaza 26952 East Mission Blvd.		\$2.25	NNN (\$0.60)	1,820	2%	Neighborhood Shopping Center with grocery anchor	Local residents
Fairway Park Rousseau & Mission Blvd.	Renov. 2007	\$2.00 - \$3.00	NNN	35,000	25%	Neighborhood Shopping Center with grocery and drug store anchors	Traffic from I-880, local residents
Other Areas							
University Plaza 26775 Hayward Blvd.		\$1.50	CAM (\$0.40)	1,012	6%	Convenience strip center with food and personal services	Local residents Traffic from I-880,
Straford Business Park 1663 Industrial Parkway		\$2.99		11162	46%	Neighborhood serving strip retail / office	local residents and office tenants
20511 Hesperian Blvd. @ West A Street	2007	\$3.25		1,444	36%	Freestanding suite in a Regional Shopping Center	Traffic from I-880, Industrial tenants
Mt. Eden Shops Industrial Blvd. & Highway 92	2007	\$3.33 - \$4.00	NNN	8,500	83%	Highway Oriented with Neighborhood Retail Uses	Traffic from Highway 92, I-880, Industrial tenants
Whipple @ Industrial Parkway Cinema Place	2002	\$3.25 - \$3.50	NNN	4,208	3%	Regional Shopping Center anchored by general merchandise (Target)	Traffic from I-880
22695 Foothill Blvd.	2008	TBD		15105	77%	Regional Downtown Destination anchored by movie theater	

Sources: Loopnet, Strategic Economics (Broker Interviews). Asking rates are sampled August through October 2007.

Table B-2: Profile of Leasable Retail Space

Foothill Boulevard	Address	Uses	Available SF	Total Building SF	Rate / SF / Month	Vacancy Rate	Year Built
	22320 Foothill Blvd.	Office	5,670	41,164	\$2.00	14%	1981
	22708 Foothill Blvd.	Office	2,700	7,590	\$1.65	36%	1960
	21297 Foothill Blvd.	Office	2,100	9,576	\$1.50	22%	1963
Second, A, and B Streets							
	A Street and Rockaway Ln.	Office	NA	2,500	\$1.69	NA	2005
	22551 2nd Street	Office	1,663	21,768	\$1.75	8%	1988
	1059 A Street	Office	7,600	14,630	\$1.50	52%	1958
	1147 A Street	Office	2,817	11,268	\$1.60	25%	1960
	1617 B Street	Office	1,760	1,760	\$1.31	100%	NA
	578 B Street	Office	1,800	1,800	\$1.31	100%	NA
	Gatehouse Plaza	Office	5,255	55,000	\$1.90	10%	1985
Mission Boulevard							
	21144 Mission Blvd.	Office	3,800	9,200	\$1.50	41%	1960
	SDV/ACCI	Office	8,314	9,022	\$1.35	92%	1960
Other Hayward Areas							
	3583 Investment Blvd.	Office/R&D	1,415	10,661	\$1.20	13%	1980
	3563 Investment Blvd.	Office	2,353	14,318	\$1.15	16%	1980
	26102 Eden Landing Rd.	Office	3,689	20,000	\$1.15	18%	1980
	371389 Gresel St.	Office	3,200	3,200	\$1.13	100%	1958
	24046 Eden Landing Rd.	Office/R&D	4,860	85,980	\$1.00	6%	1973
	3524 Breakwater Ave.	Office	7,800	15,660	\$0.95	50%	1970
	20609 Cosair Blvd.	Office/R&D	26,278	26,278	\$0.75	100%	NA
	20609 Cosair Blvd.	Office	13,139	13,139	\$0.65	100%	1975

Sources: Loopnet, Strategic Economics (Broker Interviews). Asking rates are sampled August through October 2007.

Table B-3: Profile of Leasable Office Space

Appendix C: List of Observed Plant and Animal Species

Plant and wildlife species observed by WRA in or near the Route 238 Bypass Corridor Project Area during an assessment conducted on September 21 and 24, 2007. Most species are common for the region, and the only special status species observed was Loggerhead Shrike.

Common Name	Scientific Name
Mammals	
fox squirrel	<i>Sciurus niger</i>
coyote (scat)	<i>Canis latrans</i>
raccoon (scat)	<i>Procyon lotor</i>
striped skunk	<i>Mephitis mephitis</i>
feral and domestic cat	<i>Felis domesticus</i>
mountain lion (scat)	<i>Puma concolor</i>
black-tailed deer	<i>Odocoileus hemionus</i>
Birds	
Great Blue Heron	<i>Ardea herodias</i>
Great Egret	<i>Ardea alba</i>
Snowy Egret	<i>Egretta thula</i>
Mallard	<i>Anas platyrhynchos</i>
Turkey Vulture	<i>Cathartes aura</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
American Kestrel	<i>Falco sparverius</i>
Wild Turkey	<i>Megeagris gallopavo</i>
Mourning Dove	<i>Zenaida macroura</i>
Rock Dove (Feral Pigeon)	<i>Columba livia</i>
Anna's Hummingbird	<i>Calypte anna</i>
Nuttall's Woodpecker	<i>Picoides nuttallii</i>
Northern Flicker	<i>Colaptes auratus</i>
Black Phoebe	<i>Sayornis nigricans</i>
Steller's Jay	<i>Cyanocitta stelleri</i>
Western Scrub-jay	<i>Aphelocoma californica</i>
American Crow	<i>Corvus brachyrhynchos</i>
Chestnut-backed Chickadee	<i>Poecile rufescens</i>
Bewick's Wren	<i>Thryomanes bewickii</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
European Starling	<i>Sturnus vulgaris</i>
California Towhee	<i>Pipilo crissalis</i>
Spotted Towhee	<i>Pipilo maculatus</i>
Song Sparrow	<i>Melospiza melodia</i>

Plant and wildlife species observed by WRA in or near the Route 238 Bypass Corridor Project Area during an assessment conducted on September 21 and 24, 2007. Most species are common for the region, and the only special status species observed was Loggerhead Shrike.

Dark-eyed Junco	<i>Junco hyemalis</i>
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
House Finch	<i>Carpodacus mexicanus</i>
Lesser Goldfinch	<i>Carduelis psaltria</i>

Reptiles

red-eared slider (turtle)	<i>Trachemys scripta elegans</i>
western fence lizard	<i>Sceloporus occidentalis</i>

Fish

Unidentified minnow	
Carp	<i>Cyprinidae sp.</i>

Plants

American century plant	<i>Agave americana</i>
acacia (several species)	<i>Acacia spp.</i>
bigleaf maple	<i>Acer macrophyllum</i>
five-fingered fern	<i>Adiantum aleuticum</i>
California buckeye	<i>Aesculus californica</i>
tree of heaven	<i>Ailanthus altissima</i>
onion	<i>Allium sp.</i>
madrone	<i>Arbutus menziesii</i>
California mugwort	<i>Artemisia douglasiana</i>
California sage	<i>Artemisia californica</i>
giant reed	<i>Arundo donax</i>
narrowleaf milkweed	<i>Asclepias fascicularis</i>
wild oat	<i>Avena fatua</i>
false brome	<i>Brachypodium distachyon</i>
black mustard	<i>Brassica nigra</i>
ripgut brome	<i>Bromus diandrus</i>
soft chess	<i>Bromus hordeaceus</i>
Italian thistle	<i>Carduus pycnocephalus</i>
sea fig	<i>Carpobrotus edulis</i>

Plant and wildlife species observed by WRA in or near the Route 238 Bypass Corridor Project Area during an assessment conducted on September 21 and 24, 2007. Most species are common for the region, and the only special status species observed was Loggerhead Shrike.

yellow star thistle	<i>Centaurea solstitialis</i>
chicory	<i>Cichorium intybus</i>
bull thistle	<i>Cirsium vulgare</i>
poison hemlock	<i>Conium maculatum</i>
bindweed	<i>Convolvulus arvensis</i>
horseweed	<i>Conyza sp.</i>
pampas grass	<i>Cortaderia jubata</i>
cotoneaster (several species)	<i>Cotoneaster spp.</i>
artichoke thistle	<i>Cynara cardunculus</i>
Bermuda grass	<i>Cynodon dactylon</i>
tall flatsedge	<i>Cyperus eragrostis</i>
cape ivy	<i>Delairea odorata</i>
saltgrass	<i>Distichlis spicata</i>
stinkwort	<i>Dittrichia graveolens</i>
wood fern	<i>Dryopteris arguta</i>
barnyard grass	<i>Echinochloa crus-galli</i>
panic veldtgrass	<i>Ehrharta erecta</i>
willowherb	<i>Epilobium cicutarium</i>
giant horsetail	<i>Equisetum telmateia ssp. braunii</i>
California buckwheat	<i>Eriogonum fasciculatum var. foliolosum</i>
nude buckwheat	<i>Eriogonum nudum</i>
blue gum eucalyptus	<i>Eucalyptus globulus</i>
Albanian spurge	<i>Euphorbia characias</i>
fig	<i>Ficus carica</i>
fennel	<i>Foeniculum vulgare</i>
French broom	<i>Genista monspessulana</i>
California everlasting	<i>Gnaphalium californicum</i>
common gumplant	<i>Grindelia camporum</i>
English ivy	<i>Hedera helix</i>
heliotrope	<i>Heliotropium curassavicum</i>

Plant and wildlife species observed by WRA in or near the Route 238 Bypass Corridor Project Area during an assessment conducted on September 21 and 24, 2007. Most species are common for the region, and the only special status species observed was Loggerhead Shrike.

hayfield tarweed	<i>Hemizonia congesta ssp. congesta</i>
toyon	<i>Heteromeles arbutifolia</i>
telegraph weed	<i>Heterotheca grandiflora</i>
alum root	<i>Heuchera micrantha</i>
foxtail barley	<i>Hordeum murinum ssp. leporinum</i>
Northern California black walnut	<i>Juglans californica var. hindsii</i>
English walnut	<i>Juglans regia</i>
common rush	<i>Juncus patens</i>
iris leaved rush	<i>Juncus xiphioides</i>
prickly lettuce	<i>Lactuca serriola</i>
Italian ryegrass	<i>Lolium multiflorum</i>
bird's-foot trefoil	<i>Lotus corniculatus</i>
cheeseweed	<i>Malva parviflora</i>
pennyroyal	<i>Mentha pulegium</i>
sticky monkeyflower	<i>Mimulus aurantiacus</i>
forget-me-not	<i>Myosotis latifolia</i>
purple needlegrass	<i>Nassella pulchra</i>
olive	<i>Olea europea</i>
mission cactus	<i>Opuntia ficus-indica</i>
gold back fern	<i>Pentagramma triangularis ssp. triangularis</i>
Harding grass	<i>Phalaris aquatica</i>
bristly ox-tongue	<i>Picris echioides</i>
Monterey pine	<i>Pinus radiata</i>
smilo grass	<i>Piptatherum miliaceum</i>
Victorian box	<i>Pittosporum undulatum</i>
English plantain	<i>Plantago lanceolata</i>
common plantain	<i>Plantago major</i>
sycamore	<i>Platanus sp.</i>
common knotweed	<i>Polygonum arenastrum</i>
rabbitfoot grass	<i>Polypogon monspeliensis</i>

Plant and wildlife species observed by WRA in or near the Route 238 Bypass Corridor Project Area during an assessment conducted on September 21 and 24, 2007. Most species are common for the region, and the only special status species observed was Loggerhead Shrike.

cottonwood	<i>Populus sp.</i>
exotic cherry/plum trees	<i>Prunus sp.</i>
coast live oak	<i>Quercus agrifolia</i>
blue oak	<i>Quercus douglasii</i>
valley oak	<i>Quercus lobata</i>
cork oak	<i>Quercus suber</i>
wild radish	<i>Raphanus sativus</i>
water cress	<i>Rorippa nasturtium-aquaticum</i>
Himalayan blackberry	<i>Rubus discolor</i>
California blackberry	<i>Rubus ursinus</i>
curly dock	<i>Rumex crispus</i>
red willow	<i>Salix laevigata</i>
arroyo willow	<i>Salix lasiolepis</i>
Russian thistle	<i>Salsola tragus</i>
blue elderberry	<i>Sambucus mexicana</i>
pincushion plant	<i>Scabiosa atropurpurea</i>
common tule	<i>Scirpus acutus var. occidentalis</i>
California figwort	<i>Scrophularia californica</i>
milk thistle	<i>Silybum marianum</i>
false solomon's seal	<i>Smilacina sp.</i>
common nightshade	<i>Solanum americanum</i>
snowberry	<i>Symphoricarpos albus var. laevigata</i>
medusahead	<i>Taeniatherum caput-medusae</i>
hedge parsley	<i>Torilis arvensis</i>
poison oak	<i>Toxicodendron diversilobum</i>
wandering jew	<i>Tradescantia fluminensis</i>
rose clover	<i>Trifolium hirtum</i>
cattail	<i>Typha sp.</i>
California bay	<i>Umbellularia californica</i>
stinging nettle	<i>Urtica dioica</i>
periwinkle	<i>Vinca major</i>

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Appendix D: Potential for Special Status Species to Occur in the Project Area

Appendix D. Potential for special status species to occur in the Route 238 Bypass Corridor Project Area. List compiled from September 2007 searches of California Department of Fish and Game Natural Diversity Database (CDFG 2007), U.S. Fish and Wildlife Service Species Lists (USFWS 2007), and the California Native Plant Society Electronic Inventory (CNPS 2006) for the Hayward, Oakland East, Las Trampas Ridge, Dublin, Niles, Diablo, San Leandro, Redwood Point, and Newark USGS 7.5' quadrangles, and a review of other CDFG lists and publications (Jennings and Hayes 1994, Zeiner et al. 1990).

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Mammals			
salt-marsh wandering shrew <i>Sorex vagrans halicoetes</i>	CSC	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6 to 8 feet above sea level where abundant driftwood is scattered among Salicornia.	No Potential. Salt marsh habitat not present within the Project Area.
San Francisco dusky-footed woodrat <i>Neotoma fuscipes annectens</i>	CSC	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	High Potential. Woodlands near creek corridors throughout the Project Area provide suitable habitat for this species.
riparian (=San Joaquin Valley) woodrat <i>Neotoma fuscipes riparia</i>	FE, CSC, RP	Riparian areas along the San Joaquin, Stanislaus, and Tuolumne Rivers. Need areas with mix of brush and trees. Need suitable nesting sites in trees, snags or logs.	No Potential. The only verified population of this species is located approximately 46 miles to the east on the San Joaquin River (USFWS 1998).
pallid bat <i>Antrozous pallidus</i>	CSC, WBWG	Occupies a variety of habitats at low elevation including grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Present. CNDDDB records show this species to be present in the Hayward area. Trees, abandoned buildings, and other structures within the Project Area may provide roosting habitat. Presence of this species may also indicate suitable habitat for other sensitive bats.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	CSC, WBWG	Primarily found in rural settings in a wide variety of habitats including oak woodlands and mixed coniferous-deciduous forest. Day roosts highly associated with caves and mines. Very sensitive to human disturbance.	Moderate Potential. Unoccupied buildings within the Project Area may provide roosting habitat for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
western mastiff bat <i>Eumops perotis californicus</i>	CSC, WBWG, BLM	Found in a wide variety of open, arid and semi-arid habitats. Distribution appears to be tied to large rock structures which provide suitable roosting sites, including cliff crevices and cracks in boulders.	Moderate Potential. Historical records of this species exist near or within the Project Area. Suitable roosting and foraging habitat exists in open areas and a quarry site within the Project Area.
salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE, SE, CFP	Found only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat. Do not burrow, build loosely organized nests. Require higher areas for flood escape.	No Potential. Salt marsh habitat not present within the Project Area.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	FE, ST, RP	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	Unlikely. There is a possibility of this species occurring within the Project Area west of Garin Regional Park where undeveloped grassy slopes are contiguous with the undeveloped East Bay Hills. This species is generally considered to inhabit the San Joaquin Valley, further southeast from the Project Area.
American badger <i>Taxidea taxus</i>	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	Unlikely. Most potential burrowing habitat for this species within the Project Area is disced and lacks suitable prey. There are no records of this species in the vicinity of the Project Area.
Birds			
California Brown Pelican <i>Pelecanus occidentalis californicus</i>	FE, SE, CFP	Colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators.	No Potential. Project Area is far from potential coastal island habitat or open water foraging habitat.
Cooper's Hawk <i>Accipiter cooperii</i>	CSC	Associated with open or interrupted woodland and riparian habitats in the Coast ranges and foothills surrounding the Central Valley. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also nests in live oaks.	High Potential. Woodlands and riparian corridors provide suitable nesting habitat, and foraging habitat is available both within the Project Area and in open space to the east.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Sharp-shinned Hawk <i>Accipiter striatus</i>	CSC	This species is a fairly common migrant and winter visitor throughout California and is found in a variety of habitats, especially woodlands. It usually nests in dense small-tree stands of conifers near water. Preferred roost sites are within intermediate to high-canopy forest areas.	High Potential. Isolated riparian woodlands may provide nesting habitat, and foraging habitat is present in isolated grasslands and open areas. This species nested about 2 miles east of the Project Area in 1994 (CNDDDB 2007).
Golden Eagle <i>Aquila chrysaetos</i>	BCC, CSC, CFP, CDF, BLM	Rolling foothills and mountainous areas, sage-juniper flats, desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Moderate Potential. This species is unlikely to nest in the Project Area but may forage over undeveloped hillsides contiguous with open space to the east. This species nested about 2 miles east of the Project Area in 1994 (CNDDDB 2007).
Ferruginous Hawk <i>Buteo regalis</i>	BCC, CSC, BLM	(Wintering) Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys and fringes of pinyon-juniper habitats. Preys on lagomorphs, ground squirrels and mice. Population trends may follow lagomorph population cycles.	Moderate Potential. This species would not nest within the Project Area, but may forage in the East Bay hills during winter months.
Northern harrier <i>Circus cyaneus</i>	CSC	Nests and forages in grassland habitats, usually in association with coastal salt and freshwater marshes. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas. May also occur in alkali desert sinks.	Moderate Potential. This species is unlikely to find suitable nesting habitat within the Project Area, but is likely to be found in the vicinity year-round and may forage in isolated open areas.
White-tailed Kite <i>Elanus leucurus</i>	CFP	Year-long resident of coastal and valley lowlands; rarely found away from agricultural areas. Preys on small diurnal mammals and occasional birds, insects, reptiles, and amphibians.	High Potential. Woodlands and riparian corridors provide suitable nesting habitat, especially in more isolated portions of the Project Area adjacent to open space to the east. Grasslands and open areas within and adjacent to the Project Area provide suitable foraging habitat.
American Peregrine Falcon <i>Falco peregrinus anatum</i>	FD, SE, CFP, BCC	Winters throughout Central Valley. Requires protected cliffs and ledges for cover. Feeds on a variety of birds, and some mammals, insects, and fish.	Unlikely. Cliff habitat suitable for nesting is not present within the Project Area. Species is locally uncommon.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Prairie falcon <i>Falco mexicanus</i>	BCC, CSC	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Unlikely. Cliff habitat suitable for nesting is not present within the Project Area. Species is locally uncommon.
California black rail <i>Laterallus jamaicensis coturniculus</i>	ST, BCC, CFP	Mainly inhabits salt-marshes bordering larger bays. Occurs in tidal salt marsh heavily grown to pickleweed; also in fresh-water and brackish marshes, all at low elevation.	No Potential. Salt marsh habitat not present within the Project Area.
California clapper rail <i>Rallus longirostris obsoletus</i>	FE, SE, CFP	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Require dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on molluscs and crustaceans.	No Potential. Salt marsh habitat not present within the Project Area.
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT, CSC, BCC, RP	Federal listing applies only to the Pacific coastal population. Found on sandy beaches, salt pond levees and shores of large alkali lakes. Requires sandy, gravelly or friable soils for nesting.	No Potential. The project Area is over 3.5 miles from San Francisco Bay and contains no suitable nesting habitat or open water areas for foraging.
California least tern <i>Sterna antillarum browni</i>	FE, SE, CFP	Nests along the coast from San Francisco Bay south to northern Baja California. Breeding colonies in San Francisco Bay found in abandoned salt ponds and along estuarine shores. Colonial breeder on barren or sparsely vegetated, flat substrates near water.	No Potential. The project Area is over 3.5 miles from San Francisco Bay and contains no suitable nesting habitat or open water areas for foraging.
Long-eared Owl <i>Asio otus</i>	CSC	Inhabits riparian bottom lands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Moderate Potential. This species may be present in the vicinity of the Project Area year-round, although it is unlikely to nest there. Marginal habitat for this species is present along isolated, wooded creek corridors.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Burrowing Owl <i>Athene cunicularia</i>	CSC, BCC	Frequents open grasslands and shrublands with perches and burrows. Preys upon insects, small mammals, reptiles, birds, and carrion. Nests and roosts in old burrows of small mammals.	Unlikely. Discing of open spaces within the Project Area has drastically reduced the potential for this species to occur. Burrowing owls are often found in association with ground squirrels, and no ground squirrels or burrows were observed within the Project Area.
Loggerhead Shrike <i>Lanius ludovicianus</i>	BCC, CSC	Inhabits broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Present. WRA biologists observed a single shrike in agricultural grassland north of East 16 th Street. Suitable nesting and foraging habitat is found throughout much of the Project Area.
California horned lark <i>Eremophila alpestris actia</i>	CSC	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Moderate Potential. This species is known to frequent grassy open space near the Project Area. It may forage in the Project Area but is unlikely to nest there due to discing and other disturbance.
Bank Swallow <i>Riparia riparia</i>	ST	Migrant in riparian and other lowland habitats in western California. Nests in riparian areas with vertical cliffs and banks with fine-textured or sandy soils in which to nest.	Unlikely. Suitable bank habitat not observed within the Project Area. The nearest documented occurrence of this species is approximately 5 miles to the south.
Yellow Warbler <i>Dendroica petechia brewsteri</i>	CSC	Yellow warblers prefer dense riparian vegetation for breeding. Yellow warbler populations have declined due to brood parasitism by brown-headed cowbirds (<i>Molothrus ater</i>) and habitat destruction. Diet is primarily insects supplemented with berries.	High Potential. This species has been documented in a creek corridor that runs through the Project Area. The occurrence was roughly two miles to the northeast. Suitable riparian habitat is present along a number of creeks within the Project Area.
Saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	CSC, BCC	Frequents low, dense vegetation near water including fresh to saline emergent wetlands. Brushy habitats used in migration. Forages among wetland herbs and shrubs for insects primarily.	Moderate Potential. Creek corridors containing willow trees may provide habitat for this species. It has been documented in numerous locations of the South Bay as close as two miles from the Project Area.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Alameda song sparrow <i>Melospiza melodia pusillula</i>	BCC, CSC	Resident of salt marshes bordering south arm of San Francisco Bay. Inhabits <i>Salicornia</i> marshes; nests low in <i>Grindelia</i> bushes (high enough to escape high tides) and in <i>Salicornia</i> .	No Potential. This species is generally restricted to salt marsh habitat, which is not present within or near the Project Area.
Tricolored Blackbird <i>Agelaius tricolor</i>	CSC, BCC	Usually nests over or near freshwater in dense cattails, tules, or thickets of willow, blackberry, wild rose or other tall herbs.	Unlikely. Habitat suitable for this species is generally absent within the Project Area. Isolated patches of dense wetland vegetation near standing open water were rare or nonexistent.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Reptiles and Amphibians			
California tiger salamander <i>Ambystoma californiense</i>	FT, CSC	Inhabits annual grass habitat and mammal burrows. Seasonal ponds and vernal pools crucial to breeding.	Unlikely. Suitable breeding locations and upland estivation sites were not observed within the Project Area. The urban, fragmented nature of most of the Project Area makes it unsuitable as habitat for this species. Discing and landscaping activities in almost all open areas have removed suitable estivation and refugia sites. Stock ponds and other depressions that hold water for a sufficient length of time to allow breeding were not observed.
California red-legged frog <i>Rana aurora draytonii</i>	FT, CSC, RP	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Must have access to estivation habitat.	Moderate Potential. Suitable habitat for this species exists along creeks, and occurrences have been reported nearby.
foothill yellow-legged frog <i>Rana boylei</i>	CSC	Found in or near rocky streams in a variety of habitats. Feed on both aquatic and terrestrial invertebrates.	Unlikely. Very few occurrence records exist for this species in the East Bay, and it may be locally extirpated. Creeks within the Project Area are generally lower-gradient, more degraded, and have a higher degree of siltation than typical FYLF habitat.
western pond turtle <i>Actinemys marmorata</i>	CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat for egg-laying.	Moderate potential. Suitable habitat for this species is present in perennial creeks within the Project Area.
coast horned lizard <i>Phrynosoma coronatum frontale</i>	CSC, FS	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Moderate Potential. The Project Area contains marginal habitat for this species. Occurrence records suggest that this species may be locally extirpated (Jennings and Hayes 1994, CNDDB 2007), although it is known to be present as close as Livermore.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Alameda whipsnake <i>Masticophis lateralis euryxanthus</i>	FT, ST	Inhabits chaparral and foothill-hardwood habitats in the eastern Bay Area. Prefers south-facing slopes and ravines with rock outcroppings where shrubs form a vegetative mosaic with oak trees and grasses and small mammal burrows provide basking and refuge.	Unlikely. The majority of the Project Area is unsuitable for this species, although AWS has been recorded to occur near the Project Area. Critical habitat for this species has been designated less than 1 mile to the east. Small areas of undisturbed grassland contiguous with Garin Regional Park may be used by AWS, although this species is likely to stay within the higher-quality habitat in the park. Extensive trapping in 1996 and 1997 did not result in the finding of this species within the Project Area (Caltrans 2000), and habitat assessments found little potential for occurrence.
Fishes			
Central California Coastal steelhead <i>Oncorhynchus mykiss irideus</i>	FT, CSC, NMFS	Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean	Present. <i>O. mykiss</i> have been recently documented in San Lorenzo Creek (Leidy et al. 2003), and the USFWS would likely consider these to be the protected oceangoing species. However, barriers to movement and spawning as well as minimal and degraded habitat make San Lorenzo Creek and adjoining tributaries only marginal habitat.
coho salmon - central CA coast ESU <i>Oncorhynchus kisutch</i>	FE, NMFS	Occurs inland and in coastal marine waters. Requires beds of loose, silt-free, coarse gravel for spawning. Also needs cover, cool water and sufficient dissolved oxygen.	Unlikely. This species was believed to be present in San Lorenzo Creek through the 1960's (Leidy et al. 2003), but barriers to movement and spawning as well as minimal and degraded habitat make this species unlikely to utilize the creek today.
Invertebrates			
Lum's micro-blind harvestman <i>Microcina lumi</i>		Rocky grassland areas with serpentine soil near south San Francisco Bay.	Unlikely. Serpentine soils are rare or absent within the Project Area.
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE, SSI, RP	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	Unlikely. Seasonal wetland depressions and vernal pools required for this species were not observed during site visits. Undisturbed bottom land where such wetlands might form is generally absent within the Project Area.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
longhorn fairy shrimp <i>Branchinecta longiantenna</i>	FE, SSI, RP	Endemic to the eastern margin of the central coast mountains in seasonally astatic grassland vernal pools. Inhabit small, clear-water depressions in sandstone and clear-to-turbid clay/grass-bottomed pools in shallow swales.	Unlikely. Seasonal wetland depressions and vernal pools required for this species were not observed during site visits. Undisturbed bottom land where such wetlands might form is generally absent within the Project Area.
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT, SSI, RP	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Unlikely. Seasonal wetland depressions and vernal pools required for this species were not observed during site visits. Undisturbed bottom land where such wetlands might form is generally absent within the Project Area.
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE, SSI, RP	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	Unlikely. Seasonal wetland depressions and vernal pools required for this species were not observed during site visits. Undisturbed bottom land where such wetlands might form is generally absent within the Project Area.
California linderiella <i>Linderiella occidentalis</i>	SSI	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and TDS.	Unlikely. Seasonal wetland depressions and vernal pools required for this species were not observed during site visits. Undisturbed bottom land where such wetlands might form is generally absent within the Project Area.
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT, SSI, RP	Occurs only in the central valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers to lay eggs in elderberry 2 to 8 inches in diameter; some preference shown for "stressed" elderberry.	No Potential. The Project Area is far outside the known range of this species (USFWS 1991).
Bay checkerspot butterfly <i>Euphydryas editha bayensis</i>	FT, SSI, RP	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. <i>Plantago erecta</i> is the primary host plant; <i>Orthocarpus densiflorus</i> and <i>O. purpurscens</i> are the secondary host plants.	Unlikely. Host plant not observed. This species has not been documented to occur in the vicinity. Suitable grassland habitat is minimal or nonexistent within the Project Area.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
San Bruno elfin butterfly <i>Incisalia (=Callophrys) mossii bayensis</i>	FE, SSI, RP	Limited to the vicinity of San Bruno Mountain, San Mateo County. Colonies are located on in rocky outcrops and cliffs in coastal scrub habitat on steep, north-facing slopes within the fog belt. Species range is tied to the distribution of the larval host plant, <i>Sedum spathulifolium</i> .	No Potential. Project Area is far outside the accepted range for this species. Host plant not observed.
monarch butterfly <i>Danaus plexippus</i>	SSI	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	Moderate Potential. Suitable roost habitat is present within the project Area, and a roost site has been documented 4 miles to the south.
Plants			
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	List 1B	Coastal bluff scrub, cismontane woodland, valley and foothill grassland. 3-500 meters(m). Blooms March-June.	Low Potential. Disturbed grassland and woodland habitat available, but there are very few recorded occurrences in the Project Area vicinity or in Alameda County.
<i>Anomobryum julaceum</i> slender silver-moss	List 2	Broadleafed upland forest, lower montane coniferous forest, North Coast coniferous forest/ damp rock and soil on outcrops, usually on roadcuts. 100-1000 m.	No Potential. No appropriate forest habitat present. Existing roadcuts and outcrops are in exposed, sunny locations and are heavily invaded by exotic plants such as pampas grass.
<i>Arctostaphylos auriculata</i> Mt. Diablo manzanita	List 1B	Chaparral (sandstone). 135-650 m. Blooms January-March.	No Potential. No chaparral habitat is present in the Project Area, and no manzanita species were observed during site assessment.
<i>Arctostaphylos manzanita</i> ssp. <i>laevigata</i> Contra Costa manzanita	List 1B	Chaparral (rocky). 500-1100 m. Blooms January-February.	No Potential. No chaparral habitat or appropriate elevations are present in the Project Area, and no manzanita species were observed during site assessment.
<i>Arctostaphylos pallida</i> pallid manzanita	FT, SE, List 1B	Broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub/siliceous shale, sandy or gravelly. 185-465 m. Blooms December-March.	No Potential. No suitable habitat is present in the Project Area, and no manzanita species were observed during site assessment.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	RP, List 1B	Playas, valley and foothill grassland (adobe clay), vernal pools/alkaline. 1-60 m. Blooms March-June.	Low Potential. Areas that would support appropriate seasonal wetland/alkaline habitat are disced or otherwise heavily disturbed.
<i>Atriplex joaquiniana</i> San Joaquin spearscale	List 1B	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland/ alkaline. 1-835 m. Blooms April-October.	Low Potential. Areas that would support appropriate seasonal wetland/alkaline habitat are disced or otherwise heavily disturbed.
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> big-scale balsamroot	List 1B	Chaparral, cismontane woodland, valley and foothill grassland/ sometimes serpentinite. 90-1400 m. Blooms March-June.	Low Potential. Several occurrences recorded nearby, and grassland and woodland habitats available, although disturbed and largely lacking native herbaceous or grassland species. No serpentine present in the Project Area.
<i>Calochortus pulchellus</i> Mt. Diablo fairy-lantern	List 1B	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. 30-840 m. Blooms April-June.	Low Potential. Riparian, woodland, and grassland habitats available, but species is typically found at higher elevations and the only confirmed occurrences are near Mount Diablo.
<i>Campanula exigua</i> chaparral harebell	List 1B	Chaparral (rocky, usually serpentinite). 275-1250 m. Blooms May-June.	No Potential. No chaparral or serpentine habitat is present in the Project Area.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	List 1B	Valley and foothill grassland (alkaline). 1-230 m. Blooms May-October.	Low Potential. Areas that would support appropriate seasonal wetland/alkaline habitat are disced or otherwise heavily disturbed.
<i>Chorizanthe robusta</i> var. <i>robusta</i> robust spineflower	FE, List 1B	Chaparral (maritime), cismontane woodland (openings), coastal dunes, coastal scrub/ sandy or gravelly. 3-300 m. Blooms April-September.	No Potential. Openings in woodland areas are disturbed by grading and invasive species; so suitable natural areas with sandy/gravelly substrate are present. Only known occurrence in the vicinity may be extirpated.
<i>Clarkia franciscana</i> Presidio clarkia	FE, SE, List 1B	Coastal scrub, valley and foothill grassland (serpentinite). 25-335 m. Blooms May-July.	No Potential. No serpentine habitat is present in the Project Area; species is extremely rare.
<i>Cordylanthus maritimus</i> ssp. <i>palustris</i> Point Reyes bird's-beak	List 1B	Marshes and swamps (coastal salt). 0-10 m. Blooms June-October.	No Potential. Salt marsh habitat is not present in the Project Area. Only recorded occurrence in the vicinity is near Redwood City.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
<i>Dirca occidentalis</i> western leatherwood	List 1B	Broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, riparian woodland/ mesic. 50-395 m. Blooms January-March.	Moderate Potential. Suitable habitat present, but no recorded occurrences in the Hayward Hills or vicinity. Most known occurrences are located farther north in the Oakland Hills.
<i>Eriogonum luteolum</i> var. <i>caninum</i> Tiburon buckwheat	List 3	Chaparral, coastal prairie, valley and foothill grassland/ serpentinite. 10-500 m. Blooms June-September.	No Potential. No suitable habitat or serpentine soils are present in the Project Area. Not observed during September site assessment.
<i>Eriogonum truncatum</i> Mt. Diablo buckwheat	List 1B	Chaparral, coastal scrub, valley and foothill grassland/ sandy. 3-350 m. Blooms April-September.	No Potential. Any suitable habitat in the Project Area is highly disturbed; species is known mostly from Mount Diablo.
<i>Erodium macrophyllum</i> (<i>California macrophylla</i>) round-leaved filaree	List 1B	Cismontane woodland, valley and foothill grassland/clay. 15-1200 m. Blooms March-May.	Low Potential. Suitable but somewhat disturbed habitat available. Only records in the vicinity are from the 1800's.
<i>Fritillaria liliacea</i> fragrant fritillary	List 1B	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland/ often serpentinite. 3-410 m. Blooms February-April.	Low Potential. Disturbed grassland, scrub, and oak/bay woodland habitat available, but no serpentine areas.
<i>Helianthella castanea</i> Diablo helianthella	List 1B	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. 60-1300 m. Blooms March-June.	Moderate Potential. Several occurrences in the vicinity, but typically found in chaparral-associated habitat not available in Project Area. Project Area oak/bay woodlands and grasslands do not have ideal characteristics for this species because of dense forest canopy or disturbance by invasives, grazing, and historic uses.
<i>Hesperolinon breweri</i> Brewer's western flax	List 1B	Chaparral, cismontane woodland, valley and foothill grassland/ usually serpentinite. 30-900 m. Blooms May-July.	Low Potential. Disturbed grassland and oak/bay woodland habitat available, but no serpentine areas.
<i>Hoita strobilina</i> Loma Prieta hoita	List 1B	Chaparral, cismontane woodland, riparian woodland/ usually serpentinite, mesic. 30-860 m. Blooms May-July.	Low Potential. Riparian oak/bay woodland habitat available, but no serpentine areas. The only record in the vicinity is from the late 1800's.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
<i>Holocarpha macradenia</i> Santa Cruz tarplant	FT, SE, List 1B	Coastal prairie, coastal scrub, valley and foothill grassland/ often clay, sandy. 10-220 m. Blooms June-October.	Low Potential. Grassland and scrub habitats available, although disturbed. Only known occurrence in the vicinity is from the 1800's and is likely extirpated. Not observed during September site assessment, during peak blooming period.
<i>Horkelia cuneata</i> ssp. <i>sericea</i> Kellogg's horkelia	List 1B	Closed-cone coniferous forest, chaparral (maritime), coastal dunes, coastal scrub/ sandy or gravelly, openings. 10-200 m. Blooms April-September.	No Potential. No suitable habitat available in the Project Area. Coastal scrub habitats are highly disturbed and heavily invaded by annual grasses and other exotics.
<i>Juglans hindsii</i> Northern California black walnut	List 1B	Naturally-occurring stands in riparian forest and riparian woodland. 0-440 m. Blooms April-May.	Low Potential. Several specimens found in low elevations in the Project Area, in vacant lots (non-riparian areas), but these are most likely naturalized. Low potential to find any natural occurrences in the intact riparian corridors in the Project Area. Natural stands not known to Alameda County.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE, RP, List 1B	Cismontane woodland, playas (alkaline), valley and foothill grassland, vernal pools/ mesic. 0 to 470 m. Blooms March-June.	No Potential. No vernal pools or similar habitat is present. Areas that would support appropriate seasonal wetland habitat have been disced.
<i>Malacothamnus hallii</i> Hall's bush mallow	List 1B	Chaparral, coastal scrub. 10-760 m. Blooms May-September.	No Potential. Coastal scrub habitat in the Project Area is on highly disturbed, often graded slopes. No significant remnant natural stands of scrub are present, and no chaparral is present.
<i>Meconella oregana</i> Oregon meconella	List 1B	Coastal prairie, coastal scrub. 250-620 m. Blooms March-April.	No Potential. Coastal scrub in the Project Area is highly disturbed, often on graded slopes. No significant remnant natural stands of scrub are present, and no coastal prairie or suitable elevations are present.
<i>Micropus amphibolus</i> Mt. Diablo cottonweed	List 3	Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland/ rocky. 45-825 m. Blooms March-May.	No Potential. Rocky grassland and woodland habitats are only available in highly disturbed forms, often graded or regularly mowed.
<i>Monardella antonina</i> ssp. <i>antonina</i> San Antonio Hills monardella	List 3	Chaparral, cismontane woodland. 500-1000 m. Blooms June-August.	No Potential. No suitable habitat or elevations present in the Project Area.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
<i>Monardella villosa</i> ssp. <i>globosa</i> robust monardella	List 1B	Broadleafed upland forest (openings), chaparral (openings), cismontane woodland, coastal scrub, valley and foothill grassland. 100-915 m. Blooms June-July.	Low Potential. Scrub, woodland openings, and grasslands are heavily invaded with exotics or disturbed by urban development. Local occurrences are in native, relatively intact coastal scrub and chaparral not available in the Project Area.
<i>Navarretia myersii</i> ssp. <i>myersii</i> pincushion navarretia	List 1B	Vernal pools/often acidic. 20-330 m. Blooms May.	No Potential. No vernal pool habitat present in the Project Area. Areas that would support appropriate wetland habitat have been disced.
<i>Phacelia phacelioides</i> Mt. Diablo phacelia	List 1B	Chaparral, cismontane woodland/rocky. 500-1370 m. Blooms April-May.	No Potential. No suitable habitat or elevations present in the Project Area.
<i>Plagiobothrys diffusus</i> San Francisco popcorn-flower	SE, List 1B	Coastal prairie, valley and foothill grassland. 60-360 m. Blooms March-June.	Low Potential. Grassland habitat is abundant but disturbed by invasives, grazing and discing of fuel breaks and flat areas. Species generally known to more coastal sites and identification is challenging; occurrence in Alameda County is questionable.
<i>Plagiobothrys glaber</i> hairless popcorn-flower	List 1A	Meadows and seeps (alkaline), marshes and swamps (coastal salt). 15-180 m. Blooms March-May.	No Potential. No coastal salt marsh or un-disturbed alkaline wetlands available. Believed to be extirpated from California.
<i>Potamogeton filiformis</i> slender-leaved pondweed	List 2	Marshes and swamps (assorted shallow freshwater). 300-2150 m. Blooms May-July.	Low Potential. Shallow freshwater marsh habitat available but limited and somewhat disturbed in the Project Area. Occurs at higher elevations than in the Project Area.
<i>Sanicula maritima</i> adobe sanicle	SR, List 1B	Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland/ clay, serpentinite. 30-240 m. Blooms February-May.	Low Potential. Disturbed grassland and seep wetland habitat available, but no serpentine areas. Only known occurrence in vicinity has been extirpated.
<i>Sanicula saxatilis</i> rock sanicle	SR, List 1B	Broadleafed upland forest, chaparral, valley and foothill grassland/ rocky. 620-1175 m. Blooms April-May.	No Potential. No suitable habitat or elevations present in the Project Area.
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i> most beautiful jewel-flower	List 1B	Chaparral, cismontane woodland, valley and foothill grassland/ serpentinite. 94-1000 m. Blooms April-September.	Low Potential. Disturbed grassland and oak/bay woodland habitat available, but no serpentine areas.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
<i>Streptanthus hispidus</i> Mt. Diablo jewel-flower	List 1B	Chaparral, valley and foothill grassland/ rocky. 365-1200 m. Blooms March-June.	No Potential. Rocky grassland habitat is only available in highly disturbed forms, often graded or regularly mowed. Occurs at higher elevations than in the Project Area.
<i>Suaeda californica</i> California seablite	FE, List 1B	Marshes and swamps (coastal salt). 0-15 m. Blooms July-October.	No Potential. No coastal salt marsh habitat present in the Project Area. Believed to be extirpated from the San Francisco Bay Area.
<i>Trifolium depauperatum</i> var. <i>hydrophilum</i> saline clover	List 1B	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. 0- 300 m. Blooms April-June.	Low Potential. Only disturbed seasonal wetland and marsh habitat is present in the Project Area. Only CNDDDB record in the vicinity is near Redwood City.
<i>Triquetrella californica</i> coastal triquetrella	List 1B	Moss growing on soils in coastal bluff scrub or coastal scrub. 10-100 m.	No Potential. Coastal scrub habitat is disturbed and primarily consists of dense annual grassland invaded by coyote brush.
<i>Viburnum ellipticum</i> oval-leaved viburnum	List 2	Chaparral, cismontane woodland, lower montane coniferous forest. 215-1400 m. Blooms May-June.	Low Potential. Woodland habitat available but limited and somewhat disturbed in the Project Area. Occurs at higher elevations than in the Project Area.

* Key to status codes:

FE	Federal Endangered
FT	Federal Threatened
FD	Federal De-listed
SE	State Endangered
ST	State Threatened
SR	State Rare
BCC	USFWS Birds of Conservation Concern
RP	Sensitive species included in a USFWS Recovery Plan or Draft Recovery Plan
NMFS	Species under the Jurisdiction of the National Marine Fisheries Service
BLM	Bureau of Land Management sensitive species
FS	USDA Forest Service sensitive species
CSC	CDFG Species of Special Concern
CFP	CDFG Fully Protected Animal
SSI	G Special Status Invertebrates
WBWG	Western Bat Working Group High Priority species
CDF	CDF Sensitive: CA Department of Forestry and Fire Protection— warrant special protection during timber operations
List 1A	CNPS List 1A: Plants presumed extinct in California
List 1B	CNPS List 1B: Plants rare, threatened or endangered in California and elsewhere
List 2	CNPS List 2: Plants rare, threatened, or endangered in California, but more common elsewhere
List 3	CNPS List 3: Plants about which CNPS needs more information (a review list)

Appendix E: Infrastructure Exhibits

238 CORRIDOR LAND USE STUDY EXISTING UTILITIES ASSESSMENT

HAYWARD CALIFORNIA

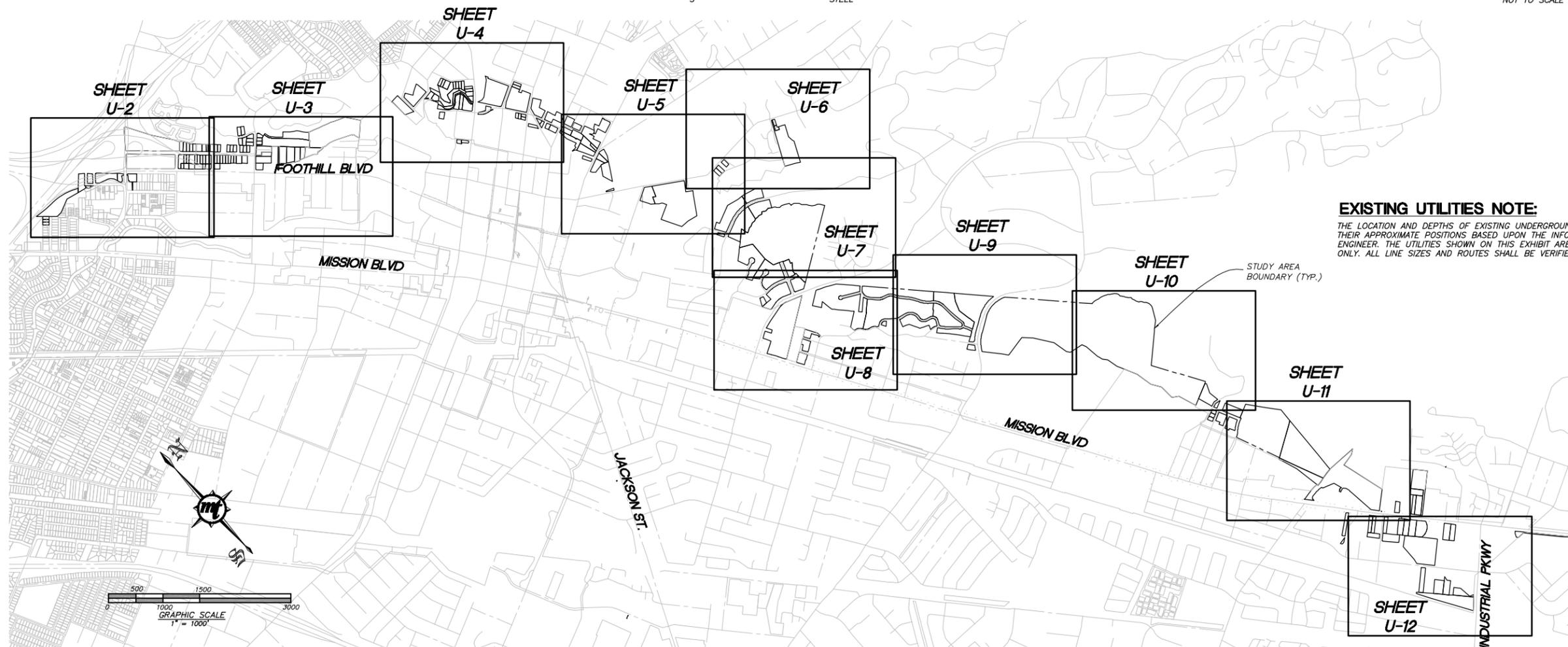
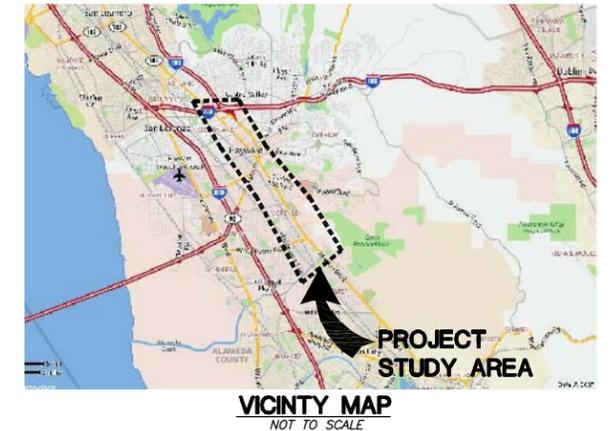
STANDARD SYMBOLS & LEGEND

DESCRIPTION	EXISTING
STORM DRAIN SYSTEM	SD
SANITARY SEWER	SS
WATER MAIN	W
STUDY AREA PROPERTY LINE	---
CENTER LINE ROAD	---
OLSD	ORO LOMA SANITATION DISTRICT
HSD	HAYWARD SANITATION DISTRICT
EBMUD	EAST BAY MUNICIPAL UTILITIES DISTRICT
VCP	VITRIFIED CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
CONC.	CONCRETE
DIP	DUCTILE IRON PIPE
CI	CAST IRON PIPE
SCP	STEEL CYLINDER PIPE
SM	STEEL PIPE W/ MORTAR LINING
SMM	STEEL PIPE W/ MORTAR LINING AND COATED
SS	STAINLESS STEEL OR SANITARY SEWER
AC	ASBESTOS CEMENT
P	PLASTIC ASTM SPECIFICATION
CYL.	CYLINDER PIPE
S	STEEL

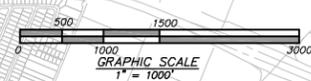
CLIENT
CITY OF HAYWARD
777 B STREET
HAYWARD, CA 94541
(510) 583-4000

ARCHITECT
COMMUNITY DESIGN + ARCHITECTURE, INC.
350 FRANK OGAWA PLAZA, 5TH FLOOR
OAKLAND, CA 94612-2012
(510) 839-4568

CIVIL ENGINEER
MARK THOMAS & COMPANY, INC.
Providing Engineering, Surveying and Planning Services
1960 ZANKER ROAD
SAN JOSE, CA 95112
(408) 453-5373



EXISTING UTILITIES NOTE:
THE LOCATION AND DEPTHS OF EXISTING UNDERGROUND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE POSITIONS BASED UPON THE INFORMATION AVAILABLE TO THE ENGINEER. THE UTILITIES SHOWN ON THIS EXHIBIT ARE FOR CONCEPTUAL PREPOCESS ONLY. ALL LINE SIZES AND ROUTES SHALL BE VERIFIED PRIOR TO ANY DESIGN.



11" X 17" N.T.S.

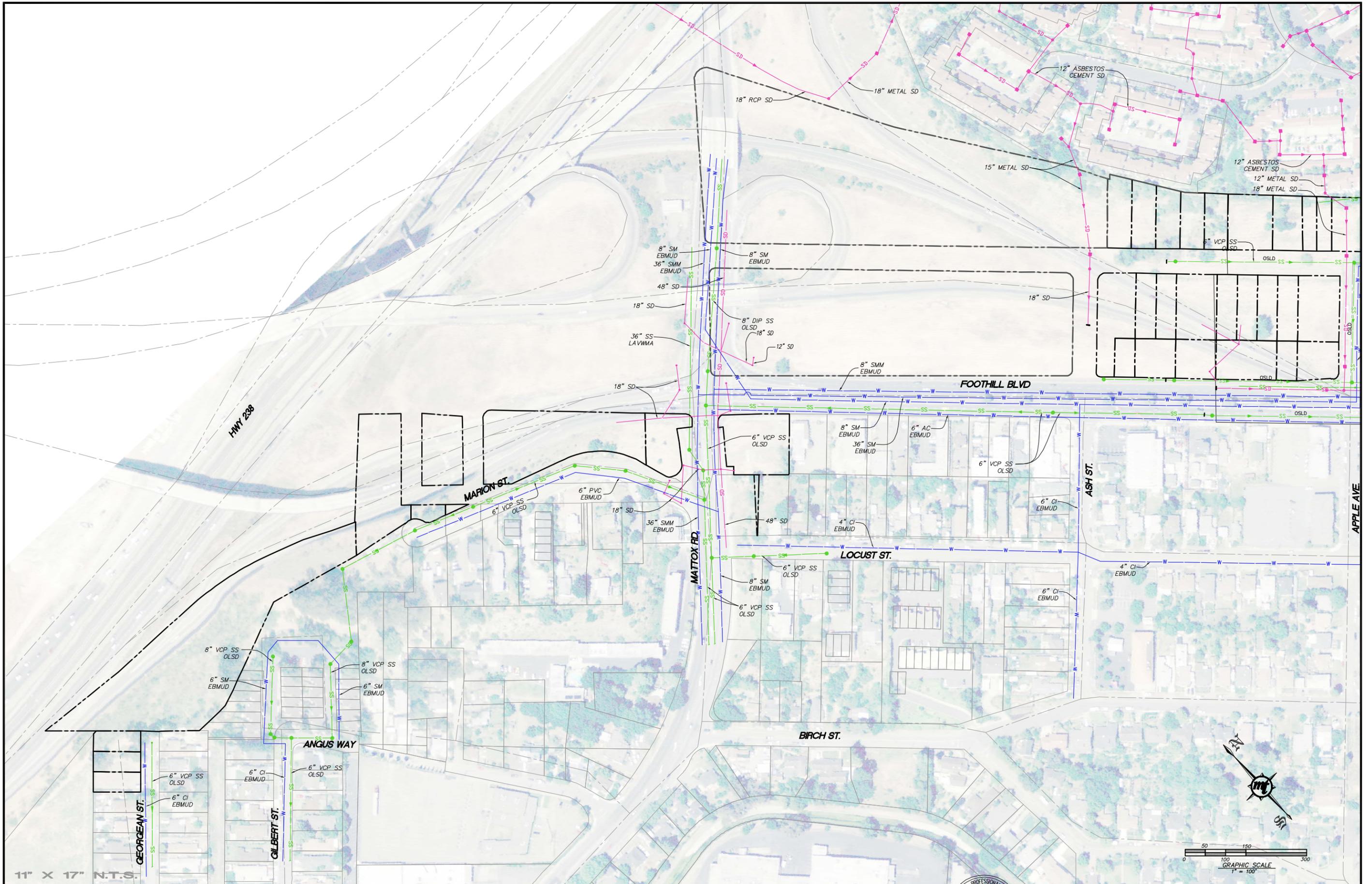
MARK THOMAS & COMPANY, INC.
Providing Engineering, Surveying, and Planning Services
1960 Zanker Road
San Jose, CA 95112
(408) 453-5373

DESIGNED BY :
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DATE : 10.23.07
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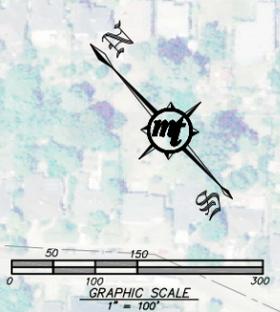
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238 CORRIDOR LAND USE STUDY
EXISTING UTILITIES EXHIBIT
HAYWARD, CALIFORNIA
U-1 OF U-12
FILE NO.



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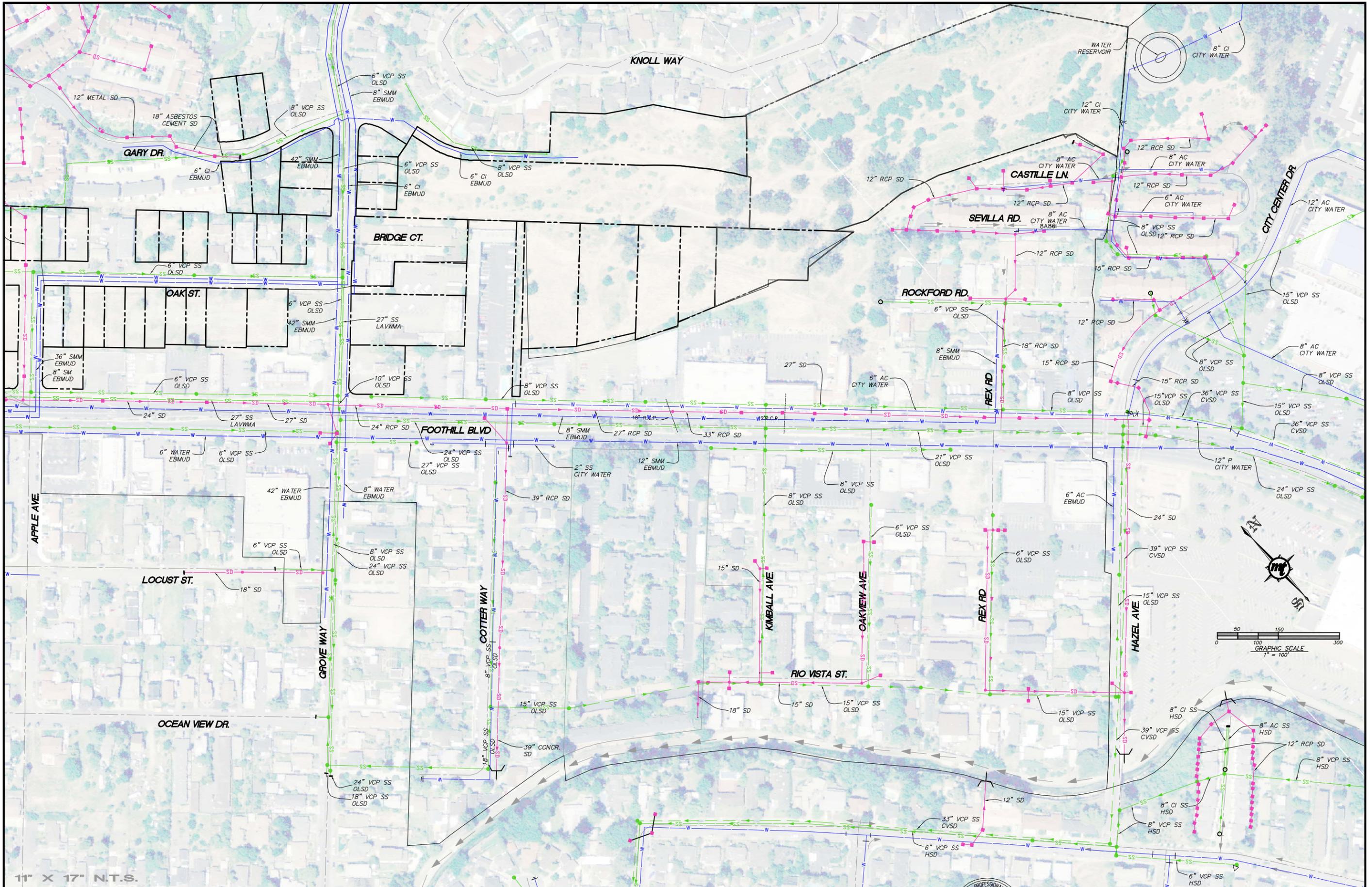
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238 CORRIDOR LAND USE STUDY
EXISTING UTILITIES EXHIBIT
HAYWARD, CALIFORNIA

U-2
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238 CORRIDOR LAND USE STUDY
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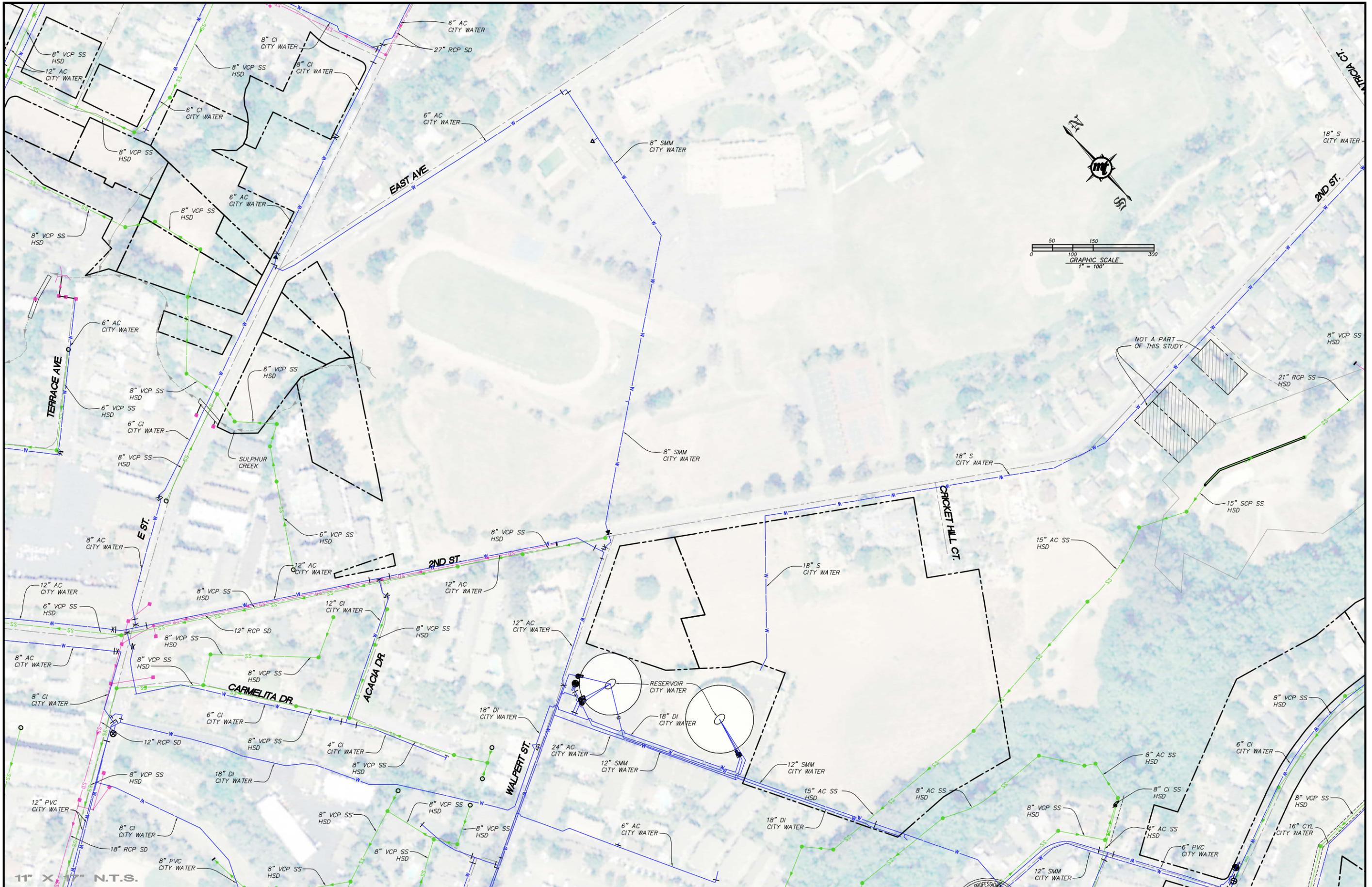
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238 CORRIDOR LAND USE STUDY
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HAYWARD, CALIFORNIA

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 OF U-12
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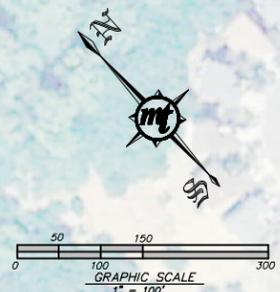
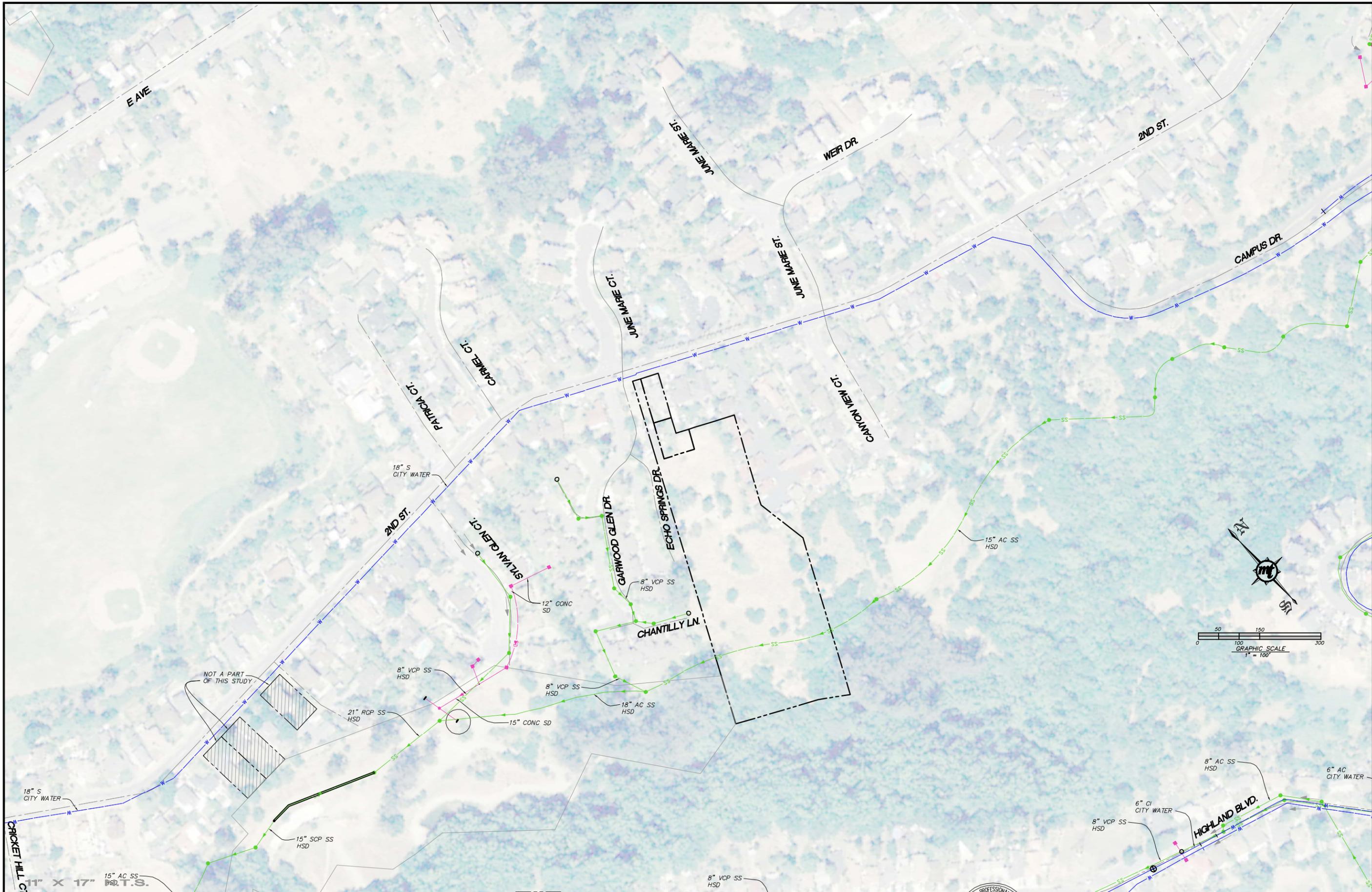
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 SCALE : 1" = 100'
 MT&CO. JOB NO. :

NUM	DATE	BY	REVISIONS	CITY ENGINEER APPROVAL	DATE

PROFESSIONAL ENGINEER
 JOHN S. HART
 No. 42225
 Exp. 03/31/08
 CIVIL
 STATE OF CALIFORNIA

238 CORRIDOR LAND USE STUDY
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HAYWARD, CALIFORNIA

U-5
 of **U-12**
 FILE NO.



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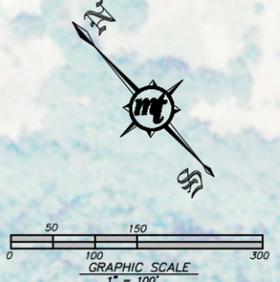
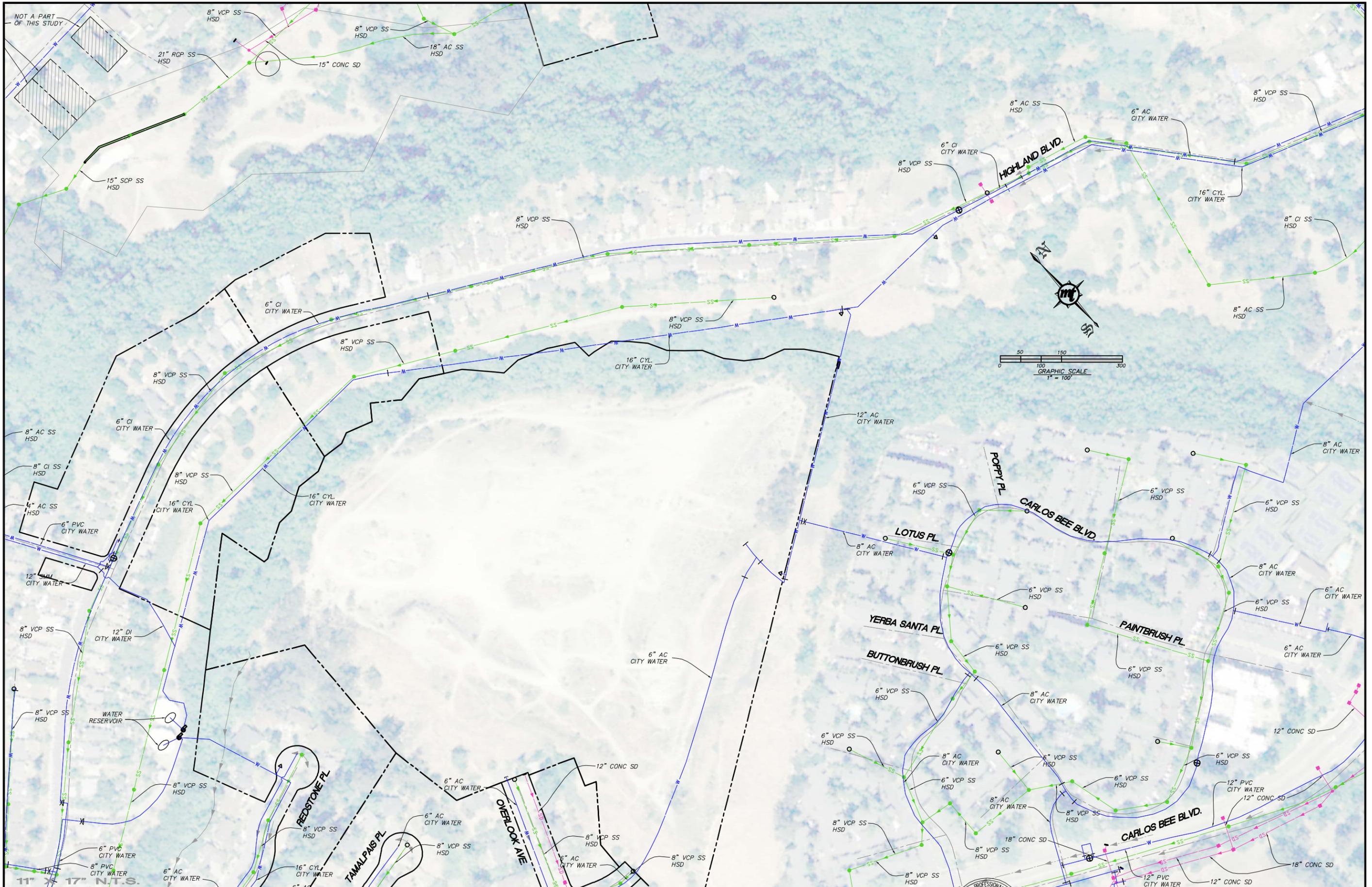
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NUM	DATE	BY	REVISIONS	CITY ENGINEER APPROVAL	DATE



238 CORRIDOR LAND USE STUDY
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HAYWARD, CALIFORNIA

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 of **U-12**
 FILE NO. 57-0217B




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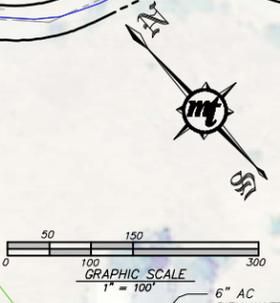
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NUM	DATE	BY	REVISIONS

CITY ENGINEER APPROVAL	DATE

PROFESSIONAL ENGINEER
 JOHN S. HART
 No. 42225
 Exp. 03/31/08
 CIVIL
 STATE OF CALIFORNIA

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 U-7
 OF U-12
 FILE NO. 57-0217B



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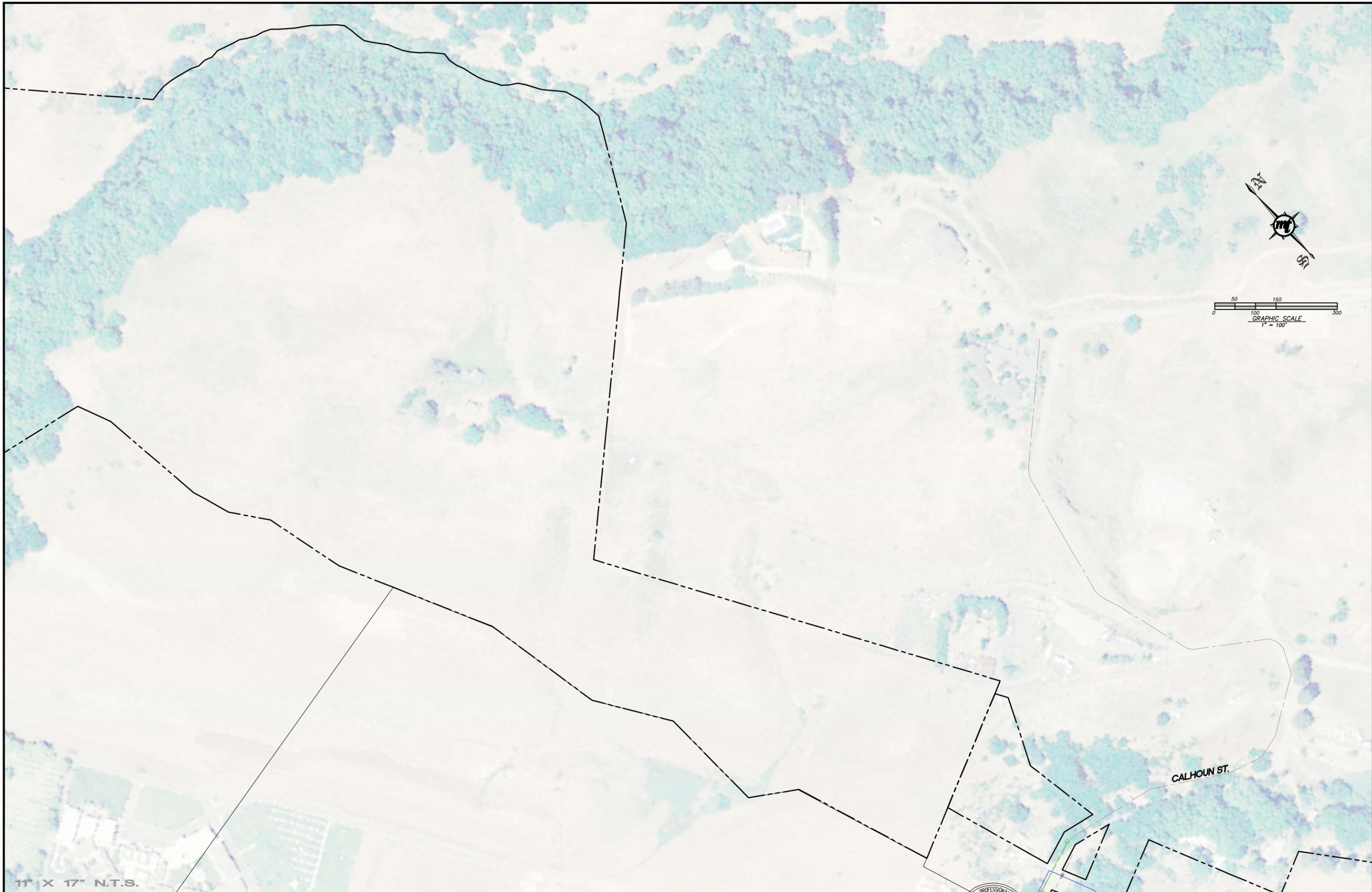
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238 CORRIDOR LAND USE STUDY
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HAYWARD, CALIFORNIA

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 FILE NO. 57-0217B



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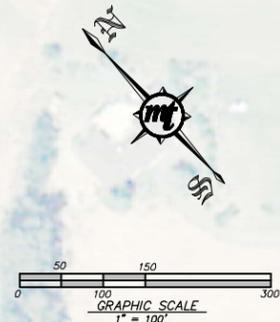
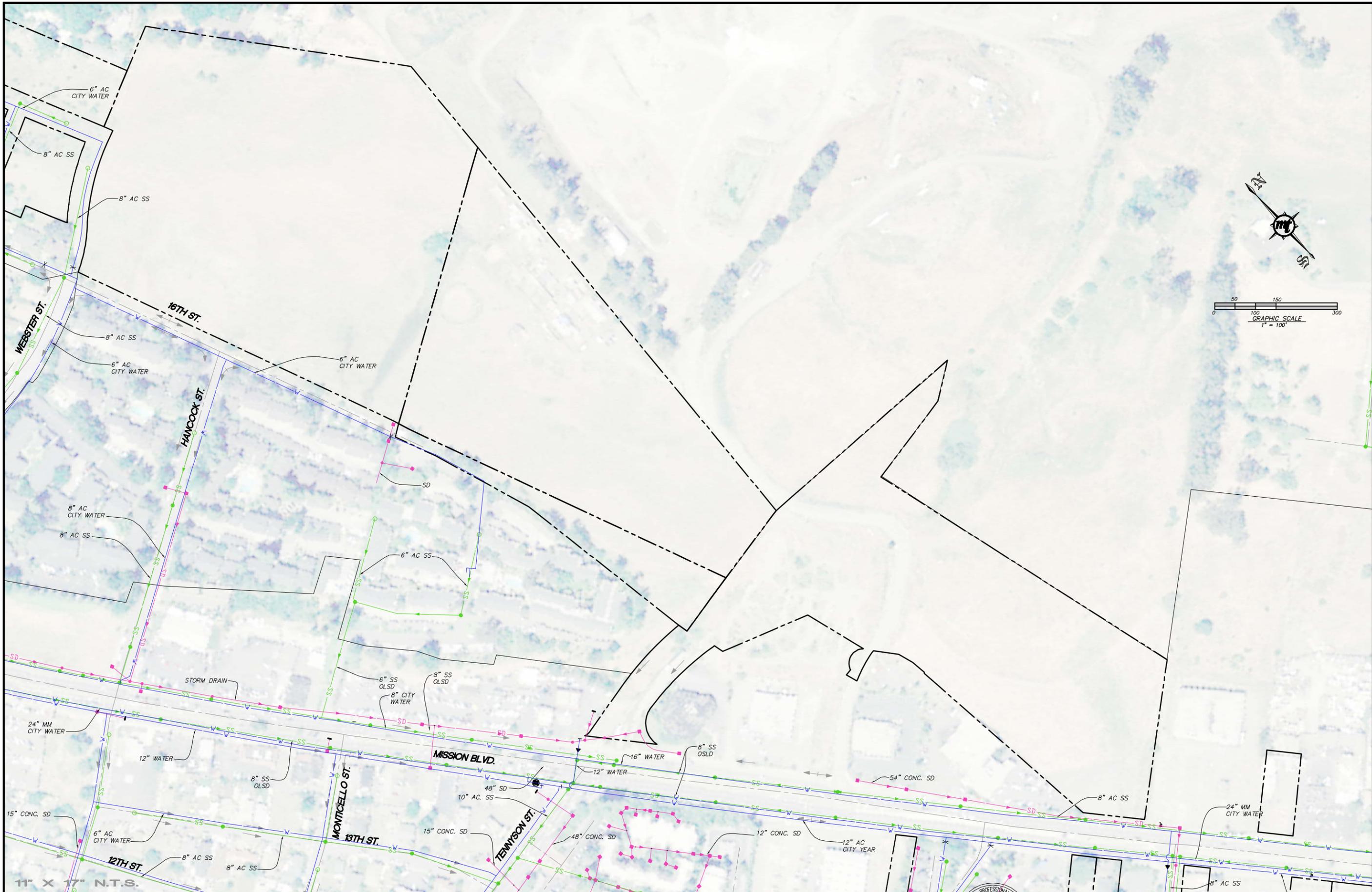
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238 CORRIDOR LAND USE STUDY
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HAYWARD, CALIFORNIA

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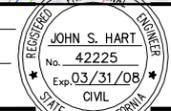


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