



Mountain View
Whisman
School District

North Bayshore Development and Impact on MVWSD

February 7, 2019



Master Plan Key Goals

- Develop an Urban Model concept of schools that uses a smaller footprint.
 - Includes type of school model (elementary, K-8)
- Identify viable locations for school(s)
- Develop an Urban School model that aligns the unique learning environment with MVWSD vision and goals

Student Generation Rates....

Land Use Analysis							SGR MR Units				SGR BMR Units				Students (K-5, 6-8)	
Unit Type	Units	% of Total Units	Market Rate Units	BMR Units	BMR-Low(60%)	MMR-Very Low (40%)	K-5	6-8	9-12	K-12	K-5	6-8	9-12	K-12	K-5	6-8
Micro	3,940	40%	3,152	788	473	315	0.008	0.005	0.003	0.016	0.008	0.005	0.003	0.016	32	20
1 BR	2,955	30%	2,364	591	355	236	0.085	0.039	0.047	0.171	0.308	0.247	0.312	0.867	383	238
2 BR	1,970	20%	1,576	394	236	158	0.085	0.039	0.047	0.171	0.308	0.247	0.312	0.867	255	159
3 BR	985	10%	786	107	118	79	0.085	0.039	0.047	0.171	0.308	0.247	0.312	0.867	128	79
Total	9,850	100%	7,880	1,970	1,182	788									797	496

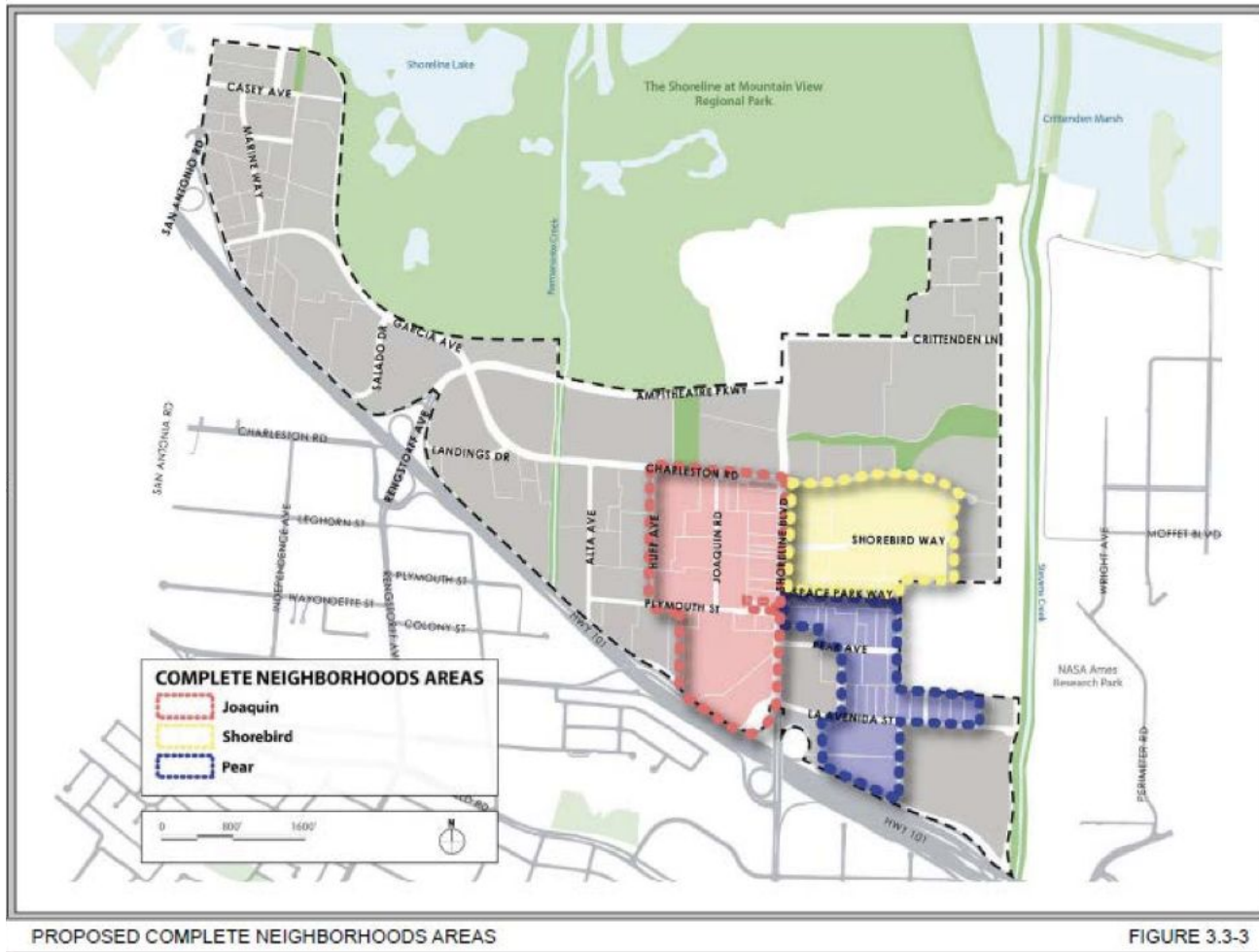
Source: Jack Schreder & Associates, SCI

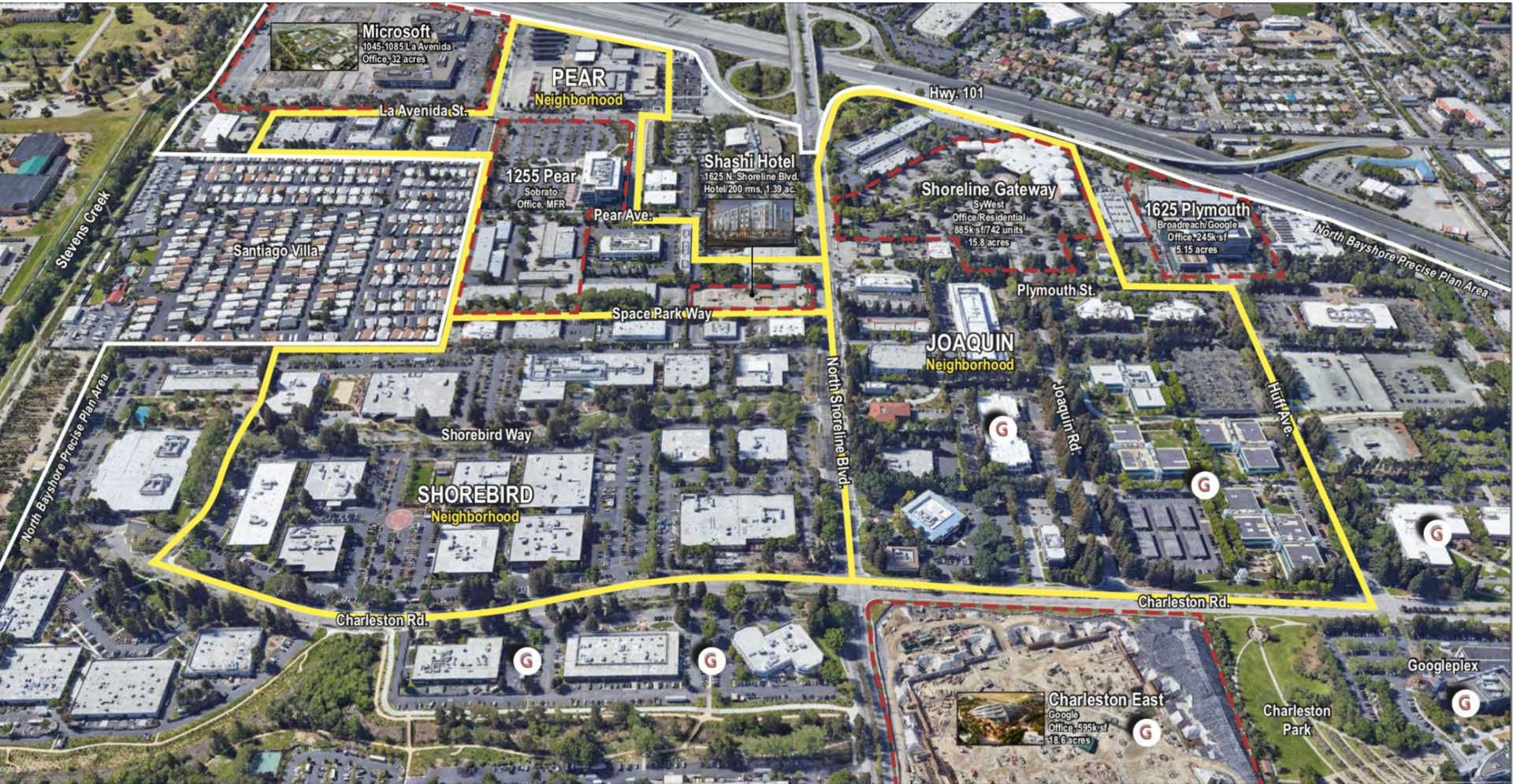


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North Bayshore Impact on Northern Schools

3 Planned Neighborhoods



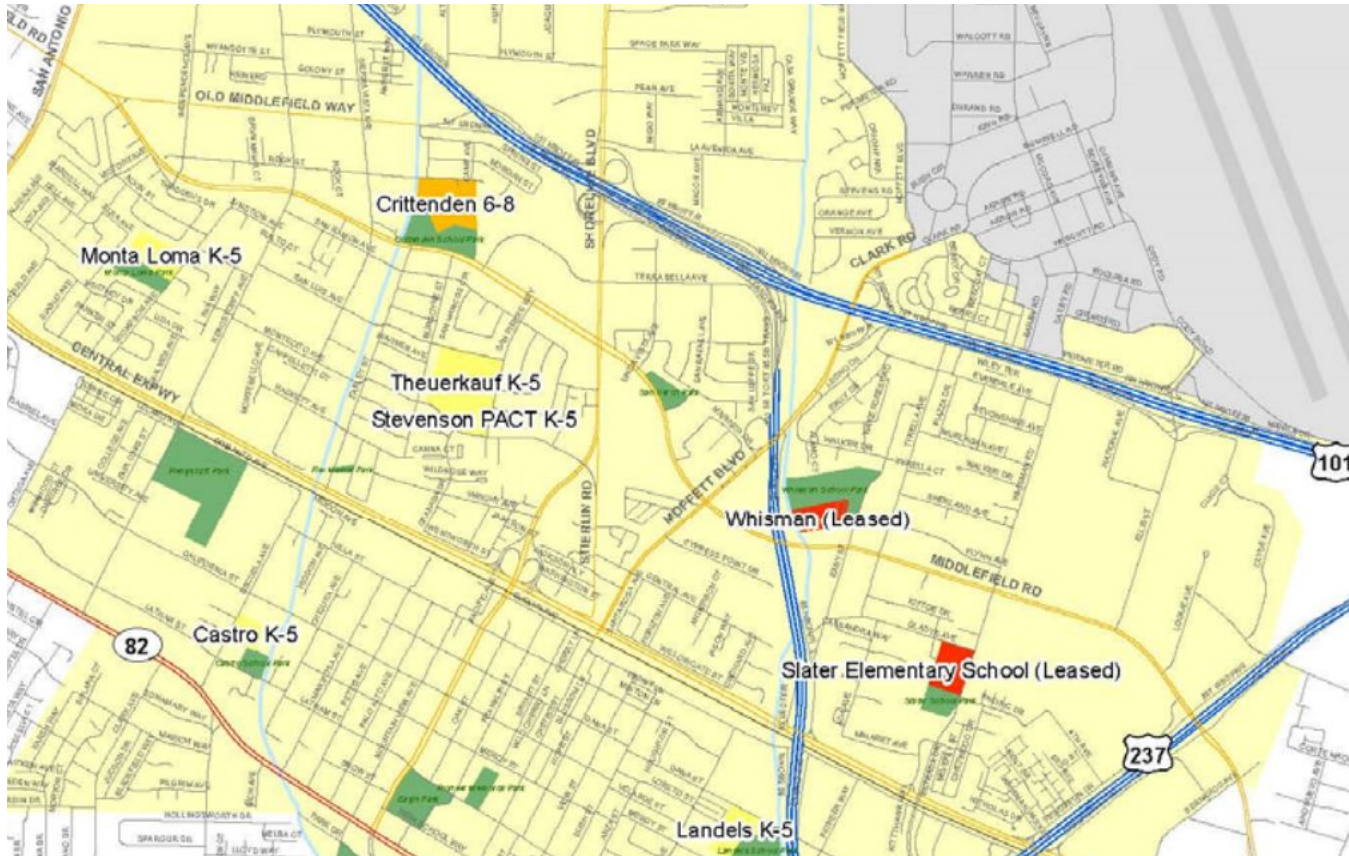


LEGEND

- Complete Neighborhood Areas North Bayshore Precise Plan
- North Bayshore Development Projects Source: City of Mountain View Development Updates
- G Google Campus Facilities

Complete Neighborhood Areas & Projects
North Bayshore Precise Plan Area

Northern Schools





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Development of North Bayshore Master Plan



Source References
 1-City of Mountain View Development Update (Nov 2018)
 2-City of Mountain View Development Update (May 2018)
 3-Mountain View Voice (11/2/2018)
 4-Mountain View Voice (11/26/2018)
 5-Shoreline Gateway Master Plan (11/30/18)

NORTH BAYSHORE MASTER PLAN MOUNTAIN VIEW, CA
 MOUNTAIN VIEW WHISMAN SCHOOL DISTRICT

NORTH BAYSHORE FUTURE DEVELOPMENT DIAGRAM
 December 2018





LEGEND

- Complete Neighborhood Areas
North Bayshore Precise Plan
- North Bayshore Development Projects
Source: City of Mountain View Development Updates
- G Google Campus Facilities

Complete Neighborhood Areas & Projects
North Bayshore Precise Plan Area

Language from Precise Plan

North Bayshore's Complete Neighborhoods include a mix of land uses and amenities. These Complete Neighborhood areas are planned around walkable access to transit, open space, and services.

~pg. 32

3.4.5 Local School Policies

New residential development in North Bayshore will result in the addition of school-age children to the area. The following policies and standards continue the City's on-going commitment to supporting local schools, and also requires new residential development to support local schools through a Local School District Strategy.

- 1. City and School District Collaboration.** Assist local school districts in identifying potential school locations to serve North Bayshore growth.
- 2. Transfer of Development Rights (TDR).** Allow areas adjacent to North Bayshore, such as the Terra Bella or North Rengstorff areas, that identify a location for a new school site to use Transfer of Development Rights (TDR). These school sites can transfer their unused site FAR to any location in the City at the discretion of the City Council. If extra office FAR in North Bayshore becomes available in the future, potential school sites in North Bayshore can transfer any unused FAR using TDR to any location in the City at the discretion of the City Council.
- 3. City and School District Partnerships.** Continue partnerships with local school districts on sharing of open space at school sites.
- 4. Local School District Strategy.** Any proposed residential development in North Bayshore requesting FAR (Floor Area Ratio) above the Plan's 1.0 residential Base FAR shall also submit to the School District and the City, a Local School District Strategy intended to support new local schools in or adjacent to the North Bayshore Precise Plan area. The School District and the Developer shall meet and confer in good faith to develop the School District Strategy to support new local schools. The School District Strategy shall be memorialized as a legally binding agreement. The strategy may include, but is not limited to, land dedication for new school development; additional funding for new school development; TDR strategies to benefit developer(s) that provide new school facilities, benefitting new school facilities; or other innovative strategies supporting schools.
- 5. Funding for Schools.** The Shoreline Community shall work with the Mountain View Whisman School District and the Mountain View Los Altos High School District to allocate revenue related to the growth in assessed value due to new residential development within the Community pursuant to/in accordance with the annual tax allocation for each school district, through mutually agreed to and legally binding agreements.
- 6. Residential Bonus FAR** (Page 90 of revised Draft Plan, under both Tier I and Tier II A and B policies).

Sobrato Settlement

Mountain View-Whisman School District North Bayshore Precise Plan Mitigation Impact
Based on Sobrato Settlement

Mitigation Settlement	Units	Payment/Unit
\$5,500,000	÷ 635	= \$8,661

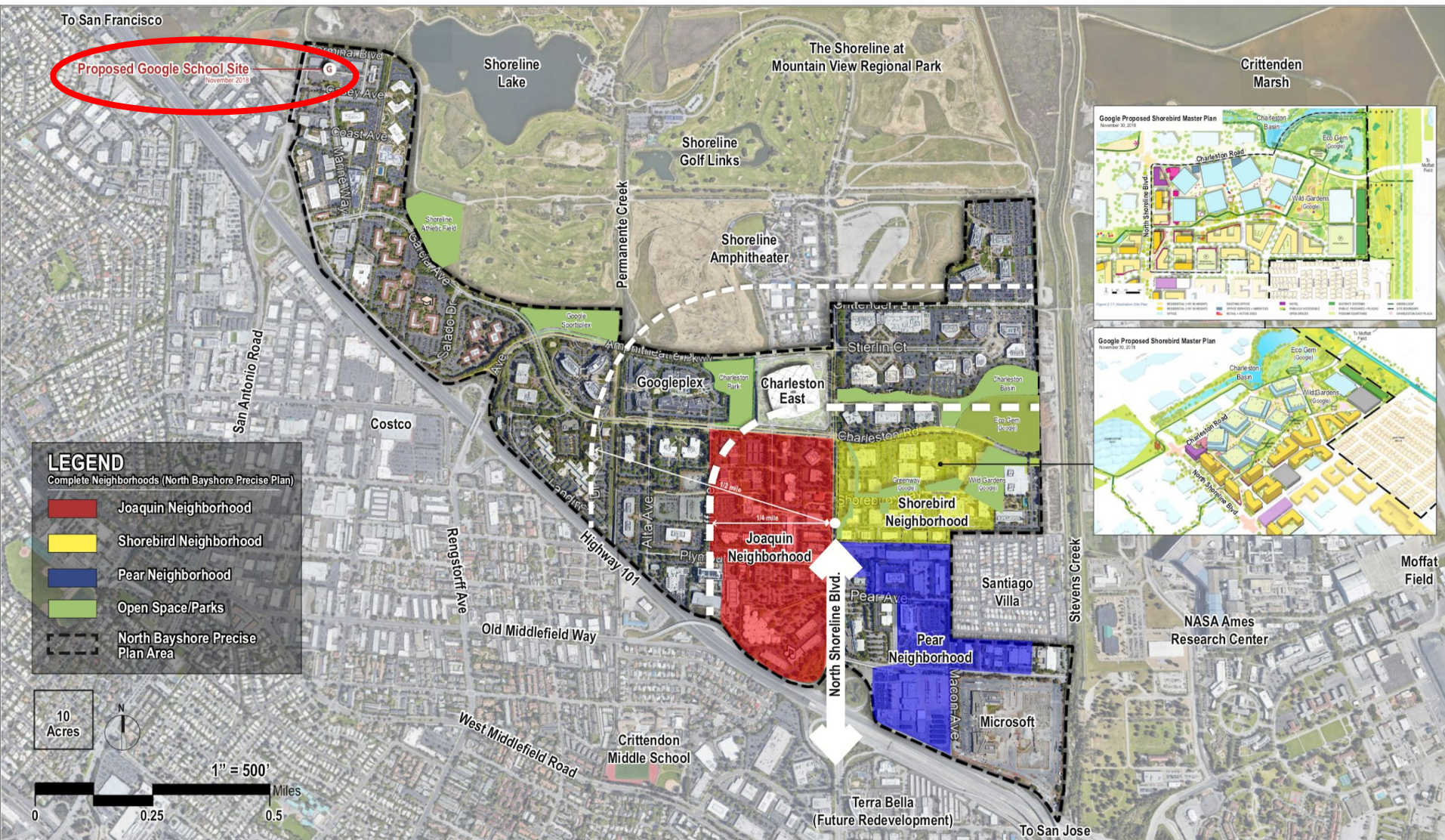
Remainder of NBPP Units	Projected Total Payment
9,215	x \$8,661 = \$79,811,115

Total Mitigation Based on
Sobrato Agreement

Sobrato	\$5,500,000
Other	+ \$79,811,115
	<hr/>
	\$85,311,115

How the Settlement was developed

- Site requirements for middle schools are too massive thus:
 - it was determined that MVWSD would replace one-story building with new two-story buildings
 - Building cost for Middle School
- City offered to contribute funds for green space ~ 2 to 2.5 acres
 - This amount will be donated by the City and resulted in a “credit”



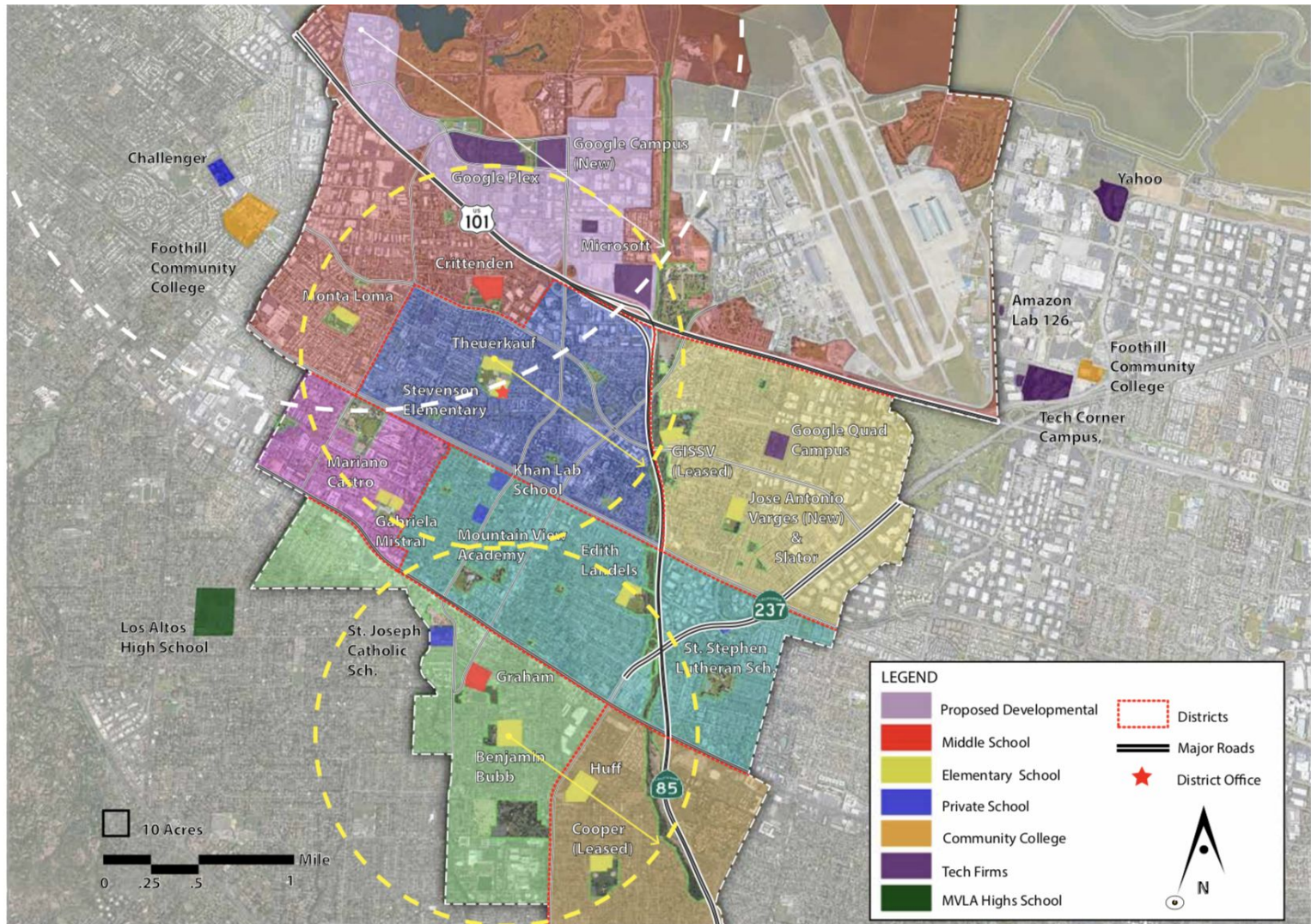


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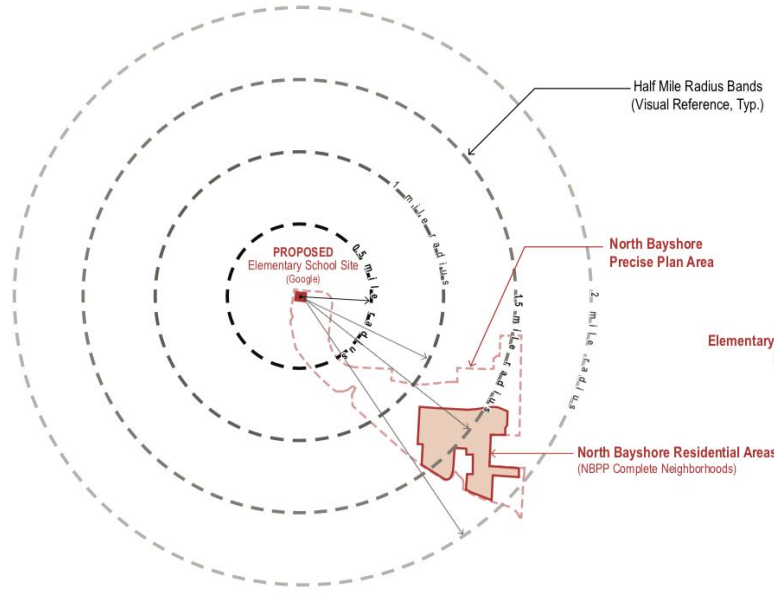
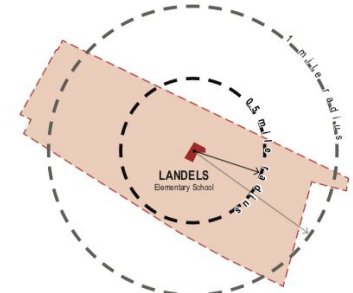
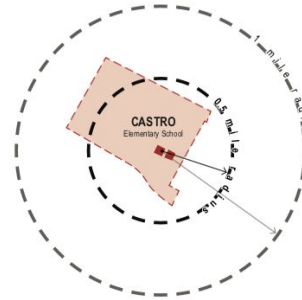
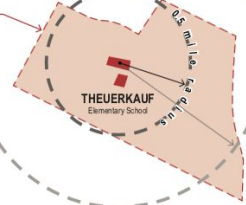
Things to consider about this site

Distance from schools

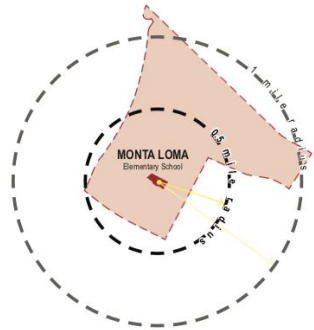
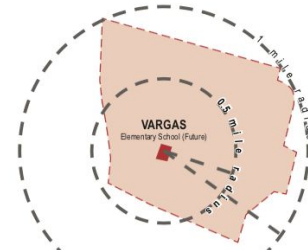
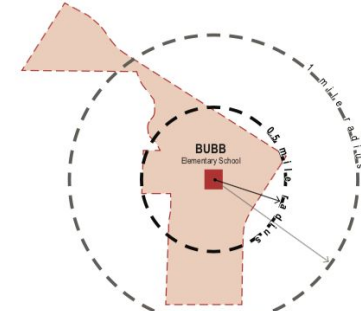
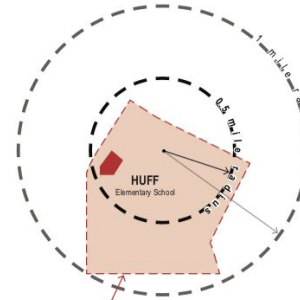
- The subsequent map illustrates what a 1-mile radius looks like around two of MVWSD Elementary Schools and a 2-mile radius around the proposed google site.
- The proximity of the Google Site is 1.5 to 2 miles from all planned residences in North Bayshore
 - Most schools in MVWSD are located .5 to 1 mile from residences



Elementary School Residential Service Boundaries



Elementary School Residential Service Boundaries



PROPOSED NORTH BAYSHORE ELEMENTARY SCHOOL SITE

EXISTING MVWSD ELEMENTARY SCHOOLS

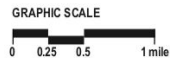


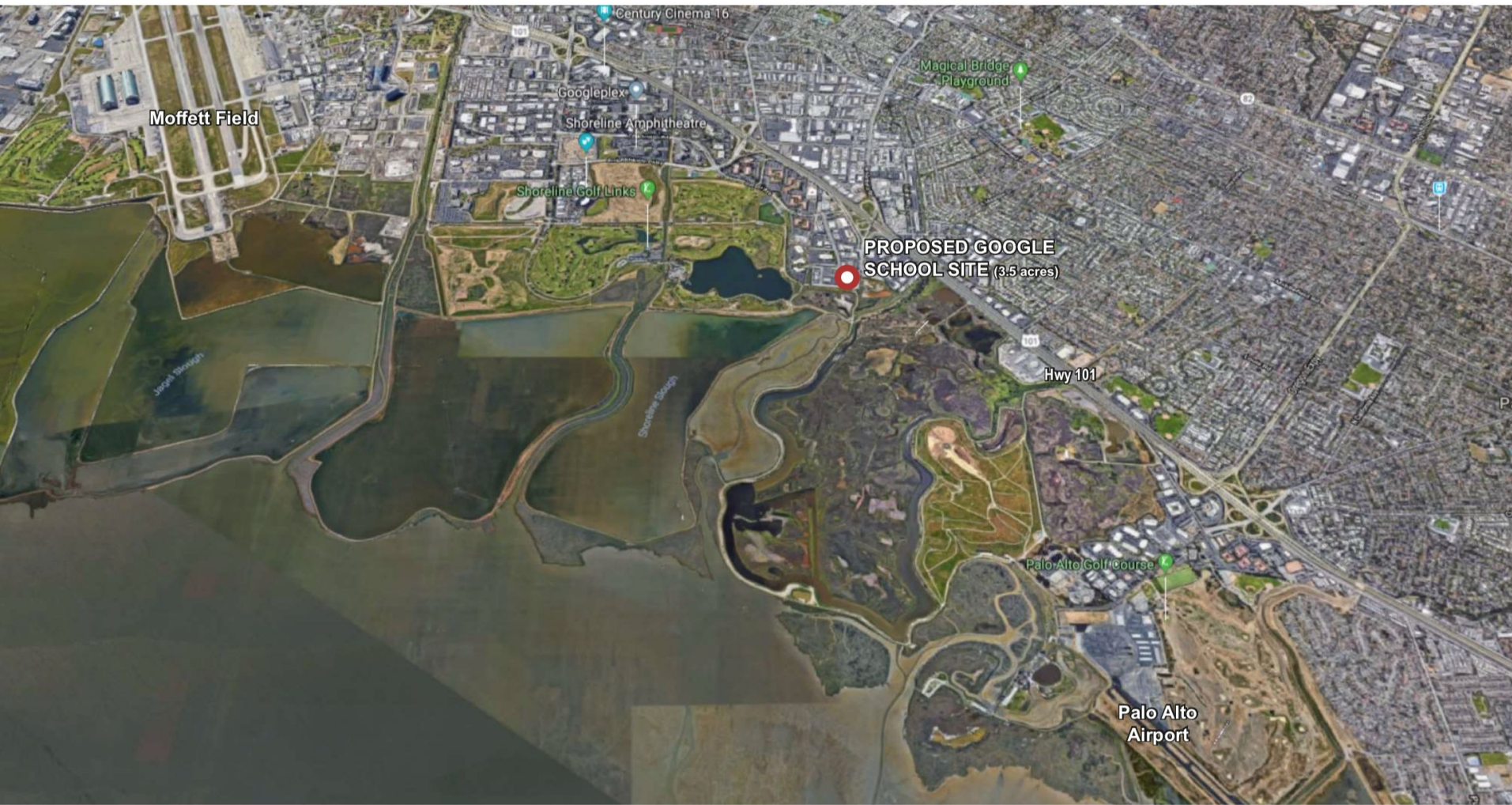


Figure 4.13: Proposed Land Dedication Site for Elementary School

- * PROPOSED SCHOOL LOCATION
- ** NEIGHBORHOOD HEARTS
- SOCIAL SPINE
- COMMUNITY SHUTTLE ROUTES
- GREEN LOOP + BICYCLE CIRCULATION
- SAFE ROUTE TO SCHOOL
- ⋯ POTENTIAL SAFE ROUTE TO ECO GEM
- - - NBPP SITE BOUNDARY

Environmental Concerns

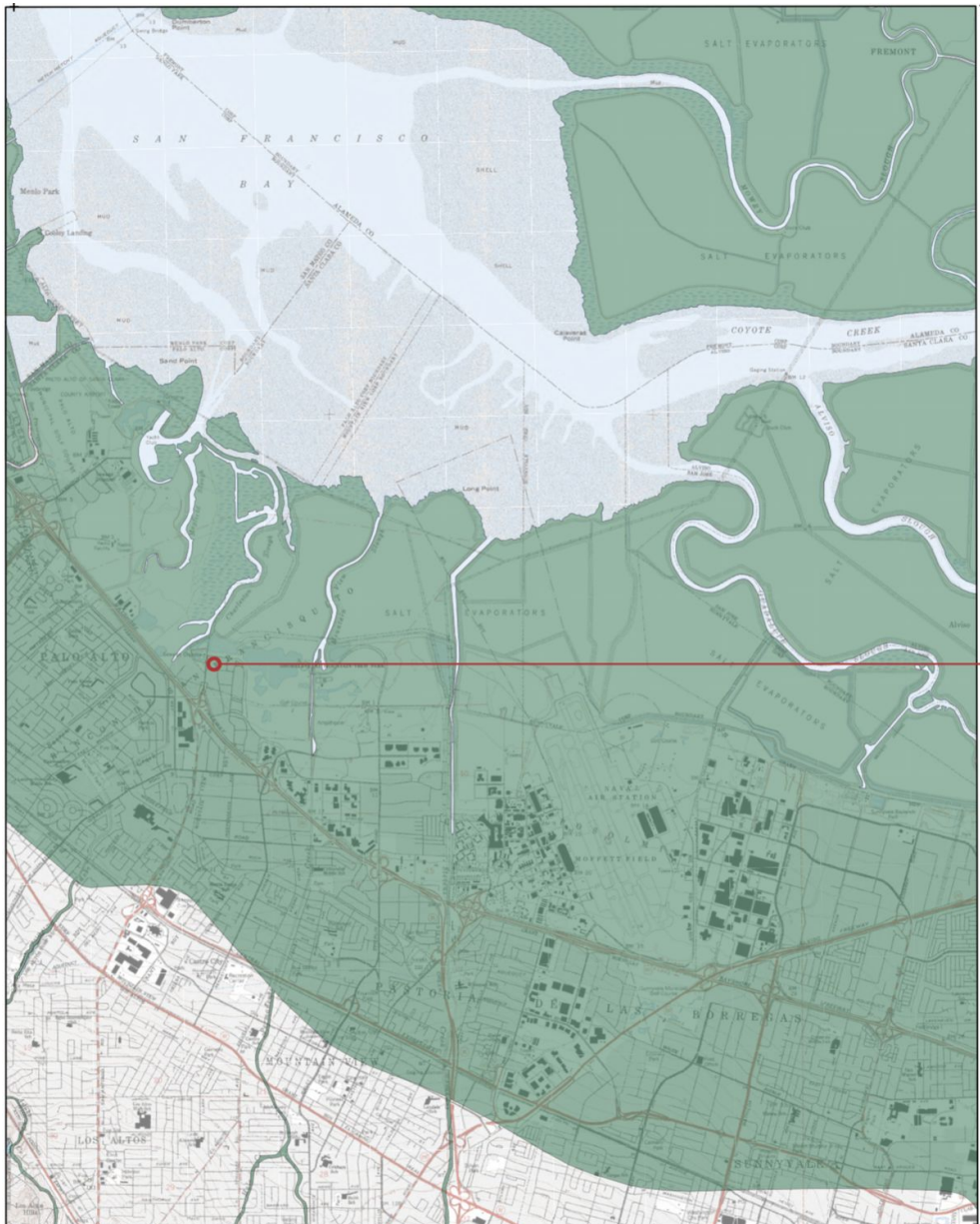
- The site is located between two active air strips
- The site is located within a flood zone
- The site is at risk for liquefaction
 - in the event of an earthquake this site will sustain more damage due to its soil
- Although not shown, there are concerns about the impact of various plumes / EPA cleanup sites





SANTA CLARA
COUNTY
UNINCORPORATED
AREAS
060337

Approximate Location
of Proposed School Site
(Google, Nov 2018)



Earthquake Zones of Required Investigation Mountain View Quadrangle

California Geological Survey

This Map Shows Seismic Hazard Zones Alquist-Priolo Earthquake Fault Zones Have Not Been Prepared For The Mountain View Quadrangle

This map shows the location of Seismic Hazard Zones, referred to here as Earthquake Zones of Required Investigation. The Geographic Information System (GIS) digital files of these regulatory zones released by the California Geological Survey (CGS) are the "Official Maps." GIS files are available at the CGS website: http://maps.conservation.ca.gov/gis/earthquake_zones/. These zones will assist cities and counties in fulfilling their responsibilities for protecting the public from the effects of earthquake-triggered ground failure as required by the Seismic Hazards Mapping Act (Public Resources Code Sections 2690-2699.8) and the Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Sections 2621-2630). For information regarding the general approach and recommended methods for preparing these zones, see CGS Special

Publication 118, Recommended Criteria for Delineating Seismic Hazard Zones in California, and Special Publication 42, Earthquake Fault Zones: a Guide for Government Agencies, Property Owners, Developers, and Geoscientist Practitioners for Assessing Fault Rupture Hazards in California, Appendix C. For information regarding the scope and recommended methods to be used in conducting required site investigations refer to CGS Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, and CGS Special Publication 42. For a general description of the Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning acts, the zoning programs, and related information, please refer to the website at www.conservation.ca.gov/gis/.

MAP EXPLANATION

SEISMIC HAZARD ZONES

- Liquefaction Zones**
Areas where historical occurrences of liquefaction, or local geologic, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.
- Earthquake-Induced Landslide Zones**
Areas where previous occurrence of landslide movement, or local topographic, geologic, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

ADDITIONAL INFORMATION

For additional information on the zones of required investigation presented on this map, the data and methodology used to prepare them, and additional references consulted, please refer to the following:
 Seismic Hazard Report for the Mountain View 7.5-minute Quadrangle, Santa Clara, Alameda, and San Mateo Counties, California, California Geological Survey, Seismic Hazard Zone Report 060 (Revised).
http://maps.conservation.ca.gov/SHP/EZRM/Reports/SHTS/SHZ1_060_Mountain_View.pdf
 For more information on the Seismic Hazards Mapping Act please refer to:
http://www.conservation.ca.gov/gis/earthquake_zones/SHP/SHZ060.pdf
 Click the link below to learn how to take greater advantage of the GeoPDF format of this map after downloading:
<http://maps.conservation.ca.gov/SHP/EZRM/Docs/TerracubeUserGuide.pdf>

Approximate Location of Proposed School Site (Google, Nov 2018)

MOUNTAIN VIEW QUADRANGLE

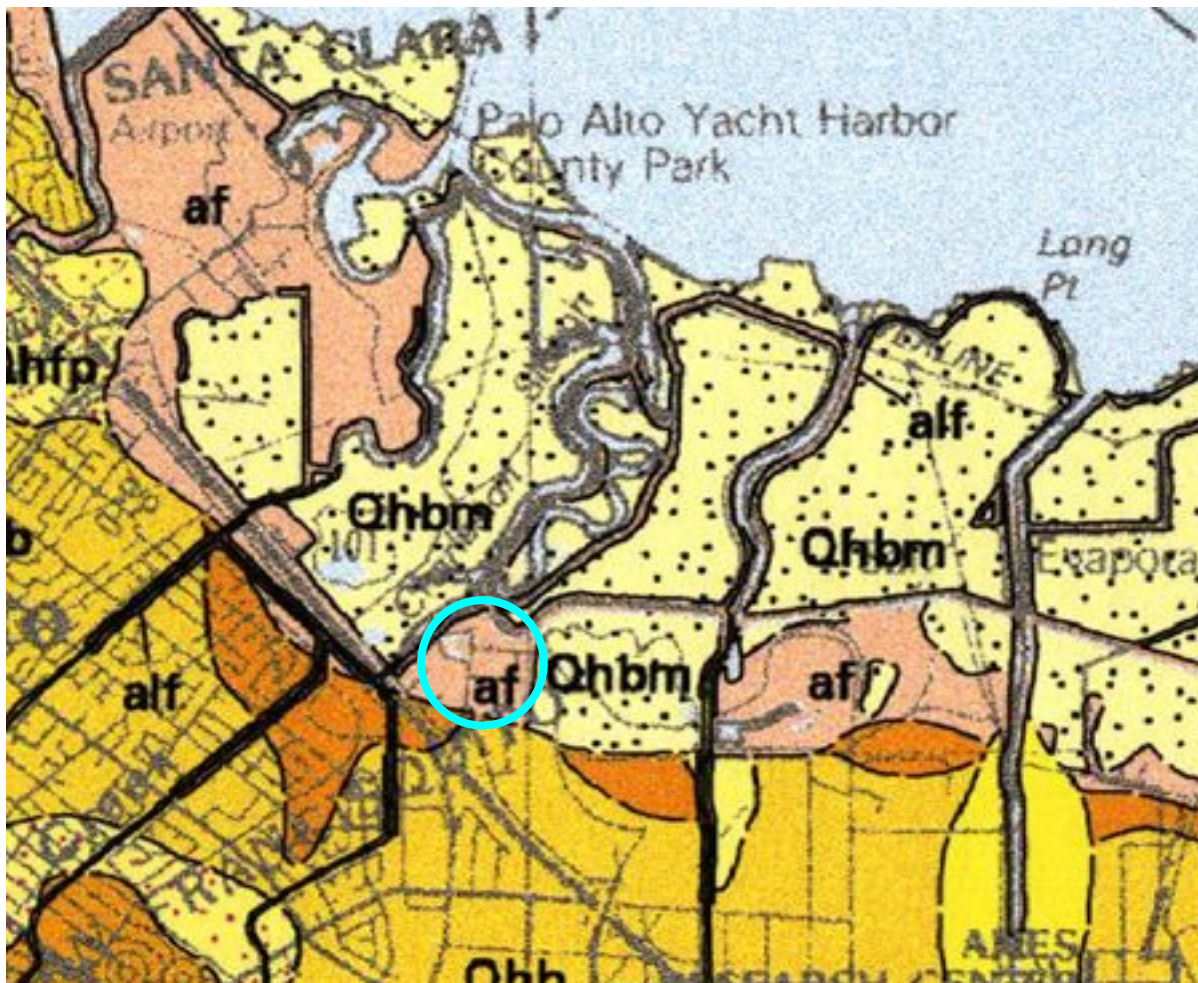
SEISMIC HAZARD ZONES

Delineated in compliance with Chapter 7.8 Division 2 of the California Public Resources Code (Seismic Hazards Mapping Act)

OFFICIAL MAP

Released: October 18, 2006

John G. Parrishi
 STATE GEOLOGIST
 CALIFORNIA GEOLOGICAL SURVEY
 JOHN G. PARRISH
 No. 4787
 STATE OF CALIFORNIA



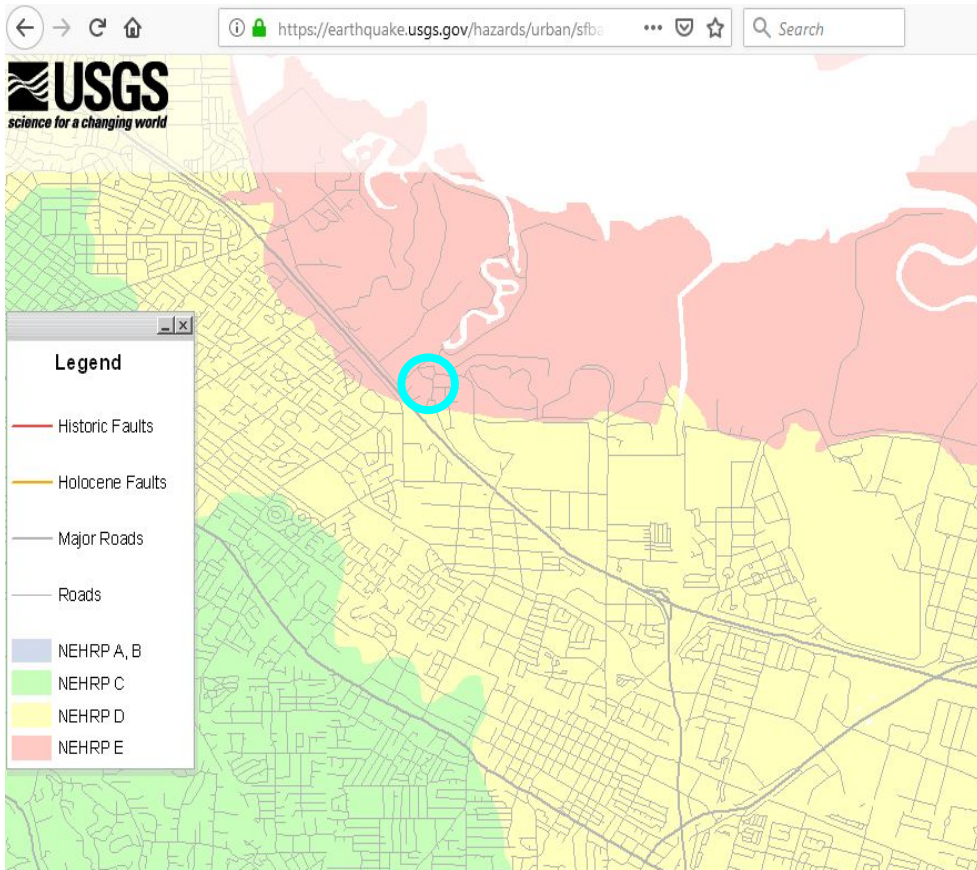
DESCRIPTION OF MAP UNITS

- af** **Artificial fill (Historic)**—Loose to very well consolidated gravel, sand, silt, clay, rock fragments, organic matter, and man-made debris in various combinations. Thickness is variable and may exceed 30 m in places. Some is compacted and quite firm, but fill made before 1965 is nearly everywhere not compacted and consists simply of dumped materials
- alf** **Artificial levee fill (Historic)**—Man-made deposits of various materials and ages, forming artificial levees as much as 6.5 m high. Some are compacted and quite firm, but fills made before 1965 are almost everywhere not compacted and consist simply of dumped materials. The distribution of levee fill conforms to levees shown on the most recent U.S. Geological Survey 7.5-minute quadrangle maps
- Qhbc** **Artificial stream channels (Historic)**—Modified stream channels; in most places where streams have been straightened and realigned
- Qhsc** **Stream channel deposits (Holocene)**—Poorly to well-sorted sand, silt, silty sand, or sandy gravel with minor cobbles. Cobbles are more common in the mountainous valleys. Many stream channels are presently lined with concrete or rip rap. Engineering works such as diversion dams, drop structures, energy dissipaters and percolation ponds also modify the original channel. Many stream channels have been straightened, and these are labeled Qhsc. This straightening is especially prevalent in the lower reaches of streams entering the estuary. The mapped distribution of stream channel deposits is controlled by the depiction of major creeks on the most recent U.S. Geological Survey 7.5-minute quadrangles. Only those deposits related to major creeks are mapped. In some places these deposits are under shallow water for some or all of the year, as a result of reservoir release and annual variation in rainfall
- Qhs** **Beach sand (Holocene)**—Unconsolidated, well-sorted sand. Local layers of pebbles and cobbles. Thin discontinuous lenses of silt relatively common in back-beach areas. Thickness variable, in part due to seasonal changes in wave energy; commonly less than 10 m thick. May interfinger with either well-sorted dune sand or, where adjacent to coastal cliff, poorly-sorted colluvial deposits. Iron- and magnesium-rich heavy minerals locally form placers as much as 0.7 m thick
- Qhbm** **Bay mud (Holocene)**—Water-saturated estuarine mud, predominantly gray, green and blue clay and silty clay underlying marshlands and tidal mud flats of San Francisco Bay, Pescadero, and Pacifica. The upper surface is covered with cordgrass (*Spartina* sp.) and pickleweed (*Salicornia* sp.). The mud also contains a few lenses of well-sorted, fine sand and silt, a few shelly layers (oysters), and peat. The mud interfingers with and grades into fine-grained deposits at the distal edge of Holocene fans, and was deposited during the post-Wisconsin rise in sea-level, about 12 ka to present (Imbric and others, 1984). Mud varies in thickness from zero, at landward edge, to as much as 40 m near north County line
- Qhb** **Basin deposits (Holocene)**—Very fine silty clay to clay deposits occupying flat-floored basins at the distal edge of alluvial fans adjacent to the bay mud (Qhbm). Also contains unconsolidated, locally organic, plastic silt and silty clay deposited in very flat valley floors
- Qhbs** **Basin deposits, salt-affected (Holocene)**—Clay to very fine silty-clay deposits similar to Qhb deposits except that they contain carbonate nodules and iron-stained mottles (U.S. Soil Conservation Service, 1958). These deposits may have been formed by the interaction of bicarbonate-rich upland water and saline water of the San Francisco Bay estuary. With minor exceptions, salt-affected basin deposits are in contact with estuary deposits.

U.S. Geological Survey, National Geologic Mapping Database
https://ngmdb.usgs.gov/Prodesc/proddesc_26231.htm

Site Conditions - “af” = Artificial fill

Mountain View Whisman School District



Soil Types and Shaking Amplification

One contributor to the site amplification is the velocity at which the rock or soil transmits shear waves (S-waves). Shaking is stronger where the shear wave velocity is lower. The National Earthquake Hazards Reduction Program (NEHRP) has defined 5 soil types based on their shear-wave velocity (V_s). We have modified these definitions slightly, based on studies of earthquake damage in the Bay Area. The modified definitions are as follows:

Soil type A	$V_s > 1500$ m/sec	Includes unweathered intrusive igneous rock. Occurs infrequently in the bay area. We consider it with type B (both A and B are represented by the color blue on the map). Soil types A and B do not contribute greatly to shaking amplification.
Soil type B	$1500 > V_s > 750$ m/sec	Includes volcanics, most Mesozoic bedrock, and some Franciscan bedrock. (Mesozoic rocks are between 245 and 64 million years old. The Franciscan Complex is a Mesozoic unit that is common in the Bay Area.)
Soil Type C	$750 > V_s > 350$ m/sec	Includes some Quaternary (less than 1.8 million years old) sands, sandstones and mudstones, some Upper Tertiary (1.8 to 24 million years old) sandstones, mudstones and limestone, some Lower Tertiary (24 to 64 million years old) mudstones and sandstones, and Franciscan melange and serpentinite.
Soil Type D	$350 > V_s > 200$ m/sec	Includes some Quaternary muds, sands, gravels, silts and mud. Significant amplification of shaking by these soils is generally expected.
Soil Type E	$200 > V_s$ m/sec	Includes water-saturated mud and artificial fill. The strongest amplification of shaking due is expected for this soil type.

Site is characterized as Soil Type E (pink) - Includes water-saturated mud and artificial fill. The strongest amplification of shaking due is expected for this soil type.

Staff Concerns

- The location of the site is not in line with the idea of being adjacent to or within the planned community
- The distance will pose an issue for students.
 - a. Safe Moves noted that anything past $\frac{1}{4}$ to $\frac{1}{2}$ a mile will result in increased traffic
 - b. The current street layout has only one way in / out

Staff concerns continued

- Google is only dedicating 3.5 of the 6.9 acres to the school district, which impacts school design
- There are clear environmental concerns
- City Council may view this as an acceptable option to satisfy the need of the local school strategy



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Next Steps

Next Steps

- Staff will meet with Google to continue our discussion about the site
- City Council meeting on February 26
- North Bayshore Master Planning Committee will start to engage Trustees and public.