This meeting will be held via teleconference only in order to reduce the risk of spreading COVID-19 and pursuant to AB 361 and the County of Los Angeles Public Health Officer's Order (revised April 21, 2022). All votes taken during this teleconference meeting will be by roll call vote, and the vote will be publicly reported.

HOW TO VIEW THE MEETING: No physical location from which members of the public may observe the meeting and offer public comment will be provided. The meeting will be live streamed at https://malibucity.org/video and https://malibucity.org/VirtualMeeting**.**

HOW TO PARTICIPATE BEFORE THE MEETING: Members of the public are encouraged to submit email correspondence to revans@malibucity.org before the meeting begins.

HOW TO PARTICIPATE DURING THE MEETING: Members of the public may also speak during the meeting through the Zoom application. The City requests that you sign up to speak before the item you would like to speak on has been called by the Chair and then you must be present in the Zoom conference to be recognized.

Please visit https://malibucity.org/VirtualMeeting and follow the directions for signing up to speak and downloading the Zoom application.

Malibu Environmental Review Board Meeting Agenda
(to be held during COVID-19 emergency)

Thursday, May 5, 2022

9:00 A.M. – ENVIRONMENTAL REVIEW BOARD MEETING
Various Teleconference Locations
YOU MAY VIEW THIS MEETING LIVE OVER THE INTERNET AT
MALIBUCITY.ORG/VIDEO

1. **Written and Oral Communications from Staff and the Board**

2. **Old Business**

   None.

3. **New Business**

   A. Malibu Middle and High School Local Coastal Program Amendment No. 21-002, General Plan Map Amendment No 21-002, Zoning Text Amendment 22-002, Coastal Development Permit No. 21-068, Site Plan Review No. 21-038, Conditional Use Permit 21-011, Lot Merger No. 21-002 and Demolition Permit No. 21-036 - An application to approve the Malibu Middle and High School Campus Specific Plan to redevelop and modernize the existing Malibu Middle and High School campus and former Juan Cabrillo Elementary School campus and implementation of Phase 1 of the Malibu Middle and High School Campus Specific Plan

   Application Filing Date: December 21, 2021

Project Applicant:	Vanessa Vasquez, NAC Architecture
Property Owner:	Santa Monica-Malibu Unified School District
Location:	30215 Morning View Drive, within the appealable coastal zone
APNs:	4469-017-900, 4469-018-900, 4469-018-901, 4469-018-902, 4469-018-903, 4469-018-904, 4469-019-900, 4469-019-901, 4469-019-902
Zoning:	Institutional (I)
Case Planner:	Senior Planner Brooks, 456-2489, ext. 276

Recommended Action: Review the proposed project and provide recommendations for the Planning Commission's consideration.

Adjournment

Guide to the Meeting Proceedings

As a result of the Coronavirus (COVID-19) pandemic, the City is under a state of local emergency, as well as states of emergency that have been declared in the County of Los Angeles, State of California, and a federal emergency declared by the President of the United States. In order to reduce the risk of spreading COVID-19, the Environmental Review Board meeting will be open and public but conducted virtually because meeting in person would present imminent risks to the health or safety of attendees. This way, the public, the staff, and the Board will not be physically in the same place.

Old Business items have appeared on previous agendas but have either been continued or tabled to this meeting with no final action having been taken. Applicants will be given 15 minutes to present their position to the Board. Members of the public wishing to speak will be limited to three (3) minutes. Members of the public wishing to speak during the meeting must participate through the Zoom application. The City requests that you sign up to speak before the item you would like to speak on has been called by the Chair. In order to speak, individuals must visit https://malibucity.org/VirtualMeeting and follow the directions for signing up to speak and downloading the Zoom application.

Items in New Business are items, which are appearing for the first time for formal action. Applicants will be given 15 minutes to present their position to the Board. Members of the public wishing to speak will be limited to three (3) minutes. Members of the public wishing to speak during the meeting must participate through the Zoom application. The City requests that you sign up to speak before the item you would like to speak on has been called by the Chair. In order to speak, individuals must visit https://malibucity.org/VirtualMeeting and follow the directions for signing up to speak and downloading the Zoom application.

Copies of the staff reports or other written documentation relating to each item of business described above are available at https://www.malibucity.org/agendacenter. Requests to show an audio or video presentation duringa Board meeting should be directed to Alex Montano at (310) 456-2489, ext. 227 or amontano@malibucity.org. Material must be submitted by 12:00 p.m. on the meeting day.

I hereby certify under penalty of perjury, under the laws of the State of California that the foregoing agenda was posted in accordance with the applicable legal requirements. Regular and Adjourned Regular meeting agendas may be amended up to 72 hours in advance of the meeting. Dated this 28th day of April 2022 at 4:30 p.m.



Rebecca Evans, Administrative Assistant

Environmental Review Board
Agenda Report

ERB Meeting
05-05-22
Item 3.A.

To: Members of the Environmental Review Board

Prepared by: Raneika Brooks, Senior Planner

Reviewed by: Adrian Fernandez, Assistant Planning Director

Approved by: Courtney McCammon, City Biologist

Date prepared: April 28, 2022 Meeting date: May 5, 2022

Subject: Malibu Middle and High School Local Coastal Program Amendment No. 21-002, General Plan Map Amendment No 21-002, Zoning Text Amendment 22-002, Coastal Development Permit No. 21-068, Site Plan Review No. 21-038, Conditional Use Permit 21-011, Lot Merger No. 21-002 and Demolition Permit No. 21-036 - An application to approve the Malibu Middle and High School Campus Specific Plan to redevelop and modernize the existing Malibu Middle and High School campus and former Juan Cabrillo Elementary School campus and implementation of Phase 1 of the Malibu Middle and High School Campus Specific Plan

Application Filing Date:	December 21, 2021
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Owner:	Santa Monica-Malibu Unified School District
Location:	30215 Morning View Drive, within the appealable coastal zone
APNs:	4469-017-900, 4469-018-900, 4469-018-901, 4469-018-902, 4469-018-903, 4469-018-904, 4469-019-900, 4469-019-901, 4469-019-902
Zoning:	Institutional (I)

RECOMMENDED ACTION: Review the proposed project and provide recommendations for the Planning Commission's consideration.

DISCUSSION: The Malibu Middle and High School (MMHS) Campus Specific Plan (Specific Plan) establishes the development standards and plans for the redevelopment of the MMHS Campus to be implemented in four phases over the next 10 to 15 years. The existing MMHS campus was constructed as Malibu Park Junior High School in 1963, and in 1992 the school was converted for use as a high school. In the last 15 years, three bond measures have been passed and utilized to modernize and build new buildings and athletic fields, including the newly completed administration/library building (Building A/B) and a two-story classroom building (Building E). The project site is situated on three of nine contiguous parcels owned by the Santa Monica-Malibu Unified School District (SMMUSD): Assessor Parcel Numbers (APNs) 4469-017-900 (40.06 acres), 4469-018-900 (9.4 acres), and 4469-018-904 (2.57 acres). The total acreage of the project site is 52.03 acres.

Apart from the recently completed Buildings A, B and E, many of the existing buildings no longer meet SMMUSD's needs to support 21st-century learning, including technology improvements and flexible classrooms that allow for multiple learning modalities. The Specific Plan would result in the demolition of 18 existing buildings on the combined campuses; only the existing athletic fields and the recently completed Buildings A, B and E on the MMHS campus would remain, and the construction of a new campus with dedicated spaces for the middle and high schools. The Specific Plan would result in 32 classrooms and 8 labs and a total of 173,595 square feet of new building space, providing the MMHS campus with a total of 47 classrooms and 12 labs and a total of 222,425 square feet of building space. While the Specific Plan will upgrade the MMHS campus, it does not increase floor area ratio (FAR) nor does it allow for an increase in the maximum student population.

Once adopted, the standards in the Specific Plan would become the regulations against which later phases of the project would be reviewed by the City. The Specific Plan would be constructed in four phases, with construction activities anticipated to begin in fall 2022 and completed in summer 2031.

The 11 Specific Plan objectives are as follows:

1. Create unique and separate identities for the MMHS Campuses.

2. Advance educational facilities to support 21st Century learning and properly support the projected enrollment.

3. Improve learning by replacing undersized and inflexible facilities with larger, functional flexible spaces that accommodate modern, diverse learning styles and allow for variable uses.

4. Provide enhanced, modern, and functional support spaces, such as libraries, cafeteria, labs, maker spaces, and other student services, that promote whole child development.

5. Improve the arts and athletic facilities in support of both the school and the community's educational, cultural, and recreational enhancement.

6. Reorganize open space and foster intercampus circulation.

7. Improve access, circulation, and drop-off and pickup, and increase on-campus parking in a manner that improves pedestrian and vehicle safety.

8. Respect the natural environment by developing a campus that is of high design, complementary to the natural landscape and that contributes to the high scenic quality of the area.

9. Adopt development standards for the MMHS allowing for the educational design requirements of many of the buildings.

10. Increase District resiliency, protect and maximize the learning environment, and maximize energy and operational savings through a photovoltaic solar array and battery backup system.

11. Remove hazardous buildings and structures.

The adoption of the Specific Plan requires legislative changes to the Local Coastal Program (LCP), the General Plan Land Use Map, and the Malibu Municipal Code (MMC) Zoning Map and Text. The City Council is the decision-maker for all the requested entitlements for the project. These entitlements would not become effective until the Specific Plan is certified by the California Coastal Commission (CCC).

The Specific Plan establishes development standards for the plan area, which includes modifications to existing development standards for the environmentally sensitive habitat area (ESHA) setback, height, and grading quantities. Attachment 1 provides a summary of the requested modifications to existing development standards to implement the redevelopment of the Malibu Middle and High School Campus.

The required coastal development permit for Phase 1 of the MMHS Campus Specific Plan has also been submitted and is being processed concurrently. The proposal for Phase 1 includes abatement and demolition of the school facilities associated with the former Juan Cabrillo Elementary School (JCES), a lot merger, new parking areas, ESHA restoration, and associated development. The CDP approval would be contingent on the approval of the Specific Plan. Phases 2 through 4 are considered conceptual and will require review and approval by the City before construction. Subsequent phases will be reviewed for compliance with the Specific Plan.

The LCP ESHA Overlay Map delineates a blue-line stream along the campus' west property line where restoration is proposed; therefore, the project requires review by the Environmental Review Board (ERB). The Planning Director requests the ERB in its capacity as advisor to the Planning Commission to make recommendations on the identified resource impacts and mitigation measures within the purview of the ERB, to ensure conformance with the LCP.

Environmental Review and Project Chronology

California Environmental Quality Act (CEQA) Guidelines Section 15367 defines the lead agency as the public agency with the principal responsibility for carrying out or approving a project and conducting the environmental review. As such, SMMUSD (District) is the Lead Agency for the proposed project and must approve the proposed project, and certify the Final EIR.

Under CEQA, a lead agency is charged with the duty to substantially lessen or avoid significant environmental effects where feasible for projects subject to CEQA. In discharging this duty, the lead agency must balance a variety of public objectives, taking into account economic, environmental, and social issues.

As a first step in complying with the procedural requirements of CEQA, the District prepared an Initial Study (IS) to determine whether any aspect of the proposed project, either individually or cumulatively, may cause a significant effect on the environment and, if so, to narrow the focus (or scope) of the environmental analysis. The IS indicated that an EIR would be the appropriate type of environmental document to address potential environmental impacts resulting from the proposed project.

After completion of the IS, the District filed a Notice of Preparation (NOP) with the California Office of Planning and Research and the County of Los Angeles indicating that an EIR would be prepared. The IS/NOP, as well as the scoping comment letters and verbal comments, are included in Section 2 of the Final EIR.

On August 20, 2020, the District issued a Notice of Preparation of a Draft EIR and the proposed project's IS for public review and comment. The comment period ended on September 21, 2020. Comment letters/emails were received that raised concerns, which the District addressed.

On September 9, 2020, District staff held a public scoping meeting. The Environmental Consultant and District staff considered all of these comments in preparing the proposed project's Draft EIR.

On October 15, 2021, the District issued a Notice of Availability and the proposed project's Draft EIR for public review and comment. The Notice of Availability was also published on the District's website and directly mailed to each commenter on the IS

and affected public agencies, as well as community members within a 500-foot radius of the MMHS Campus. The Draft EIR was made available on the District's website and at the District's Offices, Malibu Public Library, City of Malibu Planning Counter, and the MMHS Administration Building. The comment period for the Draft EIR ended on November 29, 2021 (a total of 45 days).

On November 2, 2021, District staff conducted a community presentation on the proposed project and the Draft EIR.

On December 17, 2021, an application for the proposed project's required coastal development permit and legislative amendments were submitted to the City for processing. The application was routed for review to the City Biologist, City geotechnical consultant reviewers, City Environmental Health Administrator, City Public Works Department, the Los Angeles County Waterworks District No. 29 (WD29), and the Los Angeles County Fire Department (LACFD) for LCP and MMC conformance review.

On December 28, 2021, proposed responses to the commenters were delivered to each commenter.

On January 26, 2022, the SMMUSD certified the EIR with two statements of overriding significance finding that the proposed project would cause two unavoidable significant impacts: light and noise. Since no feasible mitigation is available for these two significant impacts, a Statement of Overriding Considerations was prepared.

REQUIRED PROJECT ENTITLEMENTS

The applicant is requesting that the following discretionary actions be approved as part of the proposed project:

1. Local Coastal Program Amendment (LCPA) No. 21-002: 1) add Section 3.4.6 to Chapter 3.4 to incorporate the MMHS Campus Specific Plan into the LIP, 2) amend LCP Land Use Map 2 to add a boundary line around the MMHS property denoting the boundaries of the MMHS Campus Specific Plan area, and 3) amend the LUP to add new ESHA policies.

2. General Plan Map Amendment (GPMA) No 21-002: Amend the General Plan Land Use Policy Map, Section 3, to add the Specific Plan land use designation on the MMHS property.

3. Zoning Text and Map Amendment (ZTA) 22-002: To 1) amend Section 17.42.020 in the MMC to add a new "M." to incorporate the MMHS Campus Specific Plan and 2) amend the Zoning Map to add a boundary line around the

MMHS property denoting the boundaries of the MMHS Campus Specific Plan area.

4. Coastal Development Permit (CDP) No. 21-068: Pursuant to LIP Section 13.3, the project requires a coastal development permit for Phase I of the MMHS Specific Plan which includes the construction of Building C (Classrooms, Student Support Services, Administrative and Campus Support), Parking Lot C, Parking D, and the Drop-off/Pick-up area.

5. Site Plan Review (SPR) No. 21-038: An increase in height over 18 feet up to 28 feet for a flat roof for the new Building C (maximum 36 feet with 41 feet for science lab exhaust hoods) in the Institutional zone requires a site plan review;

6. Conditional Use Permit Amendment (CUPA) No. 21-011 to amend Conditional Use Permit (CUP) Nos. 10-008 and 10-009: Construction of more than 500 square feet of building area in the Institutional zone requires a conditional use permit and educational institutions (public or private) require a Conditional Use Permit.

7. Lot Merger (LM) No. 21-002: Merge two parcels (4469-017-900 and 4469-018-903) into a single parcel that will total 49.06 acres.

8. Demolition Permit (DP) No. 21.036: Demolition of the 11 buildings on the former JCES campus totaling 36,544 square feet of demolition requires a demolition permit.

<u>Other Required Permits and Approvals</u>

A public agency, other than the lead agency, that has discretionary approval power over a part of the project is known as a "Responsible Agency," as defined by CEQA Guidelines Section 15381 (California 2010). The Responsible Agencies, and their corresponding approvals for the proposed project, may include the following:

- State of California
  - California Coastal Commission (CCC) (Certify EIR and LCPA)
  - Division of State Architect (Approval of Construction Drawings)
  - California Department of Fish and Wildlife (CDFW)
- Regional Agencies
  - Los Angeles Regional Water Quality Control Board (RWQCB) (Issuance of waste discharge requirements)
- County of Los Angeles
  - Fire Department (Approval of Site Plan for Emergency Access)
  - Los Angeles Department of Public Works (WD29)
- City of Malibu
  - Public Works/Engineering (for grading permit)

- City Council (for proposed project and Specific Plan approval)

Site Description and Project Setting

The proposed project site is located in the Zuma Beach area of the City of Malibu. As previously discussed, the proposed project site is comprised of the existing MMHS campus, a 40-acre property shared with the former JCES.

Figure 1 – Vicinity Map



Source: Malibu GIS

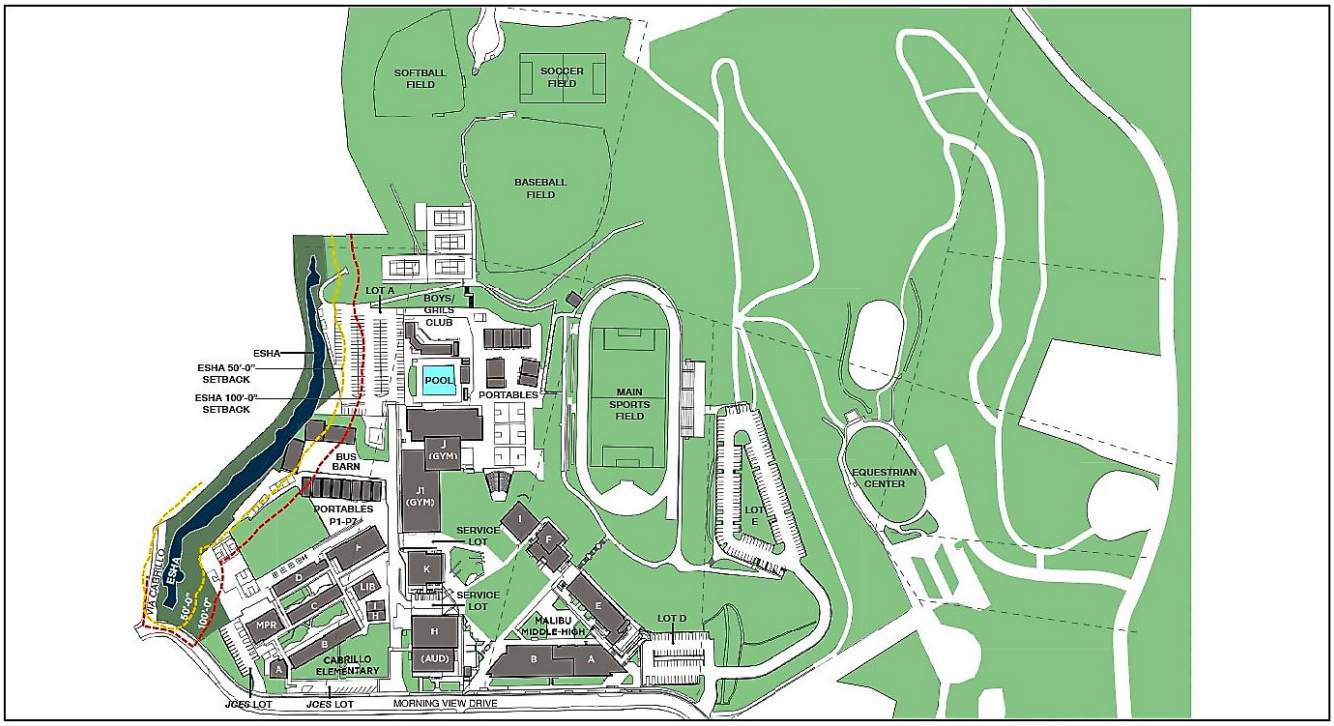
Former JCES Campus

The former JCES campus covers approximately six acres and is on the western end of the Plan Area to the north of Morning View Drive, west of the MMHS campus. JCES formerly served elementary school grades K-5. As part of SMMUSD's wider Malibu Schools Alignment Project, the JCES student population combined with the former Point Dume Marine Science School student population and moved to the Point Dume Marine Science School campus, renamed Malibu Elementary School, at the beginning of the 2019-20 school year. Currently, middle school students utilize the portable classrooms, and Boys and Girls Club utilizes the former library as the Wellness Center. No other JCES rooms are currently being used.

MMHS Campus

The MMHS campus covers approximately 34 acres of the overall District property and operates as a sixth- through twelfth-grade public school with a 2018-19 enrollment of 939 students and 134 staff. Presently, the MMHS campus has 60 classrooms (including 12 portable classrooms); a library, auditorium, and administrative offices; an athletic field, 2 gymnasiums, a pool, 9 basketball courts, and 4 tennis courts; and parking for 282 vehicles in three parking lots. Additionally, the recently constructed Buildings A, B and E would remain, with no work identified for the Specific Plan.

Figure 2 - Existing Site Plan



Source: MMHS Specific Plan

Site Access, Circulation, and Parking

The Specific Plan area can be accessed from Morning View Drive, approximately 0.3 mile northeast of the intersection of Morning View Drive and Pacific Coast Highway (PCH) and 0.9 mile southeast of the intersection of Guernsey Avenue and PCH. Morning View Drive is a narrow, two-lane, local roadway with an open drainage system that provides direct access to single-family homes in the area as well as to the existing MMHS and former JCES campuses and the Malibu Equestrian Park. Regional access to the Plan Area is provided via PCH.

There are currently two main points of vehicular entry into the MMHS and former JCES campuses. The first entry is along the eastern edge of the campus from Morning View Drive. The second point of entry is at the access road between the former JCES campus and the MMHS campus. This entry is a service access point

and provides access to the Bus Barn, Maintenance and Operations Warehouse, and Student Parking Lot A. There are currently five parking lots with a total of 375 parking spaces.

Student drop-off/pick-up for the Middle School currently occurs in Parking Lot E (150-Space Parking Lot), while drop-off/pick-up for the High School Students occurs in the JCES Parking Lot. Sidewalks are provided on both sides of Morning View Drive from PCH north to the western end of the former JCES campus. There are currently three crosswalks along Morning View Drive that provide access to the former JCES and MMHS campuses from the south side of the street. A crossing guard staffs the crosswalk in front of former JCES during the AM drop-off and PM pick-up peak periods. No parking is allowed along Morning View Drive.

Site Topography

The Plan Area is located on the southwestern portion of the the Santa Monica Mountains. Maximum topographic relief on-site is approximately 94 feet, with elevations ranging from 86 to 180 feet above mean sea level. The campus consists of several near-level pad areas with generally ascending slopes to the north and descending slopes to PCH to the south. On the MMHS campus, the street-level pad contains the recently constructed MMHS administration, library, and classroom buildings (Buildings A and B); the under-construction Lower Parking Lot; and an outdoor courtyard, cafeteria, and auditorium. On the former JCES campus, the pad contains the administration building, the kindergarten classroom, the special education classrooms, and the JCES Parking Lot. The next pad to the northwest contains the newer and old gymnasiums, outdoor basketball courts and swimming pool, the Boys and Girls Club of Malibu facility, and the Bus Barn and Parking Lot A on the MMHS campus, as well as the multipurpose room, the library, and three educational buildings on the former JCES campus. The third pad contains the Main Sports Field and the 150-Space Parking Lot. The fourth contains the tennis courts and baseball diamonds. The fifth and highest pad contains Parking Lot A (the 150-Space Parking Lot). Each terrace is accessible via stairs and handicap-accessible ramps. From street level on Morning View Drive, views of the development on the elevated terraces are limited.

ESHA

There is very little natural vegetation onsite, consisting primarily of grasses, ivy, brush, shrubs, and scattered ornamental and native trees. The LCP ESHA Overlay Map delineates a blue-line stream along the campus' west property line where restoration is proposed. The stream consists of an underground pipe from Floris Heights Road that flows under the school property and daylights into a natural streambed along the western boundary of the school property. The stream extends for approximately 1,088 feet and varies between approximately 24 and 85 feet wide. the stream course is deeply incised with steep banks. The top of the southeast bank

extends significantly higher than the northwest bank because it is located immediately adjacent to the campus.

The LCP maintains policies to protect environmentally sensitive habitat areas within City limits, and new developments must be sited and designed to minimize impacts to the ESHA.

LIP Section 4.6.1(A) provides for a buffer around native stream vegetation:

> New development shall provide a buffer of no less than 100 feet in width from the outer edge of the canopy of riparian vegetation. Where riparian vegetation is not present, the buffer shall be measured from the outer edge of the bank of the subject stream.

Portions of the campus are developed within the 100-foot buffer, including the Bus Barn, the tennis courts, and portions of the former JCES yard. However, all these structures were developed prior to the certification of the LCP, which occurred in 2002, and many of the existing uses predate the Coastal Act.

Surrounding Land Uses

Surrounding land uses in the general vicinity of the campus include properties that are zoned Rural Residential (RR). These parcels are primarily developed with large homes on lots that range between one to two acres in size. Immediately adjacent to the proposed project site to the west is JCES, while the Malibu Equestrian Center leases the District-owned property located to the east of the campus. The entirety of the District-owned property, including the elementary school, the campus, and the equestrian center, is zoned for institutional uses. To the south, across Morning View Drive, is the Malibu United Methodist Church and Nursery School. Zuma Beach and the Pacific Coast Highway are located approximately 1,000 feet and 1,500 feet south of the proposed project site, respectively.

Project Description

As shown in Table 1, Summary of Building Demolition, implementation of the Specific Plan would result in the demolition of all seven buildings and nine portables on the former JCES campus and six buildings and associated amenities on the MMHS campus, totaling 154,904 square feet of demolition. Building E and Buildings A and B at the MMHS Campus would remain, with all other structures removed (see Figure 6*, Proposed Site Plan*). The Bus Barn would be relocated to the east side of the site. No changes to the existing main sports field, baseball, or softball fields would occur except for the development of new field houses and additional parking adjacent to the softball field.

Table 1 - Summary of Building Demolition	
Name	Square Footage
Former JCES Campus	
Building A: Administration Building	2,280
Building B: Kindergarten Classroom Building	5,941
Building C: Classroom Building	4,554
Building D: Classroom Building	4,535
Building E: Library	2,694
Building F: Classroom Building	7,952
Building G: Multipurpose Room Building	4,758
Buildings H and I (Cottage Portables)	1,920 (2 x 960sf)
Portables: Portables P1 to P5	5,280 (5 x 960sf, 1 x 480sf)
Portables: P6 to P7	1,920 (2 x 96-0sf)
Restroom Portable	480
Former JCES Subtotal	42,314
MMHS Campus	
Building F (300 Building): Music/Band/Choral Building	6,720
Building H (600 Building): Cafetorium	14,478
Building I (400 Building): Graphic Arts	4,561
Building J (Building 700): Gymnasium	20,758
Building J1: 'New' Gymnasium	18,835
Building K: Classroom Building	12,698
Pool	Pool: 60'x75' Pool Equipment Building: 900
Field House	930
Portables (13 Interim Classrooms and Administration)	12,960 (1 @1,920sf, 8 @960sf, 1 @480sf, 3 @960sf)
Boys & Girls Club	9,120 (3@2,880, 1@480)
Bus Barn	9,700
Maintenance and Operation Warehouse	930
MMHS Subtotal	**112,590**
Total Demolition Square Footage	**154,904**

Source: SMMUSD 2021

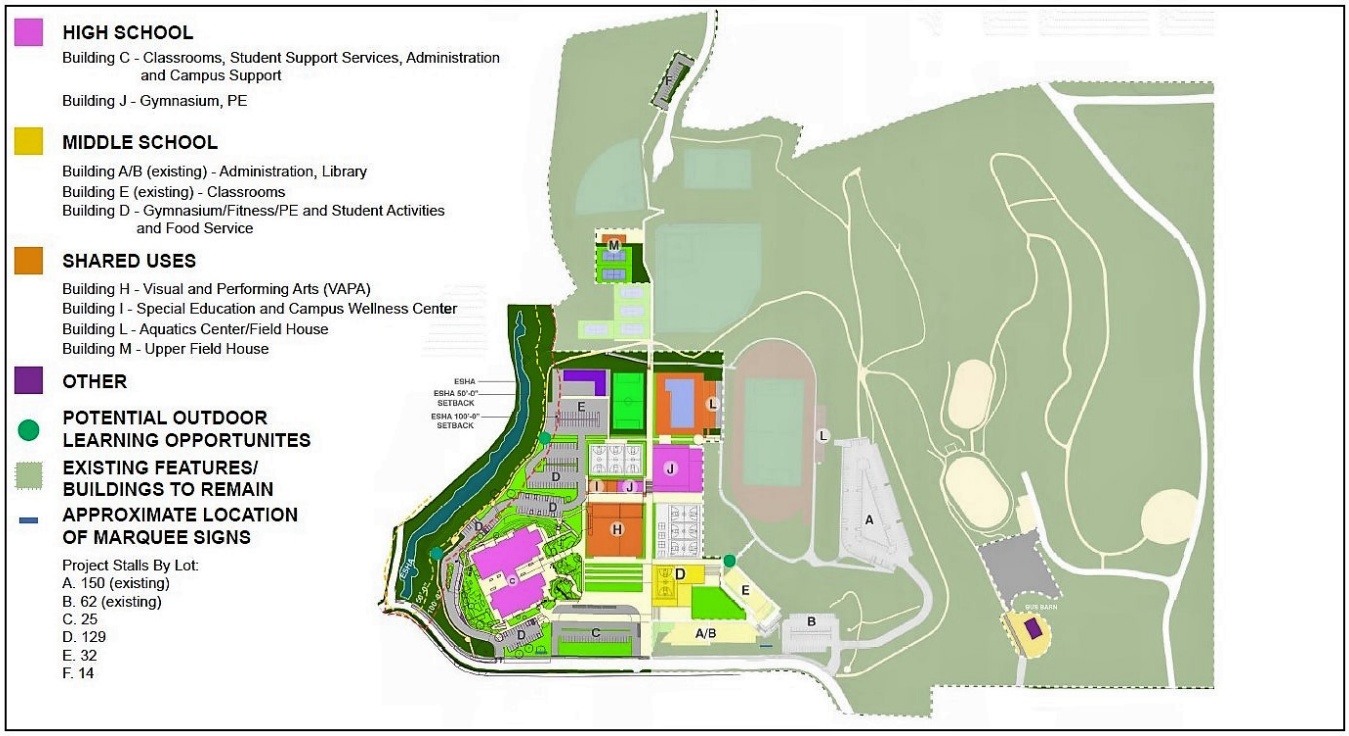
As shown in Table 2, *Summary of New Development*, the Specific Plan would result in 32 classrooms and 8 labs and a total of 173,595 square feet of building space, providing the MMHS campus with a total of 51 classrooms and 12 labs and a total of 222,425 square feet of building space, including the existing Buildings A, B and E that would remain.

Table 2 - Summary of New Development					
Building	Status	Classroom	Lab	Square Footage	Maximum Height
Middle School Core					
Building D: Gymnasium/ Fitness/ PE and Student Activities and Food Services	New	2	0	22,376	36 ft
Middle School Core Subtotal		**2**		**22,376**	
High School Core					
Building C: Classrooms, Student Support Services, Administrative and Campus Support	New	23	8	68,019	36 ft
Building J: Gymnasium/ PE	New	2	0	36,708	45 ft
High School Core Subtotal		**25**	**8**	**104,727**	
Shared Amenities					
Building I: Special Education and Campus Wellness Center	New	1	0	5,094	28 ft
Building H: Visual and Performing Arts (VAPA)	New	4	0	30,094	45 ft
Building L: Aquatics Center/Field House	New	0	0	9,249	28 ft
Building M: Upper Field House	New	0	0	2,055	28 ft
Shared Amenities Subtotal		**5**		**46,492**	
Subtotal – New Development		***32***	***8***	***173,595***	
Existing Buildings A/B and E					
Building A/B: Administration/Library	Existing	7	4	35,315	28 ft
Building E: Classroom Building	Existing	15	0	13,515	28 ft
Subtotal - Existing Buildings		***19***	***4***	***48,830***	
Total		**51**	**12**	**222,425**	

Source: LPA 2019

The plan generally organizes the campus land uses in three defined areas: Middle School core, High School core, and shared amenities. This consolidation of uses results in more efficient use of available land while enhancing independent identities for each area and improving wayfinding. The pronounced topography found onsite is also utilized to emphasize this concept by creating “terraces” for each defined area. At the center of the campus, the plan proposes the Performing Art Center along with an arrival plaza to serve as a welcoming entry and as a bridge connecting both schools. A leveled academic quad is proposed for each campus and becomes the main organizing element for the academic cores. This important space will become the “heart” of each school and hub of educational and social activities while providing access to surrounding buildings.

Figure 3 – Proposed Site Plan



Source: MMHS Specific Plan

In addition to the approval of the Specific Plan and associated legislative amendments, the project includes the following scope of work as part of the CDP for Phase 1:

OVERVIEW OF IMPACTS DISCUSSED IN EIR:

The following impacts (Less than Significant with Mitigation and Significant and Unavoidable) were discussed in detail in the EIR prepared for the proposed project. Refer to Attachment 3 (Mitigation Monitoring and Reporting Program) for details on the implementation of proposed mitigation measures.

AESTHETICS (EIR Section 3.1)

Significant Unavoidable Impacts – Light and Glare

The proposed project would occur on the currently developed former JCES and MMHS campuses, in an area visually characterized as a rural residential neighborhood. Artificial light sources found onsite and in the surrounding area include lighting on the lower parking lot (existing Parking Lot D) adjacent to Building A and B, exterior safety and security lighting associated with the campus and adjacent residential uses, light emanating from on- and off-site building interiors, streetlights along PCH, and automobile headlights. There are no streetlights on adjacent nearby roadways, including Morning View Drive, Merritt Drive, Via Cabrillo Avenue, and Clover Heights Avenue. Light originating from the project site accounts

for the majority of the nighttime lighting in the area. However, nighttime lighting levels in the surrounding area vary dependent on the time of night and the school calendar.

The proposed project includes the following general main light/glare sources: exterior building security lighting, parking lot lighting for new parking lots, marquee/sign lighting, bus barn lighting, pool lighting, and photovoltaic (PV) solar panels. The proposed project would not change or modify the restrictions imposed on the Athletic Field lighting (CDP 12-024), or the lighting associated with the 150-space Parking Lot A under the existing CDP (CDP No. A-MAL-13-030).

The proposed outdoor lighting program, including the pathway/walkway lighting, marquee/sign lighting, and exterior security building lighting, will comply with the City of Malibu Dark Sky Ordinance for total site lumen limit, limits to off-site impacts, and light-shielding for parking lot illumination.

The project also includes the replacement and upgrade of the existing 25-meter pool with a new Olympic-sized 50-meter pool. Consistent with the existing use, the pool would be lit for an annual total of 524 hours. The pool lighting would meet the established standards outlined in the Lighting Handbook: Reference and Application (Illuminating Engineering Society of North America (IESNA), 10th Edition to serve the needs of swimmers, divers, lifeguards, instructors, and spectators. Although the pool lighting would meet the industry standard for safety, this upgraded lighting system would likely exceed the City of Malibu Dark Sky Ordinance.

There is a potential for the new marquee signs, pool lighting, campus lighting configuration, and new building surfaces to adversely affect nighttime views in the area and result in substantial glare. Mitigation Measures AES-1 through AES-4 would reduce potential impacts related to an increase in light and glare for the general outdoor lighting program to a level that is less than significant by requiring dimmable lights, equipping security lighting with automatic timers, requiring the use of non-reflective materials for building exteriors, etc. However, to meet the required safety standards, the new pool lighting would likely continue to exceed standards outlined in the City of Malibu Dark Sky Ordinance. Therefore, impacts regarding pool lighting would remain significant and unavoidable.

AIR QUALITY (EIR Section 5.2)

Less than Significant Impacts with Mitigation

The proposed project would elevate concentrations of Toxic Air Contaminants (TACs) in the vicinity of sensitive land uses during construction activities. Construction modeling considered years 2022-2024 for Phase 1 construction activities and years 2024-2026 to represent the worst-case Phase 2 through 4 activities for the most conservative results. To account for construction from 2024 through 2031 under the program-level analysis of Phases 2 through 4, the emissions from the worst-case construction model were applied to Phases 2 and 3 as well as

the two sets of activities for Phase 4. The nearest sensitive receptors to the project site are the onsite students who will be on campus during periods of construction activity and the single-family residence to the northwest on Via Cabrillo Street.

Mitigation Measure AQ-1 which requires the use of off-road construction equipment to meet the United States Environmental Protection Agency's Tier 1 emissions standards, would reduce potential impacts associated with air quality below the South Coast AQMD cancer risk threshold of 10 in a million. Therefore, the proposed project would not expose off-site nor on-site sensitive receptors to substantial concentrations of air pollutant emissions during construction and impacts would be reduced to a level that is less than significant with mitigation. Therefore, no significant unavoidable adverse impacts relating to air quality have been identified.

BIOLOGICAL RESOURCES (EIR SECTION 5.3)

Less than Significant Impacts with Mitigation

One special status reptile has the potential to occur in the project impact area, the San Diegan tiger whiptail. Project implementation would result in the loss of 0.31 acre of potentially suitable habitat types (e.g., California sagebrush scrub, coyote brush – California sagebrush scrub/upland mustards, and riparian herb) for this species. This 0.31 acre would support very small numbers of individuals and the loss is considered very small due to the fragmented and degraded nature of this habitat. These impacts would be considered adverse but not substantial enough to cause regional populations to drop below self-sustaining numbers. Therefore, these impacts are considered less than significant, and no mitigation would be required.

A burrowing owl was incidentally observed to be wintering on the project site in the north-central portion of the site (outside of the project impact area). A potentially suitable burrowing owl habitat occurs in Phase 3, Parking Lot F. Implementation of Phase 3 may directly impact 0.17 of an acre because no other potentially suitable habitat for the burrowing owl exists in the area. Phases 2 and 4 may indirectly impact the burrowing owl if present in an adjacent potentially suitable habitat. Any impacts on burrowing owl would be considered potentially significant. Implementation of Mitigation Measure, BIO-1, which requires adherence to the CDFW Burrowing Owl Mitigation Guidelines, would reduce potential impacts to less than significant. Common raptor species including owls have the potential to nest on the project site. Should an active raptor nest be found on the project site, the loss of an active nest would be considered a violation of the California Fish and Game Code The loss of any active bird or raptor nest would be considered a potentially significant impact. Implementation of Mitigation Measure BIO-2 requiring nesting bird surveys and protection would reduce this impact to a less than significant level.

The western mastiff bat has the potential to occur in the Biological Site Assessment (BSA) for foraging. There is no suitable roosting habitat in the BSA. Construction activities would only occur during daylight hours; therefore, nocturnal foraging would

continue to be available over the project impact area throughout construction and would remain unchanged following completion of the proposed project. There are no impacts on western mastiff bats that would occur with project implementation and mitigation would not be required.

As discussed in the EIR, noise levels in the Survey Area would be expected to increase over present levels during the phased construction and operation of the proposed project. During construction and operation, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and/or denning activities for wildlife species occurring within or adjacent to Project Work Areas. Although final use may slightly increase noise over ambient, it would be less than construction. Wildlife species stressed by noise may disperse from the habitat located near the proposed project. Because the proposed project disturbance areas are limited in extent, this impact is considered adverse but less than significant and no mitigation would be required. However, if raptor species are nesting in the vicinity of the proposed project during construction, they may be temporarily displaced by construction noise. Indirect noise impacts on these species would be considered significant because nesting birds are protected by the California Fish and Game Code. Impacts on active nests would be reduced to a less than significant level with the implementation of Mitigation Measure BIO-2 requiring nesting bird surveys and protection.

Less than Significant Impacts with Mitigation

Approximately 0.04 acre of California sagebrush scrub would be impacted by the proposed project in Phase 2. California sagebrush scrub may be considered locally sensitive due to its ability to support the Federally Threatened coastal California gnatcatcher (Polioptila californica californica). However, the 0.04 acre of California sagebrush scrub in the survey area is isolated and limited in extent rendering it unsuitable to support breeding or foraging gnatcatchers. In addition, the coastal California gnatcatcher does not occur within the vicinity of the BSA and is not expected to occur in the BSA. Therefore, impacts to 0.04 acre of this vegetation type are considered adverse but less than significant and no mitigation would be required.
Approximately 0.24 acre of coyote brush – California sagebrush scrub/upland mustards would be impacted by project implementation in Phase 2. This is a small, isolated patch of degraded scrub habitat with relatively low biological value due to: (1) the low cover of native species and high cover of noxious weeds which are not preferred by wildlife; and (2) distance from healthy native habitat that would support a suite of native wildlife species. Impacts to 0.24 acre of this vegetation type are considered adverse but less than significant and no mitigation would be required.

Approximately 0.03 acre of riparian herb habitat would be impacted by the implementation of the proposed project in Phase 4. Impacts on this vegetation type would be considered adverse but relatively minor because of the isolated nature, extremely limited extent, and the species composition is considered relatively common in the project region. Therefore, impacts on this vegetation type are considered less than significant, and no mitigation would be required.

Approximately 0.29 acre of California sycamore – coast live oak planting would be impacted by project implementation in Phase 2. This vegetation type is intended to be ornamental and therefore, offers much lower biological value than a naturally occurring woodland with mature trees and a healthy understory. Therefore, impacts on this vegetation type are considered less than significant, and no mitigation would be required.

The special status vegetation type that occurs in the BSA, arroyo willow thicket, would not be impacted during project implementation, therefore mitigation would not be required. Impacts on special status vegetation types would be considered potentially significant. Vegetation types in the BSA may change over time. To ensure no special status vegetation types are impacted during the proposed project, Mitigation Measure BIO-3 is included which requires future assessments of vegetation types to ensure conditions remain the same. If impacts to special status vegetation types are anticipated, Mitigation Measure, BIO-4, which requires habitat restoration, would be implemented to ensure impacts are reduced to less than significant.

Phases 1 and 4 of the proposed project include the restoration of the degraded 0.7 acre of drainage and 1.35 acres of upland areas within the ESHA's 50-foot buffer which does not warrant mitigation for any significant impact on a biological resource. Therefore, impacts on the ESHA would be less than significant.

Less than Significant Impacts with Mitigation

As discussed in the EIR, the proposed project would impact a total of 0.033 acre of waters under the jurisdiction of the Regional Water Quality Control Board (RWQCB). Phase 4 of the proposed project would impact a total of 0.033 acre of waters under the jurisdiction of CDFW. No other Phase of the project impacts jurisdictional features. Jurisdictional resources are protected by Sections 401 and 404 of the Clean Water Act (CWA) and by the California Fish and Game Code (Sections 1600 through 1616). Impacts on jurisdictional resources would be significant and would require permits from each of the resource agencies. Implementation of Mitigation Measure BIO-5, which requires the creation of non-wetland jurisdictional waters, the acquisition of a streambed alteration agreement from CDFW, and/or a discharge permit from the RWQCB, and approval of a mitigation plan by the resource agencies and the City of Malibu, would reduce this impact to less than significant.

Less than Significant Impacts with Mitigation

The EIR identified protected tree species that may occur within proximity of the proposed project. Impacts on protected trees may be potentially significant. Implementation of Mitigation Measure BIO-6, which requires the creation of a tree survey map before the commencement of each phase of construction, would reduce any potentially significant impacts to less than significant.

Less than Significant Impacts with Mitigation
The EIR identified protected tree species that may occur within proximity of the proposed project. Impacts on protected trees may be potentially significant. Implementation of Mitigation Measure BIO-6, which requires the creation of a tree survey map before the commencement of each phase of construction, would reduce any potentially significant impacts to less than significant.

CULTURAL RESOURCES (EIR SECTION 5.4)

Less than Significant Impact with Mitigation
A discussion of cultural resources is included in the EIR because project construction activities could disturb previously unidentified archaeological resources. Mitigation measure (CUL-1) has been included which mitigates potential impacts on cultural resources to less than significant.

GEOLOGY/SOILS (SECTION 5.6)

Less than Significant Impacts with Mitigation
Adherence to the recommendations of the Geotechnical Investigation Report prepared for the proposed project to meet Title 24 of the California Code of Regulations (CCR), Title 15 of the City of Malibu's Municipal Code, which adopts Title 26 (Building Code) of Los Angeles County Code, and the seismic safety provisions of the most current requirements of the California Building Code (CBC) and the State Architect would ensure that the proposed project would have a less than significant impact regarding adverse effects of faulting, strong seismic ground shaking, seismic-related ground failure, and landslides.

Adherence to the National Pollutant Discharge Elimination System (NPDES) permit requirements and preparation of the Storm Water Pollution Prevention Plan (SWPPP) prepared for the proposed project, which satisfies the requirements of LIP Section 8.3(J), as well as adherence to the erosion control standards of the most current CBC, would ensure that the proposed project would have a less than significant impact associated with soil erosion and loss of topsoil.

Compliance with all applicable building codes and regulations including the City of Malibu Building Code, the Los Angeles County Building Code, the CBC, and the RWQCB would result in less than significant impacts associated with soil erosion or loss of topsoil.

Less than Significant Impacts with Mitigation
The EIR identified the potential for the proposed project to be constructed on a geologic unit or soil that is unstable or one that would become unstable as a result of the proposed project, and would potentially result in on- or off-site lateral spreading, subsidence, or collapse. Additionally, the proposed project would be located on a site underlain by highly expansive soils.

Compliance with all applicable building codes and regulations including the City of Malibu Building Code, the Los Angeles County Building Code, and the CBC, and implementation of GEO-1 would mitigate potential project impacts associated with the exposure of people or structures to hazards associated with unstable soils to a less than significant level.

The proposed project includes the removal of six existing onsite wastewater treatment systems (OWTSs) and the installation of five OWTSs. The new systems could be located on soils that are not adequate to support septic systems. However, the proposed project would comply with the 2019 CBC and requirements in the site-specific Geotechnical Investigation. Thus, soil conditions at the project site could adequately support the proposed septic tanks. Therefore, impacts would be less than significant.

Less than Significant Impacts with Mitigation
The EIR discussed how the construction of the proposed project would involve ground-disturbing activities in an area of paleontological sensitivity and that impacts are considered potentially significant. However, with the implementation of Mitigation Measure CUL-1, which requires a Qualified Paleontologist to conduct sensitivity training in advance of ground-disturbing activities for each phase and to be retained and available during a ground disturbance, impacts would be less than significant.

HAZARDS/HAZARDOUS MATERIALS (EIR SECTION 5.8)

Less than Significant Impacts with Mitigation
Construction activities may occur during the school year, and therefore all construction staging areas and access locations must be well identified so that access for pick-up/drop-off as well as emergency responders are maintained. The proposed project would implement Mitigation Measure T-1 to ensure that access is sufficiently maintained during construction activities. Implementation of this measure would result in less than significant impacts regarding emergency access and response during construction.

The proposed project would not substantially change the access configurations, and the proposed project would not result in more trips or a change in traffic patterns. The access and configurations of the parking lots would not worsen traffic conditions or emergency access in the study area. Therefore, a full buildout of all phases of the proposed project would not affect the implementation of an emergency responder or evacuation plan, and impacts would be less than significant.

HYDROLOGY/WATER QUALITY (EIR SECTION 5.9)

Less than Significant Impacts with Mitigation
Implementation of the Water Quality Management Plan prepared for the proposed project and implementation of mitigation measure MM4.7-1 would ensure that the

proposed septic system upgrades would not violate or exceed the Los Angeles Regional Water Quality Control Board's anticipated Waste Discharge Requirements for the MMHS site and reduce this impact to a less than significant level.

NOISE (EIR SECTION 5.11)

Significant and Unavoidable (Construction Noise Impacts on Sensitive Receptors)

Two types of short-term noise impacts could occur during each of the four phases of construction: (1) mobile source noise from the transport of workers, material deliveries, and debris and soil haul, and (2) stationary-source noise from the use of construction equipment. Existing uses surrounding the project site would be exposed to construction noise. Since construction activities during all phases have the potential to occur within 100 feet of the nearest receptor property line and exceed the threshold of 80 dBA Leq, this impact would be considered potentially significant. Implementation of Mitigation Measure No. N-1, which requires use of the best noise control tehcniques during construction, would reduce construction equipment-related noise impacts to off-site sensitive receptors. However, due to topography in the area of Phase 4, residences on Via Cabrillo are higher in elevation than proposed Phase 4 construction on the west end, and residences on Morning View Drive are higher in elevation than the proposed bus barn construction; the use of temporary noise barriers would not be as effective in reducing construction noise.

Students would remain on campus during all phases of construction, and there is potential for construction activities during school hours. Accordingly, construction noise could potentially exceed the interior standard of 50 dBA when within 150 feet of an active classroom. Therefore, this impact is considered potentially significant. Implementation of Mitigation Measure No. N-1 would reduce construction equipment-related noise impacts to on-site sensitive receptors to a level of less than significant.

The proposed project includes the relocation of the bus barn from its current location on campus to a District-owned location on the Malibu Equestrian Center. Operational characteristics would be the same as the existing bus barn. Bus testing begins at 6:00 am during school days. Startup testing includes momentary testing of horns and blinkers. Three buses would be in operation on a daily basis, with limited weekend operation. Buses depart the facility at 6:45 am and continuously use the facility until approximately 6:00 pm. Any maintenance, refueling, and washing activities happen at an off-site location, as under current conditions.

The EIR discussed analysis of noise associated with bus testing—including horn, idling, back-up beeps, and air brake discharge—resulted in a noise level of 64 dBA at a distance of 30 feet. The nearest residential property lines to the proposed bus barn are approximately 30 feet to the south and west. Without mitigation, the relocation of the bus barn would exceed the nighttime noise standard of 40 dBA Leq for rural residential receiving uses and would be considered potentially significant.

Implementation of Mitigation Measure No. N-2, which requires bus testing to occur inside the bus barn, would reduce this impact to a level of less than significant.

Less than Significant Impacts with Mitigation

Construction of the proposed project would generate noise levels higher than the established exterior noise limits for the City at both on-site and off-site sensitive receptor locations. However, construction noise can exceed those noise limits as long as it occurs between the hours of 7:00 AM and 7:00 PM on weekdays and between the hours of 8:00 AM and 5:00 PM on Saturday, according to MMC Section 8.24.050. Further, construction-related noise is intermittent in nature and would not generate continuous noise levels above the MMC standards.

Operational noise levels would not exceed the City's exterior standards and the proposed project's operations would not result in a perceptible change in the noise environment as compared to existing conditions. Construction of the proposed project would result in increased groundborne vibration associated with construction activities.

Less than Significant Impacts with Mitigation

Construction of Phase 1 would include the demolition of the existing JCES campus, and construction of Building C and Parking Lots C and D. The existing Parking Lots A and B would be available for student dropoff and pick-up during the construction of Phase 1; however, since the existing JCES parking lot would be demolished, vehicles that use the curbside drop-off area on Morning View Drive adjacent to the school campus would not be able to make a U-turn to head south on Morning View Drive. Drop-off on Morning View Drive would be prohibited, as there are few opportunities to make U-turns southbound on PCH. Additionally, the intersection of Guernsey Avenue at PCH is not signalized and cannot accommodate high traffic volumes on the Guernsey Avenue approach. These changes to circulation could result in increased congestion during pick-up/drop-off times, which result in potentially hazardous conditions and conflicting uses with active school and construction, and therefore potentially significant impacts. Mitigation Measures T-1 and T-2, which require approval by the City Public Works Department, would be implemented during Phase 1 construction activities.

During Phases 2 through 4, the newly constructed drop-off and pick-up areas in Parking Lots C and D would be available, and the school would continue to use Parking Lot B and the new Parking Lots D and E that would be implemented in Phase 1 of the proposed project. Nevertheless, given the likelihood that construction activities would occur during active school periods, impacts related to hazardous circulation conditions would be potentially significant. Mitigation measures T-1 and T-3, which limit potential lane closure along Morning View Drive to summer months, would be implemented during Phases 2 through 4.

The proposed project would include a pedestrian trail system that would connect to a larger system of existing trails around the Equestrian Park and surrounding hills. Pedestrian access to the campus would remain along Morning View Drive with access at the new drop-off area, and Clover Heights Avenue, with access to the athletic fields. Access to the parking areas on the western portion of the project site would be further west and away from the student drop-off area on Morning View Drive. Because of the relocation of the proposed access driveways, the existing location of the crosswalks on Morning View Drive would need to be relocated. Without relocation of existing crosswalks, crossing guards, and related pedestrian safety signage in conjunction with the proposed driveways to provide vehicular access to parking areas and drop-off areas, potentially significant impacts related to hazardous conditions could occur. Implementation of Mitigation Measure T-4, which requires SMMUSD to coordinate with the City Public Works Department to relocate crosswalks, crossings guards, and sitr access signs, would be required to ensure relocated facilities sufficiently address pedestrian safety needs. Mitigation Measures T-1 through T-4 would reduce potential impacts associated with construction-related circulation, hazards, and safety issues to a level that is less than significant.

WILDFIRE (EIR SECTION 5.16)

Less than Significant Impacts with Mitigation

The project site is in a Very High Fire Hazard Severity Zone (VHFHSZ) with a high likelihood of exposure to wildland fire and secondary effects of wildland fires. Project construction activities could result in exacerbated fire risks due to sparks, dry vegetation, and weather, particularly in areas where construction activities are in proximity to surrounding open space areas (i.e., Phases 1, 2, and 4). Given the high potential for wildland fires and associated risks in the project area, construction-related impacts are considered potentially significant. Mitigation Measure W-1, which requires approval of a Construction Fire Protection Plan by LACFD, would ensure fire prevention requirements are in place during all phases of construction activities. Therefore, impacts would be less than significant.

Less than Significant Impacts with Mitigation

Slope creep is a related phenomenon where the soils on and adjacent to fill and natural soil slopes loosen with time and incrementally move downslope due to gravity. A contributing factor at the project site is the presence of expansive soil, which expands and shrinks during wetting and drying cycles. The expanding and shrinking of the soil could cause a ratcheting effect, where soil and relatively light surface improvements, such as concrete slabs, tend to move laterally toward the unconfined slope face during expansion and downward during periods of shrinkage. This would result in a gradual downward and lateral movement of the surficial soils (and surficial improvements). This slope creep could result in slope instability, and impacts would be potentially significant. The proposed project would be required to conform to the recommendations in the preliminary geotechnical evaluation and final geotechnical report for the design and construction of proposed slopes and would be monitored during construction as required by Mitigation Measure GEO-1.

ALTERNATIVES: CEQA Guidelines (Section 15126(a)) state that an EIR must address "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." As described in the Draft EIR, three project alternatives were identified as feasible and analyzed for relative impacts as compared to the proposed project:

- No Project/No Development
- Development of Phases 1 and 2 Only
- Elimination of Parking Lot F

Refer to Chapter 7 of the EIR for a complete discussion of how the alternatives were selected and the relative impacts associated with each alternative.

STAFF FOLLOW-UP: Upon review by the ERB, a staff report with all required findings will be completed and the project will be scheduled for a public hearing before the Planning Commission. The recommendations of the ERB will be incorporated into the Planning Commission agenda report for the proposed project.

ATTACHMENTS:

Distributed to the ERB on the City's ftp site and available for review at City Hall – Planning Department.

1. Summary of Requested Development Standard Modifications
2. Draft Specific Plan
3. Mitigation Monitoring and Reporting Program
4. Department Review Sheets
5. Phase 1 Architectural, Grading and Landscape Plans
6. Fuel Modification Plan (pending review by LACFD)
7. ESHA Restoration Plan
8. Site Specific Studies
    a. Grading Verfication Worksheet
    b. Native Tree Report
    c. Biological Assessment
    d. Biology Section of the EIR
    e. Geology and Soils Reports

EIR and Statement of Overriding Considerations available on the City's website at https://www.malibucity.org/397/Malibu-Middle-High-School-Improvements

Summary of Requested Development Standard Modifications				
	Specific Plan Specifications		Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:				
Maximum Building Height[1]	Building J: Gym/PE	45 feet	Section 3.9.A1a of LIP and Section 17.40.110 A.1.a. of MC: Structures shall not exceed a maximum height of 18 feet above natural or finished grade, except for chimneys, rooftop antenna, and light standards. The maximum height of the structure may be increased up to 28 feet for a flat or pitched roof if approved through a site plan review pursuant to Section 13.27 of the Malibu LIP.	Gymnasiums must meet NFHS minimum interior height requirement of 23 feet clear from floor to ceiling for CIF Volleyball, the Specific Plan plans for 25' for adequate tolerance in design and construction and an additional 10' for long span structure and 5' for roof slope and parapet.
	Building H: Theater/ Performing Arts	45 feet		High School Performing Arts facilities require a vertical stage opening of 25' (to the bottom of the proscenium). In addition, the long span structure and tension lighting grid ceiling system will add 15 feet above the stage opening plus 5' for roof slope and parapet. This equates to a total height of 45 feet, allowing for the school to produce the types of theatrical performances expected in a high school theater curriculum.
	Building D: Middle School Gym/MPR	36 feet		Gymnasiums must meet the National Federation of State High School Association, (NFHS) minimum interior height

Summary of Requested Development Standard Modifications				
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Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:				
				requirement of 23 feet clear from floor to ceiling for competitive Volleyball, the Specific Plan plans for 24' for adequate tolerance in design and construction.
	Building C: High School Building	36 feet (Fume Hood 41 feet)		Building C north wing, second floor contains high bay/ high volume spaces to house educational uses. These high bay spaces are required to provide the students with adequate functioning spaces conducive to 21st Century learning as defined in the Campus Plan Education Specifications. The Student Union is programmed with a central space of 4,000 sf space. The interactive, collaborative nature of this space requires an appropriate high-volume ceiling. A high school Library, based on the District's Educational specifications, require a variety of spaces within the Library, including a large 3,000 sf area that can double as Staff Development space.

Summary of Requested Development Standard Modifications				
	Specific Plan Specifications		Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:				
Rooftop Equipment Height	Building C: High School Building	Science Labs require exhaust hoods with stacks placed at a minimum of 10 feet above the roof surface.	Section 3.9A.1b of LIP and Section 17.40.110 A.1.b. of MC: Roof-mounted mechanical equipment shall be integrated into the roof design, screened, and may project no more than two feet higher than the structure roof height (screens included) if approved through a site plan review pursuant to Section 13.27 of the Malibu LIP.	Required rooftop equipment will exceed the 2' maximum height above the roof plane for exhaust hoods over Science Labs, as required by the American National Standard for Laboratory Ventilation ANSI Z9.5 as well as the National Fire Protection Association Standard NFPA 45, Chapter 7, section 7.2.
	Building C: High School Building	Parapets and or Guardrails that project up to 42 inches in height above the surface of the roof.		Roof top will be occupied by students to support outdoor learning, including visual observation to ESHA. With student access to the roof deck, higher parapets or Guards are required to be 42" minimum height per California Building Code, Part 2, Volume 1, Chapter 10, section 1015.

Summary of Requested Development Standard Modifications			
	Specific Plan Specifications	Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:			
Lighting	Nighttime pool lighting will be installed.	Section 3.9.A1d of the LIP and Section 17.40.110 A.1.d. of MC: Sports field lighting shall be limited to the main sports field at Malibu High School and subject to the standards of LIP Sections 4.6.2 and 6.5.G.	Lighting will be installed to meet the requirements of a Class II facility as identified by the Illuminating Engineering Society of North America (IESNA) (10th ed.), where lighting should be a minimum of 50 foot-candles over the pool and 20 foot-candles over the deck, as measured at the water level. Consistent with IESNA recommendations, lighting would also be provided within the pool basin, with the recommended luminance of 15 candelas per square foot (161 candelas per square meter). When the pool is not in use, accessible paths, including along the pool deck, would be with a minimum of 2 foot candles until lights are turned off campus-wide. By meeting these standards, the pool lighting would also meet the requirements of California Building Code § 3115B.1
Signage	Two new 15'6" x 7'6" electronic marquee signs, with a 10'x4' LED Display	Section 3.15.3.J of the LIP ad Section 17.52.040.J.of the MC:	Marquee signs for High School and Middle School are required by the District for proper

Summary of Requested Development Standard Modifications			
	Specific Plan Specifications	Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:			
	Screen. One sign each at the Middle and High schools.	Except for those signs allowed under the provisions of Section 3.15.4 (E) of the Malibu LIP, "Special permits," the following signs are prohibited: Automatic changing signs or electronic message center signs, except for public service, time, and temperature	communications with the Students/ Community. Marquee signs serve a multitude of communication needs including emergency and safety communications.
Setback	The Specific Plan will remove existing parking and drive aisles and maintain a 50-foot buffer from ESHA with the exception of a meandering deconstructed granite walking path adjacent to the ESHA for instructional stations and parking. All new buildings will be set back 100-feet.	Section 4.6 of the LIP: New development adjacent to the riparian habitats shall provide native vegetation buffer areas of no less than 100 feet to serve as transitional habitat and provide distance and physical barriers to human intrusion. Buffers shall be of a sufficient size to ensure the biological integrity and preservation of the habitat they are designed to protect. Vegetation removal, vegetation thinning, or planting of non-native or invasive vegetation shall not be permitted within buffers except	The current District development including the vacated Juan Cabrillo ES, District Bus Barn facilities, parking lots, drive aisles and fencing/ site structures extend up to the edge of the ESHA and in some instances into the ESHA, with no set back.

Summary of Requested Development Standard Modifications			
	Specific Plan Specifications	Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:			
		as provided in Section 4.6.1 (E) or (F) of the Malibu LIP.	
Maximum Grading Quantity	The Specific Plan, as shown in Table 11, will exceed the grading limitations.	Section 8.3.B. of the LIP and Section 17.40.110 A.4.a of MC: Maximum Quantity of Grading. Notwithstanding any other provisions of the Malibu LIP, grading per lot of residential development, per acre of commercial development, or per acre of institutional development (total cut and fill) is limited to 1,000 cubic yards (per items a, b, c, and d).	Because of the topography of the site, and the need to create large terraces for student access, and the overall size of individual school buildings which are larger than most homes require the ability to cut/fill more than 1,000 cubic yards.,
Maximum Height of Cuts and Fills	Certain buildings may serve as a retaining wall.	Section 8.3.C of the LIP Section 17.40.110 A.4.b of MC: Maximum Height of Cuts and Fills with Retaining Walls. 6 feet in height for any one wall, or 12 feet for any combination of walls, where a minimum 3-foot separation exists between walls, except single cuts up to 12 feet in height which are an integral part of the structure are permitted. Retaining walls	Each bldg. will have its own site-specific geotechnical report that determines individual needs. Because of the topography of the site, and the need to create large terraces, some of the buildings (Bldg. C for example) will serve as a retaining wall and may be over 12 feet in height at certain locations.

Summary of Requested Development Standard Modifications			
	Specific Plan Specifications	Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:			
		shall be designed with smooth, continuous lines that conform to the topography.	

Source: SMMUSD 2021; Malibu 2002

[1] All other buildings will have a maximum height of 28 feet.

Malibu Middle and High School Campus

Draft Specific Plan

January 2022





Prepared For:
Santa Monica-Malibu Unified School District
1651 16th St.
Santa Monica, CA 90404

Prepared By:
PLACEWORKS

ATTACHMENT 2

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MMHS CAMPUS SPECIFIC PLAN

1.0 Introduction

The Santa Monica-Malibu Unified School District (SMMUSD or District) is in the city of Santa Monica in Los Angeles County and serves both coastal communities of Santa Monica and Malibu. SMMUSD serves approximately 11,000 students with sixteen school sites including: nine elementary schools, three middle schools, two comprehensive high schools, a continuation high school, and a K-8 alternative school. In the City of Malibu, the District operates two elementary schools, one middle school and one comprehensive high school. The SMMUSD mission is: "Extraordinary achievement for all students while simultaneously closing the achievement gap."

This Specific Plan addresses needed improvements at the Malibu Middle and High School (MMHS) which incorporates the adjacent Juan Cabrillo Elementary School campus and other adjacent undeveloped District-owned property as identified in the 2019 Campus Plan.

Malibu Middle and High School is a public secondary school in Malibu, California, serving grades 6-12. The school is approximately 0.25 miles from the Pacific Ocean and Zuma Beach. The campus is on land originally part of Juan Cabrillo Elementary, which was partitioned in 1963 to create Malibu Park Junior High School. In 1992, the District converted the Malibu Park Junior High School campus into the present combined middle school/high school. The SMMUSD property consists of approximately 87 acres over nine parcels that includes the existing Malibu Equestrian Park in the eastern part of the property, the existing MMHS campus in the center, and the former Juan Cabrillo Elementary School (JCES) campus in the west. The east side of the campus is adjacent to Malibu Equestrian Park, which is on District owned land. The west edge borders an Environmentally Sensitive Habitat Area (ESHA). The campus slopes toward the Pacific Ocean and is surrounded by single-family residences.

A new gymnasium and 2-story classroom building were added in 2002. In the last 15 years, three bond measures have passed and utilized to modernize and build new buildings and athletic fields., including the newly completed Administration/Library (A/B) and the 2-story Classroom Building (E).

The school has many partnerships with the City of Malibu, Pepperdine University, and the Boys & Girls Club. The school was recognized as a California Distinguished School in 2003. The school's mission is "to be a collaborative community that respects individuals, sets high expectations, encourages critical thinking, and fosters a passion for learning and creative expression." The school has a strong swim program, and the pool is used all day, every day by students and the community. The school also has a strong marine and environmental sciences program as well as visual and performing arts programs. Given the unique campus organization, middle school students are given the opportunity to participate in some high school electives.

1.1 School Design Evolution

In 1994, California Department of Education (CDE) formalized regulations governing standards on the design and construction of new school facilities. Included are requirements for the submittal of educational specifications (Facility Standards/ Design Guidelines)—see California Code of Regulations, Title 5, Section 14034. The requirements are delineated in the Education Code Section 39101 (c) and California Code of Regulations, Title 5, Section 14030 (a). Specific school design standards are contained in California Code of Regulations, Title 5, Section 14001, 14010 and 14030.

In 2009, CDE added a Plan Summary form for those projects applying for new construction funds from the State Allocation Board for a new school or additions to an existing school. In July 2010, all Educational Specifications (Facility Standards/ Design Guidelines) were required to be approved by the district's governing Board and submitted to CDE as part of any application for funding.

There is a recognition at the State level that traditional school design requires re-visioning. There is also acknowledgment that the Title 5 Education Code may restrict the new form that school designs may take to support 21st Century learners. CDE's requirement for the Plan Summary Form, provided by the local education agency, allows for dialogue about what is needed to support educational programs for today and tomorrow's learners. Ultimately the development of a lasting and sustainable vision that supports the goals of the District's educational program, depends upon a well thought out Educational Vision.

1.2 Development of the Campus Plan

With a history of partnership and close ties with the community, the District conducted a far-reaching stakeholder engagement process that included teachers, administrative staff, students, parents, community surveys, community meetings, and focused interviews in order to develop the Malibu Middle and High School Campus Plan (Campus Plan). The overall objective of the Campus Plan was to align education program goal with proposed facility improvements.

- Facilities District Advisory Committee (FDAC): The FDAC provided the Board of Education and District staff with the community's perspective regarding the use of bond funds for school site construction. This is a Board appointed committee and subject to the Brown Act. For the campus planning efforts, meetings were held to give process updates, seek input on the development of campus plan options, and confirm the final proposed campus plan.
- District Steering Committee (DSC): The DSC steered and coordinated the process and ensured that input from a range of stakeholders would be optimized. In addition, through regular meetings, the team was responsible for reviewing outcomes from the various groups and providing input on development of the Campus Plan and estimated budget to guide the campus planning process.
- Campus Planning Committee (CPC): The CPC was comprised of a diverse group of District Leadership, school site representatives, students, parents, and local community stakeholders. Meetings were held to discuss broad visioning concepts, develop a program, review, and provide input on the development of campus plan options, and confirm the final proposed campus plan.
- Program Focus Groups: Sub-committee meetings were held on an as-needed basis to focus on programs, including overarching topics such as Athletics and Physical Education, Special Education, and Visual and Performing Arts. Additionally, focused interviews of key District staff for Maintenance and Operations, Food and Nutrition Services, Transportation Management, and Information Services, took place to determine facilities needs within their areas of expertise.
- Community Focus Groups: Sub-committee meetings were held on an as-needed basis to seek input, answer questions and update community groups on the campus planning process.
- Community Outreach: In early late April and early May 2019, two Town Hall Meetings were held to get additional input from stakeholders. Parents and community members were invited to learn about the process, ask questions, review campus plan options, and provide input to the planning team.

After analyzing information gathered during the site walk along with various surveys and interviews on the condition of the facilities and program needs from January 2019 through late-May 2019, multiple meetings were held to review draft Campus Plan options. Stakeholders were selected to serve on a Campus Planning Committee to provide input on the proposed modifications and enhancements. Based on the feedback provided, a final proposed Campus Plan was created, which formed the basis of this Specific Plan.

The purpose of the Campus Plan was to define the long-range facility goals that support District educational goals. It is strategic in nature and illustrates the vision for the campus over the next 10 to 15 years. The plan shows a general path of how to get to the goal without providing specific design solutions and was a tool in establishing estimated budgets. The budget included in the Campus Plan is intended to be used as a "tool kit" by the District for planning purposes, to run program phasing scenarios as funding becomes available. This budget ultimately aids in decision making so that school facility improvements move toward a common, coordinated vision.

1.3 Level of Detail

Since implementation of the Specific Plan will occur over multiple phases, it is important to design individual projects with the overall Specific Plan in mind so that future projects may still be realized. Each project should have the ability to stand on its own without negatively impacting future projects and current school operations. As projects develop over time, the Specific Plan will be revisited and may be updated to reflect the changing needs of the District with sensitivity to changing economics and demographics. This updating process is recommended by the California Department of Education every 3 to 5 years.

Site Design Observation

During preparation of the Specific Plan, the following two observations helped guide design.

- The City of Malibu's Local Coastal Program ESHA Overlay Map 2 and United States Geological Survey (USGS) Point Dume California 7.5-minute topographic quadrangle map shows an unnamed stream along the western edge of the campus. Riparian areas within developed areas are designated as ESHA. The City of Malibu maintains policies to protect environmentally sensitive habitat areas. Developments must be designed to minimize impacts to the ESHA. A development buffer between the limits of the ESHA will be required and is typically 100' minimum. The unnamed stream is also subject to the Clean Water Act Section 404. Adequate setbacks are required to protect the ESHA from increases in water. Proposed septic systems should be designed and sited to avoid impacts to the ESHA. The existing Campus is immediately adjacent to the ESHA and development of a 100-foot setback would cut significantly into buildings, parking, and accessways that are needed for efficient use of the site.
- The City of Malibu municipal code and Local Coastal Program (LCP) have specific requirements under institutional development standards, that affect development. A few key requirements are, there is a "maximum height of eighteen (18) feet above natural or finished grade, whichever results in a lower building height, except for chimneys, rooftop antenna, and light standards. Modern classroom design requires additional height to allow higher interior ceiling heights for ventilation, natural light, and sound attenuation. Additionally, in order to meet California Scholastic Federation (CIF) athletic requirements, gymnasiums must reach higher interior ceiling heights, particularly with regards to volleyball. The exterior height increase is needed to allow required ventilation equipment and CIF requirements. The director may issue a development permit, pursuant to the site plan review process of this title, to allow structure height up to twenty-eight (28) feet for flat or pitched roofs." In addition, "in no event shall the maximum number of stories above grade be greater than two." And front yard setbacks shall be ten (10) feet from the street easement." The City height limit for structures is in

conflict with school building design, and while the City's municipal code allows for Planning Commission approval of buildings, the City pointed out that having to complete this entitlement process for each building over the next 10 – 15 years would be cumbersome for both the District and the City.

1.4 Specific Plan

As the design concepts in the Specific Plan are set to be developed in several phases over a long period of time, the City recommended preparation of a specific plan so that a consistent set of development standards could be adopted. Once adopted, the standards in the specific plan would become the regulations against which later phases of the project would be reviewed by the City. The Malibu Middle and High School Campus Specific Plan establishes the development standards and plan for the Malibu Middle and High School (MMHS) Campus over the next 10 to 15 years. The existing MMHS campus was constructed as Malibu Park Junior High School beginning in 1963, and in 1992 the school was converted for use as a high school. The Project Site is situated on three of nine parcels: Assessor's Parcel Numbers (APN) 4469-017-900 (40.06 acres), 4469-018-900 (9.4 acres), and 4459-018-904 (2.57 acres). The total acreage of the Project Site is 52.03 acres.

Apart from the recently completed Buildings A/B and E, many of the existing buildings no longer meet the District's needs to support 21st century learning, including technology improvements and flexible classrooms that allow for multiple learning modalities. This Specific Plan would result in the demolition of 18 existing buildings on the combined campuses; with only the existing athletic fields, and the recently completed Buildings A/B and E on the MMHS campus would remain, and the construction a new campus with dedicated spaces for Middle and High School. This Specific Plan would result in 32 classrooms and 8 labs and a total of 173,595 square feet of new building space, providing the MMHS campus with a total of 47 classrooms and 12 labs and a total of 222,425 square feet of building space. Table 1, *Existing and Proposed Floor Area Ratio (FAR)*, shows the existing and proposed floor area ratio (FAR) of the project.

Table 1 Existing and Proposed Floor Area Ratios (FAR)

Site	Acres	Existing		Proposed	
		Building Square Feet	FAR	Building Square Feet	FAR
Merged High School and Middle School[1]	40.06	203,734	0.095	222,425	0.103
Proposed Bus Barn	2.57	1,500	0.013	10,500	0.097
Maximum Allowable FAR[2]			0.150		0.150

[1] Merger proposed as part of this Specific Plan.

[2] Section 17.40.110.3.c. Malibu Municipal Code.

Development of the MMHS is subject to the City of Malibu Development Code and LCP that includes the City's zoning and development requirements. Because of their specialized educational functions, the design of some of the buildings within the Specific Plan area would exceed the current zoning requirements and would require individual variances to be built. To avoid the need for multiple variances, the City recommended preparation of this Specific Plan that would establish the vision of the District and adopt development standards specific to the MMHS campus. The MMHS Campus Specific Plan is intended to upgrade and enhance both campus structures and facilities to meet the District's Education Specifications and better accommodate the student population. While the Specific Plan will upgrade the MMHS campus, it does not allow for an increase in the maximum student population.

While this Specific Plan reflects the anticipated buildout condition of the MMHS campus, only Phase 1 of the Plan is designed and funded for construction. Construction of subsequent Phases will require additional financial resources before they can proceed. The Specific Plan relies on established City of Malibu land use and zoning regulations and procedures and provides development standards for the MMHS Campus Specific Plan. Both the City of Malibu Municipal Code and Local Coastal Plan (LCP) contain provisions for discretionary site plan review. The District anticipates that implementation of subsequent phases will be reviewed by the City for approval and compared to this Specific Plan and Environmental Impact Report for consistency.

MMHS Campus Specific Plan Organization

This Specific Plan consists of eight chapters, as described below.

- **Chapter 1: Introduction.** Covers the overview and purpose of the Specific Plan.
- **Chapter 2: MMHS Campus Specific Plan Objectives.** Outlines the project objectives of the Specific Plan.
- **Chapter 3: Background and Context.** Provides background of the project location and overview of existing conditions.
- **Chapter 4: MMHS Campus Specific Plan Facilities and Phasing.** Provides details on project development and phasing.
- **Chapter 5: Development Standards.** Identifies standards such as building heights, setbacks, design standards for signs, and landscaping.
- **Chapter 6: Circulation, Mobility, & Parking.** Outlines site access, parking, and mobility improvements.
- **Chapter 7: Infrastructure.** Focuses on the major infrastructure systems including storm drain, sewer, water, lighting, and energy.
- **Chapter 8: Administration and Authority.** Provides the process for project approvals, summary of other state, regional, and local plans and programs related to this Specific Plan, review and approval process, and environmental review.

2.0 MMHS Campus Specific Plan Objectives

The following objectives are developed for the MMHS Campus Specific Plan:

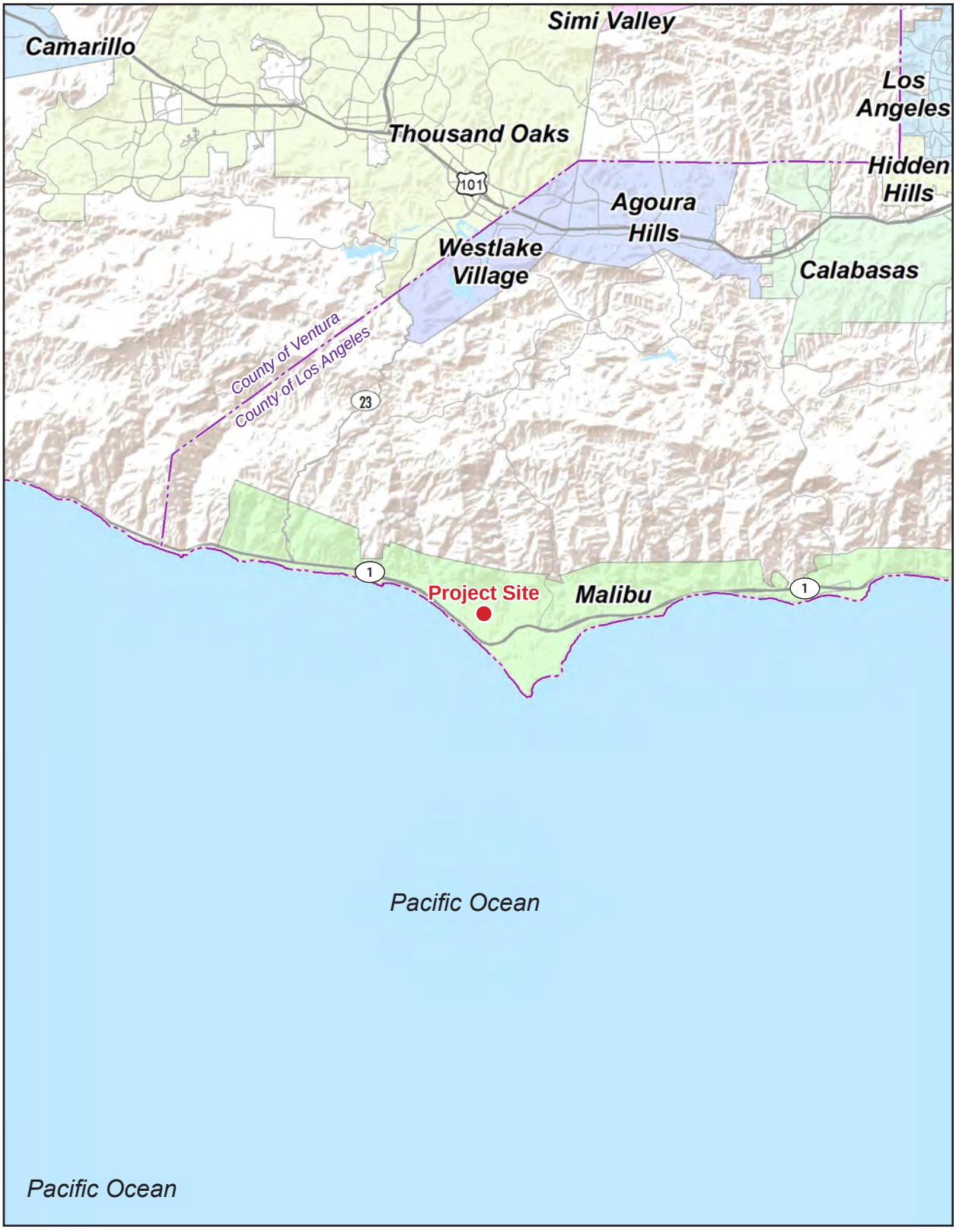
1. Create unique and separate identities for the Malibu Middle School and Malibu High School campuses.
2. Advance educational facilities to support 21st Century learning and properly support the projected enrollment.
3. Improve learning by replacing undersized and inflexible facilities with larger, functional flexible spaces that accommodate modern, diverse learning styles and allow for variable uses.
4. Provide enhanced, modern, and functional support spaces, such as libraries, cafeteria, labs, maker spaces, and other student services, that promote whole child development.
5. Improve the arts and athletic facilities in support of both the school and the community's educational, cultural, and recreational enhancement.
6. Reorganize open space and foster intercampus circulation.
7. Improve access, circulation, and drop-off and pickup, and increase on-campus parking in a manner that improves pedestrian and vehicle safety.
8. Respect the natural environment by developing a campus that is of high design, and complementary to the natural landscape and that contributes to the high scenic quality of the area.
9. Adopt development standards for the MMHS allowing for the educational design requirements of many of the buildings.
10. Increase District resiliency, protect and maximize the learning environment, and maximize energy and operational savings through a photovoltaic solar array and battery backup system.
11. Remove hazardous buildings and structures.

3.0 Background and Context

3.1 Project Location

The Specific Plan area includes the entirety of the SMMUSD property that consists of the existing Malibu Equestrian Park in the eastern portion of the property, the existing MMHS campus in the center of the property, and the former Juan Cabrillo Elementary School (JCES) campus in the western portion of the property. MMHS is located at 30215 Morning View Drive (Assessor's Parcel Map Numbers 4469-017-900, 4469-018-900, 4469-018-901, 4469-018-902, 4469-018-903, 4469-018-904, 4469-019-900, 4469-019-901, 4469-019-902 (9 parcels)), in the City of Malibu, Los Angeles County, California (Figure 1, *Regional Location*). This Specific Plan would be developed within the existing MMHS campus and the former JCES campus. The Plan Area is set amid rolling hills, and its buildings and athletic fields are terraced into the hillside setting. The Plan Area is approximately 0.25 miles northeast of both the Pacific Coast Highway (PCH) and Zuma Beach, and bounded by Merritt Drive to the east, Via Cabrillo Street to the west, and Morning View Drive to the south. Single-family homes border the Plan Area to the north (Figure 2, *Local Vicinity*, Figure 3, *Aerial Photograph*, and Figure 4, *Existing Zoning Map*).

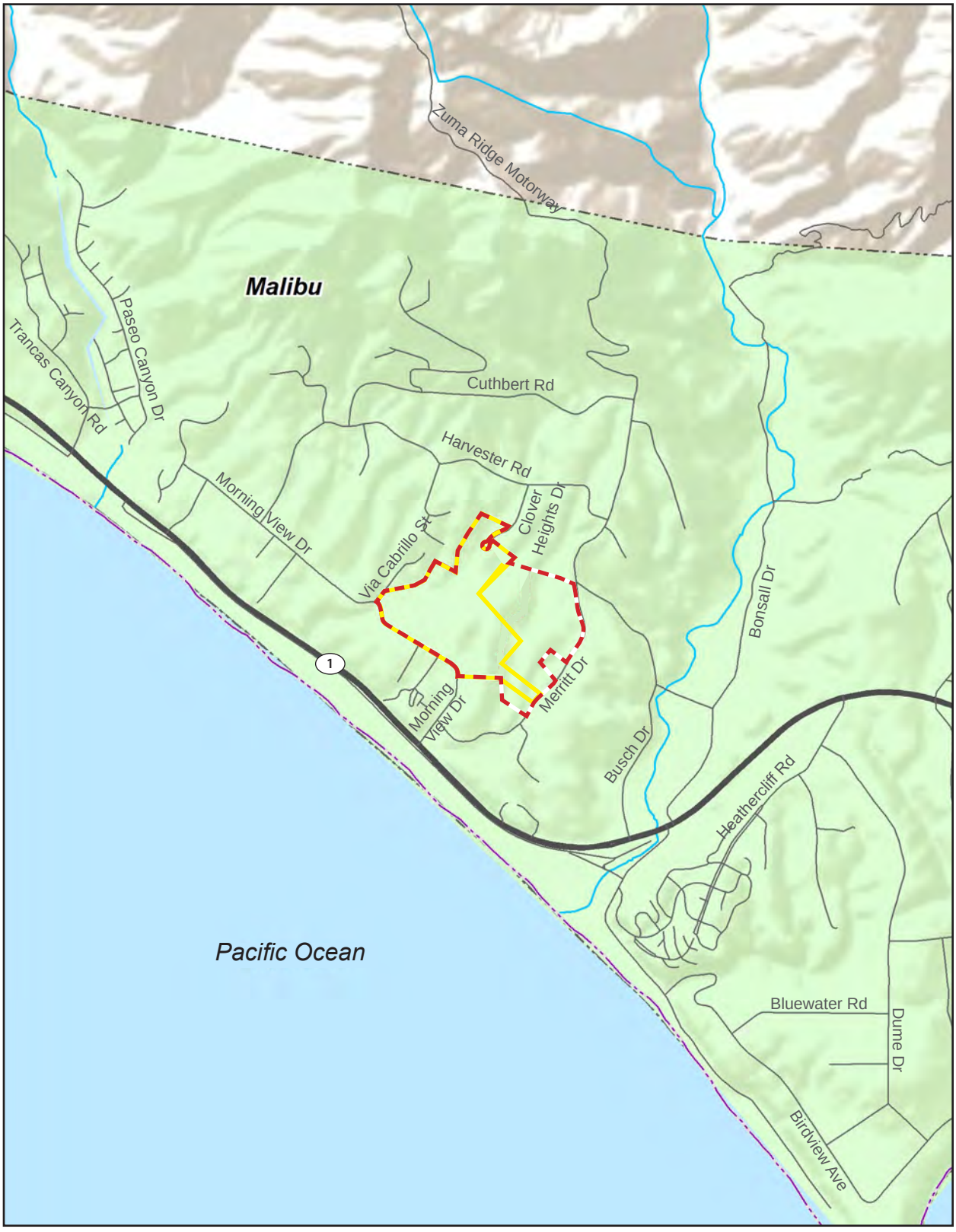
Figure 1 Regional Location



0 3
Scale (Miles)

Note: Unincorporated county areas are shown in white.
Source: ESRI, 2020

Figure 2 Local Vicinity



Source: ESRI, 2020 Note: Unincorporated county areas are shown in white.

Figure 3 Aerial Photograph



District Owned Property

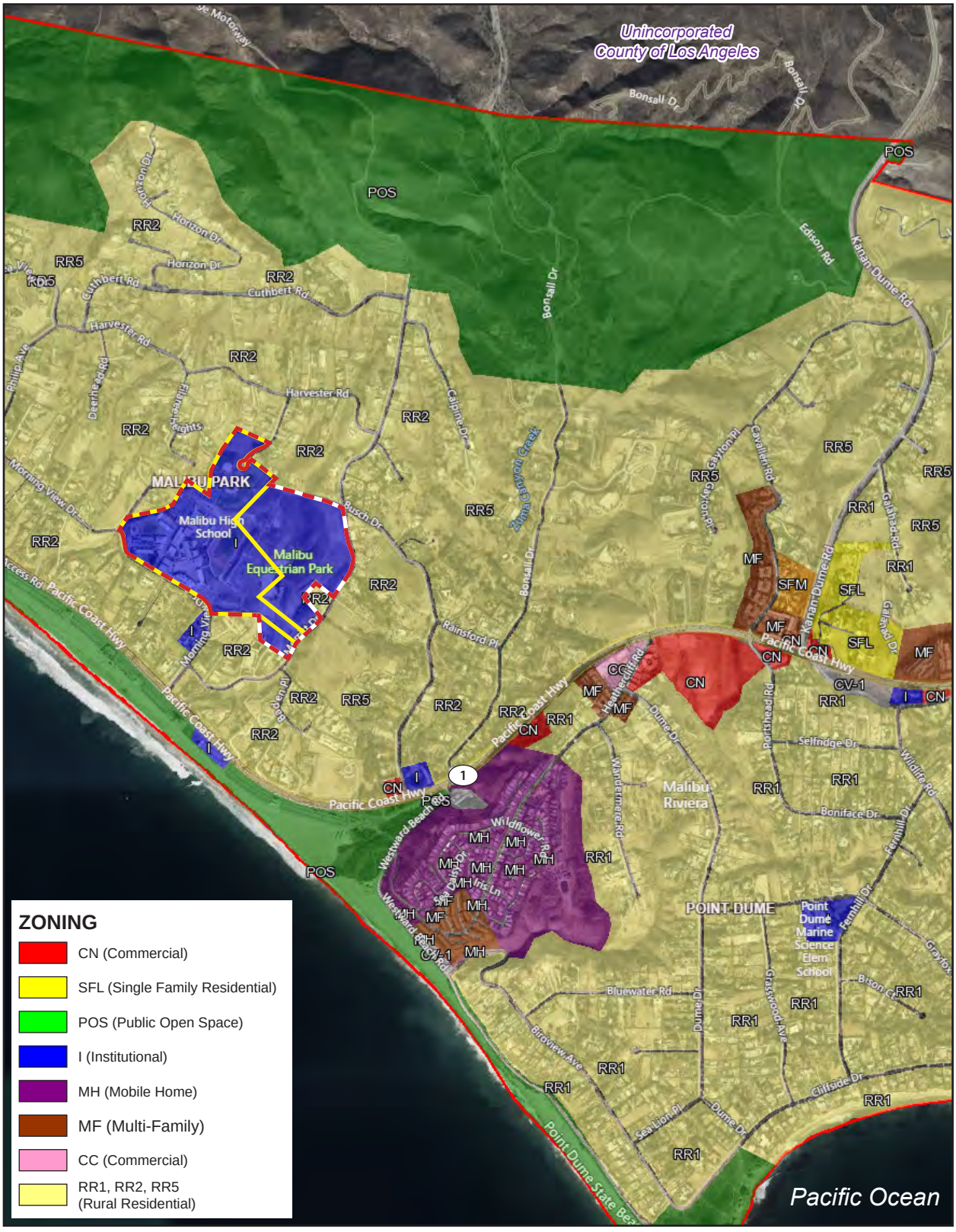
Project Boundary

Parcel Lines
(Note: Some parcel lines are hidden underneath District Owned Property and Project Boundary lines)

0 800
Scale (Feet)

Source: Nearmap, 2020

Figure 4 Zoning Map



Source: City of Malibu, 2021

3.2 Existing Conditions

Existing Land Use

The Plan Area is located within the Zuma Beach area in the Malibu Park neighborhood of the City of Malibu. As shown in Table 2, *Existing Assessor's Parcel Map Numbers in the Plan Area*, the approximately 87-acre Plan Area comprises the existing MMHS campus, the former JCES campus, and Malibu Equestrian Park. As part of this Specific Plan, the District will merge two parcels (4469-017-900, 4469-018-903) into a single parcel that will total 49.06 acres as shown in Appendix A. The combined former JCES and MMHS campus contain a total of approximately 50 acres with 222,425 square feet of developed structures as well as student areas, athletic fields, and parking areas. The Bus Barn will be relocated to the Equestrian Park as part of Phase 4.

Table 2 Existing Assessor's Parcel Map Numbers in the Plan Area

APN Number	Size
4469-017-900 To Be Merged	40.06
4469-018-900	2.49
4469-018-901	2.44
4469-018-902	2.67
4469-018-903 To Be Merged	9.40
4469-018-904 Equestrian Park (to Include Bus Barn in Phase 4)	2.57
4469-019-900	4.05
4469-019-901	5.54
4469-019-902	17.47
Total	**86.69**

Source: Los Angeles County Department of Regional Planning 2020

Former JCES Campus

The former JCES campus covers approximately six acres and is on the western end of the Plan Area to the north of Morning View Drive, west of the MMHS campus. JCES formerly served elementary school grades K-5. As part of SMMUSD's wider Malibu Schools Alignment Project, the JCES student population combined with the Point Dume Marine Science School student population and moved to the Point Dume Marine Science School campus, renamed Malibu Elementary School, at the beginning of the 2019-20 school year. Currently, middle school students utilize the portable classrooms, and Boys & Girls Club utilizes the former library as the Wellness Center., No other JCES rooms are currently being used. Figure 5, *Existing MMHS Campus Buildings and Facilities*, shows the former JCES campus buildings.

MMHS Campus

The MMHS campus covers approximately 34 acres of the overall District property and operates as a sixth- through twelfth-grade public school with a 2018-19 enrollment of 939 students and 134 staff. Presently, the MMHS campus has 60 classrooms (including 12 portable classrooms); a library, auditorium, and administrative offices; an athletic field, 2 gymnasiums, a pool, 9 basketball courts, and 4 tennis courts; and parking for 282 vehicles in three parking

lots. Additionally, the recently constructed Buildings A/B and E would remain, with no work identified for the Specific Plan. Figure 5 shows the MMHS campus buildings.

Site Access, Circulation, and Parking

The Specific Plan area can be accessed from Morning View Drive, approximately 0.3 miles northeast of the intersection of Morning View Drive and PCH and 0.9 miles southeast of the intersection of Guernsey Avenue and PCH. Morning View Drive is a narrow, two-lane, local roadway with an open drainage system that provides direct access to single-family homes in the area as well as to the existing MMHS and former JCES campuses and the Malibu Equestrian Park. Regional access to the Plan Area is provided via PCH.

There are currently two main points of vehicular entry into the MMHS and former JCES campuses. The first entry is along the eastern edge of the campus from Morning View Drive. The second point of entry is at the access road between the former JCES campus and the MMHS campus. This entry is a service access point and provides access to the Bus Barn, Maintenance and Operations Warehouse, and Student Parking Lot A. There are currently five parking lots with a total of 375 parking spaces.

Student drop-off/pick-up for the Middle School currently occurs in Parking Lot E (150-Space Parking Lot), while drop-off/pick-up for the High School Students occurs in the JCES Parking Lot. Sidewalks are provided on both sides of Morning View Drive from PCH north to the western end of the former JCES campus. There are currently three crosswalks along Morning View Drive that provide access to the former JCES and MMHS campuses from the south side of the street. A crossing guard staffs the crosswalk in front of former JCES during the AM drop-off and PM pick-up peak periods. No parking is allowed along Morning View Drive.

Site Topography

The Plan Area is situated on the southern flanks of the western portion of the Santa Monica Mountains. Maximum topographic relief on-site is approximately 94 feet, with elevations ranging from 86 to 180 feet above mean sea level. The campus consists of several near-level pad areas with generally ascending slopes to the north and descending slopes to the PCH to the south. On the MMHS campus, the street-level pad contains the recently constructed MMHS administration, library, and classroom buildings (Buildings A/B); the under-construction Lower Parking Lot; and an outdoor courtyard, cafeteria, and auditorium. On the former JCES campus, the pad contains the administration building, the kindergarten classroom, the special education classrooms, and the JCES Parking Lot. The next pad to the northwest contains the newer and old gymnasiums, outdoor basketball courts and swimming pool, the Boys & Girls Club of Malibu facility, and the Bus Barn and Parking Lot A on the MMHS campus, as well as the multipurpose room, the library, and three educational buildings on the former JCES campus. The third pad contains the Main Sports Field and the 150-Space Parking Lot. The fourth contains the tennis courts and baseball diamonds. The fifth and highest pad contains Parking Lot A (the 150-Space Parking Lot). Each terrace is accessible via stairs and handicap accessible ramps. From street level on Morning View Drive, views of the development on the elevated terraces are limited.

Environmentally Sensitive Habitat Area

There is very little natural vegetation on-site, consisting primarily of grasses, ivy, brush, shrubs, and scattered ornamental and native trees. The City of Malibu's Environmentally Sensitive Habitat Area (ESHA) Map shows a stream approximately 400 feet northwest of the campus. The stream consists of an underground pipe from Floris Heights Road that flows under the school property and daylights into a natural streambed along the western boundary of the school property. The stream extends for approximately 1,088 feet and varies between

approximately 24 and 85 feet wide. the stream course is deeply incised with steep banks. The top of the southeast bank extends significantly higher than the northwest bank because it is located immediately adjacent to the campus.

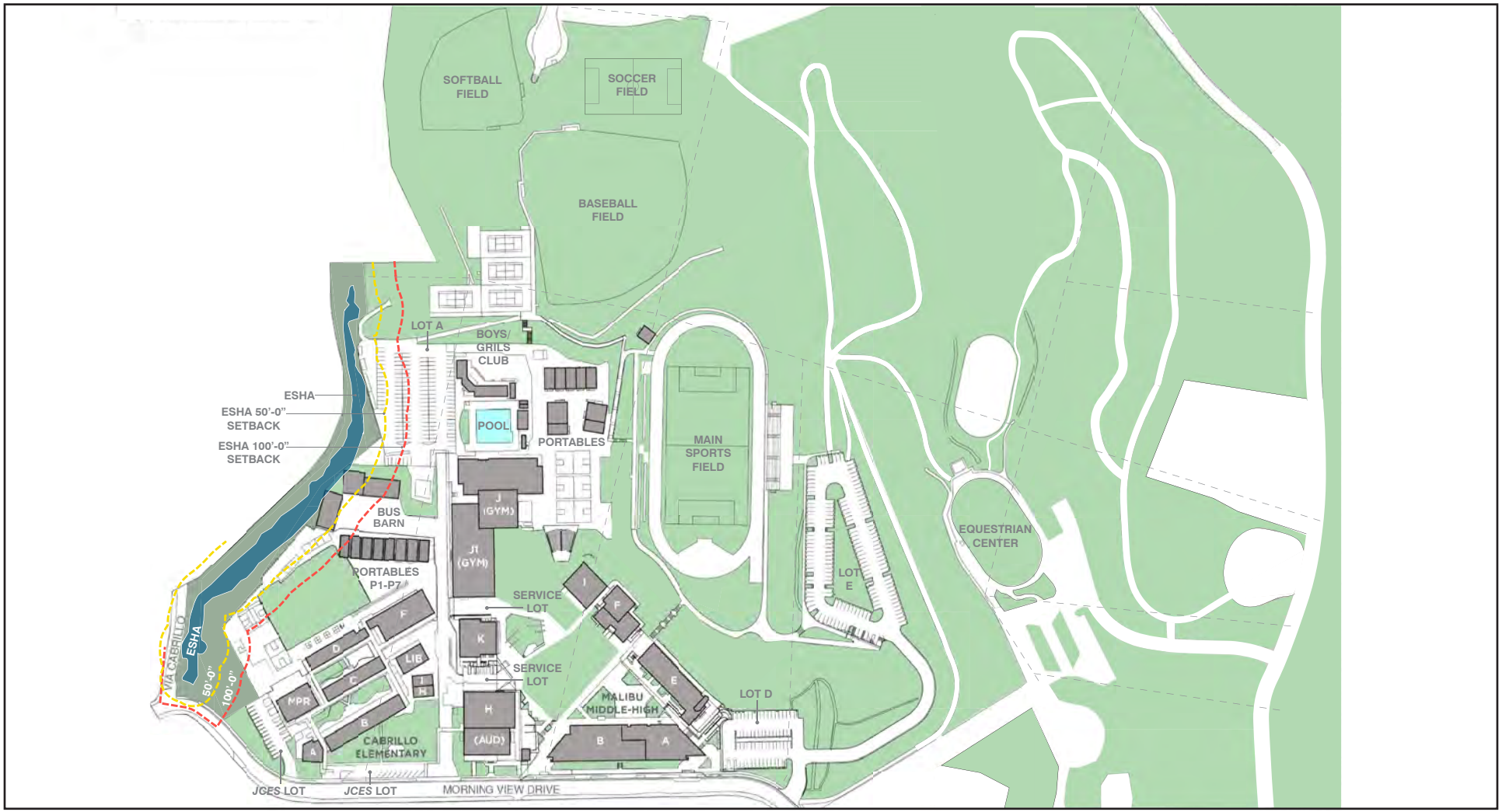
The City of Malibu maintains policies to protect environmentally sensitive habitat areas within city limits, and new developments must be sited and designed to minimize impacts to the ESHA.

Section 4.6.1(A) of the LIP provides for buffer around native stream vegetation:

> New development shall provide a buffer of no less than 100 feet in width from the outer edge of the canopy of riparian vegetation. Where riparian vegetation is not present, the buffer shall be measured from the outer edge of the bank of the subject stream.

Portions of the campus are developed within the 100-foot buffer, including the Bus Barn, the tennis courts, and portions of the former JCES yard. However, all these structures were developed prior to the certification of the LCP, which occurred in 2002, and many of the existing uses predate the Coastal Act.

Figure 5 Existing MMHS Campus Buildings and Facilities



Source: LPA, 2021

4.0 MMHS Campus Specific Plan Facilities and Phasing

4.1 MMHS Campus Specific Plan Development

As shown in Table 3, *Summary of Building Demolition*, implementation of the Specific Plan would result in demolition of all 7 buildings and 9 portables on the former JCES campus and 6 buildings and associated amenities on the MMHS campus, totaling 154,904 square feet of demolition. Building E and Buildings A/B at the MMHS Campus would remain, with all other structures removed (see Figure 6*, Proposed Site Plan*). The Bus Barn would be relocated to the east side of the site. No changes to the existing main sports field, baseball, or softball fields would occur except for the development of new field houses and additional parking adjacent to the softball field.

Table 3 Summary of Building Demolition

Name	Square Footage
Former JCES Campus	
Building A: Administration Building	2,280
Building B: Kindergarten Classroom Building	5,941
Building C: Classroom Building	4,554
Building D: Classroom Building	4,535
Building E: Library	2,694
Building F: Classroom Building	7,952
Building G: Multipurpose Room Building	4,758
Buildings H and I (Cottage Portables)	1,920 (2 x 960sf)
Portables: Portables P1 to P5	5,280 (5 x 960sf, 1 x 480sf)
Portables: P6 to P7	1,920 (2 x 96-0sf)
Restroom Portable	480
Former JCES Subtotal	42,314
MMHS Campus	
Building F (300 Building): Music/Band/Choral Building	6,720
Building H (600 Building): Cafetorium	14,478
Building I (400 Building): Graphic Arts	4,561
Building J (Building 700): Gymnasium	20,758
Building J1: 'New' Gymnasium	18,835
Building K: Classroom Building	12,698
Pool	Pool: 60'x75' Pool Equipment Building: 900
Field House	930
Portables (13 Interim Classrooms and Administration)	12,960 (1 @1,920sf, 8 @960sf, 1 @480sf, 3 @960sf)
Boys & Girls Club	9,120 (3@2,880, 1@480)
Bus Barn	9,700
Maintenance and Operation Warehouse	930
MMHS Subtotal	**112,590**
Total Demolition Square Footage	**154,904**

Source: SMMUSD 2021.

As shown in Table 4, *Summary of New Development*, the Specific Plan would result in 32 classrooms and 8 labs and a total of 173,595 square feet of building space, providing the MMHS campus with a total of 51 classrooms and 12 labs and a total of 222,425 square feet of building space, including the existing Buildings A/B and E that would remain.

Table 4 Summary of New Development

Building	Status	Classroom	Lab	Square Footage	Maximum Height
Middle School Core					
Building D: Gymnasium/ Fitness/ PE and Student Activities and Food Services	New	2	0	22,376	36 ft
Middle School Core Subtotal		**2**		**22,376**	
High School Core					
Building C: Classrooms, Student Support Services, Administrative and Campus Support	New	23	8	68,019	36 ft
Building J: Gymnasium/ PE	New	2	0	36,708	45 ft
High School Core Subtotal		**25**	**8**	**104,727**	
Shared Amenities					
Building I: Special Education and Campus Wellness Center	New	1	0	5,094	28 ft
Building H: Visual and Performing Arts (VAPA)	New	4	0	30,094	45 ft
Building L: Aquatics Center/Field House	New	0	0	9,249	28 ft
Building M: Upper Field House	New	0	0	2,055	28 ft
Shared Amenities Subtotal		**5**		**46,492**	
Subtotal – New Development		***32***	***8***	***173,595***	
Existing Buildings A/B and E					
Building A/B: Administration/Library	Existing	7	4	35,315	28 ft
Building E: Classroom Building	Existing	15	0	13,515	28 ft
Subtotal - Existing Buildings		***19***	***4***	***48,830***	
Total		**51**	**12**	**222,425**	

Source: LPA 2019.

The plan generally organizes the campus land uses in three defined areas: Middle School core, High School core, and shared amenities. This consolidation of uses results in a more efficient use of available land while enhancing independent identities for each area and improving wayfinding. The pronounced topography found on site is also utilized to emphasize this concept by creating “terraces” for each defined area.

At the center of the campus, the plan proposes the Performing Art Center along with an arrival plaza to serve as a welcoming entry and as a bridge connecting both schools. A leveled academic quad is proposed for each campus and becomes the main organizing element for the academic cores. This important space will become the “heart” of each school and hub of educational and social activities while providing access to surrounding buildings.

Middle School Core

The Middle School Core would be located at the southeastern portion of the campus with a level academic quad in the middle. As shown in Table 5, *Summary of Middle School Core Development*, the Middle School Core would consist of four buildings, including the existing Building E and Buildings A/B. Building D would include a new middle school gym, student activities, and Food Services. Upon completion, the Middle School Core would result in 71,206 square feet of total development. The Middle School Core would include 21 total classrooms (12 classrooms in the existing Building E, 7 in the existing Buildings A/B, and 2 in the proposed Building D), administration offices, supportive services, a library, four science labs (in Buildings A/B), 2D art studio, lunch shelter, multipurpose room, gymnasium, and locker rooms.

The existing Buildings A/B contains Science, Technology, Engineering, and Math programs, student support services, and administration and supportive services, and has 7 classrooms and 3 labs. Buildings A/B are two stories with a maximum height of 28 feet and oriented east-west along Morning View Drive. Building E houses the humanities department and has 12 classrooms. The existing Building E is a two-story prefabricated modular building with a maximum height of 25.5 feet at the parapet, and it is located to the north of Buildings A/B.

Figure 6 Proposed Site Plan

HIGH SCHOOL

Building C - Classrooms, Student Support Services, Administration and Campus Support

Building J - Gymnasium, PE

MIDDLE SCHOOL

Building A/B (existing) - Administration, Library
Building E (existing) - Classrooms
Building D - Gymnasium/Fitness/PE and Student Activities and Food Service

SHARED USES

Building H - Visual and Performing Arts (VAPA)
Building I - Special Education and Campus Wellness Center
Building L - Aquatics Center/Field House
Building M - Upper Field House

OTHER

POTENTIAL OUTDOOR LEARNING OPPORTUNITES

EXISTING FEATURES/ BUILDINGS TO REMAIN

APPROXIMATE LOCATION OF MARQUEE SIGNS

Project Stalls By Lot:
A. 150 (existing)
B. 62 (existing)
C. 25
D. 129
E. 32
F. 14



0 450
Scale (Feet)

Source: LPA, 2021

Building D would be located to the north and northwest of Buildings A/B, along the northern edge of the Middle School campus. Building D would house the physical education center and new student activities and food services. The physical education portion of the building would be one story and 16,932 square feet and would house a 50-foot by 84-foot multipurpose court with storage, 6 rows of bleachers, a lobby and restrooms, and a physical education center with a fitness studio; storage; boys' and girls' lockers and restrooms; and staff office, shower, and restroom. The student activities and food services portion of Building D would be two stories and 5,444 square feet and would have a maximum height of 36 feet along the northern boundary. The student activities area would include maker space and the Associated Student Body (ASB) student store and storage areas, while the food services area would include a warming kitchen, food court, restrooms, and a 3,600-square-foot exterior sheltered lunch area. Building D would serve as the gymnasium and will have a maximum height of 36 feet above grade to meet the National Federation of State High School Association, (NFHS) minimum interior height requirement of 23 feet clear from floor to ceiling for competitive Volleyball. Building D would provide an accessible path to the hardcourt area on the upper level. The Middle School Core buildings would be arranged around a quad that would serve as a central gathering area for the Middle School students.

Table 5 Summary of Middle School Core Development

Building	Status	Classroom	Lab	Square Footage	Maximum Height
Buildings A/B: Administration/Library/ Classroom Building	Existing	7	4	35,315	28 ft
Building D: Gymnasium/ Fitness/ PE and Student Activities and Food Services	New	2	0	22,376	36 ft
Building E: Classroom Building	Existing	12	0	13,515	25.5 ft
Total-Middle School Core		**21**	**4**	**71,206**	

Source: LPA 2019.

High School Core

The High School Core would be at the southwestern portion of the campus occupying the former JCES campus. As shown in Table 6, *Summary of High School Core Development*, Building C would be two stories and would include 25 classrooms, administration offices, supportive services, a library, 8 science labs and maker spaces, Art 3D sculpture/ceramics studio, lunch shelter, and a career center. Building C would be designed to fit the natural topography of the site, such that the southern portion of the building fronting Morning View Drive would have a maximum height of 36 feet above grade. The required exhaust hoods for the science classes extend another ten feet above the main roof which is four feet above the parapet for a height of 41 feet, however the exhaust hoods are near the center of the roof area and are not visible from Morning View Drive.

In addition to Building C, the High School Core would include an approximately 36,708-square-foot main gymnasium and dance/weights rooms (Building J), which would be in the center of the campus adjacent to the hardcourts. Building J would have a maximum height of 45 feet and would include team rooms and four CIF regulation hardcourts for indoor sports. As described in Table 12 below, Building C contains high bay/ high volume spaces to house the library, student union, and career center. These high bay spaces are required to provide the students with adequate functioning spaces conducive to 21st Century learning as defined in the Campus Plan Education Specifications. The interactive, collaborative nature of this space requires an appropriate high-volume ceiling.

Table 6 Summary of High School Core Development

Building	Status	Classroom	Lab	Square Footage	Maximum Height
Building C: Classrooms, Student Support Services, Administrative and Campus Support	New	23	8	68,019	36 ft
Building J: Gymnasium/ PE	New	2	0	36,708	45 ft
Total-High School Core		**25**	**8**	**104,727**	

Source: LPA 2019.

Shared uses

In addition to developing the Middle School and High School Core areas, the Specific Plan would develop new shared facilities. As shown in Table 7, *Summary of Shared Uses,* these shared facilities would include a performing arts center (Building H), wellness center and spaces for special education (Building I), aquatics center/field house (Building L), and pool. As shown in Figure 6, the new shared facilities would be built to the north of the Middle School and High School Cores and west of the existing Main Sports Field. The Boys & Girls Club building, either a newly constructed building or relocation of the existing buildings, next to the tennis courts near the northwestern portion of the campus (for the purposes of this DEIR, it is assumed the existing buildings would be demolished and new facilities constructed).

Shared Performing Arts Facilities

Under the Specific Plan, Building H would have a maximum height of 45 feet above grade for the Theater portion, and 36 feet above grade for the remainder of the performing arts facilities. As described in detail in Table 12, High School Performing Arts facilities require a vertical stage opening of 25 feet (to the bottom of the proscenium). In addition, the long span structure and tension lighting grid ceiling system will add 15 feet above the stage opening plus 5 feet for roof slope and parapet. This equates to a total height of 45 feet, allowing for the school to produce the types of theatrical performances expected in a high school theater curriculum. Buildings I, L and M would be a maximum of 28 feet above grade.

Shared Sport and Recreational Facilities

As part of the Project, the existing 25-meter pool would be replaced with a new Olympic-size 50-meter pool. As with the existing pool, the updated pool would serve educational sporting events such as swim and water polo as well as recreational community uses. In addition to the new gymnasium, weight room, aquatic center and locker rooms, the existing athletic field, baseball, and softball fields would receive minor improvements. A new field house (Building M) would be constructed for the baseball and softball fields, and one for the athletic field (Building L). The existing public address (PA) system and speakers at the athletic field would be relocated to the proposed ADA-compliant press box (same use as current). Additionally, the Specific Plan would add two new tennis courts to the existing tennis court area on the northern side of the Plan Area. The Specific Plan would also extend pedestrian trails throughout the campus to improve pedestrian circulation. The pedestrian trails would include turnouts/viewpoints, which would be used as outdoor classroom space.

Table 7 Summary of Shared Uses

Building	Status	Classroom	Lab	Square Footage	Maximum Height
Building I: Special Education and Campus Wellness Center	New	1	0	5,094	28 ft
Building H: Visual and Performing Arts (VAPA)	New	4	0	30,094	45 ft
Building L: Aquatics Center/Field House	New	0	0	9,249	28 ft
Building M: Upper Field House	New	0	0	2,055	28 ft
Total-Shared Amenities		**5**		**46,492**	

Source: LPA 2019.

Student Capacity and Schedule

Consistent with the City's population decrease, enrollment at the campus has been steadily decreasing since 2006 from a high of approximately 1,576 (281 students at JCES and 1,295 at MMHS) to 1,142 (197 at JCES and 945 at MMHS) in 2018-2019. Enrollment since 2015 to 2020 at the campus has decrease by 15 percent. In the 2019-2020 school year after the closure of JCES, the student population at MMHS was 862, and in the current 2020-2021 school year, enrollment further declined to 784 students, as shown in Table 8, *Student Enrollment by Grade Level*.

Table 8 Student Enrollment by Grade Level

YEAR	SCHOOL	TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	PERCENT DECREASE PER YEAR
2006	CABRILLO		44	40	45	52	48	52								281	
2006	MMHS								161	174	173	219	197	202	169	1295	
2006	TOTALS	0	44	40	45	52	48	52	161	174	173	219	197	202	169	1576	-
2007	CABRILLO		57	41	38	47	56	51								290	
2007	MMHS								148	162	172	177	224	188	207	1278	
2007	TOTALS	0	57	41	38	47	56	51	148	162	172	177	224	188	207	1568	1%
2008	CABRILLO		48	54	47	41	51	56								297	
2008	MMHS								140	164	164	177	174	215	173	1207	
2008	TOTALS	0	48	54	47	41	51	56	140	164	164	177	174	215	173	1504	4%
2009	CABRILLO		32	41	50	52	42	55								272	
2009	MMHS								163	156	173	178	168	170	205	1213	
2009	TOTALS	0	32	41	50	52	42	55	163	156	173	178	168	170	205	1485	1%
2010	CABRILLO		40	32	41	51	46	44								254	
2010	MMHS								145	161	150	176	174	177	177	1160	
2010	TOTALS	0	40	32	41	51	46	44	145	161	150	176	174	177	177	1414	5%
2011	CABRILLO		38	37	35	44	54	45								253	
2011	MMHS								137	161	166	153	183	175	182	1157	
2011	TOTALS	0	38	37	35	44	54	45	137	161	166	153	183	175	182	1410	0%
2012	CABRILLO		34	38	37	41	45	55								250	
2012	MMHS								157	142	162	176	151	181	175	1144	
2012	TOTALS	0	34	38	37	41	45	55	157	142	162	176	151	181	175	1394	1%
2013	CABRILLO		34	32	37	38	46	48								235	
2013	MMHS								172	153	144	177	184	151	182	1163	
2013	TOTALS	0	34	32	37	38	46	48	172	153	144	177	184	151	182	1398	0%
2014	CABRILLO		37	35	33	39	33	48								225	
2014	MMHS								157	137	158	148	170	182	148	1100	

YEAR	SCHOOL	TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	PERCENT DECREASE PER YEAR
2014	TOTALS	0	37	35	33	39	33	48	157	137	158	148	170	182	148	1325	5%
2015	CABRILLO		22	33	35	29	40	35								194	
2015	MMHS								127	158	147	169	154	175	175	1105	
2015	TOTALS	0	22	33	35	29	40	35	127	158	147	169	154	175	175	1299	2%
2016	CABRILLO	11	26	22	31	33	32	40								195	
2016	MMHS								99	117	161	155	158	154	159	1003	
2016	TOTALS	11	26	22	31	33	32	40	99	117	161	155	158	154	159	1198	8%
2017	CABRILLO	6	31	28	22	35	39	34								195	
2017	MMHS								113	107	116	159	153	152	152	952	
2017	TOTALS	6	31	28	22	35	39	34	113	107	116	159	153	152	152	1147	4%
2018	CABRILLO	14	20	28	32	24	35	44								197	
2018	MMHS								116	112	112	135	163	151	156	945	
2018	TOTALS	14	20	28	32	24	35	44	116	112	112	135	163	151	156	1142	0%
2019	MMHS								112	114	108	108	125	147	148	862	
2019	TOTALS	0	36	35	44	55	46	57	112	114	108	108	125	147	148	862	25%[1]
2020	MALIBU MIDDLE								85	125	115					325	
2020	MALIBU HIGH											111	114	123	149	497	
2020	TOTALS								85	125	115	111	114	123	149	822	5%
																Percent Decrease between 2006 and 2020	**48%**

Source: California Department of Education

Note: Student enrollment for the 2020-2021 school year is 784 students.

[1] Note that the 25 percent decrease observed in 2019 is due to the District Realignment that combined JCES with the Point Dume Marine Science School in 2019.

Moreover, enrollment is not projected to increase, as lower (feeder) grades have been tracking below historic levels, indicating a decrease in future enrollment at middle and high school grades may occur. Enrollment levels are expected to decrease over the coming decade, with a projected enrollment of 533 in 2025 (DecisionInsite 2021) Based on enrollment projections by Decision Insite LLC, the District anticipates a total enrollment of approximately 150 middle school students and 225 high school students, for a total of 375 students by 2030, which would represent a 12 percent reduction in student population compared to 2017 (Decision Insight 2021).

The existing MMHS campus has the capacity to seat approximately 1,200 students, as evidenced by the 2006 enrollment, but no longer meets the District's educational requirements due to the building's age and overall condition. The Proposed Project would not increase the capacity of the MMHS campus but would be designed to support the regrowth of the community from the Woolsey Fire.

School hours would remain the same as existing, from 8:00 AM to 3:00 PM, with staff and students of the middle/high school arriving on campus between approximately 7:00 AM and 8:00 AM and leaving between approximately 3:00 PM and 5:00 PM, with occasional special events and athletic events during weeknights and/or weekends. Additionally, the Visual and Performing Arts program uses the auditorium after school typically until 6:00 PM, and the Boys & Girls Club on the campus is open Monday through Friday from 9:00 AM to 6:30 PM.

Community/Civic Center Use

When the school facilities are not in use and are not scheduled for school-sponsored or other District-related events, the Civic Center Act permits certain community organization and members to utilize school facilities for their events by obtaining a Civic Center Permit from the SMMUSD or the City of Malibu Master Facilities Use Agreement with SMMUSD. Permitted events may include community and/or city use of the playfields, common areas, and classrooms, as permitted in the 2019 Master Agreement between SMMUSD and the City of Malibu Regarding the Joint Use of School District Facilities (SMMUSD/City of Malibu 2019).

Operation of the school facilities for community use occurs outside normal school operating hours, generally between 3:00 PM and 10:00 PM on weekdays, and between 8:00 AM and 10:00 PM on Saturday and Sundays. Parking for Civic Center uses would be provided in the school's on-site surface parking lots. The aquatic center is used for community and school activities from 5:30 AM - 8:00 AM on weekdays and often before 8:00 AM on weekends and breaks. As the Specific Plan would develop additional facilities, there may be a commensurate increase in community use with implementation of the Specific Plan. The Specific Plan would not change or modify the restrictions imposed on the Athletic Field lighting (CDP 12-024), or the lighting associated with the 150-space Parking Lot A under the existing CDP (CDP No. A-MAL-13-030). Table 9, *Existing and Buildout Community Use Facilities*, shows the existing facilities available for community use and the proposed facilities.

Table 9 Existing and Buildout Community Use Facilities

Name	Square Footage
Existing Community Use Facilities	
MMHS Building H (600 Building): Cafetorium	14,478
MMHS Building J (Building 700): Gymnasium	20,758
MMHS Building J1: 'New' Gymnasium	18,835
MMHS Building K: Classroom Building	12,698
JCES Building E: Library	2,694

Name	Square Footage
JCES Building G: Multipurpose Room Building	4,758
Pool	1
Main Sports Field	1
Baseball Field	1
Softball Field	1
Tennis Courts	4
Subtotal Existing	74,221
Proposed Community Use Facilities	
Building D: Middle School Gymnasium/ Fitness/ PE	16,932
Building J: High School Gymnasium	36,708
Building H: Shared Visual and Performing Arts (VAPA)	30,094
Building L: Aquatics Center/Field House	9,249
Building M: Upper Field House	2,055
Pool	1
Boys & Girls Club	9,120
Main Sports Field	1
Baseball Field	1
Softball Field	1
Tennis Courts	6
Subtotal Proposed (Buildout):	**104,158**
Net Increase	**29,937 and Two Tennis Courts**

Source: SMMUSD 2019.

4.2 Phasing

The Specific Plan would be constructed in four phases, with construction activities anticipated to begin in fall 2022 and completed in summer 2031. Each phase would include the following activities—grading and excavation, trenching for site utilities, demolition and construction of the buildings, paving, and finishing. It is anticipated that students would occupy existing buildings on the MMHS campus during construction activities. With the completion of Phase 1, the majority of the Specific Plan's classrooms would be constructed. Therefore, it is not anticipated that portable classrooms, beyond those currently on campus, would be used to house students or staff during construction. Table 10, *Proposed Specific Plan Phasing*, provides details for each construction phase, including timing, amount of demolition, new construction, and drainage management areas (DMA) and infrastructure improvements for each phase.

Table 10 Proposed Specific Plan Phasing

Phase	Demolition	Demolition Square Footage	New Construction	New Construction Square Footage	Infra-structure Improvement	Timeline
1	JCES Buildings A, B, C, D, E, F, G, H, I, P6–P7	36,544	Building C, Parking Lot D Drop-off/Pick-up, Parking Lot C	68,019	• DMA A • DMA B • Septic 1	Fall 2022 – Fall 2024
2	N/A	N/A	Building D, Middle School Quad	22,376	• DMA C • Septic 2	Fall 2024 – Fall 2026
3	MMHS Buildings F, I, Field House, and Portables	27,571	Buildings J, L, and M, Parking Lot E, Parking Lot F, Bus Barn	48,012	• DMA D • Septic 3 • Septic 5	Fall 2026 – Fall 2028
4	MMHS Building K, J, J1, Pool, Pool Building, Boys & Girls Club (demolished or relocated), JCES Portables P1-P5, Restroom Portable, Bus Barn, M&O Warehouse	69,581	Building H and I, Boys & Girls Club (relocated)	56,816	• DMA E • DMA F • Septic 4	Fall 2028 – Fall 2030
	MMHS Building H	14,478	N/A	N/A	• DMA G	Spring 2030 – Spring 2031

SMMUSD 2020

DMA = Drainage Management Area

Phase 1

Phase 1 would consist of demolition of all existing former JCES campus buildings and portables P6 and P7 and construction of the Building C (see Figure 7a and Figure 7b, *Proposed Elevations*), Parking Lot C, Parking D, and the Drop-off/Pick-up area (see Figure 8, *Specific Plan Phasing-Construction*). Phase 1 is anticipated to begin in Fall 2022 and completed by Summer 2024.

Phase 2

Phase 2 would consist of construction of the Building D and the Middle School Quad. Phase 2 is anticipated to begin in Fall 2024 and completed by Fall 2026, a new bond is required before subsequent phases can move forward.

Phase 3

Phase 3 would consist of demolition of MMHS Buildings F, I; the existing field house; and the portables adjacent to the existing pool, and construction of Buildings J, L, and M and Parking Lot E and F. Phase 3 is anticipated to begin in Fall 2028 and completed by Fall 2030.

Phase 4

Phase 4 would involve the demolition of MMHS Buildings K, J, J1; the pool and pool building; and Bus Barn, and the demolition and/or relocation of the Boys & Girls Club and construction of the new Buildings H and I. This phase would also require the demolition of the existing MMHS Building H. Phase 4 is anticipated to begin in Spring 2030 and completed by summer 2031.

Photo Renderings

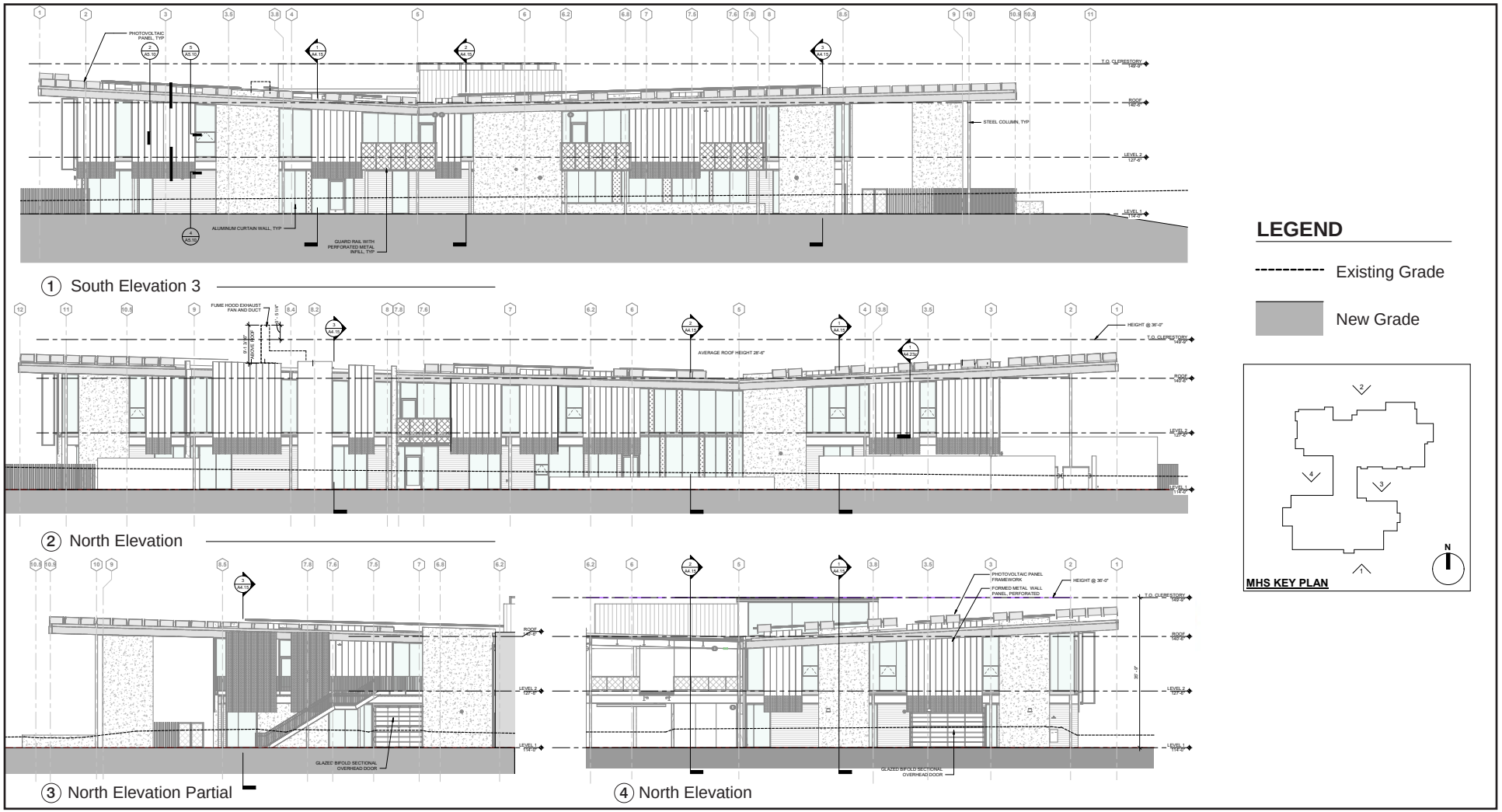
Figure 9 shows vantage points taken from public rights of way (A, B, C, and D) from which photo renderings demonstrating the change in view associated with the plan were prepared. Figures 10 through 13 provide an existing view and a proposed view from each vantage point shown in Figure 9.

Figure 7a Proposed Elevations



Source: NAC Architecture/Koning Eizenberg Architecture, 2021

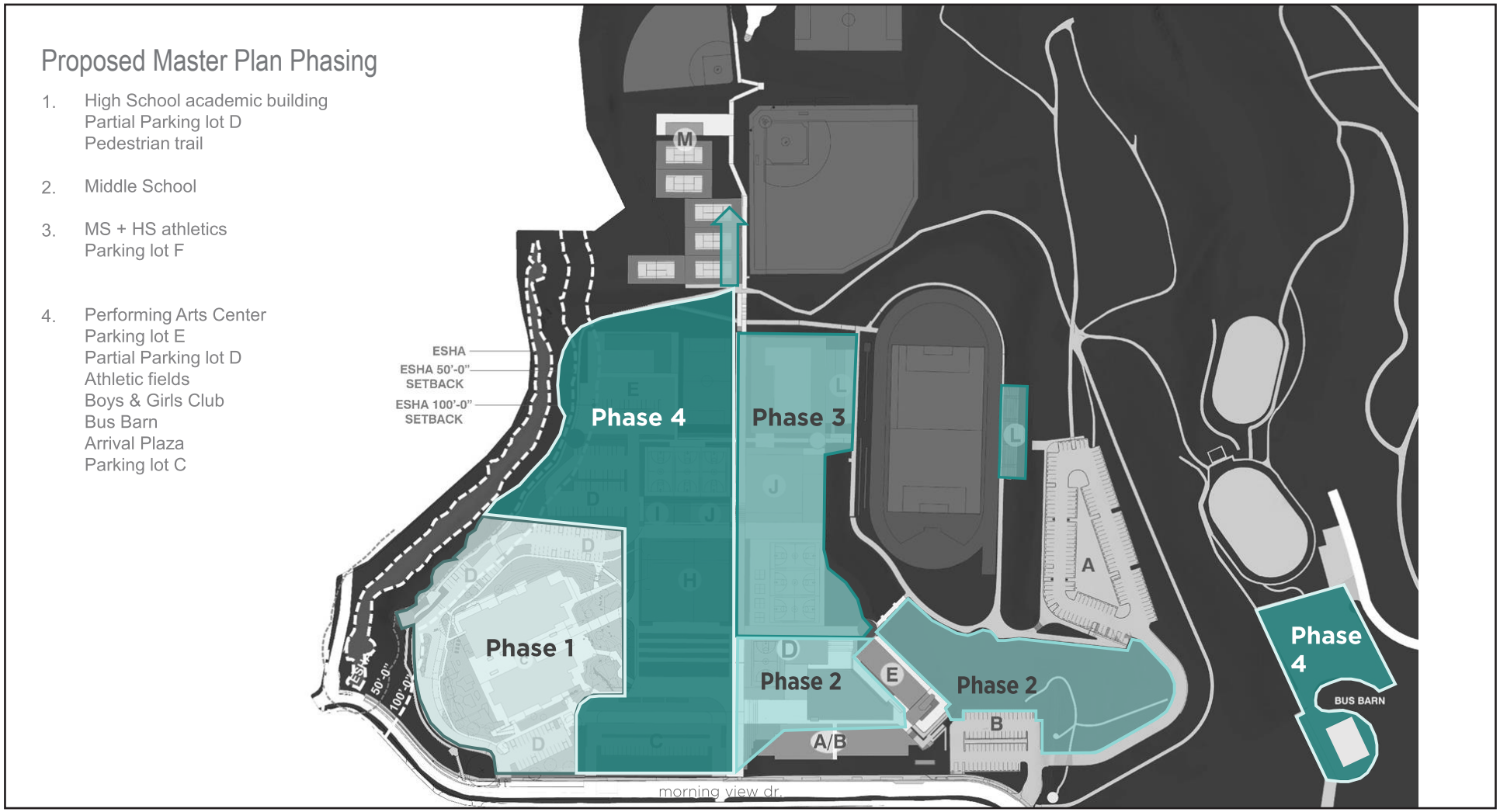
Figure 7b Proposed Elevations



0 35
Scale (Feet)

Source: NAC Architecture/Koning Eizenberg Architecture, 2021

Figure 8 **Specific Plan Phasing-Construction**



Source: LPA, 2021

Figure 9 Public Vantage Points A, B, C, and D



District Owned Property

Project Boundary

Elevation View Location and Direction (4)

0 800

Scale (Feet)

Source: Nearmap, 2021

Figure 10 View from Vantage Point A

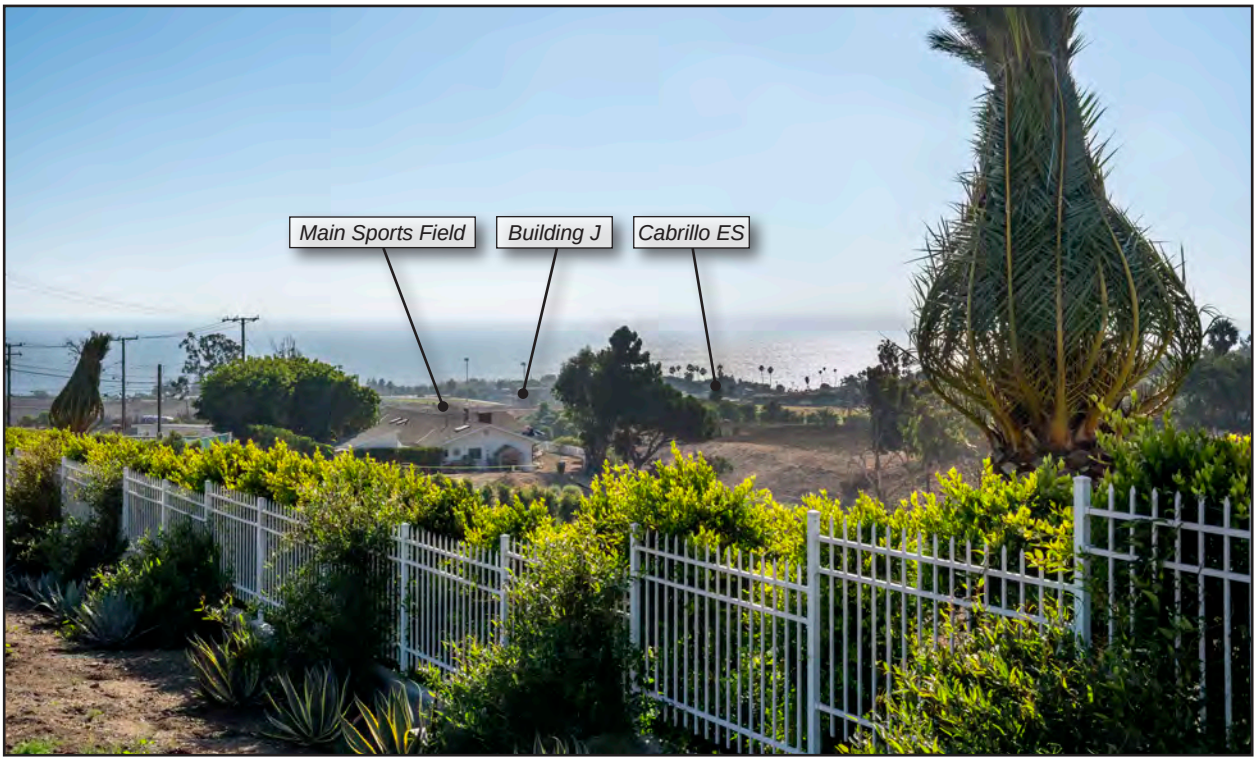


Existing



Proposed

Figure 11 View from Vantage Point B



Existing

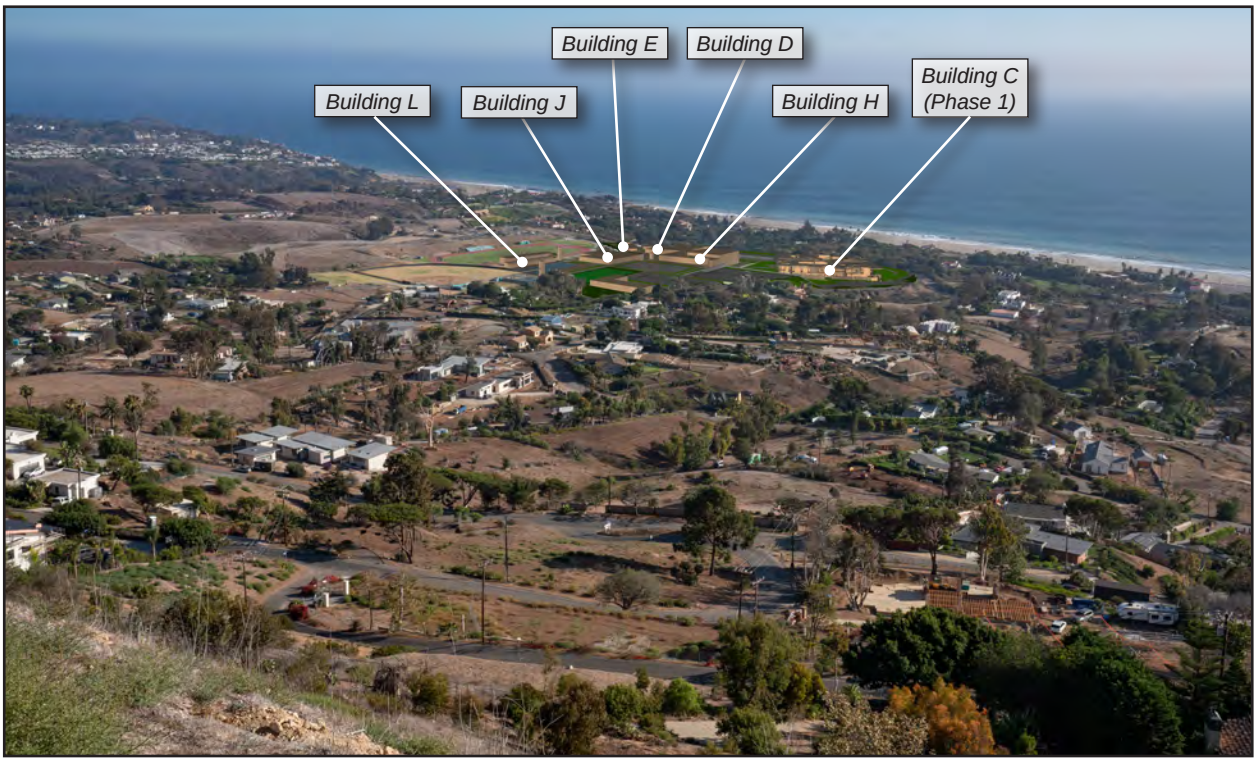


Proposed

Figure 12 View from Vantage Point C



Existing



Proposed

Figure 13 View from Vantage Point D



Existing



Proposed

4.3 Grading

Previous construction and grading at the Plan Area have created a series of near-level building pads for existing structures and paved parking lots. The majority of the Plan Area, including all areas with current development, is situated on slopes of between 0 and 20 percent, at a minimum of 80 feet above mean sea level (amsl). Around the perimeter of the Plan Area, surrounding the football field, and between building pads, slopes increase to between 40 to 100 percent, reaching up to 170 feet amsl.

For the most part, proposed new construction would take place on the flat, previously developed areas of campus, and existing slope conditions would remain. Because of the topography of the site, and the need to create large terraces for student safety and access, and the overall size of individual school buildings which are larger than most homes require the ability to cut/fill more than 1,000 cubic yards. Table 11a, *Phase I Grading,* reflects proposed grading estimates consistent with City format for Building C. Table 11b, *Estimated Cut/Fill for Phases 2-4*, provides estimated amounts of soil to be graded for subsequent phases 2 through 4.

To minimize grading, each bldg. will have its own site-specific geotechnical report that determines individual needs. Because of the topography of the site, and the need to create large terraces, some of the buildings (Bldg. C for example) will serve as a retaining wall and may be over 12 feet in height at certain locations. Building heights shall be measured from natural or finished grade, whichever produces the lowest building height.

Table 11a Phase I Grading

	Exempt			Non-Exempt	Remedial	Total
	R&R	Understructure	Safety			
Cut	9,300	9,800	4,700	11,300	100	35,200
Fill	9,300	0	300	800		10,400
Total	18,600	9,800	5,000	12,100	100	45,600
Import	0	0	0	0	0	0
Export	0	9,800	4,400	10,500	100	24,800

All quantities indicated shall be in cubic yards only.

R&R = Removal and Recompaction – R&R must be balanced.

Safety Grading is required grading for L.A. County Fire Department access approval beyond the 15 foot minimum access and may include turnouts, hammerheads, turnarounds, and access roadway widening.

Remedial grading is grading recommended by a full site geotechnical or soils report prepared by a licensed geologist or soils engineer which is necessary to correct physical deficiencies on the site for the construction of a primary residential structure or access to the lot.

Imported means soil that is brought on to the site. Exported means soil that is leaving the site. This information will be used to calculate the number of truck trips required for site preparation.

Table 11 Estimated Cut/Fill for Phases 2, 3, and 4

Phase	Cut (cy)	Fill (cy)	Project Phase Total (cy)
1	35,190	10,530	24,660 cut
2	5,175	-	5,175 cut
3	25,300	14,000	11,300 cut
4	10,000	33,350	23,350 fill
Total	40,475 75,665	47,350 57,880	6,875 fill17,785 cut

Source: LPA 2019

5.0 Development Standards

Overall, the development standards definer in the specific plan as outlined below, meet the zoning and development requirements of the City. Table 12 summarizes the exceptions to existing development standards that are essential to the completion of the specific plan.

Higher ceilings in school instructional and creative space are the industry standard; they have been part of new school construction for more than a decade and identified as vital for modern learning. The additional height provides for improved ventilation, noise attenuation, and natural lighting. Similar building heights can be found in several school projects in California such as Newport Harbor High School Library: Newport Beach, New Library/ Media Center, 18 feet high ceiling; Lawndale High School Student Union: Lawndale, 22 feet high ceiling; E Stem High School, Eastvale, Makerspace/ Collaboration Learning Space: 18 feet high ceiling; Hugo Reid ES, Arcadia, Library/ Media Center, 18 feet high ceiling; and Johnson Middle School, Westminster, Maker Classroom, 16 feet high ceiling. The Specific Plan is intended to allow for similar ceiling heights which requires new development standard unique to the school.

With higher interior ceilings the exterior dimensions of the buildings are also higher. Generally, there is between 6 to 8 feet between the interior ceiling and the exterior roofline to provide for internal wiring, lighting, and ventilation. Ventilation equipment and other roof top architectural features would extend above the roofline. Development standards established for the MMHS Campus Specific Plan include the building specifications such as heights, setbacks, design standards for signs and landscaping. To meet the standards established by the District's Educational Specifications, the California Interscholastic Federation, the National Federation of State High School Association, Buildings D, C, H and J must be 36 feet on average, with the science lab hood ventilation equipment for the science classrooms extending to 41 feet. These building heights would exceed the LCP and City's 28-foot height requirements therefore Table 12 includes standards that would allow construction of the school to modern standards. Building heights shall be measured from natural or finished grade, whichever produces the lowest building height.

- **Building C:** High School Building north wing second floor contains high bay/high volume spaces to house educational uses. These high bay spaces are required to provide the students with adequate functioning spaces conducive to 21st Century learning as defined in the Campus Plan Education Specifications. The Student Union is programmed with a central space of 4,000 sf space. The interactive, collaborative nature of this space requires an appropriate high-volume ceiling. A high school Library, based on the District's Educational specifications, require a variety of spaces within the Library, including a large 3,000 sf area that can double as Staff Development space.
- Required rooftop equipment will exceed the 2' maximum height above the roof plane for the science lab exhaust hood, as required by the American National Standard for Laboratory Ventilation (ANSI) Z9.5 as well as the National Fire Protection Association Standard NFPA 45, Chapter 7, section 7.2. Roof top will be occupied by students to support outdoor learning, including visual observation to ESHA. With student access to the roof deck, higher parapets or Guards are required to be 42" minimum height per California Building Code, Part 2, Volume 1, Chapter 10, section 1015.

- **Building D:** The Middle School gymnasium and multipurpose room (MPR) must meet the National Federation of State High School Association, (NFHS) minimum interior height requirement of 23 feet clear from floor to ceiling for competitive Volleyball, the Specific Plan plans for 24' for adequate tolerance in design and construction.
- **Building H:** High School Performing Arts facilities require a vertical stage opening of 25' (to the bottom of the proscenium). In addition, the long span structure and tension lighting grid ceiling system will add 15 feet above the stage opening plus 5' for roof slope and parapet. This equates to a total height of 45 feet, providing for the school to produce the types of theatrical performances expected in a high school theater curriculum. A compromise is being made to create a variable open theater/performance space rather than a traditional proscenium space which would require a fly tower over 80'.
- **Building J:** Gymnasiums must meet National Federation of State High School Associations (NFHS) minimum interior height requirement of 23 feet clear from floor to ceiling for California Interscholastic Federation (CIF) Volleyball, the Specific Plan plans for 25' for adequate tolerance in design and construction and an additional 10' for long span structure and 5' for roof slope and parapet.

Development under the Specific Plan will conform to all other existing development standards under §17.40.110 of the City's Municipal Code for Institutional Development and §3.9 of the City's Local Implementation Program except for those listed under Table 12, *Specific Plan Development Standards.* The table outlines the Specific Plan specifications along with the current City LIP and Municipal Code and reasoning for exceeding current City regulations.

5.2 Building Height Measurements

The campus has varied topography within which several large buildings and plazas will be developed. To meet student safety and accessibility requirements, the buildings and areas surrounding them need to be as even as possible minimizing ramps, stairs, and abrupt changes in elevation. This will result in site grading and a change in the topography to accommodate the buildings. In some cases, the existing grade is such that entry will occur at one level and exit at a different level. Building heights shall be measured from natural or finished grade, whichever produces the lowest building height.

Table 12 Specific Plan Development Standards – Exceptions from Existing Zoning

	Specific Plan Specifications		Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:				
Maximum Building Height[1]	Building J: Gym/PE	45 feet	Section 3.9.A1a of LIP and Section 17.40.110 A.1.a. of MC: Structures shall not exceed a maximum height of 18 feet above natural or finished grade, except for chimneys, rooftop antenna, and light standards. The maximum height of the structure may be increased up to 28 feet for a flat or pitched roof if approved through a site plan review pursuant to Section 13.27 of the Malibu LIP.	Gymnasiums must meet NFHS minimum interior height requirement of 23 feet clear from floor to ceiling for CIF Volleyball, the Specific Plan plans for 25' for adequate tolerance in design and construction and an additional 10' for long span structure and 5' for roof slope and parapet.
	Building H: Theater/ Performing Arts	45 feet		High School Performing Arts facilities require a vertical stage opening of 25' (to the bottom of the proscenium). In addition, the long span structure and tension lighting grid ceiling system will add 15 feet above the stage opening plus 5' for roof slope and parapet. This equates to a total height of 45 feet, allowing for the school to produce the types of theatrical performances expected in a high school theater curriculum.
	Building D: Middle School Gym/MPR	36 feet		Gymnasiums must meet the National Federation of State High School Association, (NFHS) minimum interior height requirement of 23 feet clear from floor to ceiling for competitive Volleyball, the Specific Plan plans for 24' for adequate tolerance in design and construction.
	Building C: High School Building	36 feet (Fume Hood 41 feet)		Building C north wing, second floor contains high bay/ high volume spaces to house educational uses. These high bay spaces are required to provide the students with adequate functioning spaces conducive to 21st Century learning as defined in the Campus Plan Education Specifications. The Student Union is programmed with a central space of 4,000 sf space. The interactive, collaborative nature of this space requires an appropriate high-volume ceiling. A high school Library, based on the District's Educational specifications, require a variety of spaces within the Library, including a large 3,000 sf area that can double as Staff Development space.
Rooftop Equipment Height	Building C: High School Building	Science Labs require exhaust hoods with stacks placed at a minimum of 10 feet above the roof surface.	Section 3.9A.1b of LIP and Section 17.40.110 A.1.b. of MC: Roof-mounted mechanical equipment shall be integrated into the roof design, screened,	Required rooftop equipment will exceed the 2' maximum height above the roof plane for exhaust hoods over Science Labs, as required by the American National Standard for Laboratory Ventilation ANSI Z9.5 as well as the National Fire Protection Association Standard NFPA 45, Chapter 7, section 7.2.

	Specific Plan Specifications		Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:				
	Building C: High School Building	Parapets and or Guardrails that project up to 42 inches in height above the surface of the roof.	and may project no more than two feet higher than the structure roof height (screens included) if approved through a site plan review pursuant to Section 13.27 of the Malibu LIP.	Roof top will be occupied by students to support outdoor learning, including visual observation to ESHA. With student access to the roof deck, higher parapets or Guards are required to be 42" minimum height per California Building Code, Part 2, Volume 1, Chapter 10, section 1015.
Lighting	Nighttime pool lighting will be installed.		Section 3.9.A1d of the LIP and Section 17.40.110 A.1.d. of MC: Sports field lighting shall be limited to the main sports field at Malibu High School and subject to the standards of LIP Sections 4.6.2 and 6.5.G.	Lighting will be installed to meet the requirements of a Class II facility as identified by the Illuminating Engineering Society of North America (IESNA) (10th ed.), where lighting should be a minimum of 50 foot-candles over the pool and 20 foot-candles over the deck, as measured at the water level. Consistent with IESNA recommendations, lighting would also be provided within the pool basin, with the recommended luminance of 15 candelas per square foot (161 candelas per square meter). When the pool is not in use, accessible paths, including along the pool deck, would be with a minimum of 2 foot candles until lights are turned off campus-wide. By meeting these standards, the pool lighting would also meet the requirements of California Building Code § 3115B.1
Signage	Two new 15'6" x 7'6" electronic marquee signs, with a 10'x4' LED Display Screen. One sign each at the Middle and High schools.		Section 3.15.3.J of the LIP ad Section 17.52.040.J.of the MC: Except for those signs allowed under the provisions of Section 3.15.4 (E) of the Malibu LIP, "Special permits," the following signs are prohibited: Automatic changing signs or electronic message center signs, except for public service, time, and temperature	Marquee signs for High School and Middle School are required by the District for proper communications with the Students/ Community. Marquee signs serve a multitude of communication needs including emergency and safety communications.
Setback	The Specific Plan will remove existing parking and drive aisles and maintain a 50-foot buffer from ESHA with the exception of a meandering deconstructed granite walking path adjacent to the ESHA for instructional stations and parking. All new buildings will be set back 100-feet.		Section 4.6 of the LIP: New development adjacent to the riparian habitats shall provide native vegetation buffer areas of no less than 100 feet to serve as transitional habitat and provide distance and physical barriers to human intrusion. Buffers shall be of a sufficient size	The current District development including the vacated Juan Cabrillo ES, District Bus Barn facilities, parking lots, drive aisles and fencing/ site structures extend up to the edge of the ESHA and in some instances into the ESHA, with no set back.

	Specific Plan Specifications	Current LIP/ and Municipal Code (MC) Requirements	Reason/Notes
Development under the Specific Plan will conform to all existing development standards under § 17.40.110 of the City's Municipal Code for Institutional Development and § 3.9 of the City's LIP with the exception of the following:			
		to ensure the biological integrity and preservation of the habitat they are designed to protect. Vegetation removal, vegetation thinning, or planting of non-native or invasive vegetation shall not be permitted within buffers except as provided in Section 4.6.1 (E) or (F) of the Malibu LIP.	
Maximum Grading Quantity	The Specific Plan, as shown in Table 11, will exceed the grading limitations.	Section 8.3.B. of the LIP and Section 17.40.110 A.4.a of MC: Maximum Quantity of Grading. Notwithstanding any other provisions of the Malibu LIP, grading per lot of residential development, per acre of commercial development, or per acre of institutional development (total cut and fill) is limited to 1,000 cubic yards (per items a, b, c, and d).	Because of the topography of the site, and the need to create large terraces for student access, and the overall size of individual school buildings which are larger than most homes require the ability to cut/fill more than 1,000 cubic yards.,
Maximum Height of Cuts and Fills	Certain buildings may serve as a retaining wall.	Section 8.3.C of the LIP Section 17.40.110 A.4.b of MC: Maximum Height of Cuts and Fills with Retaining Walls. 6 feet in height for any one wall, or 12 feet for any combination of walls, where a minimum 3-foot separation exists between walls, except single cuts up to 12 feet in height which are an integral part of the structure are permitted. Retaining walls shall be designed with smooth, continuous lines that conform to the topography.	Each bldg. will have its own site-specific geotechnical report that determines individual needs. Because of the topography of the site, and the need to create large terraces, some of the buildings (Bldg. C for example) will serve as a retaining wall and may be over 12 feet in height at certain locations.

Source: SMMUSD 2021; Malibu 2002

[1] All other buildings will have a maximum height of 28 feet.

The following are the development standards for the MMHS Specific Plan:

A. The Malibu Middle and High School (MMHS) Campus Specific Plan shall be subject to the following development standards:

1. Height. Except as allowed in this section structures shall not exceed eighteen (18) feet above finished or natural grade, whichever results in lower building height, except for chimneys, rooftop antenna, and light standards.

a. Building C: High School Building shall not exceed a maximum height of thirty-six (36) feet finished grade, except for chimneys, rooftop antenna, and light standards that shall not exceed forty-one (41) feet above approved grading plan.

b. Building D: Middle School Gym/Multi-Purpose Room and Structures shall not exceed a maximum height of thirty-six (36) feet finished grade, except for chimneys, rooftop antenna, and light standards that shall not exceed forty (40) feet.

c. Building H: Theater/Performing Arts and shall not exceed a maximum height of forty-five (45) feet above finished grade.

d. Building J: Gym/Physical Education shall not exceed a maximum height of forty-five (45) feet above finished grade.

e. Building L: shall not exceed a maximum height of eighteen (18) feet above finished grade, except for chimneys, rooftop antenna, and light standards that shall not exceed a maximum height of 28 feet.

f. For all other buildings, roof-mounted mechanical equipment shall be integrated into the roof design, screened, and may project no more than two feet higher than the structure roof height (screens included).

g. In no event shall the maximum number of stories above grade be greater than two.

2. Yards/Setbacks.

a. Building placement for Phase 1 shall be as shown on Figure 6, *Proposed Site Plan*, as approved by City Council. Building Placement for subsequent phases will be considered by the City as part of the site plan review process.

b. Any future buildings must comply with the following:

(1) Front yard setbacks shall be ten (10) feet from the street easement.

(2) Side yard setbacks shall be five feet

(a) When adjacent to a residentially-zoned parcel(s) along a side yard, the setback shall be increased to ten (10) percent of the lot width or ten (10) feet, whichever is greater.

(b) When adjacent to the ESHA all buildings shall have a 100-foot setback from the ESHA. With the exception of access trails and fencing, and parking, all other improvements shall be setback 50-feet from the ESHA.

(3) Rear yard setbacks shall be five feet; however, when adjacent to a residentially-zoned parcel(s) along the rear yard, the setback shall be increased to fifteen (15) percent of the lot depth or fifteen (15) feet, whichever is greater.

3. **Site Development Criteria**. All proposed construction within the MMHS Specific Plan shall comply with the following site development standards:

   a. Structure Size. The gross floor area of all buildings on a given parcel shall be limited to a maximum Floor Area Ratio (FAR) of 0.15, or fifteen (15) percent of the lot area (excluding slopes equal to or greater than 1:1 and street easements). Additional gross floor area may be approved by the city council, up to the maximum allowed for the parcel under the general plan, where additional significant public benefits and amenities are provided as part of the project.

   b. Landscaping and Site Permeability. Twenty-five (25) percent of the lot area (excluding slopes equal to or greater than 1:1 and street easements) shall be devoted to landscaping. The required five-foot landscape buffer around the perimeter of parking areas pursuant to Section 17.48.050(E)(1) shall count toward the twenty-five (25) percent requirement. An additional five percent of the lot area (excluding slopes equal to or greater than 1:1 and street easements) shall be permeable.

   c. Pool and pool deck lighting shall be installed consistent with the Illuminating Engineering Society of North America (IESNA) standards for a Class II pool facility. Lighting shall be a minimum of 50-foot candles over the pool and 20-foot candles over the deck, as measured at the water level. for improved safety. Consistent with IESNA recommendations, lighting shall also be provided within the pool basin, with the recommended luminance of 15 candelas per square foot (161 candelas per square meter). All pool lighting shall also be consistent with the California Building Code and section 3115B.1, where the pool must have underwater and deck lighting such that lifeguards or other persons may observe, without interference from direct and reflected glare from the lighting sources, every part of the underwater area and pool surface, all diving boards or other pool appurtenances.

   d. Sports field lighting shall be limited to the main sports field and parking lots at Malibu High School. All new outdoor lighting shall adhere to the standards of Malibu Local Coastal Program Local Implementation Plan Sections 4.6.2 and 6.5.G and Section 17.41 Malibu Dark Sky provisions of the municipal code.

   e. All parking areas within the 100-foot ESHA area shall be paved with permeable pavement, to allow stormwater runoff to infiltrate into the soil below. Suspended paving systems shall be constructed below the permeable paving to treat and slow stormwater runoff before it reaches the ESHA. The system shall be designed to provide treatment and storage for stormwater but also promote healthy tree growth within parking areas.

4. **Grading.** Notwithstanding any other provisions of this code, grading shall be as follows:

   a. Grading for Phase 1 shall be as follows:

Phase I Grading

	Exempt			Non-Exempt	Remedial	Total
	R&R	Understructure	Safety			
Cut	9,300	9,800	4,700	11,300	100	35,200
Fill	9,300	0	300	800		10,400
Total	18,600	9,800	5,000	12,100	100	45,600
Import	0	0	0	0	0	0

	Exempt			Non-Exempt	Remedial	Total
	R&R	Understructure	Safety			
Export	0	9,800	4,400	10,500	100	24,800

All quantities indicated shall be in cubic yards only.

R&R = Removal and Recompaction – R&R must be balanced.

Safety Grading is required grading for L.A. County Fire Department access approval beyond the 15 foot minimum access and may include turnouts, hammerheads, turnarounds, and access roadway widening.

Remedial grading is grading recommended by a full site geotechnical or soils report prepared by a licensed geologist or soils engineer which is necessary to correct physical deficiencies on the site for the construction of a primary residential structure or access to the lot.

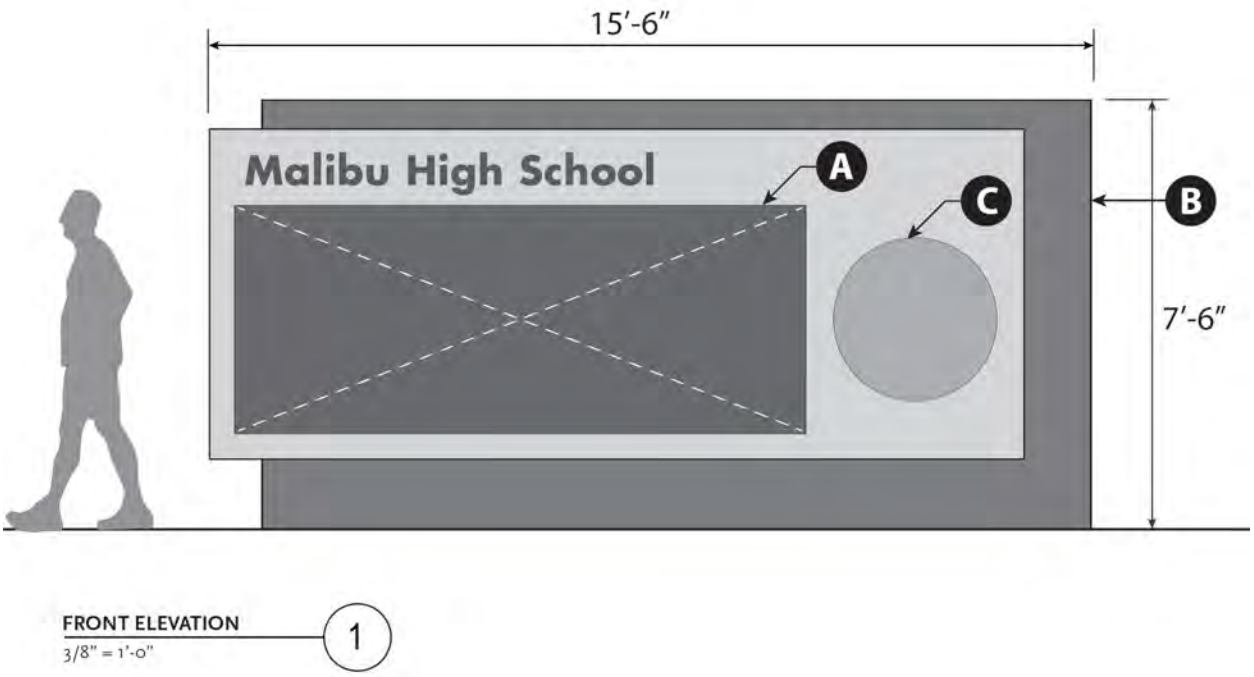
Imported means soil that is brought on to the site. Exported means soil that is leaving the site. This information will be used to calculate the number of truck trips required for site preparation.

b. Grading for subsequent phases will be considered by the City as part of the site plan review process.

5.3 Wayfinding and Informational Signage

Campus identification and wayfinding is important to the District as more trails and joint use facilities are open to the public. Figure 6, I, shows the location of the marquee signs that would occur along Morning View Drive to guide parents and visitors. Figure 14, *Monument Signs*, shows the two single-sided monument signs 15 feet 6 inches wide by 7 feet 6 inches tall, that will contain a 10-foot by 4-foot LED display screen, 10 mm pixel spacing with dimmable brightness (A), be placed on a concrete wall support (B), and have an internally illuminated logo (C). Marquee sign(s) for high schools and middle schools are required by the District for proper communications with the students/ community. Marquee signs serve a multitude of communication needs including emergency and safety communications. Building Identification Signs. All buildings will have non-illuminated identification signs mounted flush to the wall to comply with public safety requirements.

Figure 14 Monument Sign, Two Locations along Morning View Drive



5.4 Landscaping

Landscaping would be provided along pathways, building perimeters, and within and around new parking lot areas. Landscaping would be consistent with the requirements of the City of Malibu's Municipal Code, Chapter 9.22, "Landscape Water Conservation." Such requirements include that plants must be grouped into hydrozones—that is, with other plant species having similar water demand—and by their soil, sun, and shade requirements. Additionally, irrigation systems would be designed to prevent runoff, overspray, low-head drainage, and similar conditions when irrigation water flows or sprays onto unintended areas, such as walkways, driveways, roadways. Landscaping plans for subsequent phases will be provided as part of the site plan approval process.

Table 13 shows the plant palette that will be used in the landscaping of the Campus. While only Phase 1 is shown in detail as Figure 15, *Phase 1 Landscaping Plan*, the plants in the table will be used throughout the campus in subsequent phases.

Table 13 HSMS Campus Plant Palette

* In Middle School Construction/CCD Plan, not on Coastal Permit
**In High School Plant List; not yet reviewed by Coastal
*** Also on ESHA list. Refer to 3/18/2021 Psomas memo with Conceptual Plant Palette for ESHA Restoration Site

Large Canopy Trees	**Common Name**
Juniperus californica**	California juniper
Metrosideros excelsus**	New Zealand Christmas Tree
Pinus torreyana**	Torrey Pine
Platanus racemosa***	California sycamore
Quercus species***	California Native Oak
Medium and Accent Trees	**Common Name**
Alnus rhombifolia***	White Alder
Arbutus unedo or 'Marina'**	Strawberry Tree
Cercis occidentalis/canadensis**	Western Redbud /Eastern Redbud
Cordyline australis**	Dracaena Spike
Heteromeles arbutifolia***	Toyon
Juglans californica**	Black Walnut
Lagerstroemia 'Natchez'	Crape Myrtle
Lyonothamnus floribundus	Catalina Ironwood
Metrosideros collina 'Spring Fire'	Dwarf New Zealand Christmas Tree
Olea europea 'Swan Hill'	Olive
Umbellularia californica	California Bay
Shrubs	
Arctostaphylos species***	Manzanita
Artemisia calfornica***	Californian Sagebrush
Baccharis species***	Coyote Bush
Ceanothus species	Wild Lilac
Erigonum species	Buckwheat
Juniperus californica-- prostrate species	California Juniper
Peritoma arborea***	Bladderpod
Pittosporum toberia 'Wheeler's Dwarf'	Dwarf Pittosporum
Fragula californica***	California Coffeeberry
Rhus integrifolia	Lemonade Berry
Ribes speciosum***	California Gooseberry
Rosmarinus spp**	NCN
Westringia fruticosa**	Coast Rosemary

* In Middle School Construction/CCD Plan, not on Coastal Permit
**In High School Plant List; not yet reviewed by Coastal
*** Also on ESHA list. Refer to 3/18/2021 Psomas memo with Conceptual Plant Palette for ESHA Restoration Site

Groundcovers/Grasses	
Carissa macrocarpa**	Natal Plum
Dianella species**	Flax Lilly
Dieties bicolor/ irioides**	Fortnight Lilly
Festuca glauca 'Elijah Blue'*	Elijah Blue Fescue
Festuca species**	Native no-mow Meadow Mix
Juncus patens	California Gray Rush
Juniperus species**	Juniper
Lantana camara**	Lantana
Leymus condensattus 'Canyon Prince'**	Giant Wild Rye
Lomandra longfolia 'Breeze'*	Spiny-Head Mat Rush
Muhlenbergia rigens	Deer Grass
Myoporum parvifolium	NCN
Sedum species	Stonecrops
Senecio mandraliscae/serpens	Kleinia/Blue Chalksticks
Perennials/ Accents	
Agave species	Agave
Aloe species**	Aloe
Anigozanthos 'Bush Gold'	Kangaroo Paw
Dasylirion quadrangulatum/ wheeleri**	Mexican Grass Tree
Encelia californica	California bush sunflower
Hesperaloe parviflora	Red Yucca
Kalanchoe species	Kalanchoe
Keckiella cordifolia**	Heart-Leaved Penstemon
Opuntia species**	Prickley Pear Cactus
Penstemon species **	Beard Tongue
Rosa californica***	California Rose
Salvia species - native varieties	Sage
Yucca species	Yucca
Vines	
Jasminus polyanthum	Pink Jasmine
Lonicera hispidula***	California Honeysuckle
Vitis californica**	California Grape

Edited 3/31/2021, Spurlock Landscape Architects

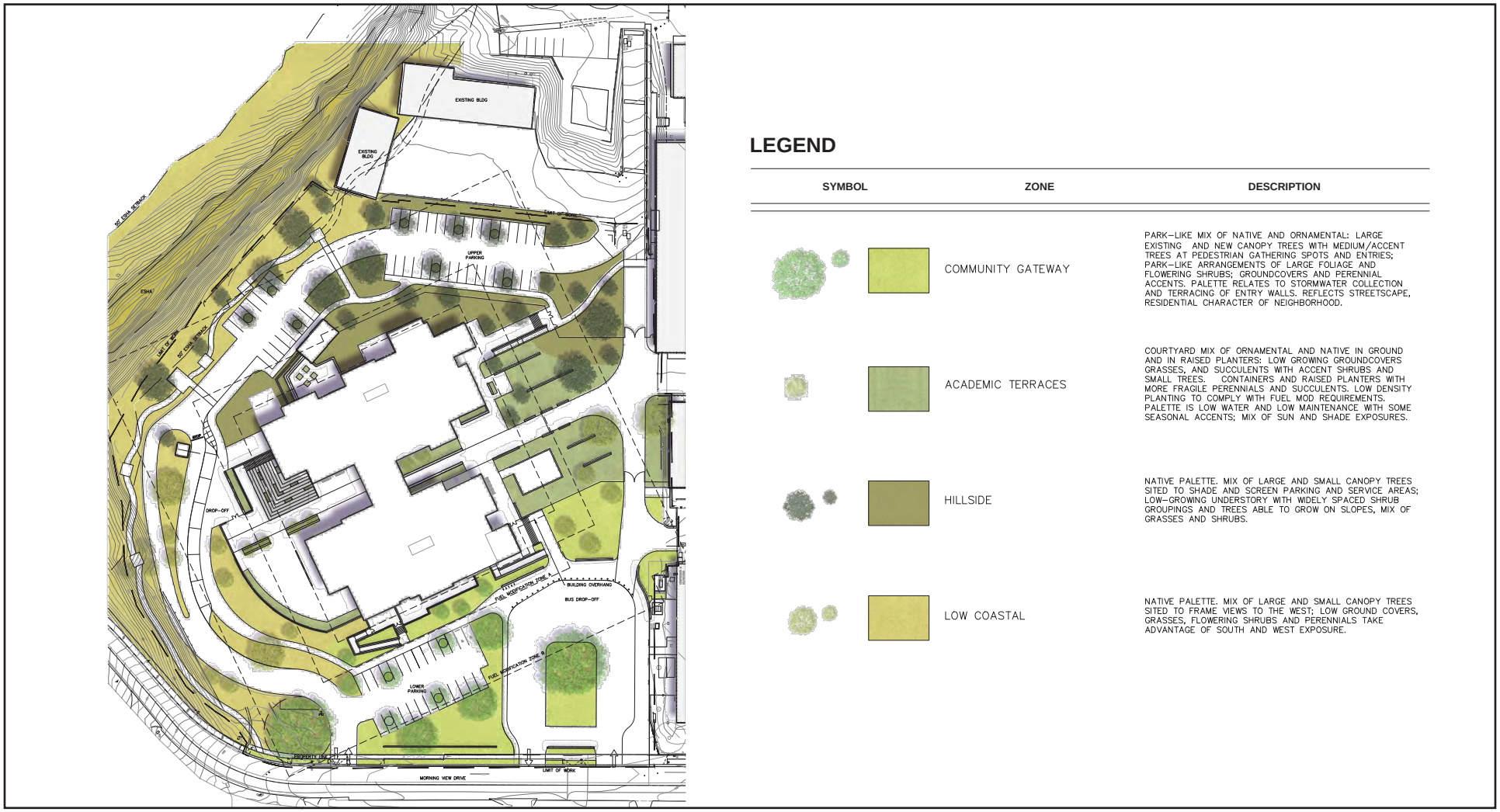
The Malibu campus landscape plan includes several strategies to promote a sustainable environment. These include strategies within the ESHA and its buffer, as well as connections between the restored ESHA and the central campus.

A proposed trail outside of the 50-foot ESHA buffer creates accessible pedestrian access from Morning View Drive along the restored upland ESHA and the campus beyond. The trail is proposed to be decomposed granite paving, which is composed of natural, locally sourced, and permeable materials. The trail would connect users to outdoor education overlooks, small areas located for their views into the ESHA. These areas may include relevant interpretive signage dependent on the location.

The 100-foot ESHA buffer is anticipated to contain large areas of restored native landscape, after the removal of existing asphalt and lawn. It will also contain a small amount of vehicular circulation, which includes required fire access, and parking. The parking areas are proposed to be paved with permeable pavement, to allow stormwater runoff to infiltrate into the soil below. Suspended paving systems are also proposed below the permeable paving to treat and slow stormwater runoff before it reaches the ESHA. These systems not only provide treatment and storage for stormwater but also promote healthy tree growth within parking areas.

Native plant communities connect the Phase 1 high school site both visually and physically with the restored ESHA and buffer. The edges between the campus along the ESHA and adjacent hillside are proposed to be primarily composed of native plants that are also used within the ESHA. Stormwater basins along these edges and within the central campus also utilize some of the same native riparian plant species to capture, slow down and filter campus stormwater runoff.

Figure 15 Proposed Phase I Landscaping Plan



Source: NAC Architecture, 2021

5.5 Sustainability Features

All new buildings developed under the Specific Plan would be designed using applicable green building practices, including those of the most current Building Energy Efficiency Standards (Title 24, California Code of Regulations, Part 6) and California Green Building Standards Code (CALGreen; Title 24, California Code of Regulations, Part 11). The Building Energy Efficiency Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. CALGreen is California's statewide "green" building code. Its purpose to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: planning and design; energy efficiency; water efficiency and conservation; water conservation and resource efficiency; and environmental quality. Additionally, the District has an adopted Districtwide Plan for Sustainability that incorporates sustainability into Education Services and all aspects of student learning; and integrates climate protection, resource efficiency, waste management, and other sustainability practices into District operations. (See also Section 7.5, *Solar Panel System*)

5.6 Restoration Plan in the ESHA

There is very little natural vegetation on the Proposed Project Site, consisting primarily of grasses, ivy, brush, ruderal species, and scattered ornamental trees with pockets of native riparian and upland species, including native trees in various stages of development. However, a stream course designated as an ESHA by the City of Malibu's LCP maps occurs on the western edge of the MMHS campus Developed portions of the existing campus are within the mapped ESHA boundaries, including portions of the JCES play yard, the Bus Barn, and existing Parking Lot A. The ESHA map also shows a stream approximately 400 feet northwest of the campus. This stream consists of an underground pipe from Floris Heights Road that flows onto the school property and daylights into the ESHA streambed along the school's western property boundary.

The stream course along the District's western boundary extends for approximately 1,088 feet and varies between approximately 24 and 85 feet wide, covering an area of approximately 0.68 acres determined to be potentially under regulatory jurisdiction with an additional approximately 1.35 acres within a 50-foot buffer of the ESHA for a total of approximately 2.03 acres. The stream course is deeply incised with steep banks. The drainage is unlined along its entire length. The upstream end of the drainage has a broad, concave cross-section with no abrupt break in bank slope. Soils in this area were saturated and surface water was present during multiple site visits. The middle and downstream end of the drainage is more incised, with steep slopes and a narrow channel bed. A portion of the bank is eroded or undercut. The ESHA and surrounding areas burned in the 2018 Woolsey fire. Some vegetation experienced mortality as a result of the fire while other vegetation is recovering.

Approximately 0.50 acres of the existing developed campus, specifically the JCES play yard, the bus barn, and portions of Existing Parking Lot A are within the 100-foot buffer of the ESHA. The Proposed Project would result in demolition of these structures within this buffer area. As part of the Proposed Project, the District would construct a pedestrian path and elevated outdoor learning spaces overlooking the ESHA and within 100 feet, but not closer than 50 feet of the ESHA boundaries. The trails would be accessible to the public during non-school.

All parking areas (excluding drive aisles) within the 100-foot ESHA area shall be paved with permeable pavement, to allow stormwater runoff to infiltrate into the soil below. Suspended paving systems shall be constructed below the permeable paving to treat and slow stormwater runoff before it reaches the ESHA. The system shall be designed to provide treatment and storage for stormwater but also promote healthy tree growth within parking areas.

The District would implement a phased restoration plan for the ESHA within the District's property. The restoration plan would include removing all hardscape within the proposed 100-foot buffer of the ESHA boundary. The District would conduct weed abatement, establish invasive plant controls, broadcast seed and plant native species within the ESHA and the proposed 50-foot buffer area, and implement erosion prevention and bank stability improvements as part of the restoration plan within District property. The restoration plan would be phased to meet the District's development schedule and funding constraints. The restoration and trail enhancements would reestablish the ESHA as viable habitat, provide educational opportunities for the MMHS students within the confines of the campus, and allow the public greater connectivity to the various trails in the community, including the newly reconstructed Equestrian Path Trail. See Figures 16 through 18.

Opportunities for restoration are present at upstream, middle, and downstream areas of the ESHA as well as developed and undeveloped areas within the proposed 50-foot buffer of the ESHA boundary. During Phase 1 of the Proposed Project, demolition of hardscape within the 100-foot buffer of the downstream area would occur. Restoration activities that would occur within the entire reach include weed abatement, broadcast of native seed and planting of native stock and invasive plant controls. Bank stability improvements and erosion control would occur in the upstream and downstream portions of the ESHA during Phase 1 of the Proposed Project, which would include the proposed pedestrian trail and new drive aisles. Demolition of developed areas within the 100-foot buffer of the upstream and middle stream area would occur during Phase 4, as the Bus Barn and other existing structures would remain operational until Phase 4 commences. Upon completion of Phase 4, the pedestrian trail would be completed and connect to existing trails on the campus.

Each phase of the Proposed Project would add to the overall reclamation/restoration plan. The restoration effort will focus on supplementing the native vegetation currently found within the ESHA with native seed and stock and utilizing contouring and natural features such as the existing mature native trees to enhance and stabilize the bank. The proposed trail and teaching platforms within the 100-foot buffer would connect the existing Equestrian Trail along the northeastern portion of the campus to the western portion of the campus and provide the community with additional pedestrian access to Morning View Drive. The teaching platforms would be utilized by the MMHS students, as well as community groups. In total, 2.03 acres of the ESHA would be restored, with the removal of approximately 0.50 acres of hardscape and structures.

Table 14, *Conceptual Plant Palette for ESHA Restoration Site*, provides a list of plants suitable for consideration for ESHA restoration efforts. The list is consistent with recommendations of the Los Angeles/Santa Monica Mountains Chapter of the California Native Plant Society for landscaping in the Santa Monica Mountains and have been updated to reflect the current scientific and common names changes designated by the Jepson Herbarium. Species that have no assigned common name by the Jepson Herbarium follow the Calflora website.

Table 14 Conceptual Plant Palette for ESHA Restoration Site

Plant Species		Restoration Location		
Common Name	Scientific Name	Lower Bank	Upper Bank	Upland
White alder	*Alnus rhombifolia*		x	
Yerba mansa*	*Anemopsis californica*	x		
California sagebrush	*Artemisia californica*			x
Narrow-leaf milkweed*	*Asclepias fascicularis*		x	x
Coyote brush	*Baccharis pilularis*			x
California brickellia	*Brickellia californica*		x	x
Yerba buena	*Clinopodium douglasii*		x	x
Bush poppy	*Dendromecon rigida*			x
Salt grass	*Distichlis spicata*	x	x	
Bush sunflower	*Encelia californica*		x	x
Scarlet monkeyflower*	*Erythranthe cardinalis*	x		
Common monkeyflower*	*Erythranthe guttata*	x		
California coffee berry	*Fragula californica*		x	x
Gumweed	*Grindelia camporum*			x
Toyon*	*Heteromeles arbutifolia*		x	x
California barley	*Hordeum brachyantherum* ssp. *Californicum*	x		
Spreading Rush	*Juncus patens*	x		
Giant tickseed*	*Leptosyne gigantea*		x	x
Pink honeysuckle	*Lonicera hispidula*		x	
Greene's saxifrage	*Micranthes californica*	x		
Bird's foot fern	*Pellaea mucronata*		x	
Bladderpod	*Peritoma arborea*			x
Western sycamore*	*Platanus racemosa*		x	
Bracken fern	*Pteridium aquilinum* var. *pubescens*	x	x	x
Coast live oak*	*Quercus agrifolia*		x	x
Golden currant	*Ribes aureum*		x	x
Fuchsia-flowering gooseberry	*Ribes speciosum*			x
California rose	*Rosa californica*	x	x	
Arroyo willow	*Salix lasiolepis*	x	x	
Purple sage	*Salvia leucophylla*			x
Black sage	*Salvia mellifera*			x
California hummingbird sage*	*Salvia spathacea*		x	x
Blue elderberry	*Sambucus nigra subsp. caerulea*		x	x
California figwort	*Scrophularia californica*		x	x

Plant Species		Restoration Location		
Common Name	Scientific Name	Lower Bank	Upper Bank	Upland
Nightshade*	*Solanum xanti*		x	x
Southern hedge nettle	*Stachys bullata*		x	x
Creeping snowberry	*Symphoricarpos mollis*	x	x	
California bay	*Umbellularia californica*		x	x
Giant chain fern	*Woodwardia fimbriata*	x		

Source: California Native Plant Society; Los Angeles/Santa Monica Mountains Chapter. 1996 [Revised 2007]. *Recommended List of Native Plants for Landscaping in the Santa Monica Mountains*

*Fire Resistant

Figure 16 ESHA Restoration Plan - Downstream Segment

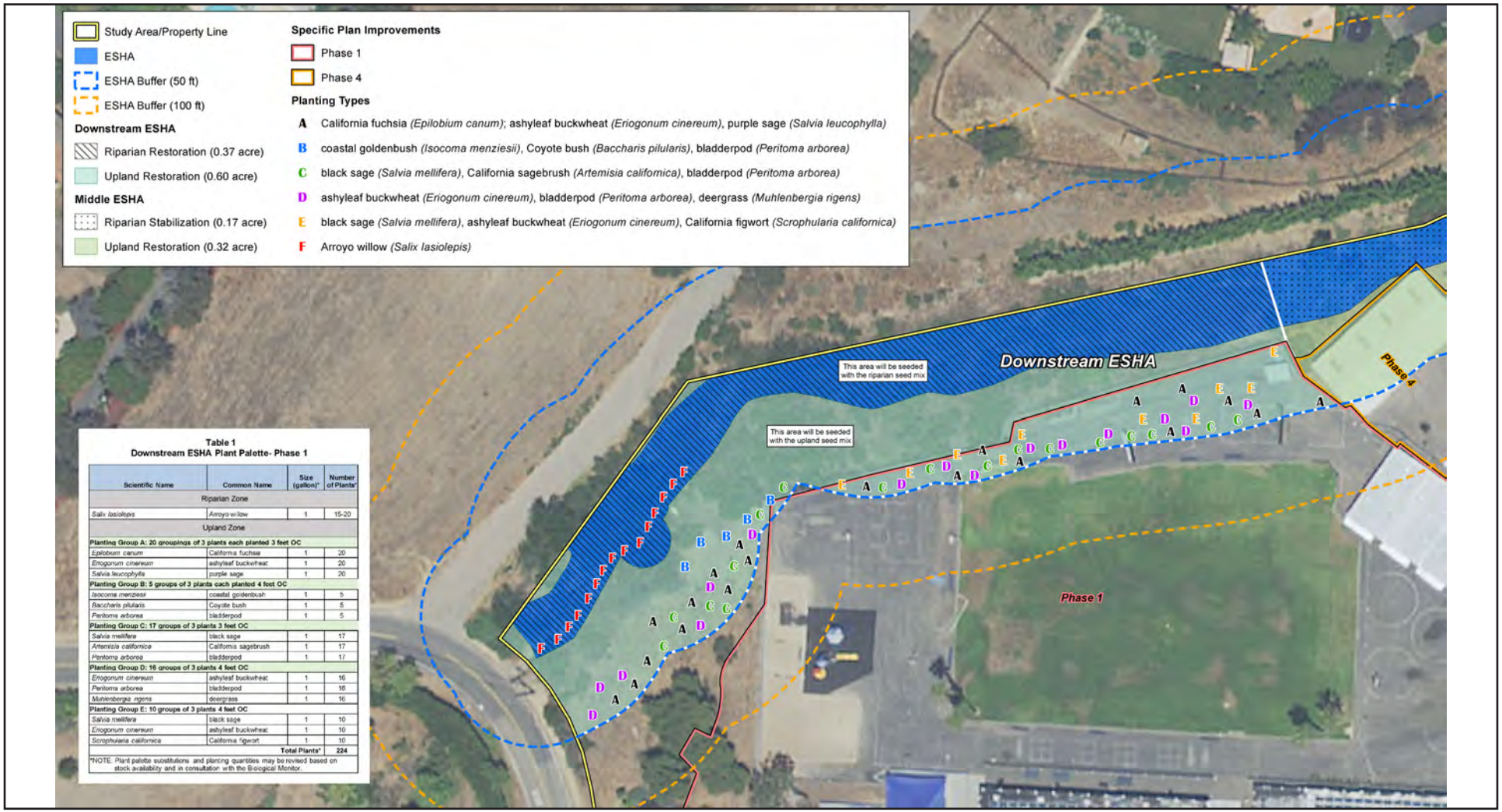


Table 1
Downstream ESHA Plant Palette- Phase 1

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone			
Salix lasiolepis	Arroyo willow	1	15-20
Upland Zone			
Planting Group A: 20 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	20
Eriogonum cinereum	ashyleaf buckwheat	1	20
Salvia leucophylla	purple sage	1	20
Planting Group B: 5 groups of 3 plants each planted 4 feet OC			
Isocoma menziesii	coastal goldenbush	1	5
Baccharis pilularis	Coyote bush	1	5
Peritoma arborea	bladderpod	1	5
Planting Group C: 17 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	17
Artemisia californica	California sagebrush	1	17
Peritoma arborea	bladderpod	1	17
Planting Group D: 16 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	16
Peritoma arborea	bladderpod	1	16
Muhlenbergia rigens	deergrass	1	16
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
	Total Plants*		**224**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.

0 80
Scale (Feet)

Source: Hexagon Geosystems, 2021

Figure 17 ESHA Restoration Plan - Middle Segment

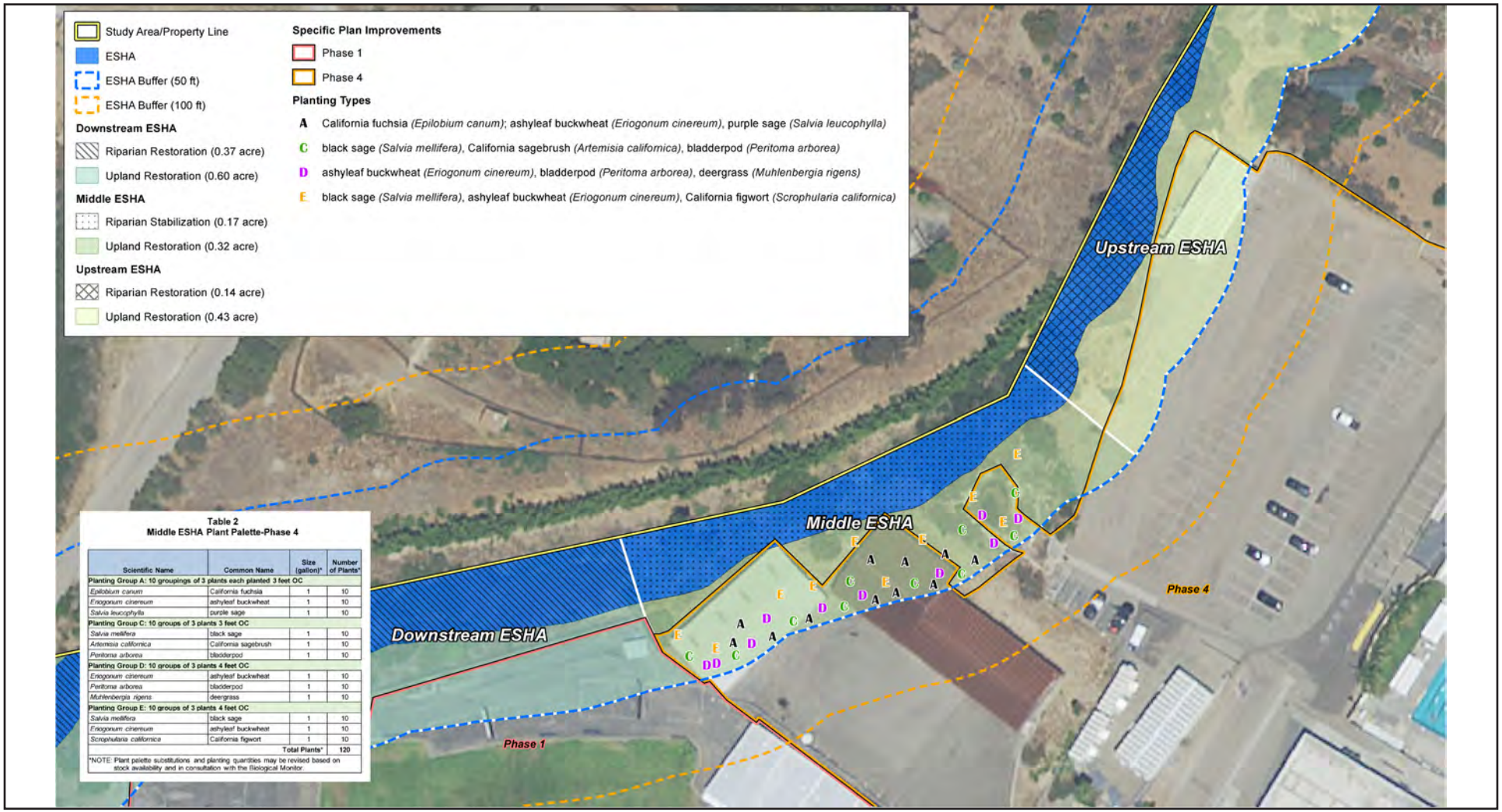


Table 2
Middle ESHA Plant Palette-Phase 4

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Planting Group A: 10 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Salvia leucophylla	purple sage	1	10
Planting Group C: 10 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	10
Artemisia californica	California sagebrush	1	10
Peritoma arborea	bladderpod	1	10
Planting Group D: 10 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	10
Peritoma arborea	bladderpod	1	10
Muhlenbergia rigens	deergrass	1	10
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	120

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.

0 80
Scale (Feet)

Source: Hexagon Geosystems, 2021

Figure 18 ESHA Restoration Plan - Upper Segment

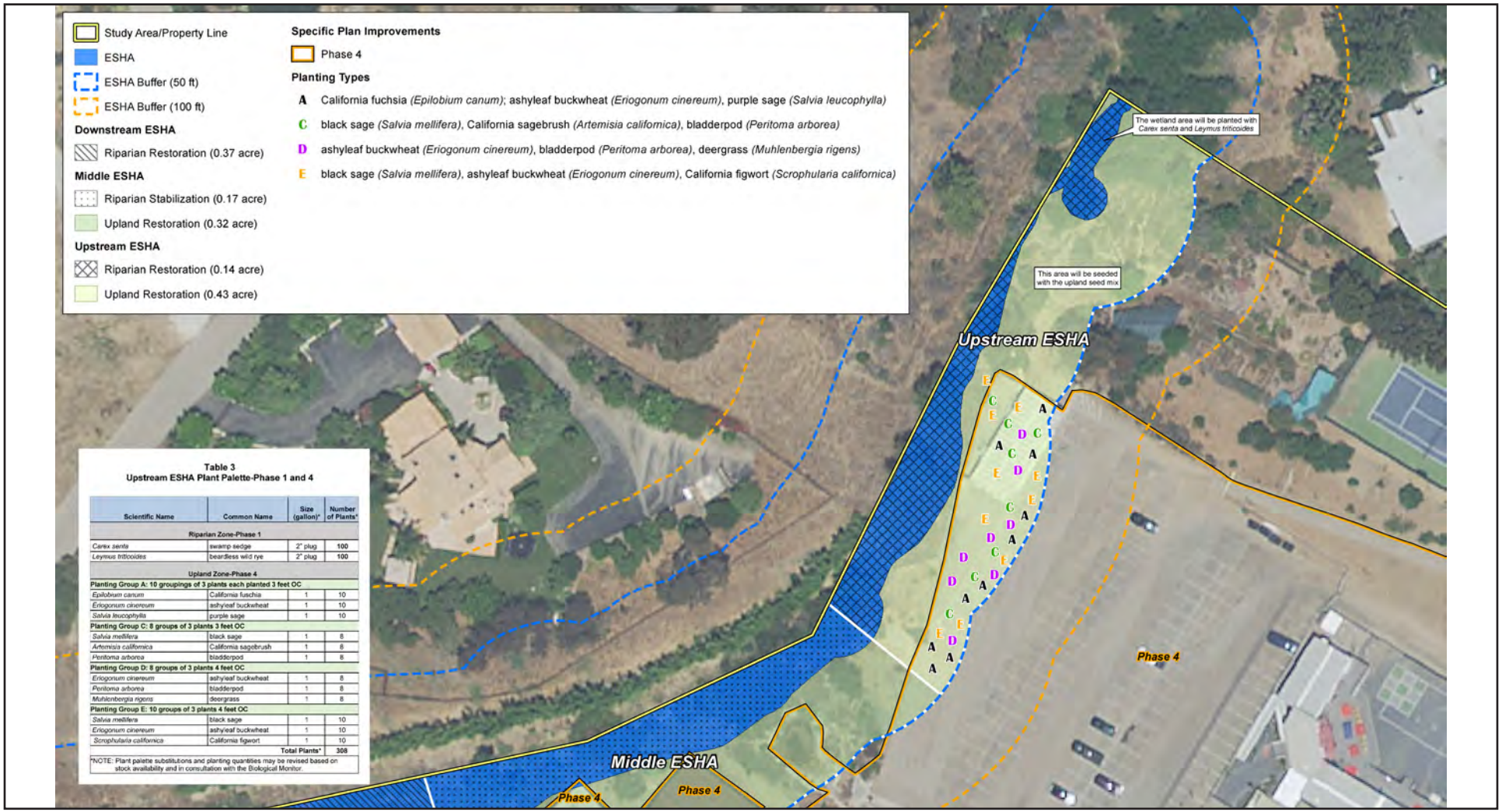


Table 3
Upstream ESHA Plant Palette-Phase 1 and 4

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone-Phase 1			
Carex senta	swamp sedge	2" plug	100
Leymus triticoides	beardless wild rye	2" plug	100
Upland Zone-Phase 4			
Planting Group A: 10 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuschia	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Salvia leucophylla	purple sage	1	10
Planting Group C: 8 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	8
Artemisia californica	California sagebrush	1	8
Peritoma arborea	bladderpod	1	8
Planting Group D: 8 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	8
Peritoma arborea	bladderpod	1	8
Muhlenbergia rigens	deergrass	1	8
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	308

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.

Source: Hexagon Geosystems, 2021

6.0 Circulation, Mobility and Parking

6.1 Vehicle Access and Parking

The campus plan has been developed with input from the neighbors and user groups to improve vehicle access and to reduce impacts to Morning View Drive. These items include expanding the drop off lane on Morning View; providing multiple drop off and pick up zones off of Morning View; separating the bus pick up and drop off away from commuter vehicles; moving the bus barn away from the schools; and providing more parking so that parking does not spill onto the roadways.

Regional vehicle access to the Specific Plan Area is provided via Pacific Coast Highway (State Route 1). The Specific Plan area can be accessed from Morning View Drive, approximately 0.3 miles northeast of the intersection of Morning View Drive and State Route 1 and 0.9 miles southeast of the intersection of Guernsey Avenue and Highway 1. Morning View Drive is a narrow, two-lane, local roadway that provides direct access to single-family homes in the area as well as to the existing MMHS and former JCES campuses and the Malibu Equestrian Park.

Site access would remain along Morning View Drive, with a centrally located drop-off area for buses and parents/guardians between the Middle School and High School Core areas. The District will re-label the parking lots and reconfigure parking within the Master Plan resulting in an increase in overall site parking and an improved pick-up and drop off location on Morning View Drive. The new drop-off/pick-up area would be able to accommodate up to five school buses and would have parking spaces for visitor use (Parking Lot C). Figure 19, *Vehicle Circulation Plan*, show the existing parking and proposed circulation under the Specific Plan. The Specific Plan will modify the existing access configuration to include:

- One two-way driveway from Morning View Drive on the southeastern portion of the campus providing vehicular access to parking lots A and B. Parking lot A has already been constructed. This driveway will provide access to a total of 212 parking spaces. Parking lots A and B will have a one-way counterclockwise circulation. Currently parking lot A is utilized as one of the areas for student drop-off. Lot B would be the closes parking lot to the future middle school buildings.
- Two one-way driveways from Morning View Drive in the southern portion of the campus across Ebbtide Way providing vehicular access to parking lot C, which will consist of 25 spaces. The eastern driveway will provide ingress and the western driveway egress. School buses will utilize this area for student drop-off and pick-up. Lot C would provide easy access to both the high-school and the middle school buildings.
- One two-way driveway from Morning View Drive on the southwestern portion of the campus providing vehicular access to parking lots D and E. This driveway will provide access to a total of 175 parking spaces. Lots D and E would be the closest lots to the proposed high-school buildings.
- One two-way driveway from Clover Heights Avenue on the northern part of the campus that would provide access to parking area F with 14 parking spaces. This lot is required to provide accessible parking to the upper fields. This parking lot would be the most accessible to the upper fields (baseball and soccer). Lot F is intended to serve athletic programs for school and non-school related youth sports. The parking lot would be primarily required to provide ADA parking spaces for access to the upper fields and field house and would link to accessible paths. Other parking spaces in Parking Lot F would be provide for parking during athletic events and prevent cars from parking in the cul-de-sac, which is an emergency turn around. There

is not a driveway from the upper part of the campus to the lower part of the campus to not increase driving through the neighborhood to support school.

- Curbside drop-off would continue to occur on the northern side of Morning View Drive. However, no parking is allowed along Morning View Drive.
- Other than frontage improvements along Morning View Drive, no vehicle related off-site improvements are proposed.

Parking Lot D would be a new, approximately 129-space parking lot that would be developed to the north of Building C and would be accessed by a new entryway along the western edge of the campus from Morning View Drive. Parking Lot E would be constructed during Phase 3 and would have 32 parking spots and be connected by the shared driveway to serve both the High School and the Boys & Girls Club. A small parking lot (Parking Lot F) with approximately 14 spaces would be developed along the northeastern boundary of the softball field with access from Clover Heights Avenue. Table 15, *Campus Specific Plan Buildout Parking Count*, shows the name and parking count for each lot and the construction phasing of each lot. The Specific Plan would not change or modify the restrictions imposed on the lighting associated with the 150-space Parking Lot A under the existing CDP (CDP No. A-MAL-13-030).

Table 15 Campus Specific Plan Buildout Parking Count

Existing Parking Lot	Existing Spaces	Proposed Changes	Specific Plan Spaces	Built Phase
150-Space Parking Lot (E)	150	Renamed to Parking Lot A	150	Existing
Lower Parking Lot (D)	62	Renamed to Parking Lot B	62	Existing
Student Parking Lot A	119	Removed		
JCES Parking Lots	37	Removed		
Service Lot	7	Removed		
		Parking Lot C (New)	25	1
		Parking Lot D (New)	129	1
		Parking Lot E (New)	32	3
		Parking Lot F (New)	14	3
Total	**375**	**-**	**412**	

Source: SMMUSD 2020.

Note: 11 spaces within the Bus Barn will also be removed as part of the Specific Plan.

6.2 Pedestrian Access

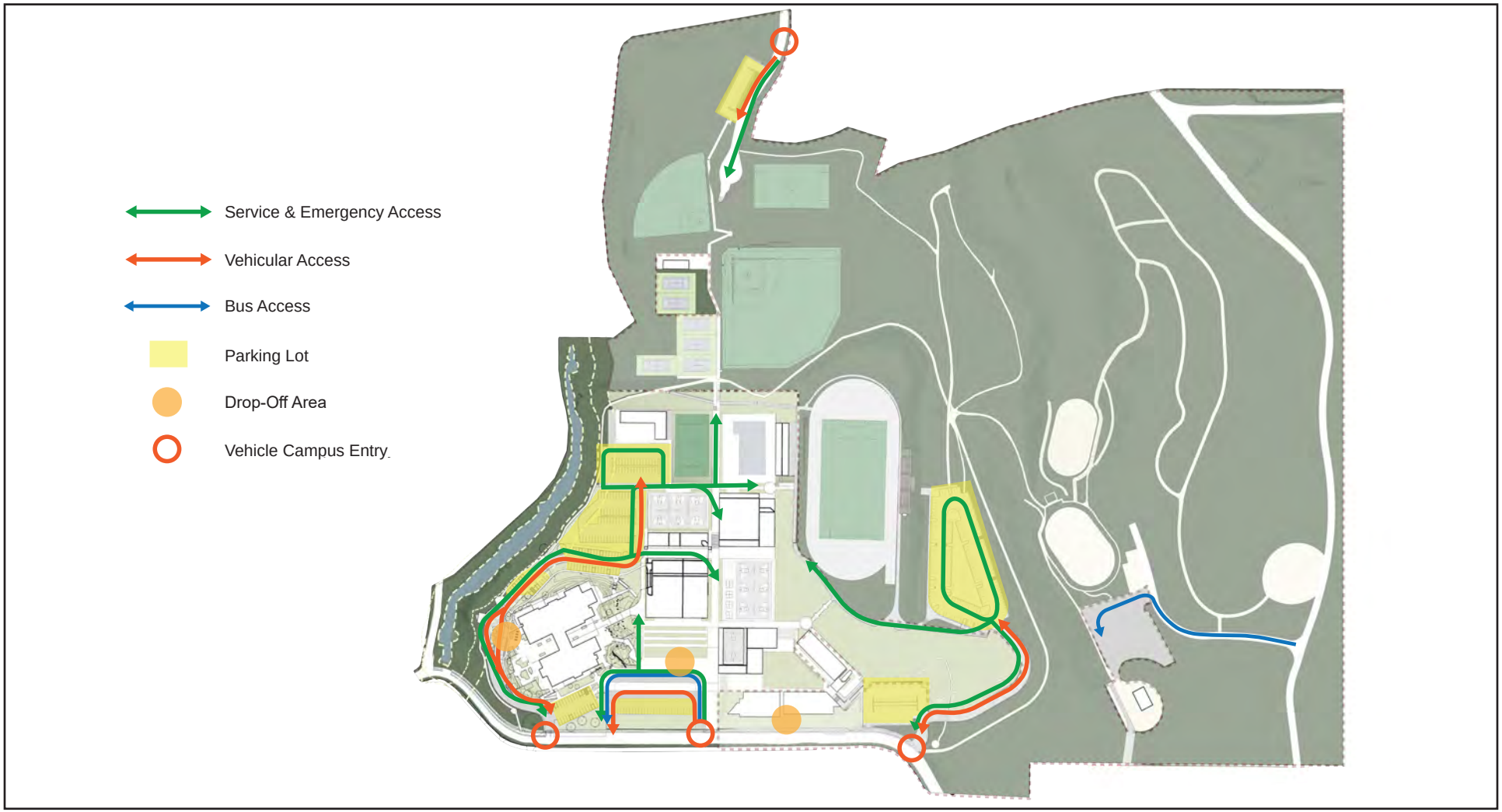
Pedestrian access to the Plan Area would remain along Morning View Drive with access at the new drop-off area, and Clover Heights Avenue, with access to the athletic fields. All circulation is wheelchair accessible via a network of either ramps and/ or elevators, connecting the parking lots with athletic and educational facilities throughout the campuses. Additionally, As shown in Figure 20, *Pedestrian Circulation Plan,* the Specific Plan would include a pedestrian trail system that starts along the ESHA on the west and connects to a larger system of existing walking trails around the Equestrian Park and surrounding hills. Fencing would surround the entire campus. Ornamental fencing near Morning View Drive and the proposed buildings would allow the MMHS and former JCES campuses to

be secure during school days and would reinforce a single point of entry for each school. Wildlife permeable fencing would run along the east, north, and west sides of the Plan Area.

6.3 Construction

Construction of the Specific Plan would temporarily generate additional traffic on the existing area roadway network. These vehicle trips would include construction workers traveling to the Plan Area as well as delivery trips associated with construction equipment and materials. Delivery of construction materials to the Plan Area would require several oversized vehicles that may travel at slower speeds than existing traffic. Once materials are delivered to the campus, all construction activities would occur on-site within the existing boundaries of the school campus and would not disrupt off-site traffic flows. Additionally, construction workers would park in the designated staging area to provide adequate parking for all employees and visitors to the campus throughout the duration of construction activities of the Specific Plan. Signage and/or workers conducting traffic would be present to direct pedestrians and vehicles during construction. Per standard construction procedures, the construction contractor would prepare and implement a traffic control plan to ensure that public safety and emergency access are maintained during the construction phase. Should any temporary fencing be needed during construction, it would meet the requirements of the LCP and LIP and be wildlife permeable.

Figure 19 Proposed Site, Access, Circulation, and Parking



Source: Spurlock Landscape Architects, 2021

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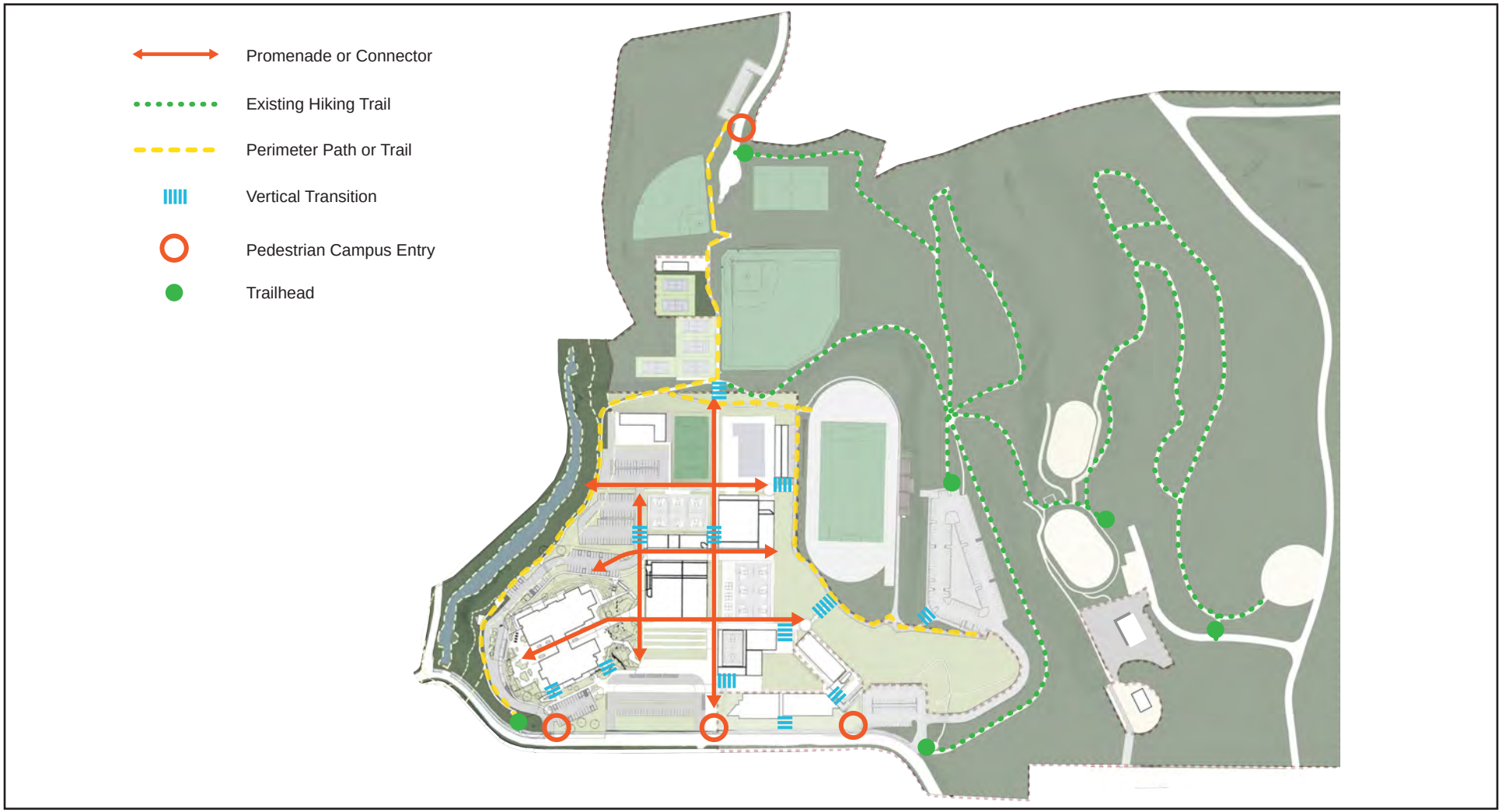
Figure 20 Pedestrian Circulation Plan



Source: Spurlock Landscape Architects, 2021

7.0 Infrastructure

Utility improvements necessary to serve the proposed replacement buildings would be constructed. The future on-site utilities would connect to existing facilities serving the site.

7.1 Water Plan

The proposed domestic and fire water lines would connect to the existing 12-inch public water main located on Morning View Drive. Water will be served by Los Angeles County Waterworks District No. 29.

7.2 Septic System

Currently, 10 septic tanks exist on the former JCES and MMHS campuses. The Specific Plan would upgrade the existing septic system as each phase is developed. The location of the septic tanks and associated leach fields will be reviewed as part of each phase. Timing of the decommissioning of existing septic systems and sizing and replacement with new infrastructure would be conducted such that continued sufficient systems remain in place and service is not disrupted. Any need for onsite treatment will be discussed further with the City during appropriate project phases.

7.3 Drainage Plan

The Plan Area would be divided into seven drainage management areas (DMA) that will coordinate drainage to Morning View Drive. New stormwater retention basins would be developed to infiltrate and treat runoff from the Specific Plan.

7.4 Lighting

Outdoor Lighting Program

The Proposed Project would install new and upgraded outdoor lighting within each development phase that would include lighting in both existing and proposed campus parking lots, pedestrian pathways, marquee sign lighting, and nighttime security- and safety-required lighting. All outdoor campus lighting would be designed to provide for the security and safety of students, staff, and visitors. Final design of the Project's outdoor lighting program must meet the requirements of the City of Malibu's Dark Sky Ordinance and adhere to the standards of the Malibu Local Coastal Program Local Implementation Plan Sections 4.6.2 and 6.5.G.

Maintenance and custodial staff typically leave the campus at 11:00 PM; as such, consistent with the existing lighting program on the MMHS Campus, the nighttime lighting would be controlled by an automatic timer and would be programmed to turn off at 11:30 PM each evening. On a limited number of occasions when school activities are scheduled to extend past 10:00 PM, such as an MMHS sports teams returning to campus following an "away" game or when a SMMUSD School Board meeting is held on campus, the programmed lights off time would be overridden to accommodate such authorized uses. The Specific Plan would not change or modify the restrictions imposed on the Athletic Field lighting (CDP 12-024), or the lighting associated with the 150-space Parking Lot A under the existing CDP (CDP No. A-MAL-13-030).

Pool lighting

In addition to the outdoor campus lighting described above, new lighting would be installed as part of the development of the new pool in Phase 4. As described in Section 3.3.1.3 above, the new pool would be an Olympic-size 50-meter pool intended to serve student sport and educational curriculum such as swim and water polo recreational, as well as community uses. Pool and pool deck lighting would be replaced as part of the Project in order to meet the needs and standards associated with this size of pool and intended uses. Lighting would be installed to meet the requirements of a Class II facility as identified by the Illuminating Engineering Society of North America (IESNA), 10th Edition, where lighting should be a minimum of 50 foot candles over the pool and 20 foot candles over the deck, as measured at the water level. for improved safety. Consistent with IESNA recommendations, lighting would also be provided within the pool basin, with the recommended luminance of 15 candelas per square foot (161 candelas per square meter). When the pool is not in use, accessible paths, including along the pool deck, would be with a minimum of 2 foot candles until lights are turned off campus-wide. Through meeting these standards, the pool lighting would also meet the requirements of California Building Code section 3115B.1, which requires a pool have underwater and deck lighting such that lifeguards or other persons may observe, without interference of glare, every part of the underwater area, pool surface, and any diving appurtenances.

As with existing use and operation, the pool would be lit for an annual total of 524 hours during evening hours, as detailed below in Table 16, *Pool Lighting*. In addition, pool lights are currently used during morning hours three days a week (Tuesday, Thursday, and Saturday) for two hours (5:30 a.m. to 7:30 a.m.), for a total of 310 hours. This results in a total lighting time of 834 hours in current condition, which would continue in the same manner under the Proposed Project.

Table 16 Pool Lighting

Months	Days Lit	Times
Annually in morning hours	Tuesdays, Thursdays, Fridays	5:30am – 7:30am (310 hours)
July 1 – August 18	No Lights	-
August 19 – November 6	Monday – Friday (53 school days)	6:15pm – 8:45pm (132.5 hours total over this time period)
November 7 – March 12	Monday – Friday (74 school days)	5:15pm – 8:45pm (259 hours total over this time period)
March 13 – June 10	Monday – Friday (53 school days)	6:15pm – 8:45pm (132.5 hours total over this time period)
June 11 – June 30	No Lights	-

Source: SMMUSD 2021

7.5 Solar Panel System

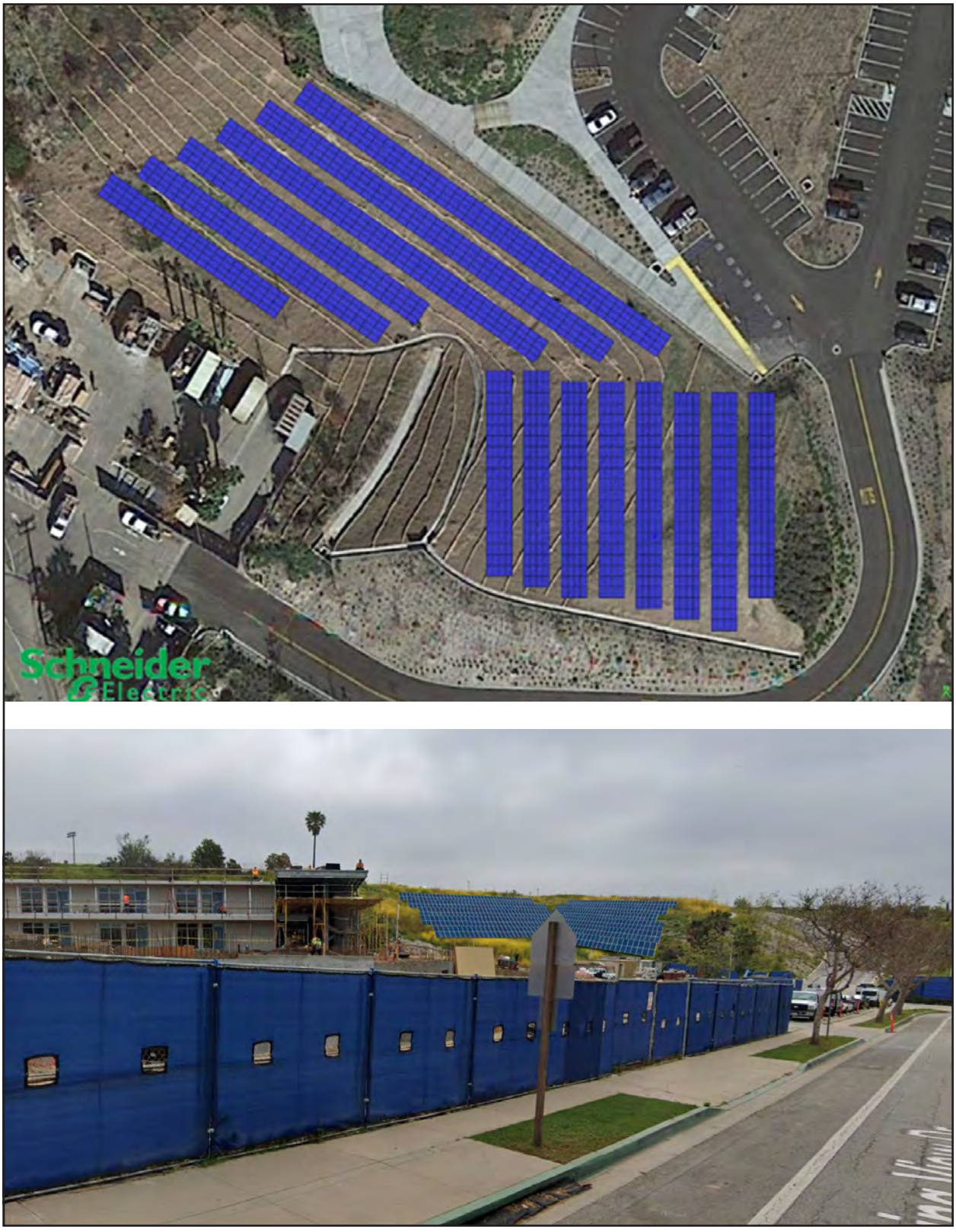
Because of the campus location in a high-risk fire area with an increased severity of wildfire risks in recent years, mandated public safety utility shutdowns have led to approximately 20 days of lost instruction at the MMHS Campus. In addition, the cost of utility provision continues to rise in California. To increase District resiliency, protect the learning environment, and maximize energy and operational savings, the MMHS Campus Specific Plan includes development of an “islandable microgrid” or ground mount photovoltaic (PV) solar array system treated to reduce glare, with battery storage and energy control center. An approximately 422 kilowatt (KW) PV system would be installed on the sloping hillside to the south of the existing Lot A and the Main Sports Field and to the

north/northwest of the new Middle School Building E (core classrooms building). A 500 KW/1,000 KW hour battery storage system would be installed. The existing approximately 118 KW of PV located on the newly constructed Building A/B would connect with the larger system. The solar panel system, shown in Figure 21, would be installed as part of Phase 2.

7.6 Solid Waste Disposal

Solid waste is gathered daily from each of the school buildings by custodial staff and taken to a central location for pickup. Other than small trash cans that are placed throughout the campus to discourage littering, trash facilities are screened from public view and accessible only to authorized employees. While the location of some of the small trash cans may vary, the centralized collection points are not anticipated to change with adoption of the specific plan. As no increase in capacity is planned, there should be no increase in solid waste from the campus.

Figure 21 Solar Panel System



Source: Schneider Electric, 2020

8.0 Administration and Authority

8.1 Specific Plan Authority

The MMHS Campus Specific Plan provides customized regulatory guidance to enable development of architectural features and building designs that would not otherwise be allowed by the City's current development standards. The Specific Plan is established through the authority granted to the City of Malibu by the California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457. The Government Code authorizes cities to adopt specific plans either by resolution as policy or by ordinance as regulation.

A Planning Commission hearing and City Council hearing are required to adopt this specific plan. This Specific Plan is a regulatory document for all development projects within the boundaries of the Plan Area. Development within this area must be consistent with this Specific Plan and with all applicable City and District regulations. Government Code 65450 states that a "Specific Plan shall include a statement of the relationship of the Specific Plan to the General Plan, and further, that it may not be adopted or amended unless found to be consistent with the General Plan." The Specific Plan document has been designed to be consistent with the City of Malibu General Plan goals and policies.

8.2 Relationship to the General Plan

Adopted November 20, 1995, The City of Malibu's General Plan is intended to guide development, as well as promote the general welfare of the local community, while protecting the local resources. Table 17, *Relationship to the General Plan*, shows the applicable policies relevant to the Specific Plan.

Table 17 Relationship to the General Plan

General Plan Policies	Relevance/Consistency
LU Policy 1.1.1: The City shall protect the natural environment by regulating design and permitting only land uses compatible with the natural environment.	**Consistent.** Implementation of the MMHS Campus Specific Plan would not result in a new land use onsite that would be incompatible with the natural environment. Instead, the MMHS Campus Specific Plan would redevelop and modernize the existing MMHS campus and former JCES campus to provide increased resources for the campus.
LU Policy 1.1.4: The City shall preserve the City's rural residential character.	**Consistent.** Implementation of the MMHS Campus Specific Plan would redevelop and modernize buildings within an existing school site. The institutional land use would remain the same. The MMHS Campus Specific Plan would not impede upon the surrounding rural residential character. The MMHS Campus Specific Plan's lighting program would be consistent with the existing lighting program on the MMHS campus and the City of Malibu's Dark Sky Ordinance. All campus lighting would be designed to provide for the security and safety of students, staff, and visitors.
LU Policy 1.1.5: The City shall require careful site planning which blends development with the natural topography.	**Consistent.** The topography of the campus slopes up north from Morning View Drive. The existing topography of the site would not be altered because of the Specific Plan implementation.

General Plan Policies	Relevance/Consistency
LU Policy 1.2.1: The City shall prohibit development in Environmentally Sensitive Habitat Areas (ESHA) unless no feasible alternative is available.	**Consistent.** As discussed previously as part of the Restoration Plan for the ESHA, the MMHS Campus Specific Plan proposes to remove existing parking and drive aisles and maintain a 50-foot buffer from ESHA except for a meandering deconstructed granite walking path adjacent to the ESHA for instructional stations. Therefore, no development would occur in the ESHA.
LU Policy 1.4.1: The City shall preserve significant ridgelines and other significant topographic features (such as canyons, knolls, hills, and promontories).	**Consistent.** The MMHS campus is set amongst rolling hills and its buildings and athletic fields are terraced into its hillside setting. The existing topography of the site would be maintained, and no significant topographic features would be altered because of the Specific Plan's implementation.
LU Policy 2.1.4: The City shall require development to be landscaped so that the project blends in with the environment and neighborhood.	**Consistent.** The MMHS Campus Specific Plan is a redevelopment and modernization of an existing public educational use. New development would be designed and landscaped in a manner that preserves the existing topography, incorporates sustainable building practices, maintains open spaces, and reflects the rural community character of Malibu. Landscaping would be provided along pathways, building perimeters, and within and around new parking lot areas.
LU Policy 2.2.1: The City shall require adequate infrastructure, including but not limited to roads, water, and wastewater disposal capacity, as a condition of proposed development.	**Consistent.** The MMHS Campus Specific Plan will include adequate infrastructure to serve the Malibu Middle and High School Campus. The future on-site utilities would connect to existing facilities serving the site. The MMHS Campus Specific Plan modifications to the wastewater and drainage system will adequately serve the Malibu Middle and High School Campus.
LU Policy 2.3.1: The City shall protect and preserve the unique character of Malibu's many distinct neighborhoods.	**Consistent.** Implementation of the MMHS Campus Specific Plan would modernize and renovate buildings within an existing school site. The MMHS Campus Specific Plan is consistent with similar modern school facilities and the design limits its scale and massing to blend with the surrounding topography and buildings.
LU Policy 2.4.2: The City shall limit nonresidential uses to those compatible with the rural residential character of the surrounding neighborhoods.	**Consistent.** The MMHS Campus Specific Plan continues the existing public educational use for the site. The existing topography of the site would not be altered because of project implementation. The MMHS Campus Specific Plan blends and preserves the rural qualities of the community including the maintenance of open space areas for equestrian and trail uses.
LU Policy 2.4.6: The City shall avoid improvements which create a suburban atmosphere such as sidewalks and streetlights.	**Consistent.** The MMHS Campus Specific Plan would not create new sidewalks. However, the MMHS Campus Specific Plan would include lighting on the existing and new campus parking lots, pedestrian pathways, pool lighting, and other nighttime security- and safety-required lighting, consistent with existing conditions. Pool lighting would be regulated by the requirements of California Building Code (CBC) Section 3115B.1, requiring sufficient illumination that lifeguards have direct view of all areas of the pool surface and diving appurtenances. The MMHS Campus Specific Plan's lighting program would be consistent with the City of Malibu's Dark Sky Ordinance. The Specific Plan would not change or modify the restrictions imposed on the Athletic Field lighting (CDP 12-024), or the lighting associated with the 150-space Parking Lot A under the existing CDP (CDP No. A-MAL-13-030).

Source: Malibu 1995.

8.3 Relationship to Other Plans, Programs, Agencies, and Regulations

The following is a summary of the most relevant plans, programs, agencies, and regulations that should be referenced for consistency or compliance when implementing the Specific Plan.

California Coastal Act of 1976

The California Coastal Act of 1976 (CCA) is the permanent enacting law approved by the State Legislature. The CCA established a set of policies, coastal boundary lines, and permitting procedures regulating coastal development. Further, it provides for the transfer of permitting authority, with certain limitations reserved for the state, to local governments through adoption and certification of Local Coastal Program (LCP) by the California Coastal Commission. In conjunction with this Specific Plan, the LCP for the Plan Area will also be updated and submitted to the Coastal Commission.

City of Malibu Municipal Code

The Zoning Regulations (Title 17 of the Malibu Municipal Code), in conformance with the General Plan, regulate land use development in the City of Malibu. In each zoning designation, the regulations specify the permitted and prohibited uses and the development standards, including setbacks, height, parking, and design standards, among others. The Specific Plan is located within the Institutional District Zone that authorizes public educational institutions with a conditional use permit.

Malibu Local Coastal Program

The City of Malibu is located within the California coastal zone and all developments are subject to the regulations of the City's LCP. It was certified by the California Coastal Commission in 2002 and grants the City authority to review and approve coastal development permits (CDPs) at the local level. The LCP includes a Land Use Plan (LUP to regulate land use and a Local Implementation Plan (LIP) for zoning. Amendments to certified LUPs and LIPs only become effective after approval by the California Coastal Commission. Development within the Coastal Zone may not commence until a coastal development permit has been issued by either the Commission or a local government that has a Commission-certified local coastal program.

8.4 Review and Approval Process

The responsibilities of the Director shall include administering, interpreting, and enforcing all requirements and standards of the Specific Plan, including the acceptance and processing of all land use permit applications. Enforcement of the Specific Plan shall be in accordance with Chapter 17.04 Administration and Enforcement provisions of the City Municipal Code.

- **The Planning Director** or designated representative may approve, conditionally approve, or deny applications that meet the requirements of this Specific Plan and do not require a conditional use permit. The Director holds final approval authority for and enforcement of building permits, certificates of occupancy, sign permits, and temporary use permits.
- **The Planning Commission** may recommend approval, conditional approval, or denial of conditional use permits, applications for variances, specific plan amendments, and appeals of the actions of the Director or Zoning Administrator.

- **The City Council** may approve, conditionally approve, or deny conditional use permits, applications for variances, specific plan amendments, and appeals of the actions of the Planning Commission.
- **Coastal Commission** will have the final approval authority over the amendment to the LCP.

8.5 Administrative Amendments

Any modifications to the MMHS Campus Specific Plan shall occur in accordance with the Specific Plan amendment process and are required to be reviewed for approval by the Planning Commission and the City Council, with final review authority by the California Coastal Commission. In all cases, Specific Plan amendments must be found to be in conformance with the objectives and intent of the MMHS Campus Specific Plan. Amendments may be requested at any time pursuant to section 65453(a) of the Government Code. Depending upon the nature of the proposed Specific Plan amendment, a supplemental environmental analysis may be required, pursuant to the CEQA Guidelines section 15162. Amendments may also require revision of the City's Local Coastal Program and approval by the California Coastal Commission.

8.6 Site Plan Review and Approval

Phases II through IV are considered conceptual and will require review and approval by the City prior to construction. Subsequent phases will be reviewed for compliance with this Specific Plan. Site Plan Approval shall occur in accordance with the City's Municipal Code, and Local Coastal Plan.

8.7 Environmental Review

The Environmental Impact Report (EIR) primarily a source of environmental information and disclosure for the Santa Monica-Malibu Unified School District, the lead agency for the MMHS Campus Specific Plan. The EIR describes the potential impacts from the adoption of the MMHS Campus Specific Plan. While the MMHS Campus Specific Plan would be conducted in phases, each phase has been fully developed and approved by the SMMUSD Board. As such, it is not anticipated that substantial subsequent CEQA review would be required by the District. Preparation of a Project level EIR does not relieve the District of its duty to review subsequent Coastal Development Permit (CDP) projects contemplated under the EIR. Any individual CDP application that is processed as under this EIR would have to satisfy the requirements of CEQA Guidelines section 15162, such that new information or project changes would require revisions to the EIR. Further, the analysis and mitigation measures will provide the City enough detail that subsequent environmental review should not be necessary absent the conditions set forth in section 15162.

9.0 Financing Measures

Construction of the new high school, as Phase 1 of the Malibu Campus Plan, will be funded by a General Obligation Bond, entitled Measure M, passed in 2018. Prior to the election in 2018, the District created a Malibu-only School Facilities Improvement District (SFID). The result of the SFID is that bond dollars generated by Measure M can only be used in Malibu (not in Santa Monica) for school facility improvement needs. Phase 1 does not anticipate the receipt of additional funding from the state or other sources. It is anticipated that the proceeds from bond sales under Measure M will adequately fund Phase 1 of the Malibu Campus Plan. It is further anticipated that future phases will require additional funding, most likely in the form of a future general obligation bond for the Malibu SFID. The District does not anticipate funding from the city.

January 2022 | **Mitigation Monitoring and Reporting Program**
State Clearinghouse No. 2020080350

MALIBU MIDDLE AND HIGH SCHOOL CAMPUS SPECIFIC PLAN PROJECT

for Santa Monica-Malibu Unified School District

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ATTACHMENT 3

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1. Introduction

1.1 PURPOSE OF MITIGATION MONITORING PROGRAM

This Mitigation Monitoring Program has been developed to provide a vehicle by which to monitor mitigation measures and conditions of approval outlined in the Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2020080350. The Mitigation Monitoring Program has been prepared in conformance with Section 21081.6 of the Public Resources Code and Santa Monica-Malibu Unified School District (SMMUSD or District) Monitoring Requirements. Section 21081.6 states:

> (a) When making findings required by paragraph (1) of subdivision (a) of Section 21081 or when adopting a mitigated negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the following requirements shall apply:
>
> (1) The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program.
>
> (b) The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based. A public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
>
> (c) Prior to the close of the public review period for a draft environmental impact report or mitigated negative declaration, a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation

> measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit the authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

The Mitigation Monitoring and Reporting Program (MMRP) will serve to document compliance with adopted/certified mitigation measures that are formulated to minimize impacts associated with development under the Malibu Middle and High School Campus Specific Plan Project (Proposed Project).

1.2 PROJECT LOCATION

The Santa Monica–Malibu Unified School District (SMMUSD or District) property is located at 30215 Morning View Drive (Assessor's Parcel Map Numbers (APN) 4469-017-900, 4469-018-900, 4469-018-901, 4469-018-902, 4469-018-903, 4469-018-904, 4469-019-900, 4469-019-901, 4469-019-902) in the city of Malibu, Los Angeles County, California. The SMMUSD property consists of approximately 87 acres over nine parcels that includes the existing Malibu Equestrian Park in the eastern part of the property, the existing Malibu Middle and High School (MMHS) campus in the center, and the former Juan Cabrillo Elementary School (JCES) campus in the west (Project Site). The Project Site is situated on three of nine parcels: APN 4469-017-900 (40.06 acres), 4469-018-900 (9.4 acres), and 4459-018-904 (2.57 acres). The total acreage of the Project Site is 52.03 acres. The majority of the Malibu Middle and High School Campus Specific Plan Project (Proposed Project) would be developed within the existing MMHS campus and the former JCES campus, with one component of the Proposed Project in the Malibu Equestrian Park. The Project Site is set amid rolling hills, and its buildings and athletic fields are terraced into the hillside setting. The Project Site is in the City of Malibu Institutional (I) Zoning District that authorizes public educational institutions with a conditional use permit.

The Project Site is approximately 0.25-mile northeast of the Pacific Coast Highway (PCH) and Zuma Beach, and is bounded by Merritt Drive to the east, Via Cabrillo Street to the west, and Morning View Drive to the south. Single-family homes border the Project Site to the north.

1.3 PROJECT SUMMARY

The Proposed Project would redevelop and modernize the existing MMHS campus and former JCES campus to create generally three separate and distinct areas: Middle School Core, High School Core, and shared facilities. Implementation of the Proposed Project would result in demolition of all 7 buildings and 9 portables on the former JCES campus and 6 buildings and associated amenities on the MMHS campus, totaling 154,904 square feet of demolition. The existing 25-meter lighted, outdoor pool complex would be demolished, and new 50-meter lighted, outdoor pool complex would be developed. The existing Building E and Buildings A/B at the Project Site would remain, and all other structures would be removed. No changes to the existing main

football/track sports field, baseball, or softball fields would be made with the exception of minor improvements, including the development of new field houses and additional parking adjacent to the softball field. The Proposed Project would relocate the existing on-campus Bus Barn to a disturbed location on the adjacent, District-owned Malibu Equestrian Park. It would also include restoration in the campus-adjacent Environmentally Sensitive Habitat Area (ESHA) and establishment of a new trail along the ESHA that would connect to the existing, larger trail network around the campus. The Proposed Project would result in 32 classrooms, 8 labs and maker spaces, and support spaces—a total of 173,595 square feet of building space, providing the middle/high school campus with a total of 51 classrooms and 12 labs and a total of 222,425 square feet of building space.

1.1 ENVIRONMENTAL IMPACTS

1.1.1 Impacts Considered Less Than Significant

During preparation of the Initial Study, SMMUSD determined that four environmental impact categories would not be significantly affected by the proposed Malibu Middle and High School Campus Specific Plan Project. These categories are not discussed in detail in this DEIR.

- Agriculture and Forestry Resources
- Mineral Resources
- Population and Housing
- Tribal Cultural Resources

The DEIR determined that eight environmental factors would have less than significant impacts if the Proposed Project is implemented.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Recreation
- Transportation
- Utilities and Service System

- Wildfire

1.1.2 Potentially Significant Adverse Impacts That Can Be Mitigated

The DEIR determined that seven environmental factors would have potentially significant impacts without mitigation.

- Air Quality
  - Construction-related pollutants
- Biological Resources
  - Impact to sensitive species
  - Loss of sensitive habitat types
  - Impact approximately 0.033 acres of USACE, RWQCB and CDFW Jurisdiction
  - Require compliance with the local tree ordinance
- Cultural Resources
  - Impacts on archaeological resources
- Geology and Soils
  - Hazards arising from off-site landslide, lateral spreading, subsidence, collapsible soils, or expansive soils
  - Impact to paleontological resources or unique geologic feature
- Noise
  - Permanent operation-related noise
- Transportation
  - Potentially hazardous conditions and potential conflicting uses
- Wildfire
  - Exacerbate wildfire risks
  - Exposure to risks, including downslope or downstream flooding or landslides

1.1.3 Unavoidable Significant Adverse Impacts

This DEIR identifies two significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the Proposed Project. Unavoidable adverse impacts may be considered significant on a project-specific, cumulatively significant, and/or potentially significant basis. If a project is determined to have a significant impact, the District must prepare a "statement of overriding considerations" before it can approve the project, where in the decision-making body must find and determine whether the benefits of the Proposed Project were balanced against the project's unavoidable significant environmental effects outweigh the adverse effects, and therefore the adverse effects are considered acceptable. The impact that was found in the DEIR to be significant and unavoidable is:

- Aesthetics
  - Additional light and Glare
- Noise
  - Construction-generated noise

2. Monitoring and Reporting Requirements

2.1 MITIGATION MONITORING PROGRAM ORGANIZATION

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Pub. Resources Code, § 21081.6). The mitigation monitoring and reporting program is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the DEIR, specifications are made herein that identify the action required and the monitoring and reporting that must occur. In addition, a responsible agency is identified for verifying compliance with individual conditions of approval contained in the Mitigation Monitoring and Reporting Program. To effectively track and document the status of mitigation measures, a mitigation matrix has been prepared (see Table 2-1, *Mitigation Monitoring Requirements*).

2. Mitigation Monitoring Process

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Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
5.1 AESTHETICS					
AES-1	To minimize spill lighting and glare impacts, all lighting from the Proposed Project, including from pool lighting, shall be LED, have full-cutoff shielding, be aimed specifically to direct areas.	Construction Contractor, Santa Monica-Malibu Unified School District	During design of each phase of the Project	Santa Monica-Malibu Unified School District	
AES-2	Atmospheric lighting pollution shall be reduced by using full cut-off shielded lighting fixtures that eliminate light directed to the sky. Marquee sign lighting shall be dimmable in the evenings when not required for student/community communication.	Construction Contractor, Santa Monica-Malibu Unified School District	During design of each phase of the Project	Santa Monica-Malibu Unified School District	
AES-3	Santa Monica-Malibu Unified School District (SMMUSD) shall minimize the effects of new sources of night lighting. Such measures, which may include the following and/or other measures, will be incorporated into each phase of the Proposed Project's design and operation: • All exterior lighting shall be delineated as either "night lighting" or "security lighting" and controlled by separate automatic timers. Lights delineated as security lighting shall be determined by the campus principal, security, and facility manager. • All lighting delineated as "night lighting" shall be shut off automatically at 10:00 p.m. on school nights. This includes pool lights. • When operation of "night lighting" is necessary after 10:00 p.m., SMMUSD as operator of the Project Site shall provide notice to the community by posting such notice on the campus website and the school message board and marquee. • When school is not in session (such as summer and winter break and weekends), "night lighting" shall not be permitted, and only required security lighting shall be illuminated.	Construction Contractor, Santa Monica-Malibu Unified School District	During design of each phase of the Project	Santa Monica-Malibu Unified School District	
AES-4	All structures shall incorporate nonreflective exterior building materials in their designs, and the use of reflective glass shall be prohibited.	Construction Contractor, Santa Monica-Malibu Unified School District	During design of each phase of the Project	Santa Monica-Malibu Unified School District	
AES-5	The pool lighting shall be designed to meet safety requirements of 30 foot candles over the pool and 20 foot candles over the deck as measured at the water level, while also minimizing light spill, glare, and skyglow to the extent feasible to ensure proper lighting levels necessary for competitive water polo play. Pool lighting shall be turned off within ½ hour of aquatic use and the 2-	Construction Contractor, Santa Monica-Malibu Unified School District	During design of the pool phase (before construction and operation)	Santa Monica-Malibu Unified School District	

2. Mitigation Monitoring Process

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	foot candle safety perimeter lighting shall be turned off with all other automatic campus lighting.				
5.2 AIR QUALITY					
AQ-1	Construction bids for Phase 1 through 4 activities at the Project Site shall specify use of offroad equipment that meets the United States Environmental Protection Agency (US EPA) Tier 4 interim emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated that such equipment is not available. In the event the equipment is not available, as demonstrated by the contractor, Tier 3 equipment retrofitted with a California Air Resources Board's Level 3 Verified Diesel Emissions Control Strategy (VDECS) shall be used. The following shall be specified in the construction bid: • Construction contractors shall use engines that meet US EPA Tier 4 Interim emission standards for equipment over 50 horsepower. • Construction contractors shall maintain a list of all operating equipment in use on the Project Site in use for more than 20 hours for verification by the District. The construction equipment list shall state the makes, models, and number of construction equipment on-site. • Construction contractors shall ensure that all equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. • Construction contractors shall communicate with all sub-contractors in contracts and construction documents that all non-essential idling of construction equipment is restricted to five minutes or less in compliance with CARB Rule 2449. Construction contractors shall be responsible for ensuring that this requirement is met.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	
5.3 BIOLOGICAL RESOURCES					
BIO-1	Pre-Construction Burrowing Owl Surveys and Avoidance: In the year prior to initiation of Proposed Project activities in Phase 4, and/or before recommencing construction activities if suspended/delayed for six months or more, a qualified biologist shall conduct pre-construction burrowing owl surveys in accordance with the 2012 CDFW Burrowing Owl Consortium Survey Protocol and Mitigation Guidelines (CDFW 2012). If wintering or	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of Phase 4 of the Project	Santa Monica-Malibu Unified School District	

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	breeding burrowing owl are observed adjacent to the impact area, mitigation shall be conducted in accordance with the CDFW guidelines (CDFW 2012).				
BIO-2	Pre-Construction Nesting Bird Surveys: To the extent possible, vegetation removal shall be conducted during the non-breeding season (i.e., September 1 to January 31) in order to minimize direct impacts on nesting birds and raptors. If construction activities would be initiated during the breeding season for nesting birds/raptors (i.e., February 1–August 31), a pre-construction survey will be conducted by a qualified Biologist within three days prior to the initiation of construction (including demolition of structures). If construction activities are delayed or suspended for more than 7 days during the breeding season, nesting bird surveys shall be repeated before construction activities can begin or restart. In addition, nesting bird surveys shall be conducted prior to starting phased Project construction and activities. The absence of nesting birds and raptors shall be considered valid only until the following breeding season. The area will be surveyed for 2 hours between dawn and 10:00 AM on five occasions with at least one week between surveys. If there is appropriate habitat for owls on site, on at least three of the surveys, surveys will also be conducted during the period immediately before nightfall. The nesting bird/raptor Survey Area will include a buffer of 300 feet around the work area for nesting birds and a buffer of 500 feet around the work area for nesting raptors (including burrowing owl). If the Biologist does not find any active nests in or immediately adjacent to the impact area, construction activities can proceed. If the Biologist detects an active nest within or immediately adjacent to the construction area and determines that the nest may be impacted or breeding activities substantially disrupted by increased activity around the nest, the Biologist shall determine an appropriate protective buffer around the nest depending on the sensitivity of the species and the nature of the construction activity. The protective buffer shall be between 25 to 300 feet for nesting birds; 300 to 500 feet for nesting raptors. The active nest will be protected within the designated buffer until nesting activity has ended. Any protective buffers will be mapped on construction plans and designated as "Environmentally Sensitive Areas". Construction can proceed within the	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

2. Mitigation Monitoring Process

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	protective buffer when the qualified Biologist has determined that the nest is no longer active (i.e., fledglings have left the nest or the nest has failed).				
BIO-3	Vegetation Assessments: Vegetation types shall be verified prior to work activities occurring in Phases 2 and 4 if seven years have elapsed from the latest point in time the vegetation mapping described in this Biological Assessment was conducted (April 15, 2021). Vegetation types in the BSA shall be assessed during a field visit and compared to the vegetation types mapped and described herein. Any changes shall be documented in a revised vegetation map and provided to the City of Malibu and the District. Special status vegetation types shall be identified, and if impacts are anticipated, the Proposed Project shall comply with Mitigation Measure, BIO-4.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of Phases 2 and 4 of Project	Santa Monica-Malibu Unified School District	
BIO-4	Special Status Vegetation Types: The loss of special status vegetation types within the impact area is considered a significant impact. These vegetation types will be restored onsite or, if appropriate, offsite at a ratio of not less than 1:1, as agreed to by the City of Malibu and the District. A revegetation program shall be implemented in accordance with a City-approved landscape palette on all graded areas not utilized for improvements or structures. The revegetation program will be submitted to the City of Malibu for review and approval by a qualified biologist prior to issuance of grading permits. Restoration will consist of seeding and container planting of appropriate species. Impacts are considered less than significant after implementation of the following measures: A detailed restoration program will be developed prior to map recordation and implemented, and will contain the following items: • *Responsibilities and qualifications of the personnel to implement and supervise the plan*. The responsibilities of the landowner, specialists, and maintenance personnel that will supervise and implement the plan will be specified. • *Site selection*. The site(s) for mitigation will be determined in coordination with the District and the City of Malibu. The site will be located in a dedicated open space area and will be contiguous with other natural open space areas.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

Table 2-1 Mitigation Monitoring Requirements

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
• *Site preparation and planting implementation*. The site preparation will include the following: 1) protection of existing native species, 2) trash and weed removal, 3) native species salvage and reuse (i.e., duff), 4) soil treatments (i.e., imprinting, decompacting), 5) erosion control measures (i.e., rice or willow wattles), and 6) native seed mix application. • *Schedule.* Establishment of restoration/revegetation sites will be conducted between October 1 and January 30. Seeding and planting of container plants will take place immediately after preparation of the restoration sites. • *Maintenance plan/guidelines*. The maintenance plan will include the following: 1) weed control, 2) herbivory control, 3) trash removal, 4) irrigation system maintenance, 5) maintenance training, and 6) replacement planting. • *Monitoring Plan*. The monitoring plan will include the following: 1) qualitative monitoring (i.e., photographs and general observations), 2) quantitative monitoring (i.e., randomly placed transects), 3) performance criteria as approved by the City, 4) monthly reports for the first year and bimonthly reports thereafter, and 5) annual reports which will be submitted to the City for three to five years. The monitoring will be conducted for three to five years, depending upon the performance of the mitigation site. • *Long-term preservation.* Long-term preservation of the site will be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development. • *Performance standards will be identified and will apply for the revegetation of special status vegetation types.* Revegetation will be considered successful at three years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing, restored, and created habitat areas. In addition, earth-moving equipment will avoid maneuvering in areas outside the identified limits of grading in order to avoid disturbing open space areas				

2. Mitigation Monitoring Process

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	that will remain undeveloped. Prior to grading, the construction boundary limits will be marked by the construction supervisor and the Project biologist. These limits will be identified on the grading plan. The District will submit a letter to the City of Malibu verifying that construction limits have been flagged in the field. No earth-moving equipment will be allowed outside of the construction boundary.				
BIO-5	RWQCB and CDFW Jurisdiction Areas: Upon completion of construction activities, impacts to approximately 0.033 acre of non-wetland RWQCB and CDFW jurisdictional waters will be mitigated within the Proposed Project boundaries at a minimum ratio (i.e., no less than) of 1:1 through the creation of 0.033 acre of non-wetland jurisdictional waters. Acquisition of a § 1602 "lake or streambed alteration" agreement from the CDFW and waste discharge requirements from the RWQCB would be required. Prior to the final submittal of a Report of Waste Discharge from the RWQCB, and/or CDFW notification of lake or streambed alteration, the District will develop a mitigation plan for the RWQCB, CDFW, and City of Malibu. The objective of the mitigation is to ensure no net loss of habitat values as a result of the Proposed Project. The detailed restoration program shall contain the following items: • *Responsibilities and qualifications of the personnel to implement and supervise the plan*. The responsibilities of the landowner, specialists and maintenance personnel that would supervise and implement the plan will be specified and shall include the demonstration of having successfully completed at least 3 mitigation projects of similar size and scope within the last 5 years including the design and implementation of an irrigation system to ensure that the plantings and seeds are irrigated during periods of below average rainfall. The specialists that would supervise and implement the plan would include habitat restoration specialists, wildlife biologists, arborists, botanists, landscape contractor, and irrigation specialists. • *Site selection*. The site(s) for the mitigation will be determined in coordination with the Project Applicant and resource agencies. The site will be located in a dedicated open space area and will be contiguous with other natural open space.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

Table 2-1 Mitigation Monitoring Requirements

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
• *Site preparation and planting implementation.* The site preparation will include the following: 1) protection of existing native species, 2) trash and weed removal, 3) native species salvage and reuse (i.e., duff), 4) soil treatments (i.e., imprinting, decompacting), 5) temporary irrigation installation, 6) erosion control measures (i.e., rice or willow wattles), 7) native seed mix application, and 8) native container species. • *Schedule. A* schedule will be developed which includes planting and seeding to occur in late fall and early winter, between October 1 and January 30 in order to optimize the successful establishment and germination of native plants and seeds. • *Maintenance plan/guidelines.* The maintenance plan will include the following: 1) weed control, 2) herbivory control, 3) trash removal, 4) irrigation system maintenance, 5) maintenance training, and 6) replacement planting. • *Monitoring Plan.* The monitoring plan will include the following: 1) qualitative monitoring (i.e., photographs and general observations), 2) quantitative monitoring (i.e., randomly placed transects), 3) performance criteria as approved by the resource agencies, 4) monthly reports for the first year and bimonthly reports thereafter, and 5) annual reports which will be submitted to the resource agencies for three to five years. Coordination will take place on a regular basis between the biological monitor, landscape contractor and irrigation specialist with regard to non-native species targeted for removal as well as irrigation schedule to ensure that the restoration in on track for achievement of performance criteria. In addition, remedial as well as contingency measures shall also be specified should the site not meet specified performance standards. The site will be monitored and maintained for five years to ensure successful establishment of riparian habitat within the restored and created areas; however, if there is successful coverage prior to five years, the District may request from RWQCB and CDFW to be released from monitoring requirements. • *Long-Term Preservation.* Long-term preservation of the site will be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development.				

2. Mitigation Monitoring Process

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	• Performance standards will be identified and will apply for the restoration of riparian habitat. Revegetation will be considered successful at three years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing and restored and/or created habitat areas. The qualifications of the personnel to implement and supervise the plan would include the demonstration of having successfully completed at least 3 mitigation projects of similar size and scope within the last 5 years including the design and implementation of an irrigation system to ensure that the plantings and seeds are irrigated during periods of below average rainfall. The specialists that would supervise and implement the plan would include habitat restoration specialists, wildlife biologists, arborists, botanists, landscape contractor, and irrigation specialists.				
BIO-6	Adherence to City of Malibu Tree Protection Ordinance: Prior to initiation of Proposed Project activities in each Phase of the Proposed Project, the tree survey map created for the Proposed Project (Appendix C) shall be consulted and if impacts to any protected trees are anticipated, the Proposed Project shall comply with mitigation included in the Malibu Local Coastal Program Native Tree Protection Ordinance.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	
5.4. CULTURAL RESOURCES					
CUL-1	Prior to issuance of any permits allowing ground-disturbing activities for the Proposed Project (for each individual phase of the Project), the District shall ensure that an archaeologist who meets the Secretary of the Interior's standards for professional archaeology and a Qualified Paleontologist (or someone cross-trained in both areas) has been retained for the Project and will be on-call during all grading and other significant ground-disturbing activities. The Qualified Archaeologist and Paleontologist shall ensure that the following measures are followed for the Project: • Prior to any ground disturbance, the Qualified Archaeologist/Paleontologist, or their designee, shall provide worker environmental awareness protection training to construction personnel regarding regulatory requirements for the protection of cultural	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

Table 2-1 Mitigation Monitoring Requirements

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)

(prehistoric and historic) and paleontological resources. As part of this training, construction personnel shall be briefed on proper procedures to follow should unanticipated cultural or paleontological resources be made during construction.
• In the event that unanticipated cultural or fossil-bearing material is encountered during any phase of project construction, all construction work within 100 feet of the find shall cease and the Qualified Archaeologist/Paleontologist shall assess the find for importance. Construction activities may continue in other areas. If the discovery is determined to not be important by the Qualified Archaeologist/Paleontologist, work will be permitted to continue in the area.
  • If a find is determined to be important by the Qualified Archaeologist/Paleontologist, he or she shall immediately notify the District. The District shall consult on a finding of eligibility and implement appropriate treatment measures if the find is determined to be eligible for inclusion in the California Register of Historical Resources (CRHR). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: (1) is not eligible for the CRHR; or (2) that the treatment measures have been completed to their satisfaction.
  • If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the Los Angeles County Medical Examiner-Coroner (as per § 7050.5 of the California Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code (PRC), and AB 2641 will be implemented. If the Medical Examiner-Coroner determines the remains are Native American and not the result of a crime scene, the Medical Examiner-Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American				

2. Mitigation Monitoring Process

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.				
5.6 GEOLOGY AND SOILS					
GEO-1	Design recommendations listed in the Geotechnical Report prepared for the Proposed Project shall be followed. These include, but are not limited to, seismic design parameters, foundation design, retaining wall, grading, trenching, etc. Details of these recommendations are included in Appendix H.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	
GEO-2	Design recommendations regarding future irrigation systems identified in the Geotechnical Report shall be followed to ensure that irrigation shall not be allowed within at least 10-feet-horizontally around structures supported on shallow spread footings and/or with slabs-on-grade. Details of these recommendations are included in Appendix H.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	
5.11 NOISE					
N-1	Construction contractors shall implement the following measures for construction activities conducted at the Project Site during each phase of construction. Construction plans submitted to the District shall identify these measures on demolition, grading, and construction plans. The District shall verify that grading, demolition, and/or construction plans submitted include these notations prior to demolition, grading, and/or building construction.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

Table 2-1 Mitigation Monitoring Requirements

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
• During the active construction period, equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, intake silencers, ducts, engine enclosures, acoustically attenuating shields or shrouds) wherever feasible. • Impact tools (e.g., jack hammers and hoe rams) shall be hydraulic- or electric-powered wherever feasible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools. • Stationary equipment such as generators and air compressors shall be located as far as feasible from noise-sensitive uses. • The District's construction contractors and subcontractors shall be required through contract specifications to locate construction staging areas, construction worker parking, and material stockpiling as far away from vibration- and noise-sensitive sites as possible. Additionally, these activities shall be located away from occupied buildings on campus, occupied residential dwellings adjacent to the campus, and other sensitive receptors, where feasible. Prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the contact information of the District's and contractor's representatives who are authorized to respond in the event of a noise or vibration complaint. If the contractor's authorized representative receives a complaint, they shall investigate, take appropriate corrective action, and report the action to the District. • Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All equipment shall be turned off if not in use for more than 5 minutes. • During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall be responsible for adjusting alarms based on the				

2. Mitigation Monitoring Process

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	background noise level, or to utilize human spotters when feasible and in compliance with all safety requirements and laws. • Notification shall be mailed to owners and occupants of all developed land uses immediately bordering or directly across the street from the Proposed Project Site providing a schedule for major construction activities through the duration of the construction period. When construction activity would occur within 100 feet of nearby receptor property lines, contractors shall erect temporary noise barriers where feasible. The temporary noise barrier shall have a minimum height of 12 feet and be free of gaps and holes. The barrier can be (a) a ¾-inch-thick plywood wall OR (b) a hanging acoustical blanket/curtain with a surface density or at least 1.5 pounds per square foot. • Prior to construction, the contractor shall submit to the District a list of equipment and activities required during construction to ensure proper planning of the most intense construction activities during time periods that would least impact campus operations. When construction activity would occur within 150 feet of active classrooms, contractors shall ensure that interior classroom noise levels do not exceed 50 dBA Leq. Feasible methods to achieve this include those listed above, scheduling work during less sensitive time periods when the classroom is not in use, and classroom use rescheduling to move active classes away from high noise construction activities, as necessary. Construction activities within 50 feet of occupied classrooms would be prohibited during preparation and testing for National Standardized testing days of students at MMHS.				
N-2	The proposed bus barn shall be an enclosed structure constructed of wood, masonry, concrete, or other similar solid material (e.g., not corrugated metal). The structure will have no gaps and minimal window area. All bus testing shall be conducted inside the enclosed bus barn.	Construction Contractor, Santa Monica-Malibu Unified School District	During design of the relocated bus barn	Santa Monica-Malibu Unified School District	
5.14 TRANSPORTATION					
T-1	During each phase of construction activity, SMMUSD shall work with the City of Malibu Public Works Department to develop and implement a Construction	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	Traffic Mitigation Plan that is specific to the needs of each phase and shall include the following: • Haul trucks and vendor truck traffic ingress and egress to/from the construction area shall not occur 30 minutes before or after student arrival and dismissal times—8:30 am Monday through Friday, 1 pm to 3 pm Monday through Thursday, and 12 pm to 1:30 pm on Friday. • The plan shall eliminate curbside parking on the south side of Morning View Drive south of the construction staging area to provide adequate turn radius and site distance to access for trucks entering and leaving work sites. This would apply to construction Phases 1, 2, and 3 only, which would have access via the segment of Morning View Drive adjacent to the school frontage. • The plan shall include a Traffic Education Program to assist in educating parents, students, and staff on drop-off/pick-up procedures specific to each phase of construction. Informational materials shall be disseminated regarding student drop-off and pick-up procedures via regular parent/school communication methods and shall be posted on the school website. • The use of portable message signs and information signs at construction sites shall be employed as needed. • Construction activities for each phase shall be coordinated with the responsible agency departments, including the City of Malibu Public Works and Planning Departments, and the Los Angeles County Sheriff and Fire Departments no less than 10 days prior to the start of the work for each phase. Notification shall specify whether any temporary vehicle, pedestrian, or bicycle construction detours are needed, if construction work would encroach into the public right-of-way, or if temporary use of public streets surrounding the Project Site is needed.				
T-2	To facilitate safe and efficient vehicular and pedestrian circulation during student drop-off and pickup, times during Phase 1, prior to initiation of construction activities, SMMUSD shall work with the City of Malibu Public Works Department to develop and implement a Traffic and Parking C Plan to include the following:	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

2. Mitigation Monitoring Process

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	• Designation of vehicular drop-off and pick-up areas outside Morning View Drive at off-street Parking Lots A, D, and E. Vehicular access to these lots shall allow vehicles to enter and return from the area from the intersection of Morning View Drive at PCH. • Student drop-off and pick-up shall be implemented in a counterclockwise circulation pattern. Figure 7 (see Appendix L) depicts vehicular circulation patterns that shall be used in Parking Lots A, D, and E during Phase 1 construction. • The school shall educate students and parents on drop-off and pick-up routes and procedures. This may be achieved with a combination of information bulletins shared with students and parents.				
T-3	Construction scheduling during Phases 2 to 4 shall be scheduled such that any activities that would result in potential lane closures along Morning View Drive, including, but not limited to, reconstruction of the student drop-off/pick-up area and sidewalks along Morning View Drive, shall be limited to summer months when school is not in session to eliminate conflicts with local traffic and pedestrian activities.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of Phases 2 and 4 of Project	Santa Monica-Malibu Unified School District	
T-4	The SMMUSD shall coordinate with the City of Malibu Public Works Department to relocate crosswalks and school-area signage in relation to the proposed access driveways according to City of Malibu and applicable State criteria. Crossing guards shall be relocated as necessary, based on the ultimate location of crosswalks.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	
5.16 WILDFIRE					
W-1	The District and its general contractor will prepare a Construction Fire Protection Plan (CFPP) that shall be implemented during all phases of construction activity. The CFPP will be approved by the County of Los Angeles Fire Department (LACoFD) prior to building construction and may also be reviewed and approved in phases based on the phased development of the Proposed Project. The CFPP shall include, but not be limited to, guidance for: • Prevention, control, and extinguishment of fires during construction activities. • Smoking- and fire-related rules, storage, and parking area.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

Table 2-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	• Delineating work areas from natural/open space areas and establishing sufficient setbacks. • Vegetation management prior to and during construction activity, consistent with LACoFD protocols. • Requirement to use spark arrestors on construction equipment. • Limiting the type and duration of construction activities during red flag warning events issued by the National Weather Service covering the project area.				
GEO-1	Design recommendations listed in the Geotechnical Report prepared for the Proposed Project shall be followed. These include, but are not limited to, seismic design parameters, foundation design, retaining wall, grading, trenching, etc. Details of these recommendations are included in Appendix H.	Construction Contractor, Santa Monica-Malibu Unified School District	Prior to construction of each phase of Project	Santa Monica-Malibu Unified School District	

2. Mitigation Monitoring Process

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City of Malibu

23825 Stuart Ranch Rd., Malibu, California CA 90265-4804
(310) 456-2489 FAX (310) 456-7650

BIOLOGY REVIEW REFERRAL SHEET

TO: City of Malibu Biologist

FROM: City of Malibu Planning Department **DATE:** 12/17/2021

PROJECT NUMBER:	CDP 21-068
JOB ADDRESS:	30215 MORNING VIEW DR
APPLICANT / CONTACT:	Vanessa Vasquez
APPLICANT ADDRESS:	837 N Spring St Los Angeles, CA 90012
APPLICANT PHONE #:	(323)475-8075
APPLICANT FAX #:	
APPLICANT EMAIL:	vvasquez@nacarchitecture.com
PLANNER:	Ranieka Brooks
PROJECT DESCRIPTION:	(N) institutional building with SPR; CUP; Lot Merger; LCPA; ZTA; and GPA

TO: Malibu Planning Department and/or Applicant

FROM: City Biologist, Courtney McCammon

_____ **The project review package is INCOMPLETE and; CANNOT proceed through Final Planning Review until corrections and conditions from Biological Review are incorporated into the proposed project design**

X **The project is APPROVED, consistent with City Goals & Policies associated with the protection of biological resources and CAN proceed through the Planning process.**

_____ **The project may have the potential to significantly impact the following resources, either individually or cumulatively: Sensitive Species or Habitat, Watersheds, and/or Shoreline Resources and therefore Requires Review by the Environmental Review Board (ERB).**

Courtney McCammon 1/7/22

Signature Date

Additional requirements/conditions may be imposed upon review of plan revisio

Contact Information:

Courtney McCammon, City Biologist, biology@malibucity.org, (310) 456-2489, extension 277

City of Malibu

Biology • Planning Department
23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-3356 · www.malibucity.org

BIOLOGY REVIEW SHEET

PROJECT INFORMATION

Applicant: (name and email)	Vanessa Vasquez vvasquez@nacarchitecture.com	
Project Address:	**30215 MORNING VIEW DR** Malibu, CA 90265	
Planning Case No.:	CDP 21-068	
Project Description:	(N) institutional building with SPR; CUP; Lot Merger; LCPA; ZTA; and GPA	
Date of Review:	January 7, 2022	
Reviewer:	Courtney McCammon	Signature: Courtney McCammon
Contact Information:	Phone: (310) 456-2489 ext 277	Email: biology@malibucity.org

SUBMITTAL INFORMATION

Site Plan:	12/17/21
Site Survey:	12/17/21
Landscape Plan:	12/17/21
Hydrozone Plan:	12/17/21
Irrigation Plan:	12/17/21
Fuel Modification Plan:	
Grading Plan:	
OWTS Plan:	
Bio Assessment:	
Bio Inventory:	
Native Tree Survey:	
Native Tree Protection Plan:	
Miscellaneous:	
Previous Reviews:	

REVIEW FINDINGS

Review Status:	☐	**INCOMPLETE**: Additional information and/or a response to the listed review comments is required.
	☒	**APPROVED**: The project has been approved with regards to biological impacts.
	☐	**CANNNOT APPROVE AS SUBMITTED**: The proposed project does not conform to the requirements of the MMC and/or LCP.
	☐	**ERB**: This project has the potential to impact ESHA and may require review by the Environmental Review Board pursuant to LIP Section 4.4.4

Recycled Paper

DISCUSSION:

All conditions outlined in the California Coastal Commission (CCC) issued Coastal Development Permit (CDP) remain in effect. In the event of any conflict of conditions, the more restrictive shall apply. The primary purpose of this review is the revised Landscape Documentation Package. The City Biologist concurs with all other CCC conditions of approval.

1. The Maximum Applied Water Allowance (MAWA) for this project totals 2,076,749 gallons per year (gpy). The Estimated Applied Water Use (EAWU) totals 1.696,357 gpy. Therefore, the project meets the Landscape Water Conservation Ordinance Requirements.

RECOMMENDATIONS:

1. The project is recommended for **APPROVAL** with the following conditions:

   A. Prior to installation of any landscaping, the applicant shall obtain plumbing permit for the proposed irrigation system from the Building Safety Division.

   B. Prior to or at the time of a Planning final inspection, the property owner/applicant shall submit to the case planner a copy of the plumbing permit for the irrigation system installation that has been signed off by the Building Safety Division.

   C. Prior to final Planning inspection or other final project sign off (as applicable), the applicant shall submit to the Planning Director for review and approval a certificate of completion in accordance with the Landscape Water Conservation Ordinance (MMC Chapter 9.22). The certificate shall include the property owner's signed acceptance of responsibility for maintaining the landscaping and irrigation in accordance with the approved plans and MMC Chapter 9.22. (form attached)

   D. Prior to Final Plan Check Approval, if your property is serviced by the Los Angeles County Waterworks District No. 29, please provide landscape water use approval from that department. For approval contact:

      Nima Parsa
      Address: 23533 West Civic Center Way, Malibu, CA 90265-4804
      Email: Nparsa@DPW.LACOUNTY.GOV (preferred)
      Phone: (310) 317-1389

      Please note this action may require several weeks. As such, the applicant should submit their approved landscape plans to DPW as soon as feasible in order to avoid a delay at plan check.

   E. Vegetation forming a view impermeable condition (hedge), serving the same function as a fence or wall, occurring within the side or rear yard setback shall be maintained at or below six feet in height. View impermeable hedges occurring within the front yard setback serving the same function as a fence or wall shall be maintained at or below 42 inches in height.

F. Vegetation shall be situated on the property so as not to obstruct the primary view from private property at any given time (given consideration of its future growth).

G. Invasive plant species, as determined by the City of Malibu, are prohibited. The submitted plan includes the use of *Carex tumulicola*. This native species is often confused or interchanged with the invasive and non-native *Carex divulsa*. Please ensure only the native *C tumulicola* is utilized. If there is any indication that *C. divulsa* is on site it will require removal at the applicant's expense.

H. The landscape plan shall prohibit the use of building materials treated with toxic compounds such as creosote and copper arsenate.

I. Grading/excavation/vegetation removal scheduled between February 1 - September 15 will require nesting bird surveys by a qualified biologist prior to initiation of such activities. Surveys shall be completed no more than five days from proposed initiation of site preparation activities. Should active nests be identified, buffers identified in the CCC issued CDP shall be implemented and shall be fenced off until it is determined by a qualified biologist that the nest is no longer active. A report discussing the results of the surveys shall be turned in to the City within two business days of completion of surveys.

J. Night lighting from exterior and interior sources shall be minimized. All exterior lighting shall be low intensity and shielded so it is directed downward and inward so that there is no offsite glare or lighting of natural habitat areas. Up-lighting is prohibited.

K. The CCC issued CDP discussed the presence of native trees protected under LIP Chapter 5. Any and all encroachments to any native trees shall be mitigated for pursuant to the approved CCC CDP and pursuant to LIP Chapter 5.

2. **UPON COMPLETION OF ALL PLANDING**, the City Biologist shall inspect the project site and determine that all planning conditions to protect natural resources are in compliance with the approved plans.

-o0o-

If you have any questions regarding the above requirements, please contact the City Biologist office at your earliest convenience.

cc: Planning Project file
Planning Department

City of Malibu

Environmental Health ● Environmental Sustainability Department
23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-3356 · www.malibucity.org

ENVIRONMENTAL HEALTH REVIEW SHEET

PROJECT INFORMATION

Applicant: (name and email address)	Vanessa Vasquez vvasquez@nacarchitecture.com		
Project Address:	**30215 Morning View Drive** Malibu, California 90265		
Planning Case No.:	CDP 21-068		
Project Description:	(N) Institutional building with SPR; CUP; Lot Merger; LCPA; ZTA; and GPA		
Date of Review:	April 20, 2022		
Reviewer:	Paolo Quinto	Signature:	
Contact Information:	Phone: (310) 456-2489 ext. 364	Email:	pquinto@malibucity.org

SUBMITTAL INFORMATION

Project Plans:	NAC Architecture: Dated 2-24-22 (received on 4-1-22)
Operating Permit:	N/A
Previous Reviews:	

REVIEW FINDINGS

Planning Stage:	☒	**CONFORMANCE REVIEW COMPLETE** for the City of Malibu Local Coastal Program/Local Implementation Plan (LIP) and Malibu Municipal Code (MMC). The listed conditions of Planning stage conformance review and plan check review comments shall be addressed prior to plan check approval.
	☐	**CONFORMANCE REVIEW INCOMPLETE** for the City of Malibu LIP and MMC. The listed Planning stage review comments shall be addressed prior to conformance review completion.
OWTS Plot Plan:	☒	**NOT REQUIRED**
	☐	**REQUIRED (attached hereto)** ☐ **REQUIRED (not attached)**

Environmental Health **conformance review** has been completed for the development proposal described in the project description provided by the Planning Department and the project plans and reports submitted to this office. Please distribute this review sheet to all of the project consultants and, prior to final approval, provide a coordinated submittal addressing all conditions for final approval and plan check items.

The conditional conformance findings hereby transmitted complete the Planning stage Environmental Health review of the project. In order to obtain Environmental Health final approval of the OWTS Plot Plan and project construction drawings (during Building Safety plan check), all conditions and plan check items listed below must be addressed through submittals to the Environmental Health office.

Conditions of Planning Conformance Review:

No conditions are required by Environmental Health.

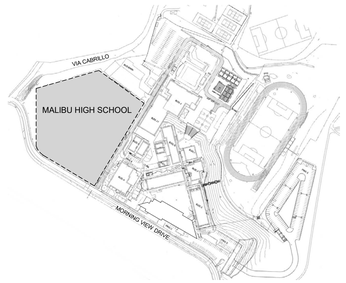
SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT
MALIBU HIGH SCHOOL - PHASE 1

MALIBU, CA



N

VICINITY MAP
Scale: NTS



N

LOCATION MAP
Scale: NTS

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200 S SAN PEDRO STREET, SUITE 500
LOS ANGELES, CA 90012
510.585.5138
WILL CHEN

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF January 1, 2020*
2019 California Administrative Code (CAC), Part 1, Title 24 CCR*
2019 California Building Code (CBC), Part 2, Title 24 CCR
(2018 International Building Code, Vol. 1 & 2, and 2019 California amendments)
2019 California Electrical Code (CEC), Part 3, Title 24 CCR
(2017 National Electrical Code and 2019 California Amendments)
2019 California Mechanical Code (CMC), Part 4, Title 24 CCR
(2018 IAPMO Uniform Mechanical Code and 2019 California amendments)
2019 California Plumbing Code (CPC), Part 5, Title 24 CCR
(2018 IAPMO Uniform Plumbing Code and 2019 California amendments)
2019 California Energy Code (CEC), Part 6, Title 24 CCR
2019 California Fire Code (CFC), Part 9, Title 24 CCR
(2018 International Fire Code and 2019 California Amendments)
2019 California Existing Building Code (CEBC), Part 10, Title 24 CCR
(2018 International Existing Building Code and 2019 California Amendments)
2019 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR
2019 California Referenced Standards Code, Part 12, Title 24 CCR
Title 19 CCR, Public Safety, State Fire Marshal Regulations
2016 ASME A17.1/CSA B44-13 Safety Code for Elevators and Escalators (per 2019 CBC Part 2 Ch 35)
Note: Cal/OSHA Elevator Unit enforces CCR Title 8 and uses the 2004 ASME A17.1 by adoption
2019 Californica Building Code (CBC), ADA Code, Chapter 11B

PARTIAL LIST OF APPLICABLE STANDARDS
NFPA 13 - Standard for the Installation of Sprinkler Systems (CA amended).....2016 Edition
NFPA 14 - Standard for the Installation of Standpipe and Hose Systems (CA amended)....2016 Edition
NFPA 17 - Standard for Dry Chemical Extinguishing Systems.....2017 Edition
NFPA 17A - Standard for Wet Chemical Extinguishing Systems.....2017 Edition
NFPA 20 - Standard for the Installation of Stationary Pumps for Fire Protection.....2016 Edition
NFPA 22 - Standard for Water Tanks for Private Fire Protection.....2013 Edition
NFPA 24 - Standard for the Installation of Private Fire Service Mains and
Their Appurtenances (CA amended).....2016 Edition
NFPA 72 - National Fire Alarm and Signaling Code (CA amended).....2016 Edition
NFPA 80 - Standard for Fire Doors and Other Opening Protectives.....2016 Edition
NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems (CA amended).....2015 Edition
UL 300 - Standard for Fire Testing of Fire Extinguishing Systems for
Protection of Commercial Cooking Equipment.....2005 (R2010)
UL 464 - Audible Signaling Devices for Fire Alarm and Signaling Systems,
Including Accessories.....2003 Edition
UL 521 - Standard for Heat Detectors for Fire Protective Signaling Systems.....1999 Edition
UL 1971 - Standard for Signaling Devices for the Hearing Impaired.....2002 (R2010)
ICC 300 - Standard for Bleachers, Folding and Telescopic Seating, and Grandstands.....2017 Edition

For a complete list of applicable NFPA standards refer to 2019 CBC (SFM) Chapter 35 and California Fire Code Chapter 80.

See California Building Code Chapter 35 for State of California amendments to the NFPA Standards.

*All parts of the 2019 California Building Code become effective January 1, 2020 except the effective date for the use of the 2019 Building Energy Efficiency Standards (Title 24, Part 1, Chapter 10) is January 8, 2019 and the effective date for the use of the California Administrative Code (Title 24, Part 1, Chapter 4) is January 8, 2019.

ZONING

ASSESSOR'S PARCEL NUMBER(S) (APN):
4469-017-900
4469-018-903

MALIBU MUNICIPAL CODE (MMC) ZONING DESIGNATION: I (INSTITUTIONAL)

GENERAL PLAN LAND USE DESIGNATION: INSTITUTIONAL DISTRICT ZONE

GROSS LOT AREA: 49.46 ACRES

NET LOT AREA: 49.18 ACRES

SETBACKS:
FRONT:
REQUIRED: 10 FT
PROPOSED: 140 FT
SIDES:
REQUIRED: 100 FT WHEN ADJACENT TO ESHA
PROPOSED: 125 FT
REAR:
REQUIRED: 5 FT, 15 FT WHEN ADJACENT TO RESIDENTIAL
PROPOSED: 600+ FT

FLOOR AREA RATIO (FAR):
ALLOWABLE: 15%
EXISTING: 9.5%
PROPOSED: 10.3 %

IMPERMEABLE LOT COVERAGE
ALLOWABLE: 25%
EXISTING: 45%
PROPOSED: 22%

PERMEABLE REQUIREMENTS PER LIP 3.9(A)(3)
NET LOT AREA: 49.18 ACRES
PERMEABLE AREA: 38.314
PROPOSED: 78% > 25% COMPLIANT

PARKING ANALYSIS:
REQUIRED PARKING STALLS:
PROVIDED PARKING STALLS: 61

ACCESSIBLE STALLS:
(REFERENCE: CBC 2019 11b-208)
TOTAL PARKING STALLS = 61
REQUIRED ACCESSIBLE STALLS = 3 (1 VAN + 2 STANDARD)
PROVIDED ACCESSIBLE STALLS = 3 (1 VAN + 2 STANDARD)

DESIGNATED PARKING FOR CLEAN AIR VEHICLES:
(REFERENCE: CALGREEN 2019 5.106.5.2)
TOTAL PARKING STALLS = 61
REQUIRED DESIGNATED STALLS = 9
PROVIDED DESIGNATED STALLS = 9
DESIGNATED WITH PARKING STALL MARKING READING "CLEAN AIR / VANPOOL / EV" COMPLYING WITH THE REQUIREMENTS OF 5.106.5.2.1

STALLS FOR EVSE (ELECTRIC VEHICLE SUPPLY EQUIPMENT):
(REFERENCE CALGREEN 2019 5.106.5.3)
TOTAL PARKING STALLS = 61
REQUIRED STALLS = 7
PROVIDED STALLS = 7
PER 5.106.5.3.5, THESE 4 STALLS QUALIFY TO MEET THE REQUIREMENTS FOR CLEAN AIR VEHICLES.

SHORT TERM BICYCLE PARKING
4 SHORT TERM BIKE STORAGE LOCATIONS, PER CALGREEN 2019 5.106.4.2.1

LONG TERM BICYCLE PARKING
2 LONG TERM BIKE STORAGE LOCATIONS, PER CALGREEN 2019 5.106.4.2.2



Received
MAR 30 2022
Planning Dept.

FILE No.: A#: 03-121943 (INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT
MALIBU HIGH SCHOOL - PHASE 1
30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

NAC ARCHITECTURE
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www.kearch.com

DATE 02/24/2022

DSA SUBMITTAL

COVER SHEET

G0.00X
ATTACHMENT 5

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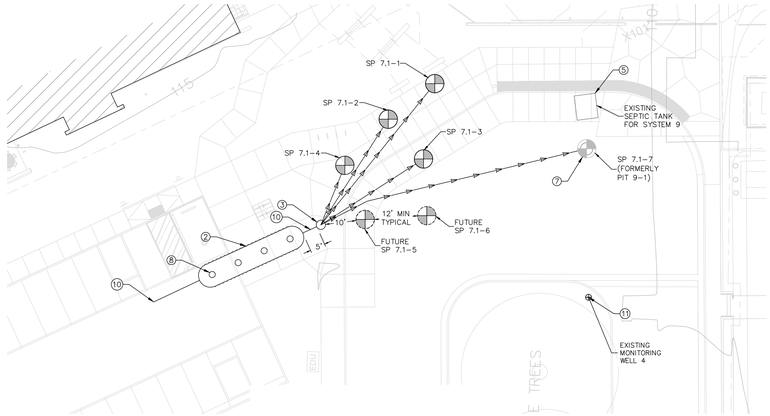

N

0' 20 40

2 WASTE WATER SYSTEM - DETAIL VIEW
Scale: 1 : 20

1 A1.02X ENLARGED SITE PLAN

1. PROVIDE 1 VAN AND 2 PASSANGER VEHICLE ACCESSIBLE SPACES
2. PROVIDE TOTAL OF 6 CLEAN AIR. PARKING - CHARGING STATION WILL BE INSTALLED AT 4/6 CLEAN AIR PARKING STALLS

TRUE NORTH / PLAN NORTH

1 CAMPUS CODE SITE PLAN
Scale: 1" = 80'-0"

ACCESSIBILITY NOTES:

1. SITE WALKWAYS SHALL PROVIDE A BARRIER FREE PATH OF TRAVEL FOR A PERSON IN A WHEELCHAIR. THE PATH OF TRAVEL SHALL BE A HARD, DURABLE AND SLIP RESISTANT ROUTE A MINIMUM OF 48 INCHES IN WIDTH (11B-403.5.1 EXCEPTION 3) AND WITH A MAXIMUM GRADIENT SLOPE OF 5% AND MAXIMUM CROSS SLOPE OF 2% (11B-403.3) ABRUPT CHANGES IN LEVEL SHALL NOT EXCEED A BEVELED SLOPE OF 1:2 WITH A 1/2" IN VERTICAL HEIGHT AND 1/4" MAXIMUM IN VERTICAL DIFFERENTIAL LEVELS. CONCRETE FINISH SHALL BE STABLE, FIRM AND SLIP-RESISTANT (11B-302).
2. PATH OF TRAVEL (P.O.T) AS INDICATED, IS A COMMON BARRIER FREE EGRESS/ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. PASSING SPACE (11B-403.5.3) AT LEAST 60"X60" ARE LOCATED NOT MORE THAN 200' APART. PARTS OF P.O.T. WITH CONTINUOUS GRADIENTS HAVE 60" LEVEL AREAS (11B-403.7) NOT MORE THAN 400' APART. THE CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL AND IS LESS THAN 5% UNLESS OTHERWISE INDICATED. (P.O.T) SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80" (11B-307.2). ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE P.O.T.
3. GATES IN PATH OF TRAVEL SHALL HAVE ACCESSIBLE HARDWARE AND KICK PLATES.
4. FOR ALL SITE GRADIENTS SEE CIVIL PLANS
5. WILDLAND-URBAN IN TERRACE: NONE

LEGEND

- PLANTING AREA, PER LANDSCAPE
- BUILDING
- EXISTING BUILDING
- EXISTING FIRE LANE
- PROPOSED FIRE LANE
- CAMPUS BOUNDARY
- SCOPE OF WORK
- ACCESSIBLE PATH OF TRAVEL
- LINE OF ROOF/CANOPY ABOVE
- ESHA 50' SET BACK
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT

FILE No.: A#: 03-121943 (INC-2)

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MALIBU HIGH SCHOOL - PHASE 1

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OVERALL CAMPUS SITE PLAN

G2.03X

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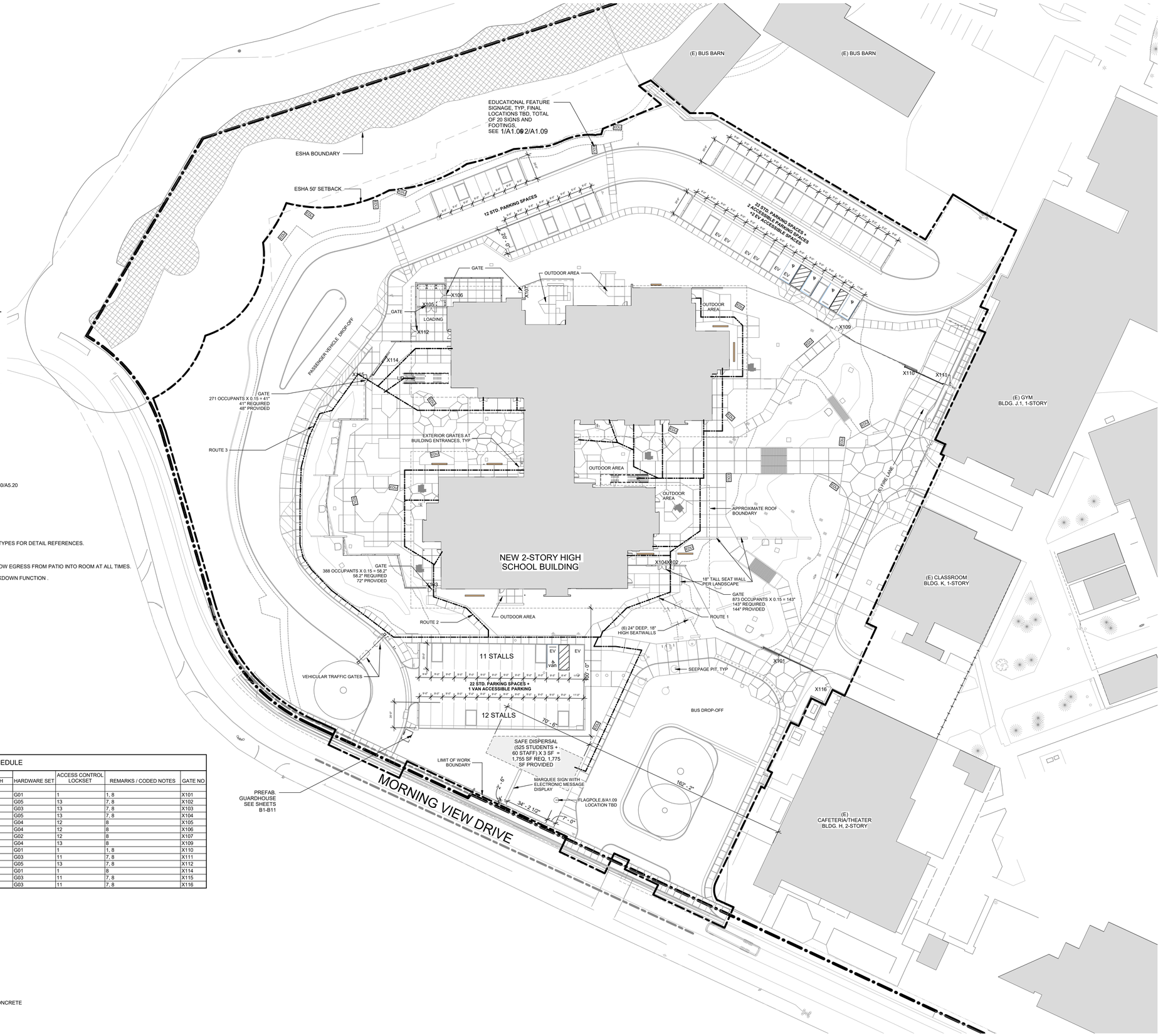

CHPS SS 3.1 MINIMIZE SITE DISTURBANCE

BUILDING GROSS SQUARE FOOTAGE	67,584 SF
BUILDING FOOTPRINT	34,824 SF

FLOOR AREA RATIO:1.94

DOOR & GATE CODED NOTES

1. FIRE LOCK BOX WITH KNOX PADLOCK MOUNTED ON WALL ADJACENT TO GATE
2. NO CENTER MULLION.
3. NO CLOSER.
4. ENERGY-EFFICIENT EXTERIOR OPENING.
5. NOT USED.
6. LOUVERS IN DOOR.
7. PANIC HARDWARE.
8. ACCESS CONTROL.
9. ACOUSTICAL SEALS AND AUTOMATIC DOOR BOTTOM, SEE DETAILS 29/A5.20 & 30/A5.20
10. NOT USED.
11. NOT USED.
12. ACTIVE LEAF 36" WIDE, BALANCE OF WIDTH AT INACTIVE LEAF.
13. NOT USED.
14. ALL-GLASS ENTRANCE AND STOREFRONT. REFER TO INTERIOR STOREFRONT TYPES FOR DETAIL REFERENCES.
15. DEADBOLT LOCKING ONLY; FREE PASSAGE OTHERWISE.
16. LOCKSET TO PREVENT UNAUTHORIZED ACCESS TO EXTERIOR PATIO, AND ALLOW EGRESS FROM PATIO INTO ROOM AT ALL TIMES.
17. MAGNETIC HOLD OPEN WITH AUTOMATIC RELEASE BY ACCESS CONTROL LOCKDOWN FUNCTION .
18. NOT USED.
19. NOT USED.
20. NOT USED.
21. NOT USED.
22. NOT USED.
23. NOT USED.
24. NOT USED.
25. NOT USED.
26. NO PANIC HARDWARE. AUTOMATIC LATCH WITH PULL EACH SIDE.
27. NOT USED.
28. NOT USED.
29. UNDERCUT DOOR 3/4".
30. REFER TO EXTERIOR ELEVATIONS FOR DETAIL REFERENCES.
31. ACCESS CONTROL PADLOCK.

GATE SCHEDULE

GATE NO	PR	GATE LEAF A	GATE LEAF B	GATE HT	GATE TYPE	GATE MATERIAL	GATE FINISH	HARDWARE SET	ACCESS CONTROL LOCKSET	REMARKS / CODED NOTES	GATE NO
X101		28'-0"	0"	7'-0"	STL GATE	STL	PT	G01	1	1, 8	X101
X102	PR	3'-0"	3'-0"	7'-0"	STL GATE	STL	PT	G05	13	7, 8	X102
X103		3'-0"	0"	7'-0"	STL GATE	STL	PT	G03	13	7, 8	X103
X104	PR	3'-0"	3'-0"	7'-0"	STL GATE	STL	PT	G05	13	7, 8	X104
X105	PR	4'-0"	4'-0"	8'-0"	STL GATE	STL	PT	G04	12	8	X105
X106	PR	4'-0"	4'-0"	8'-0"	STL GATE	STL	PT	G04	12	8	X106
X107		3'-0"	0"	7'-0"	STL GATE	STL	PT	G02	12	8	X107
X109	PR	3'-0"	3'-0"	7'-0"	STL GATE	STL	PT	G04	13	8	X109
X110		22'-0"	0"	7'-0"	STL GATE	STL	PT	G01	1	1, 8	X110
X111		3'-0"	0"	7'-0"	STL GATE	STL	PT	G03	11	7, 8	X111
X112	PR	4'-0"	4'-0"	6'-0"	STL GATE	STL	PT	G05	13	7, 8	X112
X114		12'-0"	0"	7'-0"	STL GATE	STL	PT	G01	1	8	X114
X115		3'-0"	0"	7'-0"	STL GATE	STL	PT	G03	11	7, 8	X115
X116		3'-0"	0"	7'-0"	STL GATE	STL	PT	G03	11	7, 8	X116

LEGEND

- NEW BUILDING
- EXIST BUILDING
- ORNAMENTAL MTL FENCE AND GATE, SEE A1.03
- ROUTE- # — SAFE DISPERSAL AREA ACCESS ROUTE

SITE GENERAL NOTES

1. WATER REPELLENT ON ALL EXPOSED CONCRETE WALLS AND PRECAST CONCRETE

1 ENLARGED SITE PLAN
Scale: 1" = 30'-0"

FILE No.: A#: 03-121943 (INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL - PHASE 1

30215 MORNING VIEW DR. MALIBU, CA 90265
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DATE 02/24/2022

DSA SUBMITTAL

ENLARGED SITE PLAN

A1.02X

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COLOR	SLOPE (%) FROM	SLOPE (%) TO	Area (SF)
□	0.00	20.00 (5:1)	2,192,388
■	20.00 (5:1)	25.00 (4:1)	130,426
■	25.00 (4:1)	33.33 (3:1)	175,010
■	33.33 (3:1)	40.00 (2.5:1)	128,378
■	40.00 (2.5:1)	100.00 (1:1)	271,934
■	100.00 (1:1)	600.00 (> 1:1)	2,831

PARCEL AREA:

PARCEL 1:
GROSS = 1,774,573 SQ. FT., 40.73 ACRES
NET = 1,733,284 SQ. FT., 39.79 ACRES

PARCEL 2:
GROSS = 411515 SQ. FT., 9.45
NET = 409088 SQ. FT., 9.39 ACRES



40' 20' 0' 40' 80'
GRAPHIC SCALE
Note: For reduced sized prints, original scale is in inches

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL PARCEL MERGER EXHIBIT

PSOMAS

DATE: 11-26-08 REVISED ON:
JOB No:1SAN080102

SHEET 1 OF 2

COLOR	SLOPE (%) FROM	SLOPE (%) TO	Area (SF)
□	0.00	20.00 (5:1)	2,192,388
	20.00 (5:1)	25.00 (4:1)	130,426
	25.00 (4:1)	33.33 (3:1)	175,010
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	100.00 (1:1)	600.00 (> 1:1)	2,831

PARCEL AREA:

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GROSS = 1,774,573 SQ. FT., 40.73 ACRES
NET = 1,733,284 SQ. FT., 39.79 ACRES

PARCEL 2:
GROSS = 411515 SQ. FT., 9.45
NET = 409088 SQ. FT., 9.39 ACRES

S65°53'56"E 419.66'
R=295.00'
L=142.74'
Δ=27°43'21"
R=275.00'
L=143.19'
Δ=29°50'00"
N34°49'46"E 314.97'
S42°19'10"W
76.38'
R=20.00'
L=17.45'
Δ=49°59'41"
S52°26'28"E 350.61'
S42°19'10"W
56.38'
R=20.00'
L=17.45'
Δ=49°59'41"
R=50.00'
L=244.34'
Δ=279°59'22"
N77°30'57"W
10.87'
N45°50'46"E
114.74'
N30°41'22"E 271.85'
N07°33'59"E 283.16'
N45°50'46"E 689.64'
N57°10'16W 292.51'
N31°11'46"E
163.13'
N27°11'41"E 181.91'
N63°20'34"E
135.30'
N40°35'51"W 350.06'
N40°37'19"W 536.68'
PARCEL 1
PARCEL 2

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

40' 20' 0' 40' 80'
GRAPHIC SCALE
Note: For reduced sized prints, original scale is in inches

MALIBU HIGH SCHOOL
PARCEL MERGER EXHIBIT

PSOMAS

DATE: 11-26-08 REVISED ON:
JOB No:1SAN080102

SHEET 2 OF 2

Study Area

Merged Parcels

Vegetation and Other Types

Permeable (38.314 acres)

- Arroyo Willow Thicket (0.172)
- California Sagebrush Scrub (0.045)
- California Sycamore - Coast Live Oak Planting (0.562)
- Coyote Brush - California Sagebrush Scrub/Upland Mustards (4.435)
- Disturbed (3.109)
- Disturbed Coyote Brush - California Sagebrush Scrub (0.856)
- Disturbed Upland Mustards (1.782)
- Eucalyptus Grove (0.122)
- Ornamental - Native Planting (1.713)
- Ornamental - Permeable (13.889)
- Riparian Herb (0.113)
- Turf (10.344)
- Upland Mustards (1.172)

Impermeable (11.139 acres)

- Developed (11.139)



Aerial Source: Hexagon Geosystems 2018

D:\Projects\1SAN\082310\MXD\Final_City_Comments\ex_Permeability_20220222.mxd

Permeable and Impermeable Surfaces for Merged Parcels

Exhibit 1

Malibu Middle and High School Campus Specific Plan and LCP Amendment Project

N W E S

350 175 0 350 Feet

PSOMAS

(Rev: 02/24/2022 JVR) R:\Projects\1SAN\082310\Graphics\FINAL_City_Comments\ex_Permeability.pdf

BUILDING CODE ANALYSIS

NUMBER OF STORIES: 2
CONSTRUCTION TYPE: II-B, FULLY SPRINKLERED

OCCUPANCY GROUP: SEPARATED OCCUPANCY -508.4

ASSEMBLY	A-2
ASSEMBLY	A-3
CLASSROOM	E
OFFICES	B
STORAGE	S-1

ACTUAL BUILDING HEIGHT: 36'-0" MAX.

LEVEL 1 AND LEVEL 2

ALLOWABLE AREA CALCULATION FOR SINGLE OCCUPANCY (GROUP E) MULTI-STORY BUILDINGS PER CBC 506.2.3:

AA = 43,500 + (14,500*0.75) = 54,375 SF

LEVEL 1:

AA = 45,966 SF / 54,375 SF = 0.84< 1
THE ALLOWABLE AREA ON LEVEL 1 COMPLIES WITH CBC 506.2.3

LEVEL 2:

AA = 34,730 SF / 54,375 SF = 0.63 < 1

TOTAL ALLOWABLE BUILDING AREA:
43,500 + (14,500*0.75)*2 = 108,750 SF (EQUATION 5-2)

ACTUAL BUILDING AREA = 80,696 SF < 108,750 SF

TYPE II-B FIRE-RATED ASSEMBLIES TABLE 601:

	TYPE:	REQ. RATING:	ASSEMBLY:
STRUCTURAL FRAME	STEEL	0-HR	N/A
EXTERIOR BEARING WALLS	CONCRETE/STEEL	0-HR	N/A
INTERIOR BEARING WALLS	CONCRETE/STEEL	0-HR	N/A
FLOOR	CONCRETE/STEEL	0-HR	N/A
ROOF	CONCRETE/STEEL	0-HR	N/A

TABLE 602: FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS

(FIRE SEPARATION - FEET)	TYPE IIB CONSTRUCTION A, B, E & S-2 OCCUPANCIES (HOURS)	TYPE IIB CONSTRUCTION S-1 OCCUPANCY (HOURS)
X < 5	1	2
5 ≤ X < 10	1	1
10 ≤ X < 30:	0	0
X ≥ 30:	0	0

SEE BUILDING SEPARATION DIMENSIONS ON SHEET 2-A1.01

705.8: MAX. AREA OF EXT. WALL OPENINGS FOR UNPROTECTED SPRINKLERED BLDGS.:
FIRE SEPARATION DISTANCE IN FEET:
5 ≤ x < 10 = 25%
10 ≤ x < 15 = NO LIMIT (EXCEPTION 2, 705.8.1)
15 ≤ x < 20 = NO LIMIT (EXCEPTION 2, 705.8.1)
≥ 20 = NO LIMIT
SEE BUILDING SEPARATION DIMENSIONS ON SHEET A1.01

713.4: SHAFT ENCLOSURE FIRE-RESISTANCE RATING:
1 HOUR FIRE BARRIER WHERE CONNECTING LESS THAN FOUR STORIES

1004: OCCUPANT LOAD:
SEE OCCUPANT LOAD ANNOTATION FOR INDIVIDUAL ROOM CALCULATIONS.
CBC 1005: FACTOR OF 0.15 (DOORS) AND 0.20 (STAIRS) ARE BEING USED AS BUILDING HAS EMERGENCY VOICE ALARM SYSTEM AND IS SPRINKLERED PER NFPA 13.

TABLE 1006.2.1: SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY
A & E OCCUPANCIES: 75'-0" MAX. COMMON PATH OF TRAVEL
B & S OCCUPANCIES: 100'-0" MAX. COMMON PATH OF TRAVEL

CBC TABLE 1006.3.2: MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY
1,000 + OCCUPANTS = 4 EXITS

CBC TABLE 1017.2: EXIT ACCESS TRAVEL DISTANCE
250' @ E, A & S-1 OCCUPANCIES WITH AN AFSS
300' @ B OCCUPANCIES WITH AN AFSS
400' @ S-2 OCCUPANCIES WITH AN AFSS

CBC 1009.3.3: AREA OF REFUGE AT ACCESSIBLE MEANS OF EGRESS (STAIRWAYS)
EXCEPTION 2: AREAS OF REFUGE ARE NOT REQUIRED AT STAIRWAYS IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AFSS

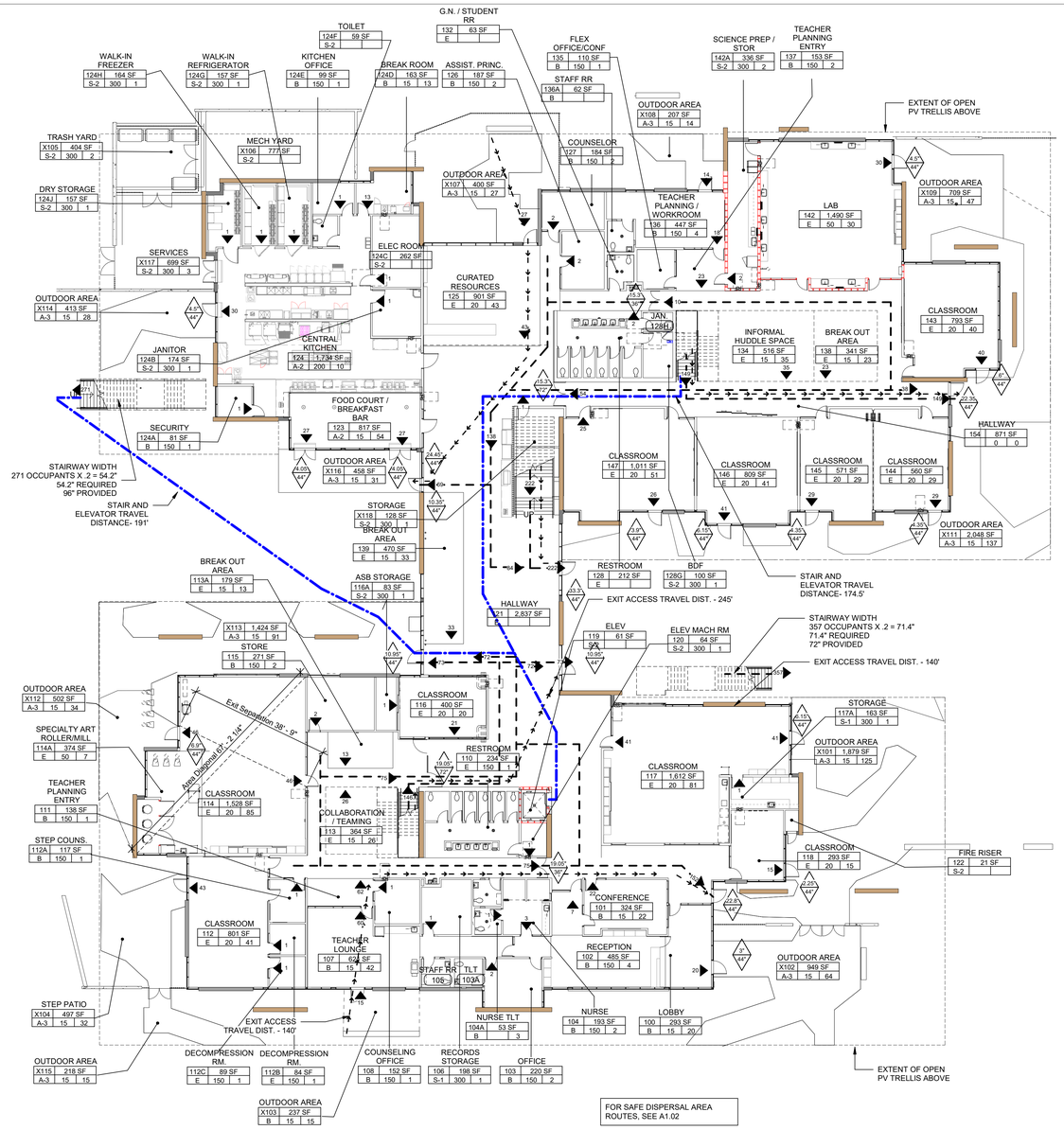
CBC 1009.4.2: AREA OF REFUGE AT ACCESSIBLE MEANS OF EGRESS (ELEVATORS)
EXCEPTION 2: AREAS OF REFUGE ARE NOT REQUIRED IN BUILDINGS AND FACILITIES EQUIPPED THROUGHOUT WITH AN AFSS

CBC 1009.8: TWO-WAY COMMUNICATION
TWO-WAY COMMUNICATION SYSTEM REQUIRED AT ELEVATOR LANDINGS

NFPA 13
5.15.11.2: SPRINKLERS ARE NOT REQUIRED IN ELECTRICAL ROOMS WHERE ALL OF THE FOLLOWING CONDITIONS ARE MET:
1) THE ROOM IS DEDICATED TO ELECTRICAL EQUIPMENT ONLY.
2) ONLY DRY-TYPE ELECTRICAL EQUIPMENT IS USED.
3) EQUIPMENT IS INSTALLED IN A 2-HR FIRE-RATED ENSLOURE INCLUDING PROTECTION FOR PENETRATIONS.
4) NO COMBUSTIBLE STORAGE IS PERMITTED TO BE STORED IN THE ROOM
SEE CODE PLANS FOR 2-HR WALL LOCATIONS AND FLOOR PLANS FOR WALL TYPES

Code Area - L1

#	Name	Area	Level	Occupant Load Factor	Occupant Load
100	LOBBY	293 SF	LEVEL 1	15 SF	20
101	CONFERENCE	324 SF	LEVEL 1	150 SF	3
102	RECEPTION	485 SF	LEVEL 1	150 SF	4
102A	CORRIDOR	101 SF	LEVEL 1		
102B	CORRIDOR	57 SF	LEVEL 1		
103	OFFICE	220 SF	LEVEL 1	150 SF	2
103A	TLT	61 SF	LEVEL 1		
104	NURSE	193 SF	LEVEL 1	150 SF	2
104A	NURSE TLT	53 SF	LEVEL 1	20 SF	
105	STAFF RR	62 SF	LEVEL 1		
106	RECORDS STORAGE	198 SF	LEVEL 1	300 SF	1
107	TEACHER LOUNGE	624 SF	LEVEL 1	150 SF	5
107A	HALL	146 SF	LEVEL 1		0
108	COUNSELING OFFICE	152 SF	LEVEL 1	150 SF	
109	RESTROOM	55 SF	LEVEL 1		
110	RESTROOM	234 SF	LEVEL 1		
111	TEACHER PLANNING ENTRY	138 SF	LEVEL 1	150 SF	
112	CLASSROOM	801 SF	LEVEL 1	20 SF	41
112A	STEP COUNS.	117 SF	LEVEL 1	150 SF	1
112B	DECOMPRESSION RM.	84 SF	LEVEL 1	150 SF	
112C	DECOMPRESSION RM.	89 SF	LEVEL 1	150 SF	
113	COLLABORATION / TEAMING	364 SF	LEVEL 1	15 SF	26
113A	BREAK OUT AREA	179 SF	LEVEL 1	150 SF	
114	CLASSROOM	1,528 SF	LEVEL 1	20 SF	85
114A	SPECIALTY ART ROLLER/MILL	374 SF	LEVEL 1	50 SF	7
114B	KILN	95 SF	LEVEL 1		
115	STORE	271 SF	LEVEL 1		
116	CLASSROOM	400 SF	LEVEL 1	20 SF	20
116A	ASB STORAGE	83 SF	LEVEL 1	300 SF	1
117	CLASSROOM	1,612 SF	LEVEL 1	20 SF	81
117A	STORAGE	163 SF	LEVEL 1	20 SF	9
118	CLASSROOM	293 SF	LEVEL 1	20 SF	
119	ELEV	61 SF	LEVEL 1		
120	ELEV MACH RM	64 SF	LEVEL 1		
121	HALLWAY	2,837 SF	LEVEL 1		
122	FIRE RISER	21 SF	LEVEL 1		
123	FOOD COURT / BREAKFAST BAR	817 SF	LEVEL 1	200 SF	5
124	CENTRAL KITCHEN	1,734 SF	LEVEL 1	200 SF	
124A	SECURITY	81 SF	LEVEL 1	150 SF	
124B	JANITOR	174 SF	LEVEL 1	200 SF	
124C	ELEC ROOM	262 SF	LEVEL 1		
124D	BREAK ROOM	163 SF	LEVEL 1	100 SF	2
124E	KITCHEN OFFICE	99 SF	LEVEL 1	150 SF	1
124F	TOILET	59 SF	LEVEL 1		
124G	WALK-IN REFRIGERATOR	157 SF	LEVEL 1	200 SF	1
124H	WALK-IN FREEZER	164 SF	LEVEL 1	200 SF	1
124J	DRY STORAGE	157 SF	LEVEL 1	300 SF	1
125	CURATED RESOURCES	901 SF	LEVEL 1	20 SF	
126	ASSIST. PRINC.	187 SF	LEVEL 1	150 SF	2
127	COUNSELOR	184 SF	LEVEL 1	150 SF	1
128	RESTROOM	212 SF	LEVEL 1		
128G	BDF	100 SF	LEVEL 1		
128H	JAN.	40 SF	LEVEL 1		
132	G.N. / STUDENT RR	63 SF	LEVEL 1		
134	INFORMAL HUDDLE SPACE	516 SF	LEVEL 1	150 SF	4
135	FLEX OFFICE/CONF	110 SF	LEVEL 1	15 SF	8
136	TEACHER PLANNING / WORKROOM	447 SF	LEVEL 1	150 SF	4
136A	STAFF RR	62 SF	LEVEL 1		
137	TEACHER PLANNING ENTRY	153 SF	LEVEL 1	150 SF	2
138	BREAK OUT AREA	341 SF	LEVEL 1	15 SF	
139	BREAK OUT AREA	470 SF	LEVEL 1	15 SF	
142	LAB	1,490 SF	LEVEL 1	50 SF	30
142A	SCIENCE PREP / STOR	336 SF	LEVEL 1	300 SF	2
143	CLASSROOM	793 SF	LEVEL 1	20 SF	40
144	CLASSROOM	560 SF	LEVEL 1	20 SF	29
145	CLASSROOM	571 SF	LEVEL 1	20 SF	29
146	CLASSROOM	809 SF	LEVEL 1	50 SF	41
147	CLASSROOM	1,011 SF	LEVEL 1	20 SF	51
150	HALLWAY	532 SF	LEVEL 1		
151	HALLWAY	450 SF	LEVEL 1		
152	HALLWAY	399 SF	LEVEL 1		
153	HALLWAY	1,318 SF	LEVEL 1		
154	HALLWAY	871 SF	LEVEL 1		
155	HALLWAY	581 SF	LEVEL 1		
156	HALLWAY	158 SF	LEVEL 1		
S5	STAIR	223 SF	LEVEL 1		
T110A	TOILET	27 SF	LEVEL 1		
T110B	TOILET	27 SF	LEVEL 1		
T110C	TOILET	27 SF	LEVEL 1		
T110D	TOILET	27 SF	LEVEL 1		
T110E	AMB. TOILET	25 SF	LEVEL 1		
T110F	ACC. TOILET	54 SF	LEVEL 1		
T138A	TOILET	25 SF	LEVEL 1		
T138B	TOILET	25 SF	LEVEL 1		
T138C	TOILET	25 SF	LEVEL 1		
T138D	TOILET	25 SF	LEVEL 1		
T138E	AMB TOILET	25 SF	LEVEL 1		
T138F	ACC. TOILET	42 SF	LEVEL 1		
X101	OUTDOOR AREA	1,879 SF	LEVEL 1	15 SF	125
X102	OUTDOOR AREA	949 SF	LEVEL 1	15 SF	
X103	OUTDOOR AREA	237 SF	LEVEL 1	15 SF	
X104	STEP PATIO	497 SF	LEVEL 1	15 SF	0
X105	TRASH YARD	404 SF	LEVEL 1		
X106	MECH YARD	777 SF	LEVEL 1		
X107	OUTDOOR AREA	400 SF	LEVEL 1	15 SF	29
X108	OUTDOOR AREA	207 SF	LEVEL 1	15 SF	13
X109	OUTDOOR AREA	709 SF	LEVEL 1	15 SF	
X111	OUTDOOR AREA	2,048 SF	LEVEL 1	15 SF	137
X112	OUTDOOR AREA	502 SF	LEVEL 1	15 SF	
X113	OUTDOOR AREA	1,424 SF	LEVEL 1	15 SF	
X114	OUTDOOR AREA	413 SF	LEVEL 1	15 SF	28
X115	OUTDOOR AREA	218 SF	LEVEL 1	15 SF	
X116	OUTDOOR AREA	458 SF	LEVEL 1	15 SF	
X117	SERVICES	699 SF	LEVEL 1		
X118	STORAGE	128 SF	LEVEL 1		
XS5	STAIR	282 SF	LEVEL 1		
Grand total: 106		43,175 SF			



1 FIRST FLOOR CODE PLAN
Scale: 1/16" = 1'-0"

PLAN LEGEND

- 2 HR WALLS; 90 MINUTE DOORS; 120 MINUTE WINDOWS
- 1 HR WALLS; 45 MINUTE OPENINGS FIRE BARRIER & SHAFT WALLS, INTERIOR
- CONSTRUCTION CAPABLE OF RESISTING PASSAGE OF SMOKE
- EXITING ROUTE
- # — EXIT ACCESS TRAVEL (LESS THAN 250')
- # — ELEVATOR AND COMMUNICATION STAIRS SEPARATION DISTANCE (LESS THAN 200')
- ## — ACCUMULATED OCCUPANT LOAD FROM ROOMS DIRECTLY INTO CORRIDOR OR EXIT
- ## — EXIT FROM ROOMS. NUMBER INDICATES THE CALCULATED ACCUMULATED LOAD AT THAT ROOM OR BUILDING EXIT. ARROW INDICATES EXIT DIRECTION.
- X / X — OCCUPANT LOAD / OCCUPANT LOAD FACTOR - TABLE 1004.1.2
- ## / ## — REQUIRED DOOR WIDTH PER 1005.3.2 / PROVIDED DOOR WIDTH

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FIRST FLOOR CODE PLAN

G2.01X

SCIENCE PREP ROOM CHEMICAL LIST

CHEMICAL NAME	STATE	CAS NO.	CONTAINER SIZE	LOCATION
Alchole spray bottle			500 ml	1
Alchole spray bottle			500 ml	1
Alchole spray bottle			500 ml	1
denatured alchohole solvant			32 fl oz	1
soap solustion tincture			500 ml	1
unk' alch 50% IPA			300ml	1
unk' alch 25% IPA			300ml	1
unk' alch 50% EtOH			300ml	1
unk' alch 25% EtOH			300ml	1
unk' alch 75% IPA			300ml	1
Aromatic ammonia			2 fl oz	1
denature alchole anhydrous			300 ml	1
denature alchole anhydrous			300 ML	1
ipa			250 ML	1
EtOH			250 ml	1
IPA			500ml	1
50% EtOH			500ml	1
MeOH			50 ml	1
Glycerin			500 ml	1
Ethylen glycol			500 ml	1
Hexane			250 ml	1
Cyclohexane			500 ml	1
Fire Alarm Fluid			150 ml	1
Iodine			25g	1
iodine tincture			500ml	1
MeOH			4 L	2
EtOH			4 L	2
Acetone			4 L	2
Etoh squirt bottle			500 ml	2
Iodine			150	2
Nail Polish remover			8 fl oz	2
Acetone Squirt bottle			500 ml	2
Acetone			1 gal	2
Lighter Fluid			8 fl oz	2
lamp oil			32 fl oz	
lamp oil			32 fl oz	
glycerol			4 L	
kerosene			500 ml	

CHEMICAL NAME	STATE	CAS NO.	CONTAINER SIZE	LOCATION
Sulfuric Acid	L		500 ml	
Sulfuric Acid	L		500 ml	
Sulfuric Acid	L		50 ml	
o-phosphoric acid	L		100 ml	
nitric acid	L		3.27 L	
nitric acid	L		75 ml	
hydrochloric acid	L		20 ml	
hydrochloric acid	L		2.5 L	
hydrochloric acid	L		500 ml	
hydrochloric acid	L		500 ml	top
hydrochloric acid	L		500 ml	top
Acetic anhydride	L		100 ml	
Acetic acid	L		150 ml	
Acetic acid	L		2.5 L	
Sodium Silicate	L		4 L	top
Sodium Silicate	L		5 L	top
Sodium Silicate	L		9x 500 ml	top
Glycerin	L		500 ml	top
Glycerin	L		14 x 118 ml	top
Glycerin	L		2 x 8 fl oz	top
Ammonium Hydrocloric acid			2.5 L	
NaOH			100 ml	top

BUILDING CODE ANALYSIS

NUMBER OF STORIES: 2
CONSTRUCTION TYPE: II-B, FULLY SPRINKLERED

OCCUPANCY GROUP: SEPARATED OCCUPANCY -508.4

ASSEMBLY	A-3
CLASSROOM	E
OFFICES	B
STORAGE	S-1

ACTUAL BUILDING HEIGHT: 36'-0" MAX.

LEVEL 1 AND LEVEL 2

ALLOWABLE AREA CALCULATION FOR SINGLE OCCUPANCY (GROUP E) MULTI-STORY BUILDINGS PER CBC 506.2.3:

AA = 43,500 + (14,500*0.75) = 54,375 SF

LEVEL 1:

AA = 50,442 SF / 54,375 SF = 0.928 < 1
THE ALLOWABLE AREA ON LEVEL 1 COMPLIES WITH CBC 506.2.3

LEVEL 2:

AA = 35,544 SF / 55,375 SF = 0.64 < 1

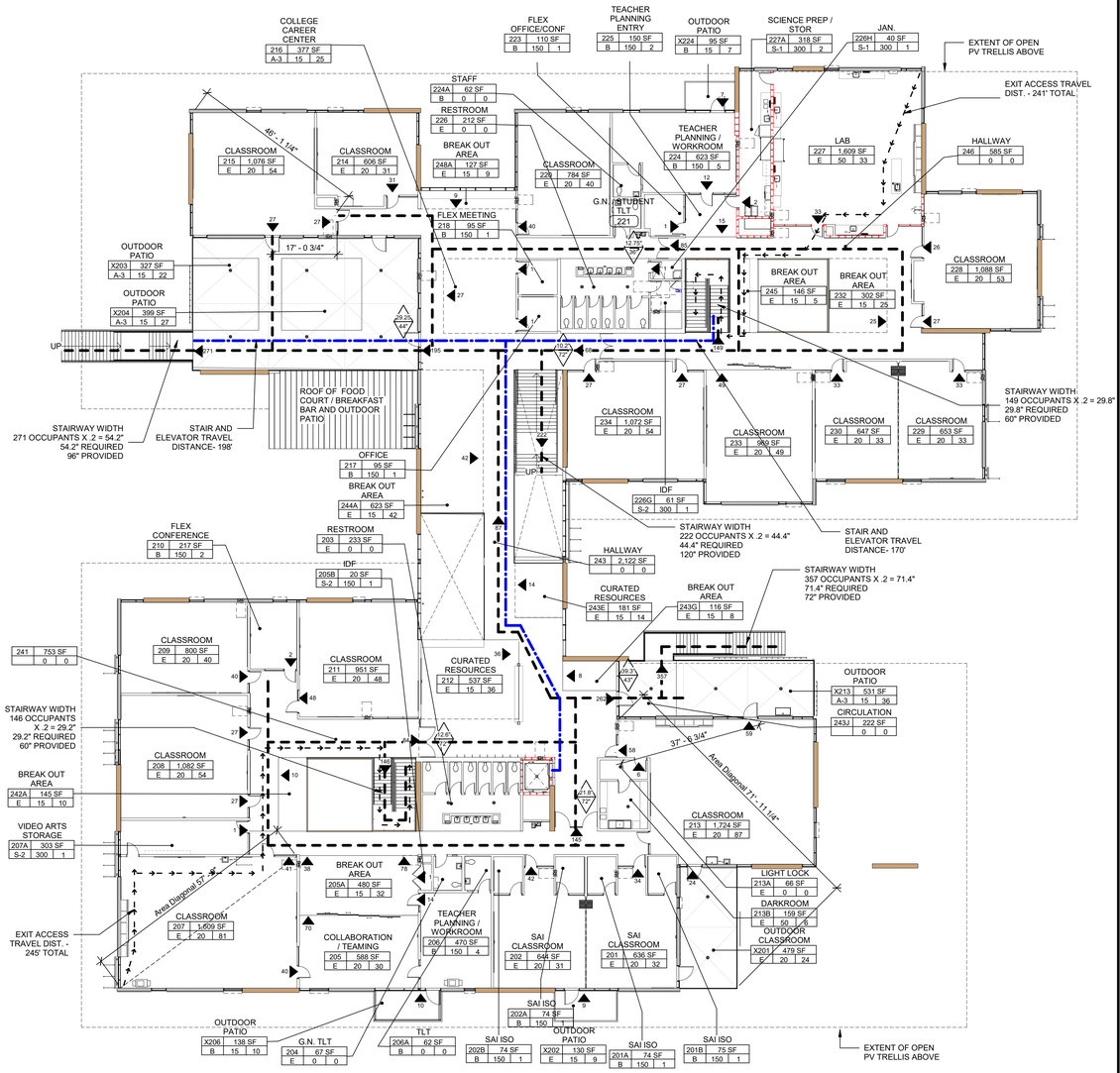
TOTAL ALLOWABLE BUILDING AREA:
43,500 + (14,500*0.75)*2 = 108,750 SF (EQUATION 5-2)

ACTUAL BUILDING AREA = 85,986 SF < 108,750 SF

TYPE II-B FIRE-RATED ASSEMBLIES:

	TYPE:	REQ. RATING:	ASSEMBLY:
STRUCTURAL FRAME	STEEL	0-HR	N/A
EXTERIOR BEARING WALLS	CONCRETE/STEEL	0-HR	N/A
INTERIOR BEARING WALLS	CONCRETE/STEEL	0-HR	N/A
FLOOR	CONCRETE/STEEL	0-HR	N/A
ROOF	CONCRETE/STEEL	0-HR	N/A

Code Area - L2						
vg	Name	Area	Level	Occupancy	Occupant Load Factor	Occupant Load
201	CLASSROOM	636 SF	LEVEL 2	E	20	32
201A	SAI ISO	74 SF	LEVEL 2	B	150	1
201B	SAI ISO	75 SF	LEVEL 2	B	150	1
202	CLASSROOM	644 SF	LEVEL 2	E	20	31
202A	SAI ISO	74 SF	LEVEL 2	B	150	1
202B	SAI ISO	74 SF	LEVEL 2	B	150	1
203	RESTROOM	233 SF	LEVEL 2	E	0	0
204	G.N. TLT	67 SF	LEVEL 2	E	0	0
205	COLLABORATION / TEAMING	588 SF	LEVEL 2	E	20	30
205A	BREAK OUT AREA	480 SF	LEVEL 2	E	15	32
205B	IDF	20 SF	LEVEL 2	S-2	150	1
206	TEACHER PLANNING / WORKROOM	470 SF	LEVEL 2	B	150	4
206A	TLT	62 SF	LEVEL 2	B	0	0
207	CLASSROOM	1,609 SF	LEVEL 2	E	20	81
207A	VIDEO ARTS STORAGE	303 SF	LEVEL 2	S-2	300	1
208	CLASSROOM	1,082 SF	LEVEL 2	E	20	54
209	CLASSROOM	800 SF	LEVEL 2	E	20	40
210	FLEX CONFERENCE	217 SF	LEVEL 2	B	150	2
211	CLASSROOM	951 SF	LEVEL 2	E	20	48
212	CURATED RESOURCES	537 SF	LEVEL 2	E	15	36
213	CLASSROOM	1,724 SF	LEVEL 2	E	20	87
213A	LIGHT LOCK	66 SF	LEVEL 2	E	0	0
213B	DARKROOM	159 SF	LEVEL 2	E	50	4
214	CLASSROOM	606 SF	LEVEL 2	E	20	31
215	CLASSROOM	1,076 SF	LEVEL 2	E	20	54
216	COLLEGE CAREER CENTER	377 SF	LEVEL 2	A-3	15	25
217	OFFICE	95 SF	LEVEL 2	B	150	1
218	FLEX MEETING	95 SF	LEVEL 2	B	150	1
220	CLASSROOM	784 SF	LEVEL 2	E	20	40
221	G.N. / STUDENT TLT	63 SF	LEVEL 2	E	0	0
223	FLEX OFFICE/CONF	110 SF	LEVEL 2	B	150	1
224	TEACHER PLANNING / WORKROOM	623 SF	LEVEL 2	B	150	5
224A	STAFF	62 SF	LEVEL 2	B	0	0
225	TEACHER PLANNING ENTRY	150 SF	LEVEL 2	B	150	2
226	RESTROOM	212 SF	LEVEL 2	E	0	0
226G	IDF	61 SF	LEVEL 2	S-2	300	1
226H	JAN.	40 SF	LEVEL 2	S-1	300	1
227	LAB	1,609 SF	LEVEL 2	E	50	33
227A	SCIENCE PREP / STOR	318 SF	LEVEL 2	S-1	300	2
228	CLASSROOM	1,088 SF	LEVEL 2	E	20	53
229	CLASSROOM	653 SF	LEVEL 2	E	20	33
230	CLASSROOM	647 SF	LEVEL 2	E	20	33
232	BREAK OUT AREA	302 SF	LEVEL 2	E	15	25
233	CLASSROOM	969 SF	LEVEL 2	E	20	49
234	CLASSROOM	1,072 SF	LEVEL 2	E	20	54
240	HALLWAY	728 SF	LEVEL 2		0	0
241	HALLWAY	753 SF	LEVEL 2		0	0
242	HALLWAY	729 SF	LEVEL 2		0	0
242A	BREAK OUT AREA	145 SF	LEVEL 2	E	15	10
243	HALLWAY	2,122 SF	LEVEL 2		0	0
243B	ELEV	61 SF	LEVEL 2		0	0
243E	CURATED RESOURCES	181 SF	LEVEL 2	E	15	14
243G	BREAK OUT AREA	116 SF	LEVEL 2	E	15	8
243J	CIRCULATION	222 SF	LEVEL 2		0	0
244	HALLWAY	800 SF	LEVEL 2		0	0
244A	BREAK OUT AREA	623 SF	LEVEL 2	E	15	42
245	BREAK OUT AREA	146 SF	LEVEL 2	E	15	5
246	HALLWAY	585 SF	LEVEL 2		0	0
247	HALLWAY	225 SF	LEVEL 2		0	0
248A	BREAK OUT AREA	127 SF	LEVEL 2	E	15	9
S2	STAIR	347 SF	LEVEL 2	E	0	0
S3	STAIR	223 SF	LEVEL 2		0	0
S4	STAIR	222 SF	LEVEL 2		0	0
T203A	TOILET	27 SF	LEVEL 2	E	0	0
T203B	TOILET	27 SF	LEVEL 2	E	0	0
T203C	TOILET	27 SF	LEVEL 2	E	0	0
T203D	TOILET	27 SF	LEVEL 2	E	0	0
T203E	AMB. TOILET	25 SF	LEVEL 2	E	0	0
T203F	ACC. TOILET	54 SF	LEVEL 2	E	0	0
T226A	TOILET	25 SF	LEVEL 2	E	0	0
T226B	TOILET	25 SF	LEVEL 2	E	0	0
T226C	TOILET	25 SF	LEVEL 2	E	0	0
T226D	TOILET	25 SF	LEVEL 2	E	0	0
T226E	AMB. TOILET	25 SF	LEVEL 2	E	0	0
T226F	ACC. TOILET	42 SF	LEVEL 2	E	0	0
X201	OUTDOOR CLASSROOM	479 SF	LEVEL 2	E	20	24
X202	OUTDOOR PATIO	130 SF	LEVEL 2	E	15	9
X203	OUTDOOR PATIO	327 SF	LEVEL 2	A-3	15	22
X204	OUTDOOR PATIO	399 SF	LEVEL 2	A-3	15	27
X206	OUTDOOR PATIO	138 SF	LEVEL 2	B	15	10
X213	OUTDOOR PATIO	531 SF	LEVEL 2	A-3	15	36
X224	OUTDOOR PATIO	95 SF	LEVEL 2	B	15	7
Grand total: 82		32,760 SF				



1 SECOND FLOOR CODE PLAN
Scale: 1/16" = 1'-0"

PLAN LEGEND

- 2 HR WALLS; 90 MINUTE DOORS; 120 MINUTE WINDOWS
- 1 HR WALLS; 45 MINUTE OPENINGS FIRE BARRIER & SHAFT WALLS, INTERIOR
- CONSTRUCTION CAPABLE OF RESISTING PASSAGE OF SMOKE
- EXITING ROUTE
- EXIT ACCESS TRAVEL (LESS THAN 250')
- ELEVATOR AND COMMUNICATION STAIRS SEPARATION DISTANCE (LESS THAN 200')
- ## — ACCUMULATED OCCUPANT LOAD FROM ROOMS DIRECTLY INTO CORRIDOR OR EXIT
- ## — EXIT FROM ROOMS. NUMBER INDICATES THE CALCULATED ACCUMULATED LOAD AT THAT ROOM OR BUILDING EXIT. ARROW INDICATES EXIT DIRECTION.
- X / X — OCCUPANT LOAD / OCCUPANT LOAD FACTOR - TABLE 1004.1.2
- ## / ## — REQUIRED DOOR WIDTH PER 1005.3.2 / PROVIDED DOOR WIDTH

FILE No.: A#: 03-121943 (INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT
MALIBU HIGH SCHOOL - PHASE 1
30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

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DATE 01-12-2022

DSA SUBMITTAL

SECOND FLOOR CODE PLAN

G2.02X

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FLOOR PLAN GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DRAWINGS, DIMENSIONS, SPECIFICATIONS AND SCHEDULES PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION. NOTIFY ARCHITECT IMMEDIATELY OF ANY UNCERTAINTY OR DISCREPANCY.
2. DRAWINGS SHALL NOT BE SCALED.
3. WHERE NOTES ON THE DRAWINGS INDICATE A CONDITION AT ONE LOCATION, WHETHER INDICATED AS TYPICAL OR NOT, THE NOTE SHALL APPLY TO ALL SIMILAR LOCATIONS UNO.
4. SEE SHEET A0.01 FOR SYMBOLS, & ABBREVIATIONS, ETC.
5. SEE CODE PLAN SHEET FOR EXTENT OF RATED WALLS, CEILINGS & OPENINGS AS WELL AS CONSTRUCTION REQUIREMENTS.
6. SEE DIMENSION & SIGNAGE PLANS FOR ALL BUILDING SIGNAGE LOCATIONS.
7. DIMENSIONS ARE TYPICALLY TAKEN TO GRID LINES AND EDGE OF WALLS UNLESS NOTED OTHERWISE OR INDICATED ON DETAILS.
8. ALL WALLS ARE REQUIRED TO BE FULL HEIGHT TO UNDERSIDE OF STRUCTURAL DECK ABOVE, UNO. SEE WALL ASSEMBLIES NOTES ON A3.00 FOR ADDITIONAL INFORMATION.
9. TYPICAL EXTERIOR METAL STUD SIZES ARE AS SPECIFIED IN STRUCTURAL DRAWINGS. REFER TO STRUCTURAL DOCUMENTS FOR ADDITIONAL SPECIFIC REQUIREMENTS.
10. REFER TO ENLARGED PLANS FOR NOTES, DOOR CLEARANCES AND INTERIOR ELEVATION TAGS, UNO. SEE ALSO DOOR/RELITE SCHEDULE AND FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
11. PROVIDE SOLID BLOCKING AT ALL CASEWORK AT TOP AND BOTTOM OF UPPERS AND AT TOP OF COUNTERS AND LOWER CABINETS. ALSO PROVIDE BLOCKING IN WALLS FOR WALL MOUNTED/SUPPORTED ITEMS INCLUDING SHORT THROW PROJECTORS, SHELVES, MARKER BOARDS, ETC.
12. COORDINATE WITH ELECTRICAL AND STRUCTURAL FOR LOCATION OF FLOOR OUTLETS. INSTALL PER ELECTRICAL/STRUCTURAL REQUIREMENTS AND PER DETAILS.

FLOOR PLAN LEGEND

NOTE: NOT ALL ITEMS MAY BE USED

- 60" WHEELCHAIR TURNING CIRLE
- ACCESSIBLE LAVATORY, SEE ENLARGED PLANS
- DOOR ADA CLEARANCES
- DRINKING FOUNTAIN, SEE 5,6/A5.30
- 30x48 CLEAR SPACE
- DISH DRAIN @ CONC. FLOOR, SEE SLAB PLANS
- FLOOR DRAIN:
  - AT CONC. FLOOR, SEE SLAB PLANS
  - AT TILED FLOOR, SEE SLAB PLANS FOR CONC. DEPRESSION & ENLARGED FLOOR PLANS FOR SLOPE/DRAIN
- PH — PANIC HARDWARE, SEE DOOR HARDWARE SCHEDULE
- LINE OF FLOOR/ ROOF ABOVE
- SEMI-RECESSED FIRE EXTINGUISHER CABINET, SEE 8/A5.30

SIGNAGE LEGEND (ALL MAY NOT BE USED)

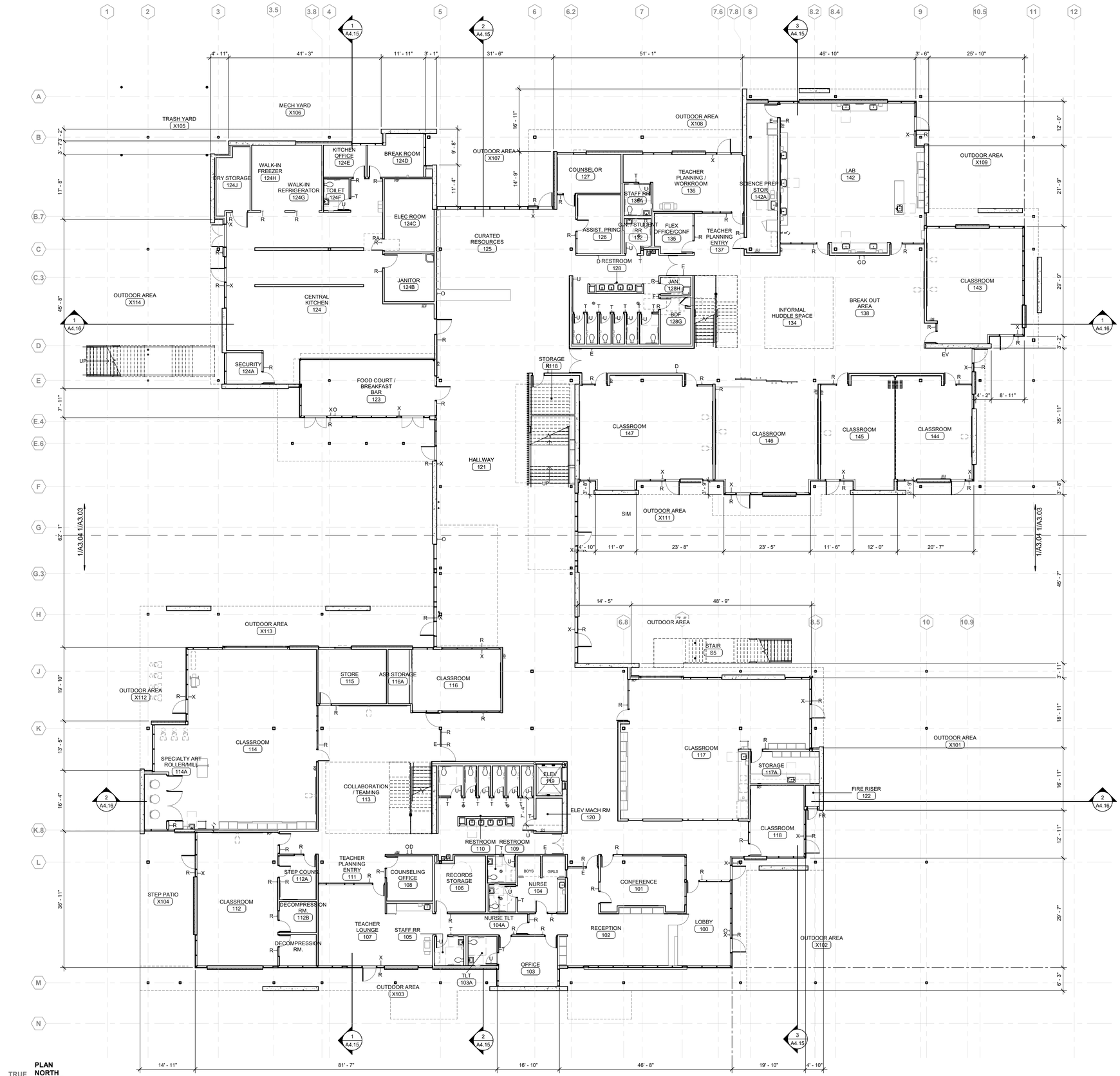
A	ACCESSIBLE SIGNAGE SEE 10/A5.60
U	UNISEX TOILET SIGNAGE SEE 6/A5.60
D	ELEVATOR DIRECTIONAL SIGNAGE SEE 8/A5.60
E	EXIT ROUTE SIGNAGE SEE 14/A5.60
L	ASSISTIVE LISTENING DEVICE SIGNAGE 2/A5.60
M	MEN'S TOILET DOOR SIGNAGE SEE 6/A5.60
R	ROOM SIGNAGE SEE 12/A5.60
RA	ROOF ACCESS SIGNAGE SEE 9/A5.60
T	TOILET SIGNAGE SEE 11/A5.60
W	WOMEN'S TOILET DOOR SIGNAGE SEE 6/A5.60
X	EXIT SIGN SIGNAGE SEE 13/A5.60
O	MAXIMUM OCCUPANCY SIGNAGE SEE 5/A5.60
2	EXIT STAIR DOWN SIGNAGE SEE 4/A5.60
FR	FIRE RISER INSIDE SIGNAGE SEE 7B/A5.60
F	F.A.C.P. INSIDE SIGNAGE SEE 7A/A5.60
EV	EVACUATION PLAN SIGNAGE PER SPEC
FP	FIRE PUMP SIGNAGE PER 7C/A5.60

SIGNAGE NOTES

1. PROVIDE 'EMERGENCY EGRESS WINDOW' UPPER AND LOWER SIGNS AT EACH OPERABLE WINDOW PER SPECIFICATION 10 1400
2. PROVIDE 'GAS SHUT-OFF VALVE' SIGNS AT ALL SITE GAS VALVES, BUILDING GAS VALVES, AND SCIENCE LAB GAS VALVES PER SPECIFICATION 10 1400.
3. MANUFACTURER-PROVIDED SIGN TO BE INSTALLED AT AT EACH EMERGENCY EYE WASH AND/OR SHOWER STATION.
4. FOR ELEVATOR SIGNAGE SEE V SHEETS

GENERAL NOTES

1. ALL DIMENSIONS ARE TAKEN FROM GRIDLINE, FACE OF STUD, OR FACE OF MASONRY, U.N.O.
2. SEE SLAB PLANS (A3.4X SERIES) FOR WALL CURBS



TRUE NORTH — PLAN NORTH

1 OVERALL FIRST FLOOR PLAN
Scale: 3/32" = 1'-0"

FILE No.: A#: 03-121943 (INC-2)

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OVERALL FIRST FLOOR PLAN

A3.01X

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4. SEE SHEET A0.01 FOR SYMBOLS, & ABBREVIATIONS, ETC.
5. SEE CODE PLAN SHEET FOR EXTENT OF RATED WALLS, CEILINGS & OPENINGS AS WELL AS CONSTRUCTION REQUIREMENTS.
6. SEE DIMENSION & SIGNAGE PLANS FOR ALL BUILDING SIGNAGE LOCATIONS.
7. DIMENSIONS ARE TYPICALLY TAKEN TO GRID LINES AND EDGE OF WALLS UNLESS NOTED OTHERWISE OR INDICATED ON DETAILS.
8. ALL WALLS ARE REQUIRED TO BE FULL HEIGHT TO UNDERSIDE OF STRUCTURAL DECK ABOVE, UNO. SEE WALL ASSEMBLIES NOTES ON A3.00 FOR ADDITIONAL INFORMATION.
9. TYPICAL EXTERIOR METAL STUD SIZES ARE AS SPECIFIED IN STRUCTURAL DRAWINGS. REFER TO STRUCTURAL DOCUMENTS FOR ADDITIONAL SPECIFIC REQUIREMENTS.
10. REFER TO ENLARGED PLANS FOR NOTES, DOOR CLEARANCES AND INTERIOR ELEVATION TAGS, UNO. SEE ALSO DOOR/RELITE SCHEDULE AND FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
11. PROVIDE SOLID BLOCKING AT ALL CASEWORK AT TOP AND BOTTOM OF UPPERS AND AT TOP OF COUNTERS AND LOWER CABINETS. ALSO PROVIDE BLOCKING IN WALLS FOR WALL MOUNTED/SUPPORTED ITEMS INCLUDING SHORT THROW PROJECTORS, SHELVES, MARKER BOARDS, ETC.
12. COORDINATE WITH ELECTRICAL AND STRUCTURAL FOR LOCATION OF FLOOR OUTLETS. INSTALL PER ELECTRICAL/STRUCTURAL REQUIREMENTS AND PER DETAILS.

FLOOR PLAN LEGEND

NOTE: NOT ALL ITEMS MAY BE USED

- 60" WHEELCHAIR TURNING CIRLE
- ACCESSIBLE LAVATORY, SEE ENLARGED PLANS
- LINE OF FLOOR/ ROOF ABOVE
- SEMI-RECESSED FIRE EXTINGUISHER CABINET, SEE 8/A5.30
- DOOR ADA CLEARANCES
- DRINKING FOUNTAIN, SEE 5,6/A5.30
- 30x48 CLEAR SPACE
- DISH DRAIN @ CONC. FLOOR, SEE SLAB PLANS
- FLOOR DRAIN:
  - AT CONC. FLOOR, SEE SLAB PLANS
  - AT TILED FLOOR, SEE SLAB PLANS FOR CONC. DEPRESSION & ENLARGED FLOOR PLANS FOR SLOPE/DRAIN
- PH — PANIC HARDWARE, SEE DOOR HARDWARE SCHEDULE

SIGNAGE LEGEND (ALL MAY NOT BE USED)

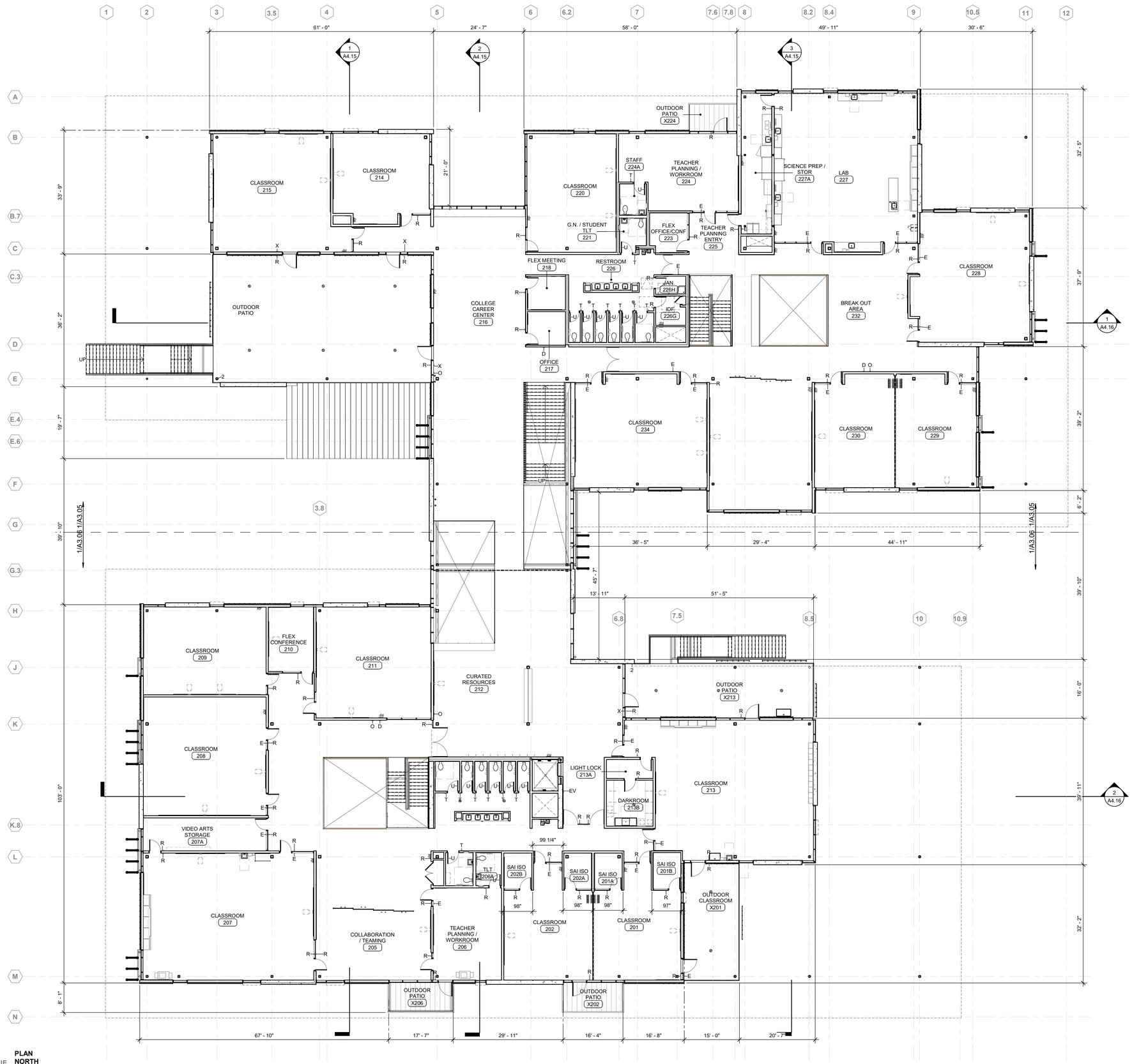
A	ACCESSIBLE SIGNAGE SEE 10/A5.60
U	UNISEX TOILET SIGNAGE SEE 6/A5.60
D	ELEVATOR DIRECTIONAL SIGNAGE SEE 8/A5.60
E	EXIT ROUTE SIGNAGE SEE 14/A5.60
L	ASSISTIVE LISTENING DEVICE SIGNAGE 2/A5.60
M	MEN'S TOILET DOOR SIGNAGE SEE 6/A5.60
R	ROOM SIGNAGE SEE 12/A5.60
RA	ROOF ACCESS SIGNAGE SEE 9/A5.60
T	TOILET SIGNAGE SEE 11/A5.60
W	WOMEN'S TOILET DOOR SIGNAGE SEE 6/A5.60
X	EXIT SIGN SIGNAGE SEE 13/A5.60
O	MAXIMUM OCCUPANCY SIGNAGE SEE 5/A5.60
2	EXIT STAIR DOWN SIGNAGE SEE 4/A5.60
FR	FIRE RISER INSIDE SIGNAGE SEE 7B/A5.60
F	F.A.C.P. INSIDE SIGNAGE SEE 7A/A5.60
EV	EVACUATION PLAN SIGNAGE PER SPEC
FP	FIRE PUMP SIGNAGE PER 7C/A5.60

SIGNAGE NOTES

1. PROVIDE 'EMERGENCY EGRESS WINDOW' UPPER AND LOWER SIGNS AT EACH OPERABLE WINDOW PER SPECIFICATION 10 1400
2. PROVIDE 'GAS SHUT-OFF VALVE' SIGNS AT ALL SITE GAS VALVES, BUILDING GAS VALVES, AND SCIENCE LAB GAS VALVES PER SPECIFICATION 10 1400.
3. MANUFACTURER-PROVIDED SIGN TO BE INSTALLED AT AT EACH EMERGENCY EYE WASH AND/OR SHOWER STATION.
4. FOR ELEVATOR SIGNAGE SEE V SHEETS

GENERAL NOTES

1. ALL DIMENSIONS ARE TAKEN FROM GRIDLINE, FACE OF STUD, OR FACE OF MASONRY, U.N.O.
2. SEE SLAB PLANS (A3.4X SERIES) FOR WALL CURBS



TRUE NORTH / PLAN NORTH

1 OVERALL SECOND FLOOR PLAN
Scale: 3/32" = 1'-0"

FILE No.: A#: 03-121943 (INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT
MALIBU HIGH SCHOOL - PHASE 1
30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

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DATE 01-12-2022

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OVERALL SECOND FLOOR PLAN

A3.02X

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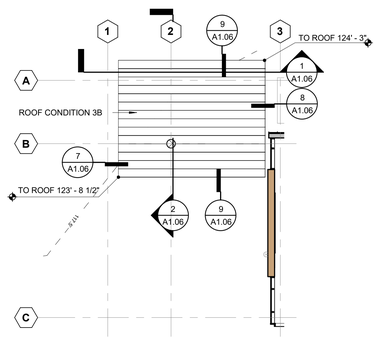
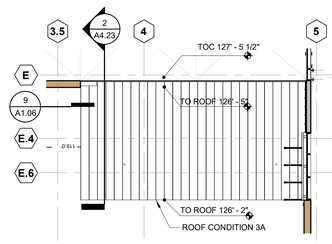
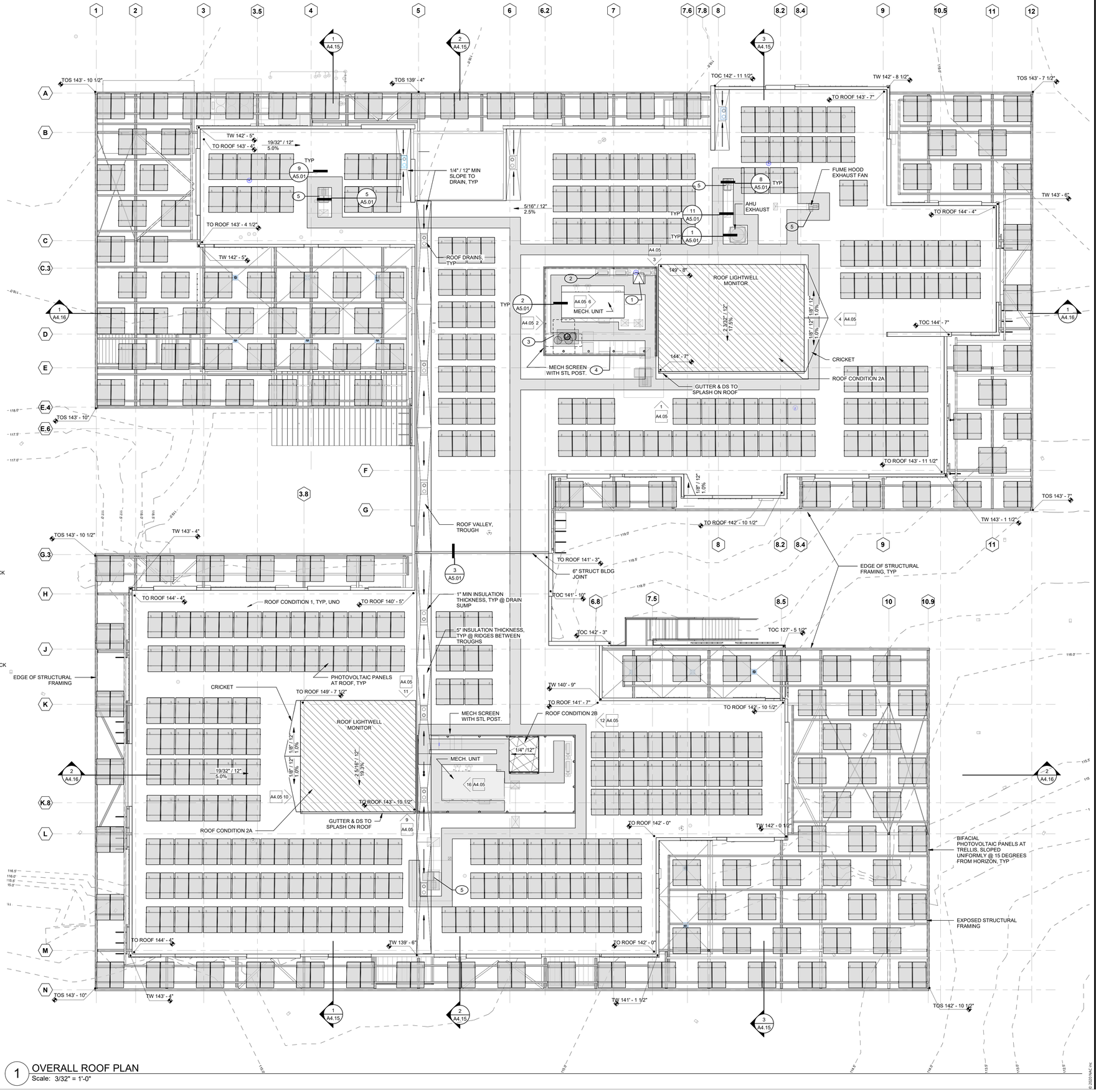


2 LOW ROOF PLAN OVER TRASH ENCLOSURE
Scale: 3/32" = 1'-0"



3 LOW ROOF PLAN OVER FOOD COURT
Scale: 3/32" = 1'-0"



1 OVERALL ROOF PLAN
Scale: 3/32" = 1'-0"

LEGEND

- DIRECTION OF SLOPE TO DRAIN
- WALKWAY PROTECTION PAD, SEE 4/A5.01
- ROOF ACCESS HATCH, SEE 12/A5.01
- ROOF DRAIN / OVERFLOW DRAIN, SEE 6/A5.01
- --100.0'-- EXISTING TOPOGRAPHICAL CONTOUR LINES (UP) (ORIENTATION OF NUMBER DICTATES DIRECTION OF UPWARD SLOPE)

ROOF TYPES

ROOF CONDITION 1

FULLY ADHERED THERMOPLASTIC MEMBRANE ROOFING OVER SLOPING CONCRETE DECK
1. FULLY ADHERED THERMOPLASTIC MEMBRANE ROOFING SYSTEM
2. 1/2" COVER BOARD
3. R-30 BASE LAYER RIGID INSULATION
4. VAPOR RETARDER

ROOF CONDITION 2A

FULLY ADHERED THERMOPLASTIC MEMBRANE ROOFING OVER SLOPING METAL DECK
1. FULLY ADHERED THERMOPLASTIC ROOFING SYSTEM
2. 1/2" COVER BOARD
3. R-30 BASE LAYER RIGID INSULATION
VAPOR RETARDER

ROOF CONDITION 2B

FULLY ADHERED THERMOPLASTIC MEMBRANE ROOFING OVER FLAT-FRAMED METAL DECK
1. FULLY ADHERED THERMOPLASTIC ROOFING SYSTEM
2. 1/2" COVER BOARD
3. TAPERED RIGID INSULATION (R-30 AVERAGE)
4. VAPOR RETARDER

ROOF CONDITION 3A

METAL ROOF PANELS OVER FLAT-FRAMED METAL DECK
1. METAL ROOF PANELS
2. SELF-ADHERING UNDERLAYMENT
3. TAPERED RIGID INSULATION (R-30 AVERAGE)

ROOF CONDITION 3B

METAL ROOF PANELS OVER SLOPED METAL DECK
1. METAL ROOF PANELS
2. SELF-ADHERING UNDERLAYMENT
3. FRTW PLYWOOD

GENERAL ROOF NOTES

1. TYPICAL ROOF CONSTRUCTION IS ROOF CONSTRUCTION TYPE 1. SEE LEGEND FOR OTHER ROOF CONSTRUCTION CONDITIONS.

2. VENTS, EXHAUST, & COWLS ARE MECHANICAL ROOF PENETRATION ITEMS. SEE MECHANICAL FOR LOCATIONS, TYPES, SIZES AND QUANTITY OF ALL PENETRATIONS. PENETRATIONS SHALL BE MIN 18" FROM ANY RIDGE, VALLEY, HIP, OR EDGE OF ROOF.

4. ALL FLASHING & ROOFING TIE-INS TO PLUMBING & HVAC PENETRATIONS ARE BY ROOFING CONTRACTOR.

5. SEE EXTERIOR ELEVATIONS FOR ADDITIONAL ROOFING DETAIL INDICATIONS.

6. SEE SHEET A5.01 FOR TYPICAL MECHANICAL AND PENETRATION DETAILS.

7. TAPERED RIGID INSULATION SHOWN FOR CRICKETS AND TRANSITIONS ARE IN ADDITION TO THE BASE LAYER OF RIGID INSULATION REQUIRED IN THE ROOF ASSEMBLY.

CHPS SS 11.1 REDUCE HEAT ISLANDS

1. TOTAL ROOF AREA	33,454 SF
2. HIGH REFLECTANCE SRI ROOF (SRI 89 OR HIGHER)	30,414 SF

SOLAR REFLECTANCE: 0.83, MINIMUM, INITIAL, AND 0.65, MINIMUM, 3-YEAR, CERTIFIED BY COOL ROOF RATING COUNCIL.
THERMAL EMISSIVITY: 0.80, MINIMUM, INITIAL, AND 0.79, MINIMUM, 3-YEAR, CERTIFIED BY COOL ROOF RATING COUNCIL.

(#) CODED NOTES - ROOF PLAN

1 36" X 36" ROOF HARCH AND GUARDRAIL
2 PHOTOVOLTAIC INVERTERS
3 FOOD SERVICE REMOTE REFRIDGERATION RACK
4 HVAC CONDENSING UNIT
5 EXHAUST FAN

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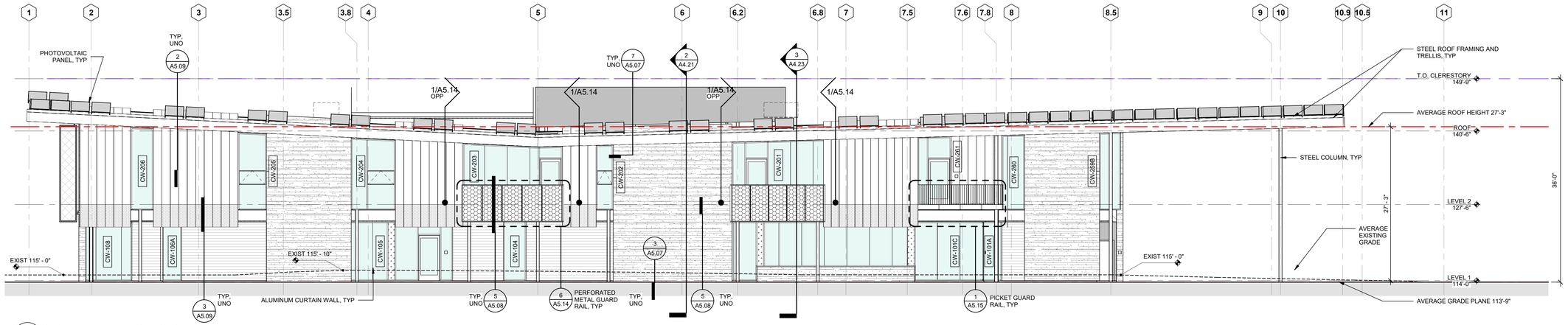
OVERALL ROOF PLAN

A4.30X



1 SOUTH ELEVATION 3 (CITY)
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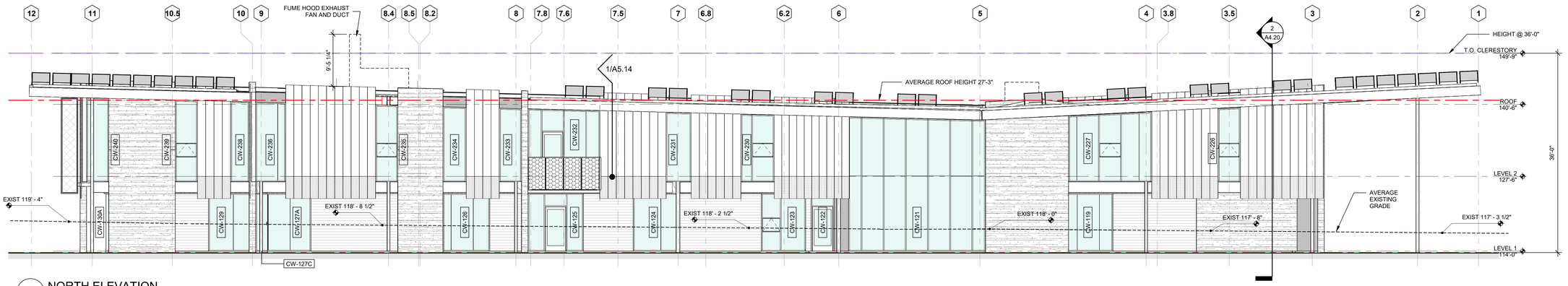
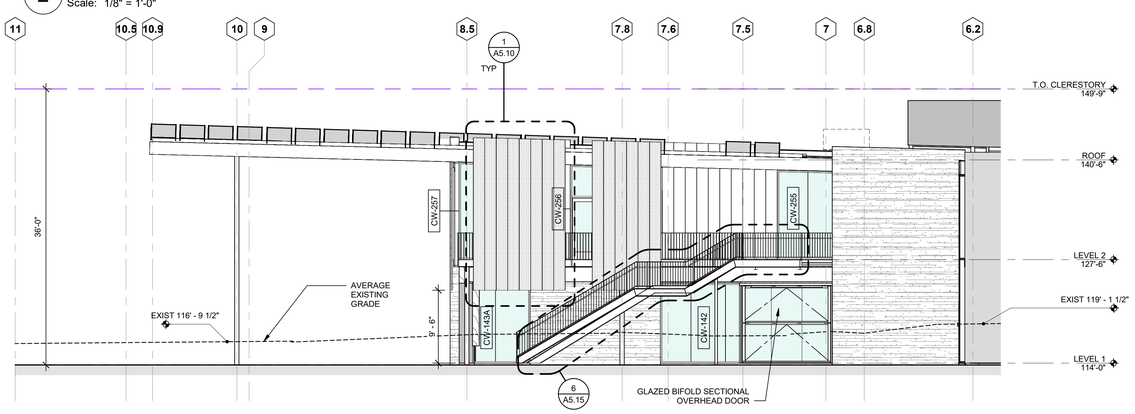
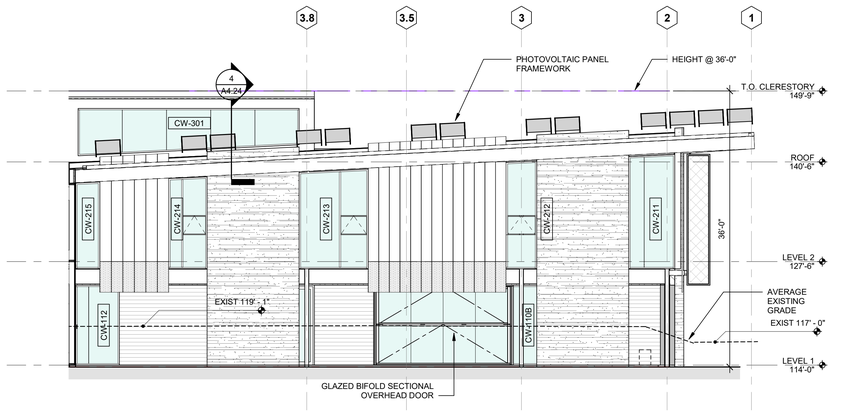


2 NORTH ELEVATION
Scale: 1/8" = 1'-0"



3 NORTH ELEVATION PARTIAL
Scale: 1/8" = 1'-0"



4 NORTH ELEVATION
Scale: 1/8" = 1'-0"

EXTERIOR FINISH GENERAL NOTES

1. EXTERIOR FINISH NOTES APPLY TO BUILDING AND SITE.
2. REFER TO FINISH KEY ON ROOM FINISH SCHEDULE SHEET(S) FOR FINISHES NOT IDENTIFIED IN THESE GENERAL NOTES OR MATERIAL LEGENDS.
3. EXTERIOR STEEL DOORS AND FRAMES TO BE PT 6.X.
4. ALL SHEET METAL FABRICATIONS UNRELATED TO CURTAIN WALL, DOOR FRAMES, FORMED METAL WALL PANELS, FIBER CEMENT SIDING, AND LOUVERS TO BE PT 6.X (FACTORY FINISH), UNO.
5. SHEET METAL FABRICATIONS ASSOCIATED WITH THE FOLLOWING ITEMS TO BE:
   A. CURTAIN WALL AND ASSOCIATED STOREFRONT DOORS: MATCH CURTAIN WALL FRAMES.
   B. EXTERIOR STEEL DOORS AND FRAMES: MATCH DOOR FRAMES.
   C. FORMED METAL WALL PANELS: MATCH FORMED METAL WALL PANELS.
   D. FIBER CEMENT SIDING: PT 6.X
   E. LOUVERS: MATCH LOUVERS.
7. CURTAIN WALL FRAMING AND RELATED STOREFRONT DOORS TO BE (TBD).
8. EXTERIOR LOUVERS AND ASSOCIATED EXPOSED FLASHING COLOR TO MATCH SHEET METAL FABRICATIONS.
9. ALL EXPOSED CAST IN PLACE CONCRETE TO HAVE A CLEAR SEALER.
10. STEEL STRUCTURE AND MISCELLANEOUS STEEL FABRICATIONS TO BE PT 6.X, UNO
11. STEEL GUARD RAILS AND INFILL TO BE PT 6.X, UNO.
12. BIKE RACKS TO BE GALVANIZED STEEL.
13. SIGN POSTS, BOLLARDS, STEEL FENCING AND GATES TO BE GALVANIZED STEEL
14. ROOF TOP VENTS, COWLS, FLUES AND ASSOCIATED FLASHINGS TO BE PT 6.X.

EXTERIOR ELEVATION GENERAL NOTES

1. LOCATION AND SPACING OF WINDOW MULLIONS, JOINTS IN FORMED METAL WALL PANELS AND FIBER CEMENT SIDING, ARE TO BE AS SHOWN ON EXTERIOR ELEVATIONS. WHERE NOT DIMENSIONED OR DETAILED, WINDOW MULLIONS AND MATERIAL JOINTS ARE TO BE EQUALLY SPACED AND/ OR CENTERED/ ALIGNED W/ ADJACENT ELEMENT (STEEL COLUMN, EDGE OR CENTER LINE OF WINDOW OR DOOR OPENING, ETC) AS SHOWN.
2. REFER TO DETAILS FOR DIMENSION REFERENCE POINTS.
3. WHERE INDICATED IN ARCHITECTURAL DRAWINGS, 100'-0" IS THE DATUM ELEVATION AND CORRESPONDS TO THE REFERENCED FIRST FLOOR SLAB ELEVATION 114.00'. SEE CIVIL FOR FURTHER INFORMATION.
4. EXTERIOR WALL FINISHES EXTEND FULL HEIGHT TO UNDERSIDE OF DECK ABOVE OR TO TOP OF PARAPET, UNO (NOT SHOWN WHERE EAVES AND BEAMS OBSCURE VIEW). SEE BUILDING SECTIONS & DETAILS.
5. SEE REFLECTED CEILING PLANS FOR EXPOSED STRUCTURE AND SOFFIT COLORS.
6. FOR DETAIL CONDITIONS CONCEALED BEHIND ITEMS IN FOREGROUND, REFER TO PARTIAL ELEVATIONS

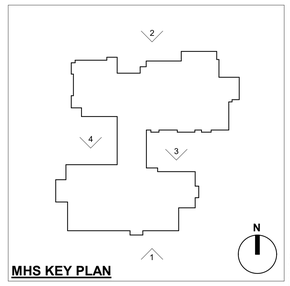
MATERIALS LEGEND

- CAST-IN-PLACE CONCRETE WITH ARCHITECTURAL FINISH, SEE 1/A4.06 & 2/A4.06
- FORMED METAL PANEL
- FORMED METAL PANEL PERFORATED, FOR BASE BID, SEE 9/A5.09 FOR ALT BID NO. 3 SEE 7/A5.09
- INSULATED METAL WALL PANEL
- FIBER CEMENT SIDING TYPE 1
- FIBER CEMENT SIDING TYPE 2
- BRAKE METAL
- PERFORATED METAL GUARD RAIL
- PERFORATED METAL SHADE FIN

GRADE LEGEND

- EXISTING GRADE
- NEW GRADE

NOTE: THIS LEGEND DOES NOT INCLUDE ALL MATERIALS. SEE NOTES & REFERENCED DETAILS FOR ADDITIONAL INFORMATION. SEE SHEET A4.11 FOR GLAZING LEGEND



MHS KEY PLAN

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FILE No.: A#: 03-121943 (INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL - PHASE 1

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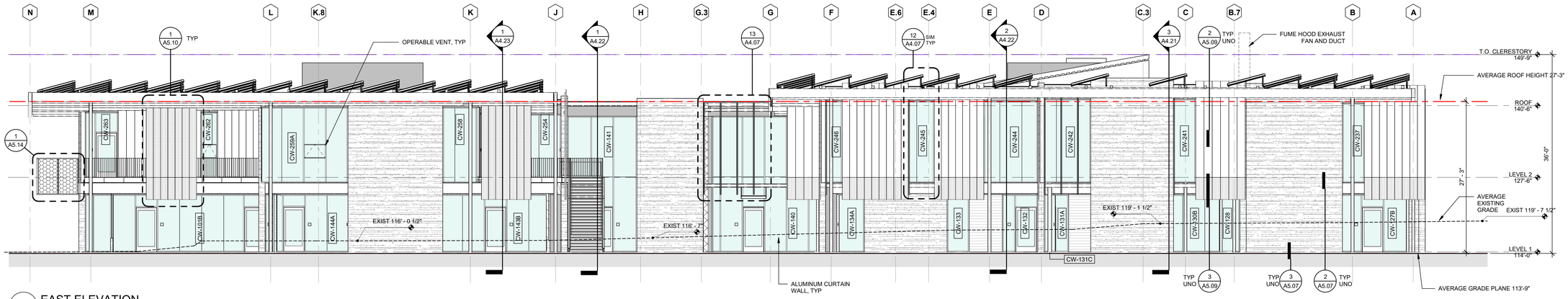
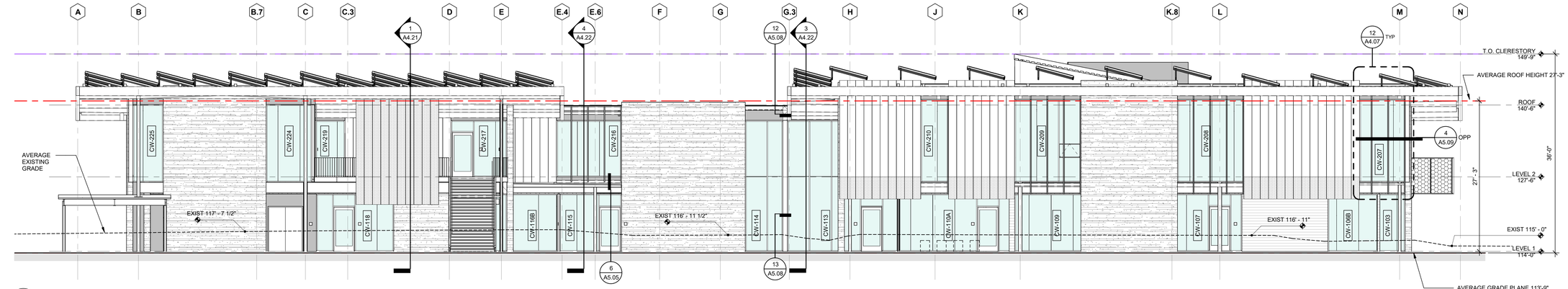
EXTERIOR ELEVATIONS

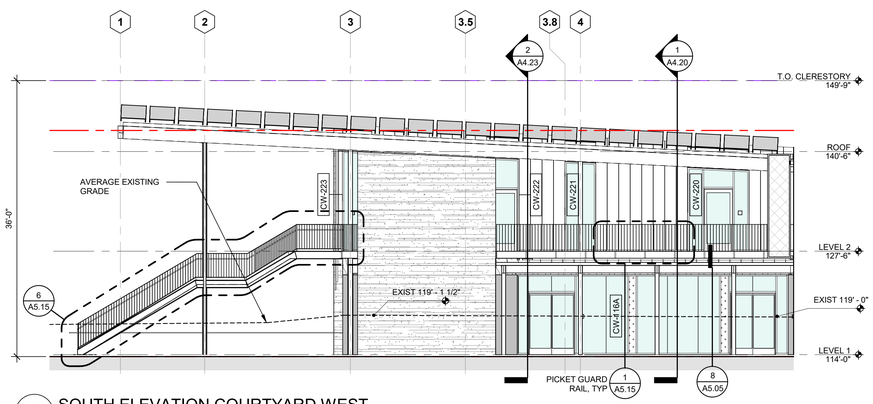
A4.01X



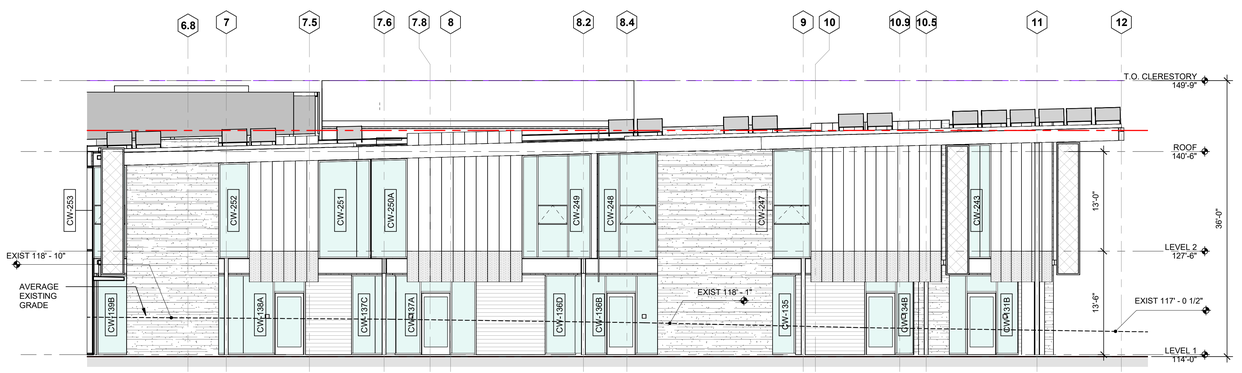
1 EAST ELEVATION
Scale: 1/8" = 1'-0"



4 WEST ELEVATION
Scale: 1/8" = 1'-0"



3 SOUTH ELEVATION COURTYARD WEST
Scale: 1/8" = 1'-0"



2 SOUTH ELEVATION COURTYARD EAST
Scale: 1/8" = 1'-0"

EXTERIOR FINISH GENERAL NOTES

1. EXTERIOR FINISH NOTES APPLY TO BUILDING AND SITE.
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3. EXTERIOR STEEL DOORS AND FRAMES TO BE PT 6.X.
4. ALL SHEET METAL FABRICATIONS UNRELATED TO CURTAIN WALL, DOOR FRAMES, FORMED METAL WALL PANELS, FIBER CEMENT SIDING, AND LOUVERS TO BE PT 6.X (FACTORY FINISH), UNO.
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10. STEEL STRUCTURE AND MISCELLANEOUS STEEL FABRICATIONS TO BE PT 6.X, UNO
11. STEEL GUARD RAILS AND INFILL TO BE PT 6.X, UNO.
12. BIKE RACKS TO BE GALVANIZED STEEL.
13. SIGN POSTS, BOLLARDS, STEEL FENCING AND GATES TO BE GALVANIZED STEEL
14. ROOF TOP VENTS, COWLS, FLUES AND ASSOCIATED FLASHINGS TO BE PT 6.X.

EXTERIOR ELEVATION GENERAL NOTES

1. LOCATION AND SPACING OF WINDOW MULLIONS, JOINTS IN FORMED METAL WALL PANELS AND FIBER CEMENT SIDING, ARE TO BE AS SHOWN ON EXTERIOR ELEVATIONS. WHERE NOT DIMENSIONED OR DETAILED, WINDOW MULLIONS AND MATERIAL JOINTS ARE TO BE EQUALLY SPACED AND/ OR CENTERED/ ALIGNED W/ ADJACENT ELEMENT (STEEL COLUMN, EDGE OR CENTER LINE OF WINDOW OR DOOR OPENING, ETC) AS SHOWN.
2. REFER TO DETAILS FOR DIMENSION REFERENCE POINTS.
3. WHERE INDICATED IN ARCHITECTURAL DRAWINGS, 100'-0" IS THE DATUM ELEVATION AND CORRESPONDS TO THE REFERENCED FIRST FLOOR SLAB ELEVATION 114.00'. SEE CIVIL FOR FURTHER INFORMATION.
4. EXTERIOR WALL FINISHES EXTEND FULL HEIGHT TO UNDERSIDE OF DECK ABOVE OR TO TOP OF PARAPET, UNO (NOT SHOWN WHERE EAVES AND BEAMS OBSCURE VIEW). SEE BUILDING SECTIONS & DETAILS.
5. SEE REFLECTED CEILING PLANS FOR EXPOSED STRUCTURE AND SOFFIT COLORS.
6. FOR DETAIL CONDITIONS CONCEALED BEHIND ITEMS IN FOREGROUND, REFER TO PARTIAL ELEVATIONS

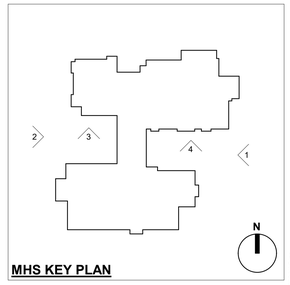
MATERIALS LEGEND

- CAST-IN-PLACE CONCRETE WITH ARCHITECTURAL FINISH, SEE 1/A4.06 & 2/A4.06
- FORMED METAL PANEL
- FORMED METAL PANEL PERFORATED, FOR BASE BID, SEE 9/A5.09 FOR ALT BID NO. 3 SEE 7/A5.09
- INSULATED METAL WALL PANEL
- FIBER CEMENT SIDING TYPE 1
- FIBER CEMENT SIDING TYPE 2
- BRAKE METAL
- PERFORATED METAL GUARD RAIL
- PERFORATED METAL SHADE FIN

GRADE LEGEND

- EXISTING GRADE
- NEW GRADE

NOTE: THIS LEGEND DOES NOT INCLUDE ALL MATERIALS. SEE NOTES & REFERENCED DETAILS FOR ADDITIONAL INFORMATION. SEE SHEET A4.11 FOR GLAZING LEGEND



MHS KEY PLAN

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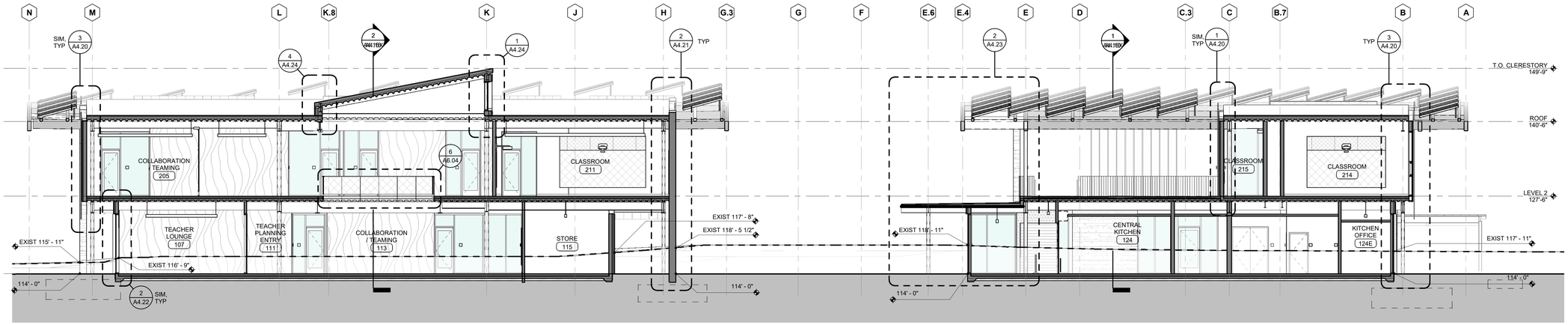
DATE 01-12-2022

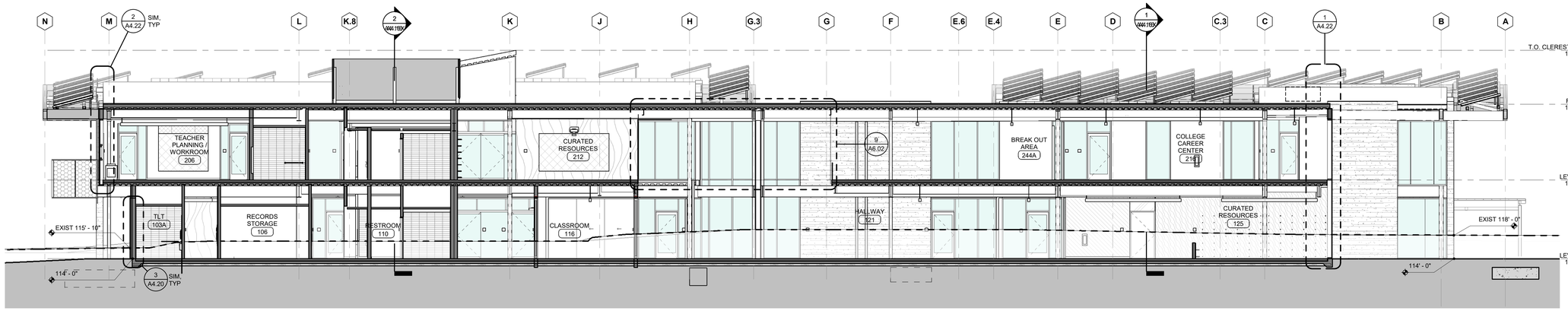
DSA SUBMITTAL

EXTERIOR ELEVATIONS

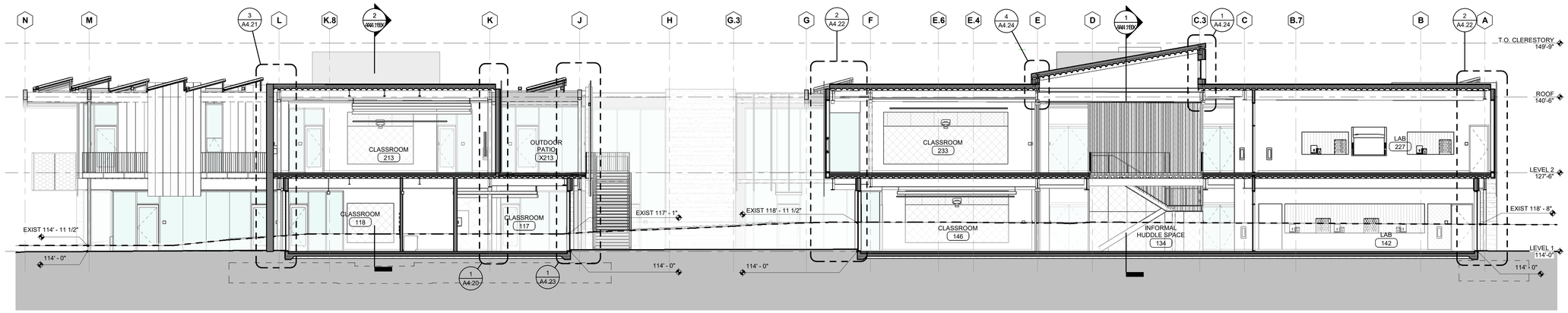
A4.02X



1 SECTION AA
Scale: 1/8" = 1'-0"



2 SECTION BB
Scale: 1/8" = 1'-0"

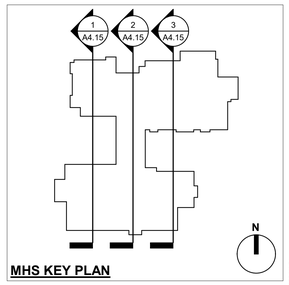


3 SECTION CC
Scale: 1/8" = 1'-0"

GRADE LEGEND

EXISTING GRADE

NEW GRADE



MHS KEY PLAN

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FILE No.: A#: 03-121943 (INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL - PHASE 1

3021 S MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

NAC ARCHITECTURE
837 NORTH SPRING STREET THIRD FLOOR
LOS ANGELES, CA 90012
Tel: 323.475.8075
www.nacarchitecture.com

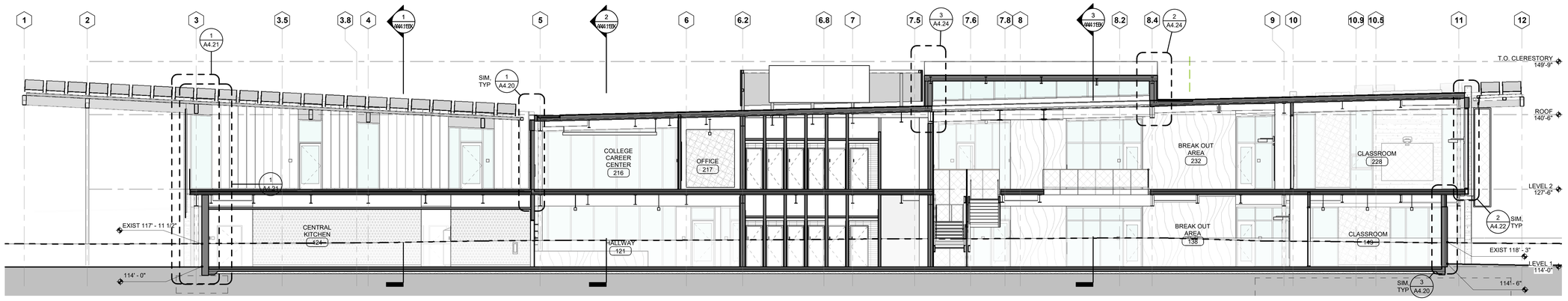
KoningEizenberg
1454 25TH STREET
SANTA MONICA, CA 90404
Tel: 310.828.6131
www.kearch.com

DATE 01-12-2022

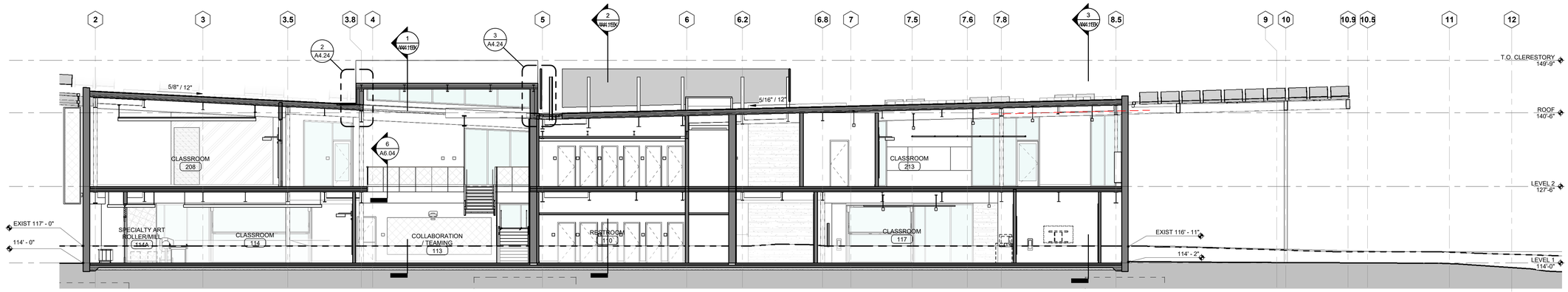
DSA SUBMITTAL

BUILDING SECTIONS

A4.15X



1 SECTION EE (CITY)
Scale: 1/8" = 1'-0"

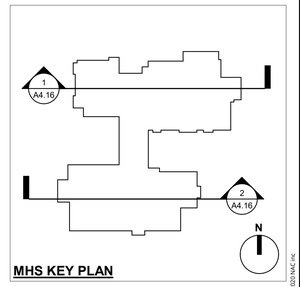


2 SECTION FF (CITY)
Scale: 1/8" = 1'-0"

GRADE LEGEND

EXISTING GRADE

NEW GRADE



MHS KEY PLAN

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FILE No.: A#: 03-121943 (INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL - PHASE 1

30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

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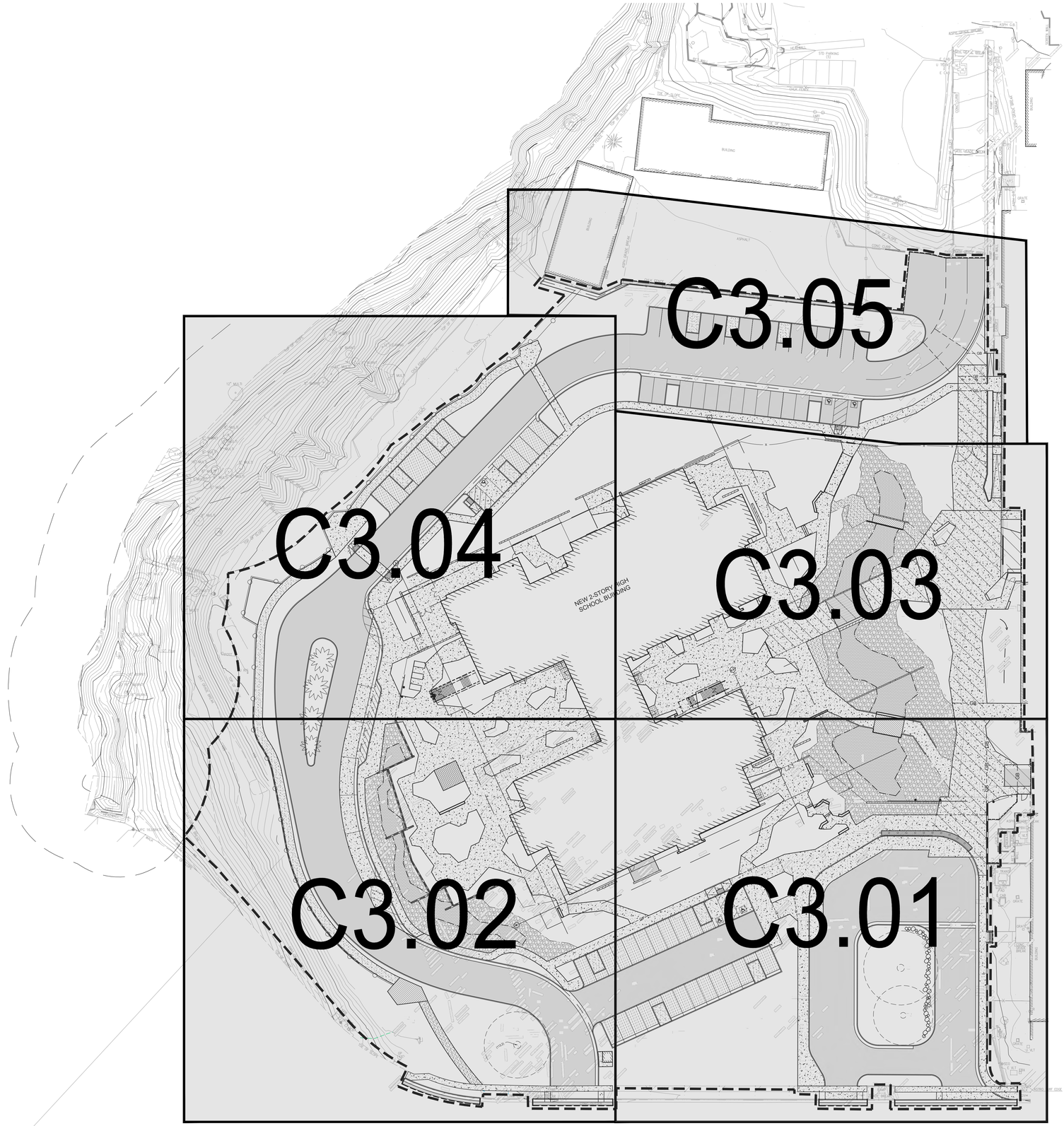
DATE 01-12-2022

DSA SUBMITTAL

BUILDING SECTIONS

A4.16X



30' 15' 0' 30' 60'
GRAPHIC SCALE
SCALE: 1" = 30'

FILE No.: A#: 00-000000

PSOMAS
555 South Flower Street, Suite 4300
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MALIBU HIGH SCHOOL - PHASE 1
30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

SMMUSD
SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

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NOT FOR CONSTRUCTION PURPOSES
DATE 10/22/2021

50% CONSTRUCTION DOCUMENTS

GRADING PLAN
KEY MAP

C3.00

MATCHLINE - SEE SHEET C3.04

MATCHLINE - SEE SHEET C3.02

NEW 2 STORY HIGHSCHOOL BUILDING
FFE = 114.00

ROOF LINE (ABOVE)

MORNING VIEW DRIVE

CONSTRUCTION NOTES:

- CONSTRUCT
- EXISTING TO REMAIN -PROTECT IN PLACE
- EXISTING TO REMOVE
- REMOVE & RELOCATE
- ADJUST TO GRADE
- PER SEPARATE CONTRACT

1. CONCRETE CURB A1-6, PER DETAIL 4 / SHEET C9.01
2. CONCRETE BENCH PER LANDSCAPE PLANS PLANS
3. CONCRETE DRIVEWAY APPROACH PER DETAIL 3 / SHEET C9.01
4. CONCRETE LONGITUDINAL GUTTER PER DETAIL 5 / SHEET C9.01
5. HEAVY DUTY ASPHALT PAVEMENT PER DETAIL 2 / SHEET C9.01
6. REMOVABLE BOLLARD PER DETAIL 10 / SHEET C9.01
7. HEAVY DUTY CONCRETE PAVEMENT PER DETAIL 1 / SHEET C9.01. THICKENED EDGE TO BE INSTALLED WHERE PAVEMENT ABUTS DIRECTLY AGAINST LANDSCAPE WITH NO CURB
8. CONCRETE PAVEMENT PER DETAIL 1 / SHEET C9.01. THICKENED EDGE TO BE INSTALLED WHERE PAVEMENT ABUTS DIRECTLY AGAINST LANDSCAPE WITH NO CURB
9. RETAINING WALL PER STRUCTURAL PLANS
10. SAWCUT AND JOIN
11. CONCRETE CURB AND GUTTER A2-6, PER DETAIL 4 / SHEET C9.01
12. DECOMPOSED GRANITE PER LANDSCAPE PLANS
13. CONCRETE STAIR PER ARCHITECTURAL PLANS
14. CONCRETE RAMP AND HANDRAILS PER ARCHITECTURAL PLANS
15. SITE FENCE PER LANDSCAPE PLANS
16. PERMEABLE PAVING OVER SILVA CELL (2X) STORMWATER CAPTURE SYSTEM, 5,100 SF
17. SCREEN WALL PER LANDSCAPE PLANS
18. LANDSCAPE AREA PER LANDSCAPE PLANS
19. BOLLARD PER DETAIL 9 / SHEET C9.01
20. ACCESSIBLE CURB RAMP PER CITY OF LOS ANGELES STD. PLAN 442-6, CASE PER PLAN
21. BIORETENTION BASIN PER DETAIL 5 / SHEET C9.03
22. SYNTHETIC WOOD DECK PER LANDSCAPE PLANS
23. WALK OFF MAT/GRATE PER ARCHITECTURAL PLANS
24. NOT USED
25. BRIDGE PER LANDSCAPE PLANS
26. VEHICULAR GATE PER ARCHITECTURE PLANS
27. PEDESTRIAN GATE PER ARCHITECTURE PLANS
28. COMMUNICATIONS VAULT
29. ELECTRICAL VAULT
30. DRAINAGE STRUCTURE PER SHEET C4.01-4.02
31. PARKWAY DRAIN PER SPPWC STD. DETAIL 151-3, SEE DETAIL 3A / SHEET C9.02
32. DETECTABLE WARNING SURFACE
33. SHEAR WALL PER ARCHITECTURAL PLANS
34. GRAVITY ROCK RETAINING WALL PER LANDSCAPE PLANS
35. SEPTIC STRUCTURE PER SHEET C4.01-C4.02
36. GUARD BOOTH PER ARCHITECTURAL PLANS
37. ROLLED CURB, B2-6, PER SPPWC STD. PLAN 121-3, SEE DETAIL 6 / SHEET C9.01
38. STAIR PER ARCHITECTURAL PLANS
39. CONCRETE WEIR RETAINING WALL PER STRUCTURAL PLANS
40. PERMEABLE PAVERS PER DETAIL 6 / SHEET C9.01
41. VEGETATED SWALE PER DETAIL 3 / SHEET C9.03

LEGEND:

- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE WALKWAY FINISH PER LANDSCAPE PLAN
- HEAVY DUTY CONCRETE WALKWAY FINISH PER LANDSCAPE PLAN
- PERMEABLE PAVERS FINISH PER LANDSCAPE PLAN
- DECOMPOSED GRANITE PER LANDSCAPE PLAN
- CIVIL LIMIT OF WORK
- PROPOSED BUILDING FOOTPRINT
- SAWCUT AND JOIN LINE
- PROPOSED CONTOUR LINE (235)
- EXISTING CONTOUR LINE (280)
- PROPERTY LINE
- DAYLIGHT LINE
- NEW RETAINING WALL
- GRADE BREAK (GB)
- RIDGE LINE (R)
- SWALE FLOW LINE
- ROOF LINE

GRAPHIC SCALE
SCALE: 1" = 10'

FILE No.: A#: 00-000000

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30215 MORNING VIEW DR. MALIBU, CA 90265
NAC Project # 161-20008

SMMUSD
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DATE 10/22/2021

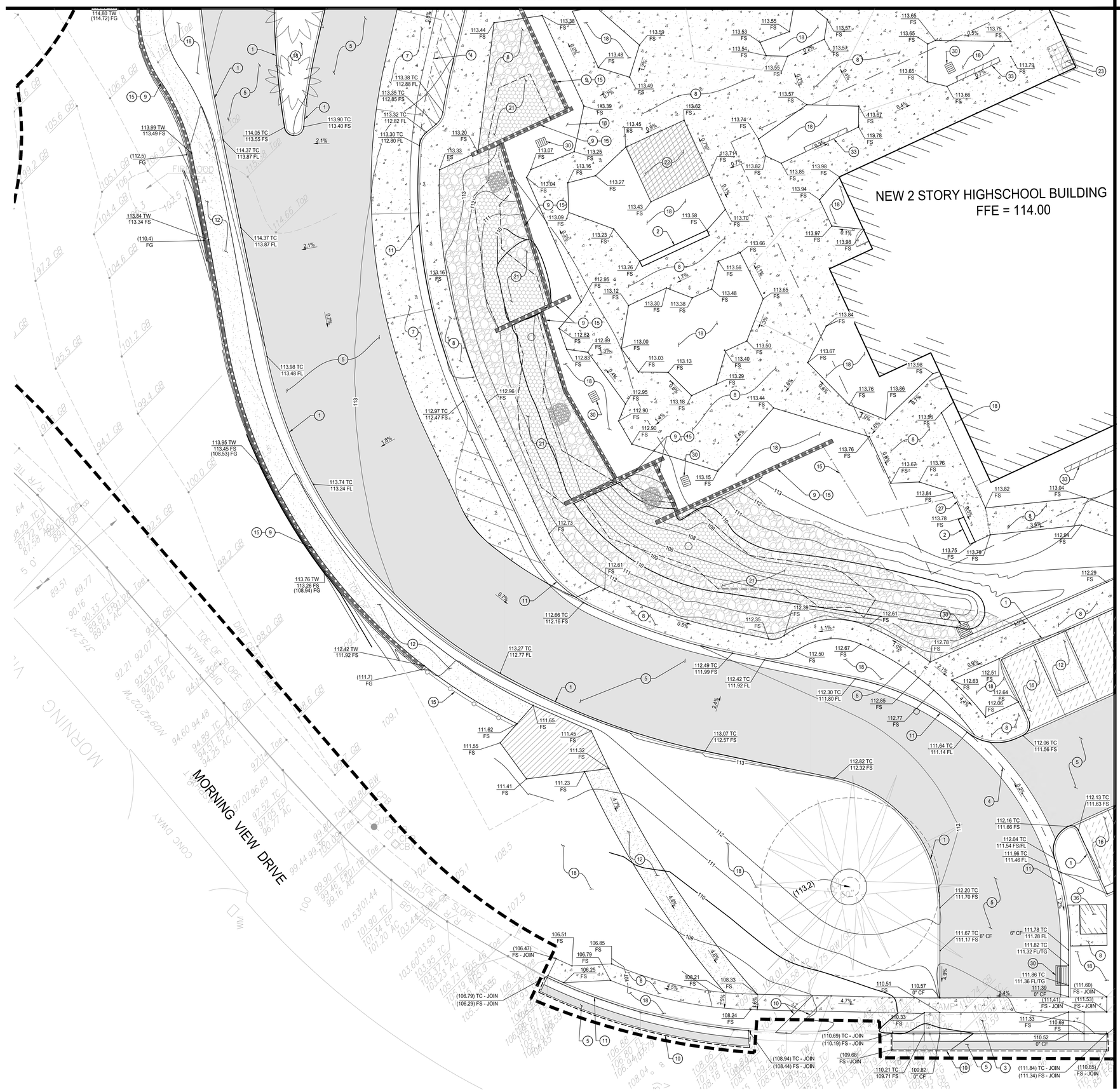
50% CONSTRUCTION DOCUMENTS

PAVING, GRADING, AND DRAINAGE PLAN

C3.01

W:\1NA0107000\CAD\Design\Sheets\C301--GRAD-MHS.dwg Mon, 18 Oct 2021 - 11:45am Plotted by: damon.hewett

MATCHLINE - SEE SHEET C3.03



CONSTRUCTION NOTES:

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LEGEND:

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- HEAVY DUTY CONCRETE WALKWAY FINISH PER LANDSCAPE PLAN
- PERMEABLE PAVERS FINISH PER LANDSCAPE PLAN
- DECOMPOSED GRANITE PER LANDSCAPE PLAN
- CIVIL LIMIT OF WORK
- PROPOSED BUILDING FOOTPRINT
- SAWCUT AND JOIN LINE
- 235 PROPOSED CONTOUR LINE
- 280 EXISTING CONTOUR LINE
- PROPERTY LINE
- DAYLIGHT LINE
- NEW RETAINING WALL
- GB GRADE BREAK
- R RIDGE LINE
- SWALE FLOW LINE
- ROOF LINE

10' 5' 0' 10' 20'

GRAPHIC SCALE
SCALE: 1" = 10'

FILE No.: A#: 00-000000

PSOMAS
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Los Angeles, CA 90071
(213) 223-1400 (213) 223-1444 (FAX)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT
MALIBU HIGH SCHOOL - PHASE 1
30215 MORNING VIEW DR., MALIBU, CA 90265
NAC Project # 161-20068

SMMUSD
SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

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www.kearch.com

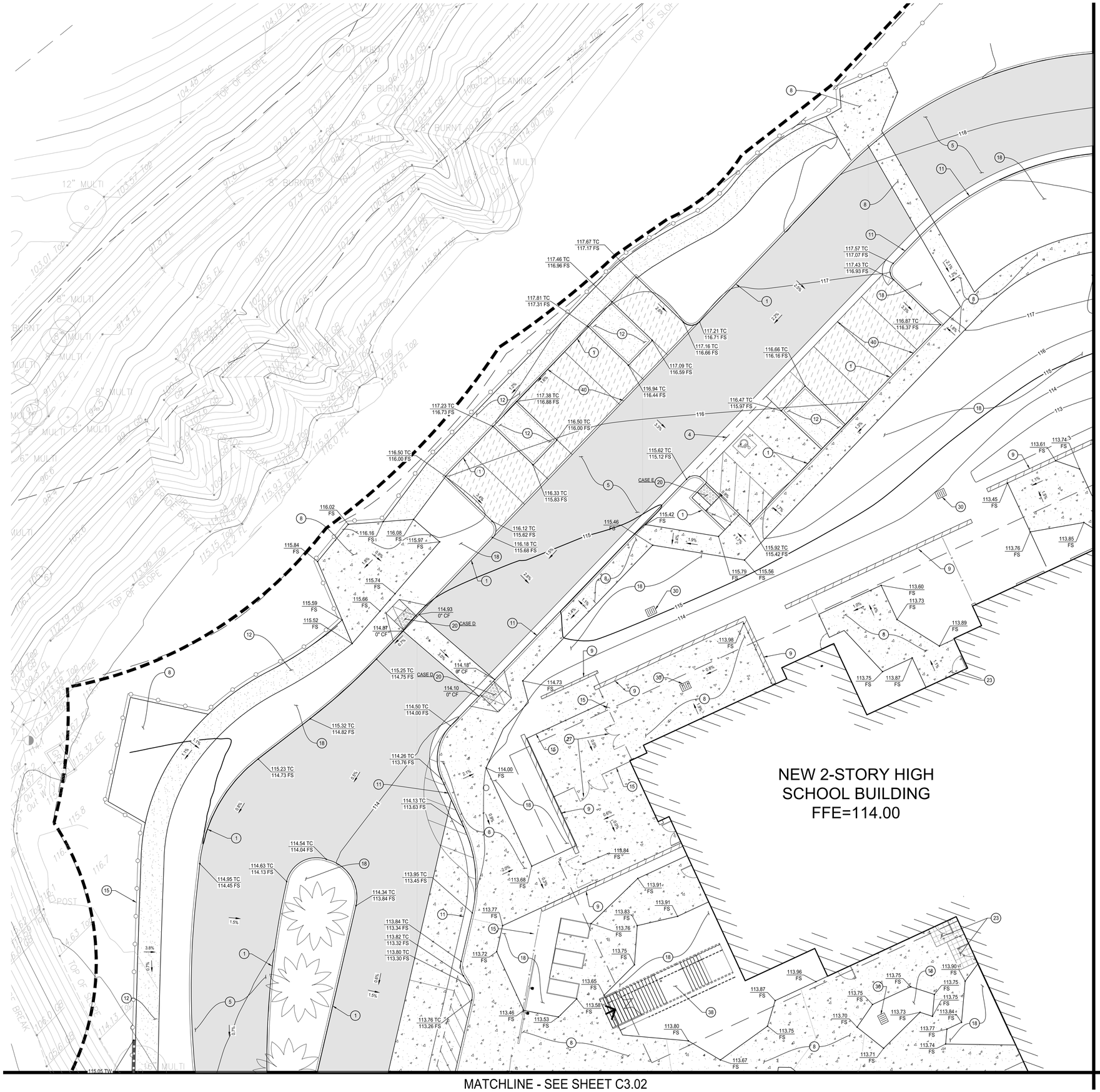
NOT FOR CONSTRUCTION PURPOSES
DATE 10/22/2021

50% CONSTRUCTION DOCUMENTS

PAVING, GRADING, AND DRAINAGE PLAN

C3.02

W:\NAC\2017\20170\Cad\Design\Sheets\C302--GRAD--MHS.dwg Mon, 18 Oct 2021 - 11:46am Plotted by: donnie.hewlett



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LEGEND:

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- ROOF LINE

10' 5' 0' 10' 20'

GRAPHIC SCALE
SCALE: 1" = 10'

FILE No.: A#: 00-000000

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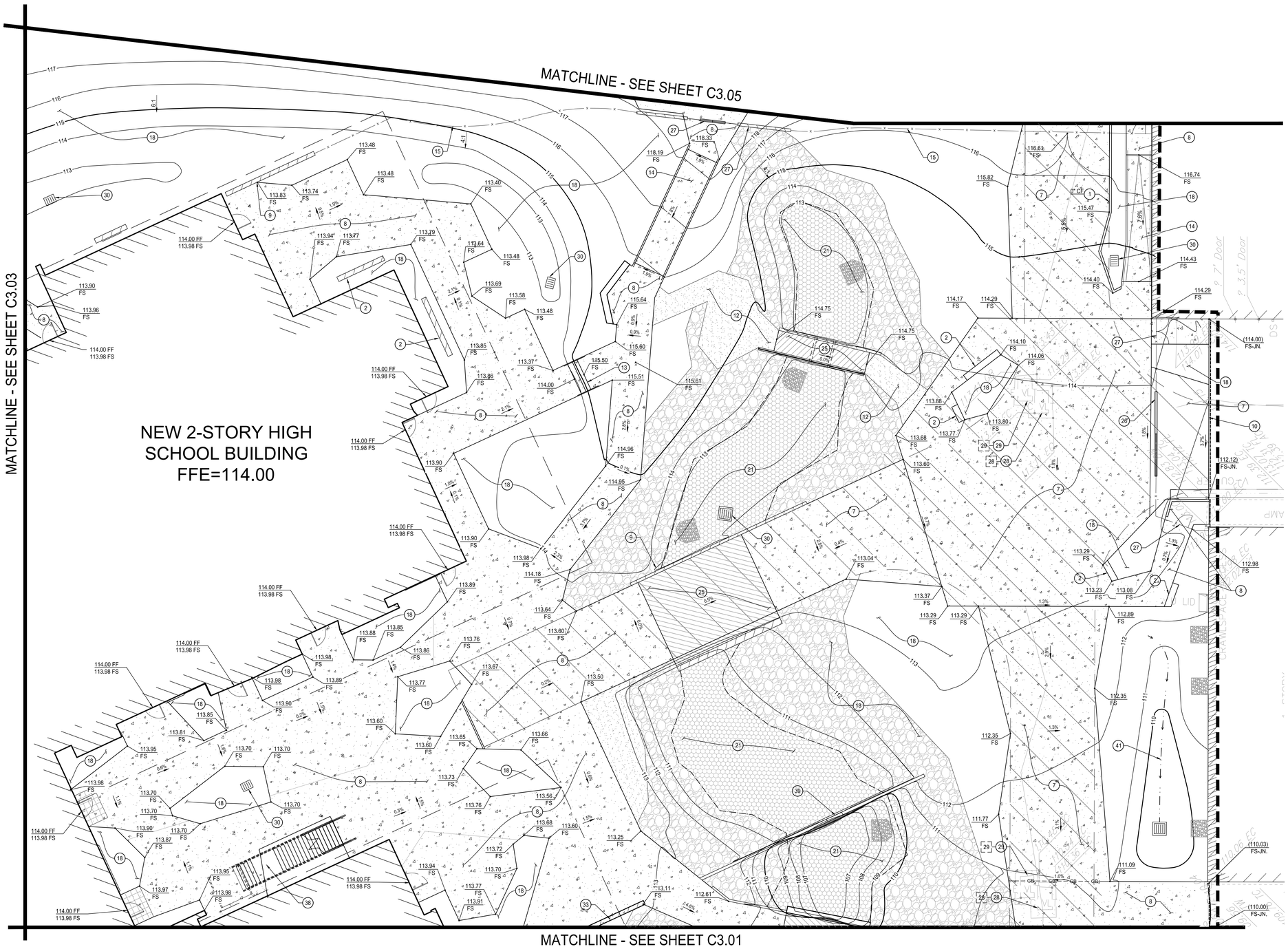
PAVING, GRADING, AND DRAINAGE PLAN

C3.03

W:\NAC\2017\2700\LCAD\Design\Sheets\C303--GRAD--MHS.dwg Mon, 18 Oct 2021 - 11:47am Plotted by: dominic.frankett


MATCHLINE - SEE SHEET C3.05
MATCHLINE - SEE SHEET C3.03
MATCHLINE - SEE SHEET C3.01
NEW 2-STORY HIGH
SCHOOL BUILDING
FFE=114.00
6:1
4:1
2.1%
1.9%
0.9%
2.8%
1.0%
0.4%
1.3%
3.7%
1.8%
0.5%
1.5%
2.4%
0.2%
0.6%
0.3%
1.2%
0.8%
0.1%
2.6%
3.2%
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0.7%
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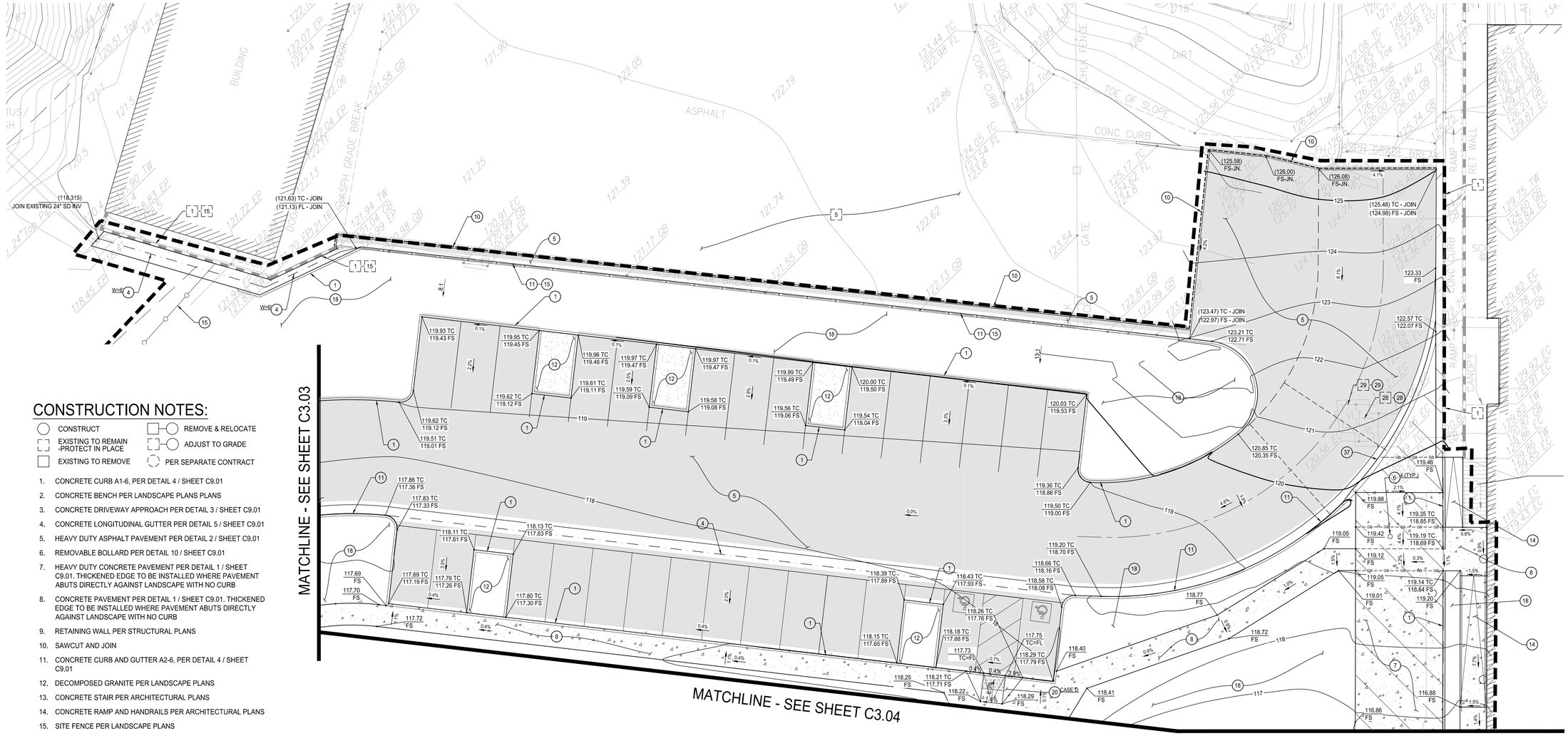
13.2%


MATCHLINE - SEE SHEET C3.03
MATCHLINE - SEE SHEET C3.04
ASPHALT
BUILDING
DIRT
CONC CURB
DIRT EDGE
CHALK FENCE
TOE OF SLOPE
ASPH GRADE BREAK
GATE
RAMP
RET WALL
CANOPY
JOIN EXISTING 24" SD INV
(118.315)
(121.63) TC - JOIN
(121.13) FL - JOIN
(125.58) FS-JN.
(126.00) FS-JN.
(126.08) FS-JN.
(125.48) TC - JOIN
(124.98) FS - JOIN
(123.47) TC - JOIN
(122.97) FS - JOIN
123.33 FS
122.57 TC
122.07 FS
123.21 TC
122.71 FS
120.85 TC
120.35 FS
119.46 FS
119.88 FS
119.35 TC
118.85 FS
119.42 FS
119.19 TC
118.69 FS
119.12 FS
119.14 TC
118.64 FS
119.05 FS
119.20 FS
119.01 FS
116.88 FS
116.86 FS
119.05 FS
118.72 FS
118.77 FS
118.40 FS
118.41 FS
119.20 TC
118.70 FS
118.66 TC
118.16 FS
118.58 TC
118.08 FS
119.36 TC
118.86 FS
119.50 TC
119.00 FS
120.03 TC
119.53 FS
119.54 TC
119.04 FS
120.00 TC
119.50 FS
119.99 TC
119.49 FS
119.97 TC
119.47 FS
119.96 TC
119.46 FS
119.97 TC
119.47 FS
119.95 TC
119.45 FS
119.93 TC
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119.12 FS
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119.11 FS
119.59 TC
119.09 FS
119.58 TC
119.08 FS
119.56 TC
119.06 FS
119.62 TC
119.12 FS
119.51 TC
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117.33 FS
118.11 TC
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117.63 FS
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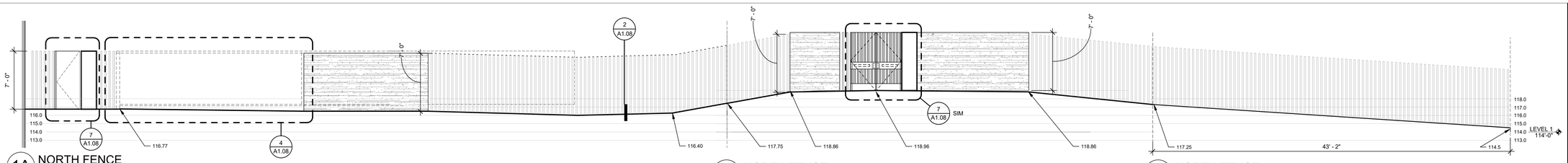
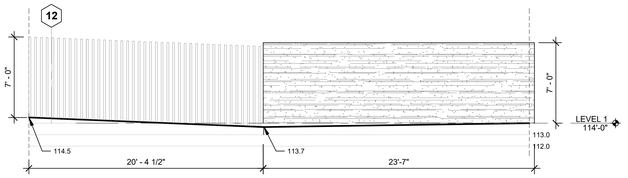


1A NORTH FENCE
Scale: 3/16" = 1'-0"

1B NORTH FENCE
Scale: 3/16" = 1'-0"

1C NORTH FENCE
Scale: 3/16" = 1'-0"



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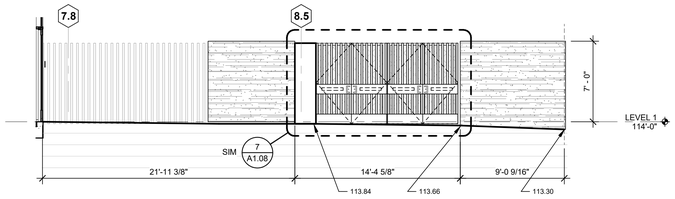

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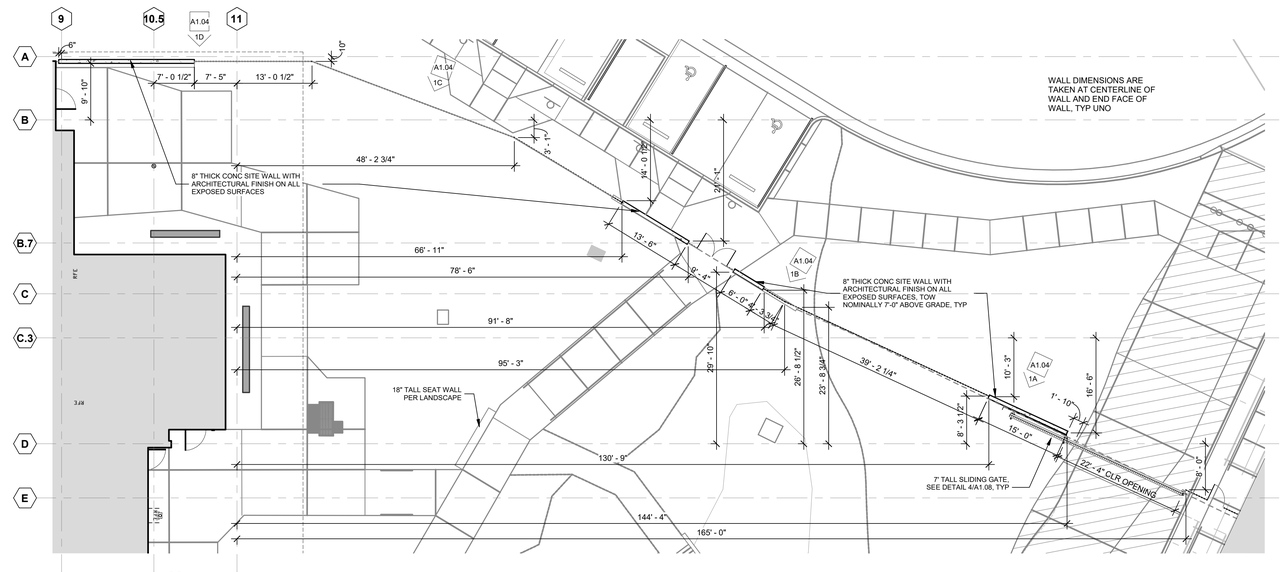
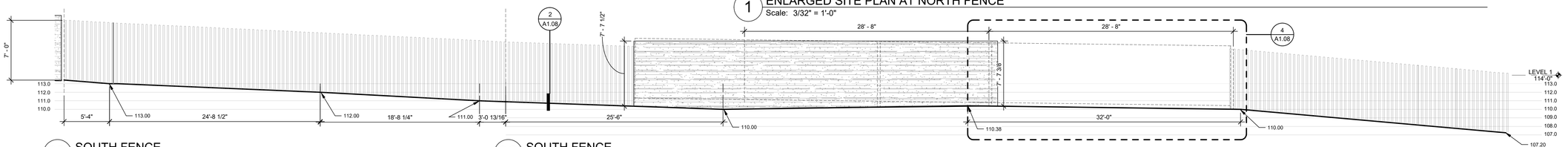
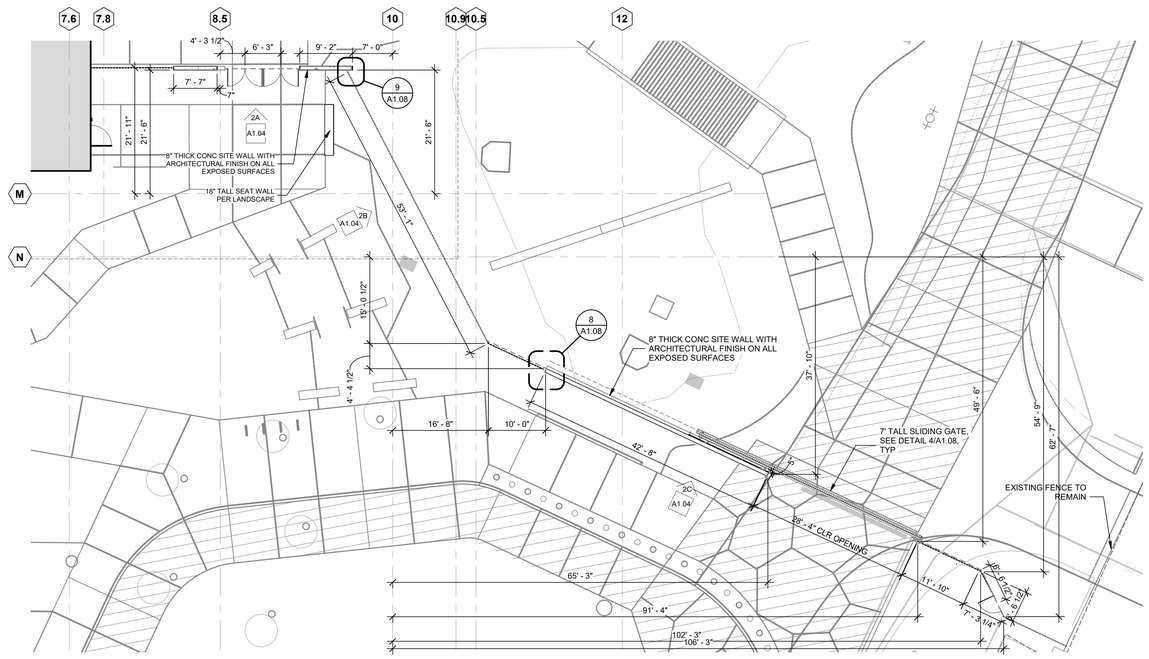


1 ENLARGED SITE PLAN AT NORTH FENCE
Scale: 3/32" = 1'-0"



2B SOUTH FENCE
Scale: 3/16" = 1'-0"

2C SOUTH FENCE
Scale: 3/16" = 1'-0"



2 ENLARGED SITE PLAN AT SOUTH FENCE
Scale: 3/32" = 1'-0"

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FILE No.: A#: 03-121943 (INC-2)

LICENSED ARCHITECT
HELENA L. JUBANY
No. C22214
Ren. 5-31-23
STATE OF CALIFORNIA

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL - PHASE 1

30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

SMMUSD
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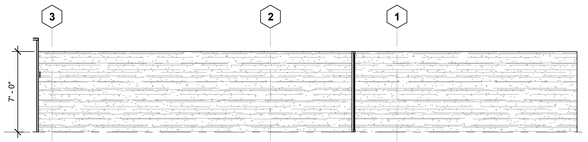
DATE 01-12-2022

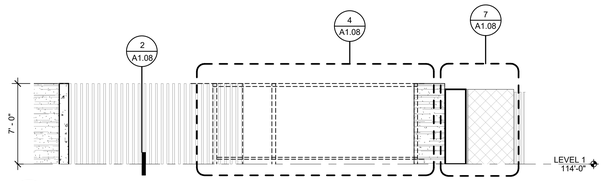
DSA SUBMITTAL

ENLARGED SITE PLANS AND ELEVATIONS

A1.04



1A SITE WALL NORTH
Scale: 3/16" = 1'-0"



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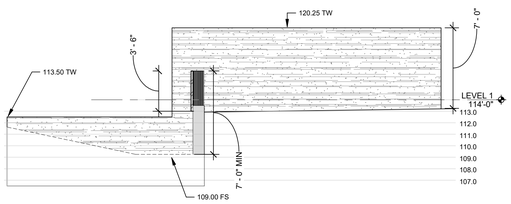

1C SITE WALL SOUTH ELEVATION
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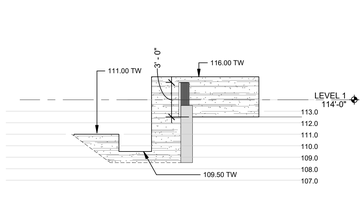

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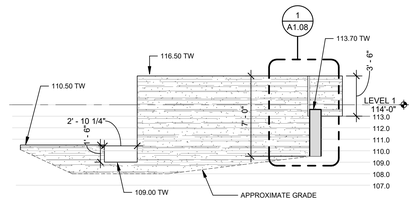

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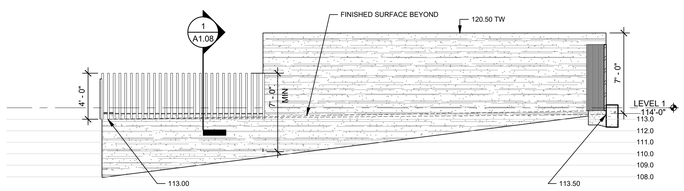

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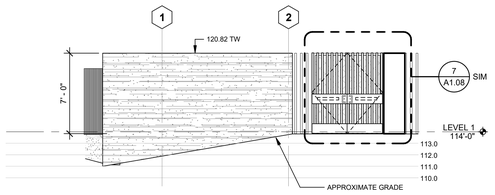
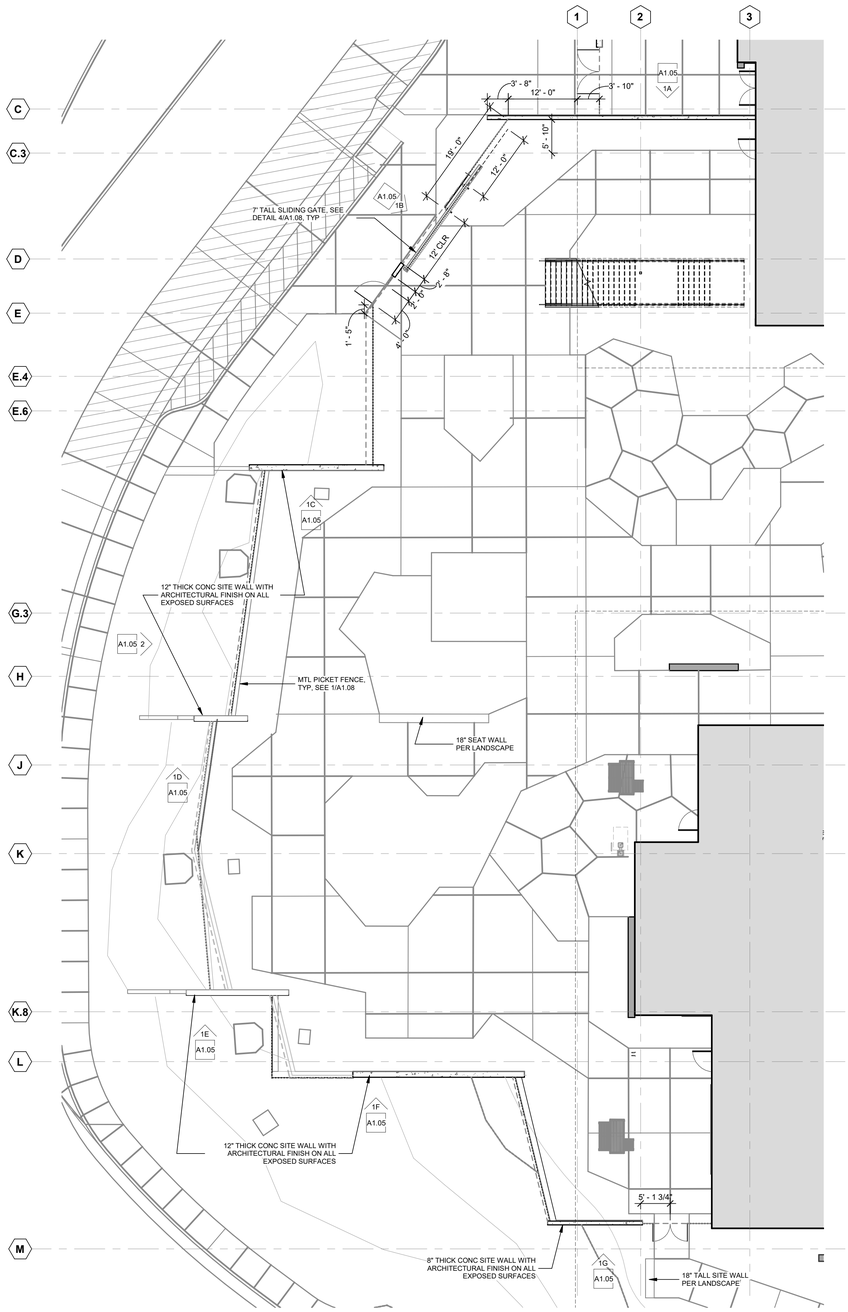
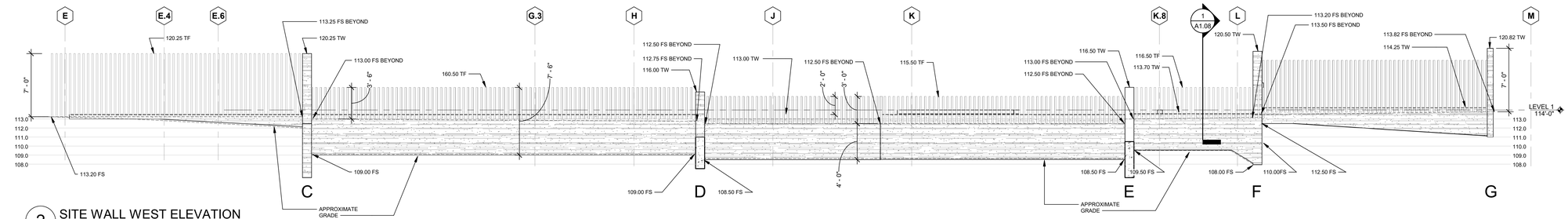


1G SITE WALL SOUTH ELEVATION
Scale: 3/16" = 1'-0"



1 NORTH FENCE PLAN
Scale: 3/32" = 1'-0"



2 SITE WALL WEST ELEVATION
Scale: 3/16" = 1'-0"

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DATE 01-12-2022

DSA SUBMITTAL

ENLARGED SITE PLANS AND ELEVATIONS

A1.05

PLANT LEGEND

TREES	BOTANICAL / COMMON NAME	CONTAINER	MATURE SIZE	FUEL MOD	WATER USE	FORM	QTY
	EXISTING TREE TO REMAIN	N/A					3
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE	48" BOX	30' H X 30' W	ZONE A, B	LOW	MULTI-TRUNK	5
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE	48" BOX	30' H X 30' W	ZONE A, B	LOW	STANDARD	18
	HETEROMELES ARBUTIFOLIA * TOYON	15 GAL	10' H X 10' W	ZONE A, B, C	LOW	STANDARD LOW BRANCH	49
	PLATANUS RACEMOSA * CALIFORNIA SYCAMORE	48" BOX	40' H X 30' W	ZONE B, C	LOW	MULTI-TRUNK	4
	PLATANUS RACEMOSA * CALIFORNIA SYCAMORE	48" BOX	40' H X 30' W	ZONE B, C	LOW	STANDARD	15
	QUERCUS AGRIFOLIA * COAST LIVE OAK	60" BOX	35' H X 35' W	ZONE B	LOW	STANDARD	10

SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	MATURE SIZE	QC SPACING	PAV OFFSET	WATER	FM	QTY
AV	AGAVE ATTENUATA 'NOVA' BLUE FOXTAIL AGAVE	5 GAL	3-4'H X 3-4'W	36"	30"	LOW	ZONE A	178
AM	ALOE RUDIKOPPE LITTLE RED RIDING HOOD ALOE	5 GAL	1'-2" H X 2'-3" W	30"	18"	LOW	ZONE A, B	116
AV	ALOE VERA MEDICINAL ALOE	5 GAL	2'H X 2'-6"W	36"	18"	LOW	ZONE A	45
AE	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR' * CARMEL SUR MANZANITA	5 GAL	6" H X 3'-5' W	108"	4'-6"	LOW	ZONE A, B, C	190
BP	BACCHARIS PILULARIS 'PIGEON POINT' * PIGEON PT DWARF COYOTE BRUSH	5 GAL	2' H X 6'-8' W	48"	36"	LOW	ZONE A, B	346
C	CAREX TUMULICOLA * FOOTHILL SEDGE	5 GAL	1' H X 1'-2' W	48"	12"	MED	ZONE A, B	919
CG	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER	5 GAL	2'-3" H X 6'-8' W	48"	42"	LOW	ZONE A, B	254
CO	CERCIS OCCIDENTALIS * WESTERN REDBUD	36" BOX	12' H X 12' W	PER PLAN	72"	LOW	ZONE A, B, C	44
DW	DASYLIRION WHEELERI GREY DESERT SPOON	15 GAL	2'-4" H X 2'-4' W	AS SHOWN	24"	LOW	ZONE A	83
DM	DRACAENA MARGINATA RED EDGED DRACAENA	15 GAL	6'-8'H X 3'-8'W	72"	30"	MODERATE	ZONE A	8
EC	ERIOGONUM CINEREUM * ASHYLEAF BUCKWHEAT	1 GAL	2'-4" H X 3'-5' W	30"	28"	LOW	ZONE A, B	535
HP	HESPERALOE PARVIFLORA RED YUCCA	5 GAL	2-3'H X 2-3'W	30"	18"	LOW	ZONE A	116
J	JUNCUS EFFUSUS COMMON RUSH	5 GAL	2-4'H X 2-4'W	24"	18"	MED	ZONE A, B	256
LC	LEYMUS CONDENSATUS 'CANYON PRINCE' CANYON PRINCE WILD RYE	5 GAL	2'-4" H X 2'-4" W (SPREADING)	24"	36"	LOW	ZONE A, B	797
MR	MUHLENBERGIA RIGENS * DEER GRASS	5 GAL	4' H X 4' W	84"	30"	LOW	ZONE A, B, C	189
NC	NASSELLA CERNUA * NODDING NEEDLEGRASS	5 GAL	2'-3" H X 1'-2' W	18"	9"	LOW	ZONE A, B	562
R	RHAMNUS CALIFORNICA * CALIFORNIA COFFEEBERRY	5 GAL	6'-8" H X 6'-8' W	48"	48"	LOW	ZONE B	35
RO	ROSA CALIFORNICA * WILD CALIFORNIA ROSE	5 GAL	3' H X 3' W	30"	18"	MODERATE	ZONE A, B	302
SU	SALVIA LEUCOPHYLLA * PURPLE SAGE	5 GAL	2'-5' H X 3'-6' W	48"	30"	MODERATE	ZONE A, B	115
YB	YUCCA BRIGHT STAR BRIGHT STAR YUCCA	15 GAL	1'-2' H X 3'-5' W	30"	30"	LOW	ZONE A, B	201
YR	YUCCA RECURVIFOLIA CURVE-LEAF YUCCA	5 GAL	6' H X 3' W	PER PLAN	4'	LOW	ZONE A	23

SEED MIX	BOTANICAL / COMMON NAME	CONTAINER	MATURE SIZE	O.C. SPACING	PAV OFFSET	WATER USE	FIELD6	QTY
	HYDROSEED MIX SANTA MONICA COVER MIX *	HYDROSEED					ZONE B, C	15,084 SF

HYDROSEED MIX

DESCRIPTION	BOTANICAL NAME	COMMON NAME	APPLICATION RATE (LBS / ACRE)	WATER USE	SUPPLIER
SANTA MONICA COVER MIX	ARTEMESIA CALIFORNICA	CALIFORNIA SAGEBRUSH	2.00	LOW	S+S SEEDS
	BROMUS CARINATUS	CALIFORNIA BROME	4.00	LOW	
	BROMUS CARINATUS 'CUCAMONGA'	CUCAMONGA BROME	6.00	LOW	
	CAMISSONIOPSIS CHEIRANTHIFOLIA	BEACH EVENING PRIMROSE	1.00	LOW	
	CLARKIA PURPUREA	WINE CUP CLARKIA	1.00	LOW	
	ENCELIA CALIFORNICA	BUSH SUNFLOWER	3.00	LOW	
	ERIOGONUM CINERUM	COASTAL BUCKWHEAT	2.00	LOW	
	ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	7.00	LOW	
	ERIOPHYLLUM CONFERTIFLORUM	GOLDEN YARROW	3.00	LOW	
	ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	2.00	LOW	
	LUPINUS SUCCULENTUS	ARROYO LUPINE	5.00	LOW	
	MELICA IMPERFECTA	COAST RANGE MELIC	2.00	LOW	
	MIMULUS AURANTIACUS LONGIFLORUS	STICKY MONKEYFLOWER	2.00	LOW	
	PENSTEMON SPECTABILIS	ROYAL PENSTEMON	1.00	LOW	
	STIPA LEPIDA	FOOTHILL NEEDLEGRASS	2.00	LOW	
	STIPA PULCHRA	PURPLE NEEDLEGRASS	4.00	LOW	
	VERBENA LASIOSTACHYS	COMMON VERVAIN	1.00	LOW	

ROOT BARRIER

PERCOLATIONS TEST AND SOILS TESTING LOCATIONS

LIMIT OF WORK

NOTES:

1. PROVIDE IRRIGATION TO ALL PLANTING AREAS.
2. REFER TO SHEETS L1.1A AND L1.2A FOR HARDSCAPE AND MISCELLANEOUS SITE FEATURES
3. ALL PLANTING AREAS EXCEPT TURF TO RECEIVE A 3" LAYER OF BARK MULCH PER SPECIFICATIONS UNLESS OTHERWISE NOTED.
4. ROOT BARRIERS TO BE INSTALLED IN ALL INSTANCES WHERE A TREE WILL BE PLANTED WITHIN 5' OF ADJACENT CURBS, SIDEWALKS, WALLS OR ANY FLATWORK OR HARDSCAPE.
5. PLANTS WITH * ARE NATIVE PLANT SPECIES

LANDSCAPE AND SITE PERMEABILITY TABLE

AREA TYPE	SF	% OF LOT SIZE (LOT = 49.18 NET ACRES)
LANDSCAPE AREA (NON-ESHA)	103,183 SF	4.7% PHASE 1 ONLY
ESHA LANDSCAPE AREA	88,427 SF	4.1% PHASE 1 ONLY
TOTAL LANDSCAPE AREA	191,610 SF	8.8% PHASE 1 ONLY
PERVIOUS SURFACES (NON-PLANTING)	5,503 SF	0.2% PHASE 1 ONLY

PERMEABLE REQUIREMENTS PER LIP 3.9(A)(3)

NET LOT AREA: 49.18 ACRES

PERMEABLE AREA: 38.314

PROPOSED: 78%>25% COMPLIANT

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Received
MAR 30 2022
Planning Dept.

FILE No.: A#: 03-121943(INC-2)

LICENSED LANDSCAPE ARCHITECT
LEIGH KYLE - 6137
Signature
06/30/21
Renewal Date
01/12/22
Date
STATE OF CALIFORNIA

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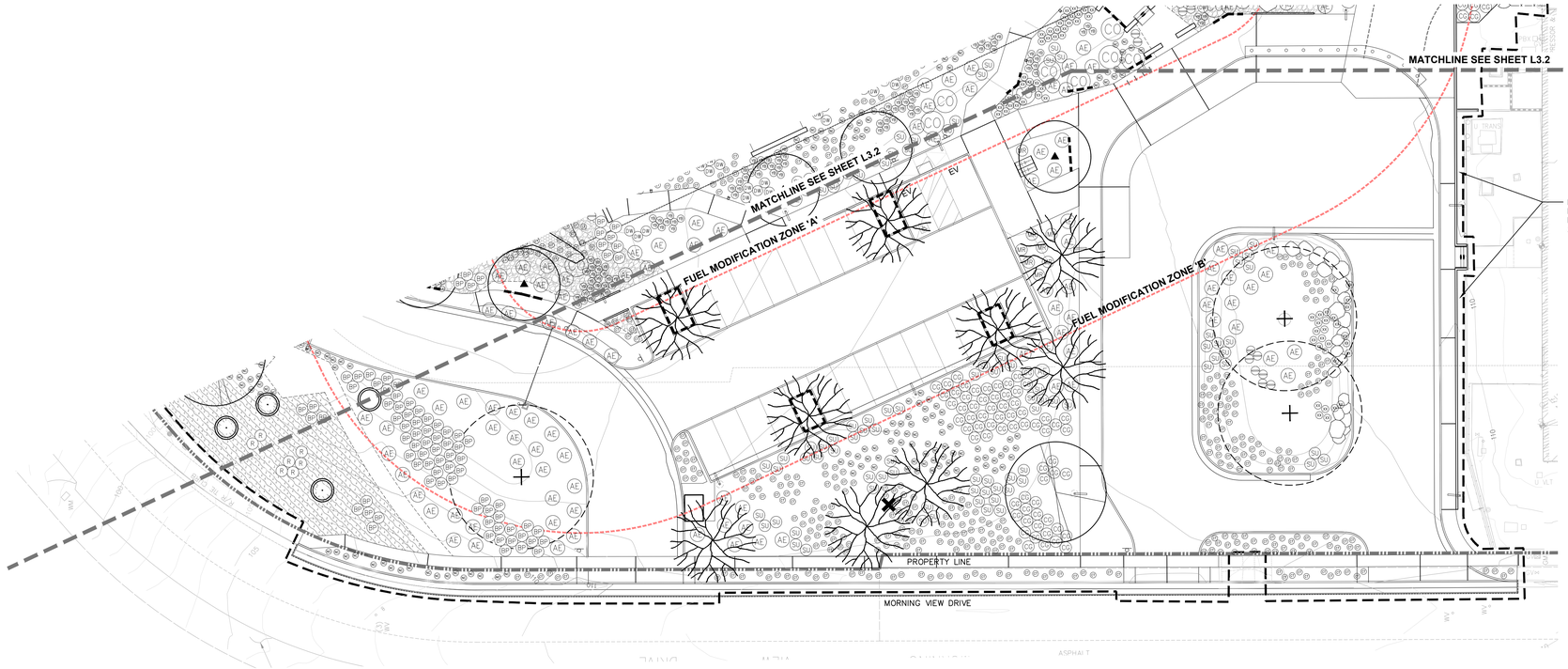
NOT FOR CONSTRUCTION PURPOSES

DATE 02/24/2022

DSA SUBMITTAL

PLANTING LEGEND

L3.4



PLANT LEGEND

TREES	BOTANICAL / COMMON NAME
+	EXISTING TREE TO REMAIN
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▲	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE
⊙	HETEROMELES ARBUTIFOLIA TOYON *
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *
	QUERCUS AGRIFOLIA COAST LIVE OAK *

SHRUBS	BOTANICAL / COMMON NAME
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⊛	ALOE RUDIKOPPE LITTLE RED RIDING HOOD ALOE
⊕	ALOE VERA MEDICINAL ALOE
AE	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR' CARMEL SUR MANZANITA *
BP	BACCHARIS PILULARIS 'PIGEON POINT' PIGEON PT DWARF COYOTE BRUSH *
CV	CAREX TUMULICOLA FOOTHILL SEDGE *
CG	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER
CO	CERCIS OCCIDENTALIS WESTERN REDBUD *
DW	DASYLIRION WHEELERI GREY DESERT SPOON
DM	DRACAENA MARGINATA RED EDGED DRACAENA
EC	ERIOGONUM CINEREUM ASHYLEAF BUCKWHEAT *
HP	HESPERALOE PARVIFLORA RED YUCCA
JE	JUNCUS EFFUSUS COMMON RUSH
LX	LEYMUS CONDENSATUS 'CANYON PRINCE' CANYON PRINCE WILD RYE
MR	MUHLENBERGIA RIGENS DEER GRASS *
NC	NASSELLA CERNUA NODDING NEEDLEGRASS *
R	RHAMNUS CALIFORNICA CALIFORNIA COFFEEBERRY *
RC	ROSA CALIFORNICA WILD CALIFORNIA ROSE *
SU	SALVIA LEUCOPHYLLA PURPLE SAGE *
YB	YUCCA BRIGHT STAR BRIGHT STAR YUCCA
YR	YUCCA RECURVIFOLIA CURVE-LEAF YUCCA

SEED MIX	BOTANICAL / COMMON NAME
	HYDROSEED MIX SANTA MONICA COVER MIX *

ROOT BARRIER

PERCOLATIONS TEST AND SOILS TESTING LOCATIONS

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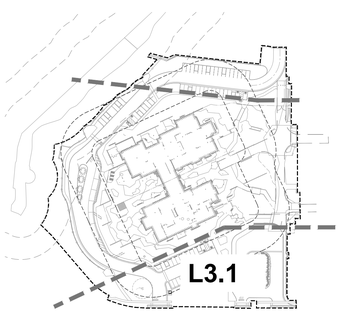

KEYMAP
SCALE: NTS

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FILE No.: A#: 03-121943(INC-2)

LICENSED LANDSCAPE ARCHITECT
LEIGH KYLE 6137
Signature
06/30/21
Renewal Date
01/12/22
Date
STATE OF CALIFORNIA

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL - PHASE 1

30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

SMMUSD
SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

NAC
ARCHITECTURE
837 NORTH SPRING STREET THIRD FLOOR
LOS ANGELES, CA 90012
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KoningEizenberg
1454 25TH STREET
SANTA MONICA, CA 90404
Tel: 310.828.6131
www.kearch.com

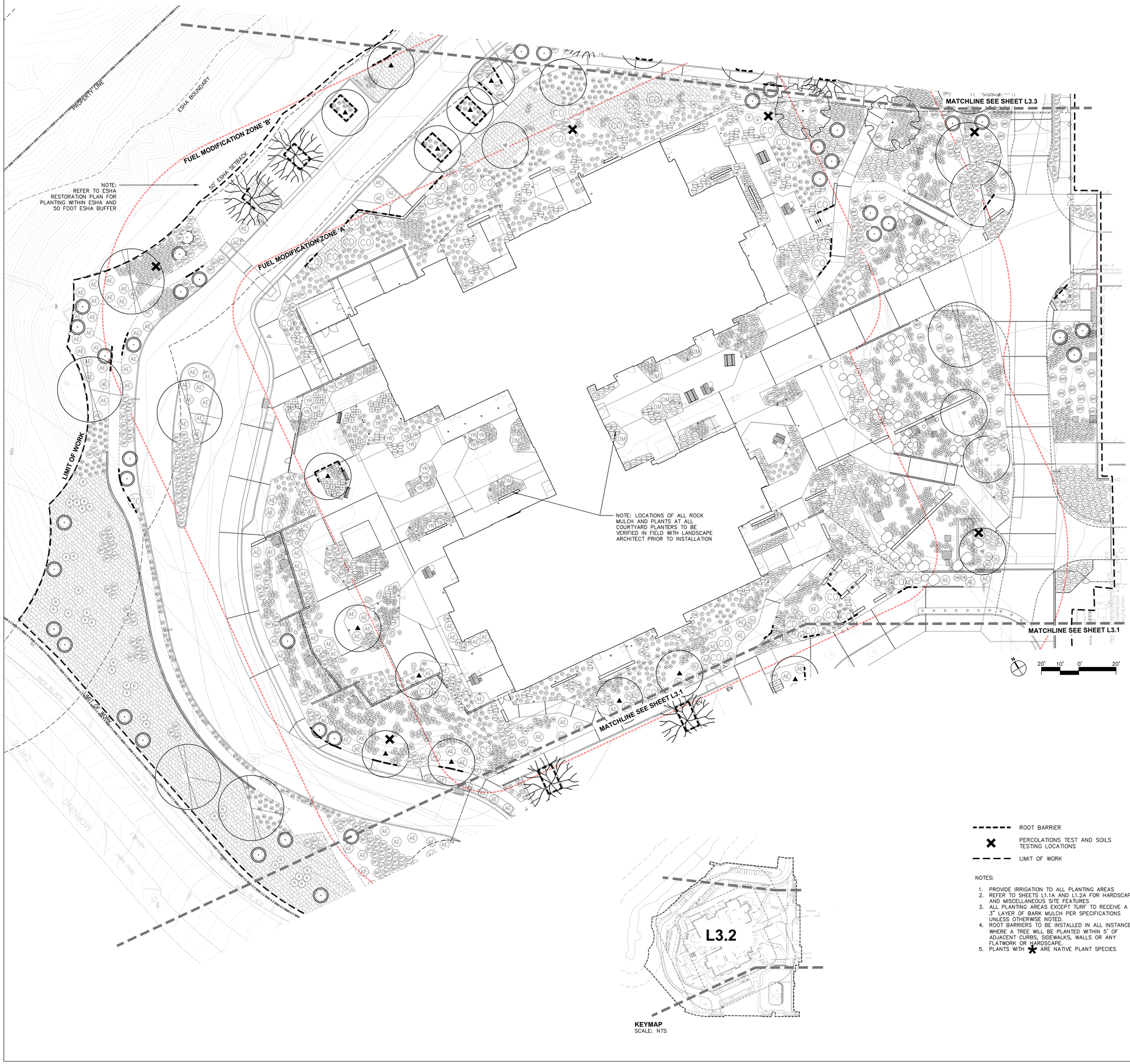
NOT FOR CONSTRUCTION PURPOSES

DATE 02/24/2022

DSA SUBMITTAL

PLANTING PLAN

L3.1



ROOT BARRIER

PERCOLATIONS TEST AND SOILS TESTING LOCATIONS

LIMIT OF WORK

NOTES:

1. PROVIDE IRRIGATION TO ALL PLANTING AREAS
2. REFER TO SHEETS L1.1A AND L1.2A FOR HARDSCAPE AND MISCELLANEOUS SITE FEATURES
3. ALL PLANTING AREAS EXCEPT TURF TO RECEIVE A 3" LAYER OF BARK MULCH PER SPECIFICATIONS UNLESS OTHERWISE NOTED.
4. ROOT BARRIERS TO BE INSTALLED IN ALL INSTANCES WHERE A TREE WILL BE PLANTED WITHIN 5' OF ADJACENT CURBS, SIDEWALKS, WALLS OR ANY FLATWORK OR HARDSCAPE.
5. PLANTS WITH * ARE NATIVE PLANT SPECIES

KEYMAP
SCALE: NTS

PLANT LEGEND

TREES	BOTANICAL / COMMON NAME
+	EXISTING TREE TO REMAIN
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE
	HETEROMELES ARBUTIFOLIA TOYON *
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *
	QUERCUS AGRIFOLIA COAST LIVE OAK *

SHRUBS	BOTANICAL / COMMON NAME
	AGAVE ATTENUATA 'NOVA' BLUE FOXTAIL AGAVE
(AR)	ALOE RUDIKOPPE LITTLE RED RIDING HOOD ALOE
	ALOE VERA MEDICINAL ALOE
(AE)	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR' CARMEL SUR MANZANITA *
(BP)	BACCHARIS PILULARIS 'PIGEON POINT' PIGEON PT DWARF COYOTE BRUSH *
(CF)	CAREX TUMULICOLA FOOTHILL SEDGE *
(CO)	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER
(CO)	CERCIS OCCIDENTALIS WESTERN REDBUD *
(DW)	DASYLIRION WHEELERI GREY DESERT SPOON
(DM)	DRACAENA MARGINATA RED EDGED DRACAENA
(EC)	ERIOGONUM CINEREUM ASHYLEAF BUCKWHEAT *
(HP)	HESPERALOE PARVIFLORA RED YUCCA
(JE)	JUNCUS EFFUSUS COMMON RUSH
(LC)	LEYMUS CONDENSATUS 'CANYON PRINCE' CANYON PRINCE WLD RYE
(MR)	MUHLENBERGIA RIGENS DEER GRASS *
(NC)	NASSELLA CERNUA NODDING NEEDLEGRASS *
(R)	RHAMNUS CALIFORNICA CALIFORNIA COFFEEBERRY *
(RC)	ROSA CALIFORNICA WLD CALIFORNIA ROSE *
(SU)	SALVIA LEUCOPHYLLA PURPLE SAGE *
(YB)	YUCCA BRIGHT STAR BRIGHT STAR YUCCA
(YR)	YUCCA RECURVIFOLIA CURVE-LEAF YUCCA

SEED MIX	BOTANICAL / COMMON NAME
	HYDROSEED MIX SANTA MONICA COVER MIX *

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NAC Project # 16120008

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PLANTING PLAN

L3.2

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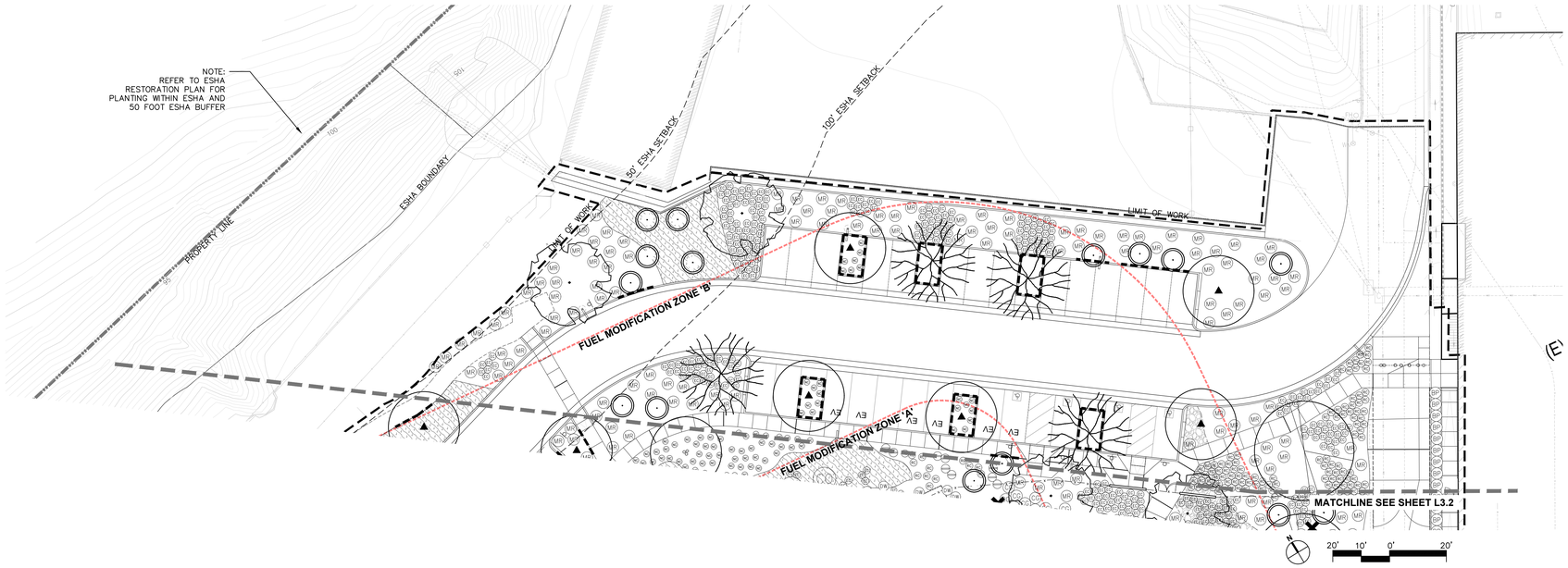

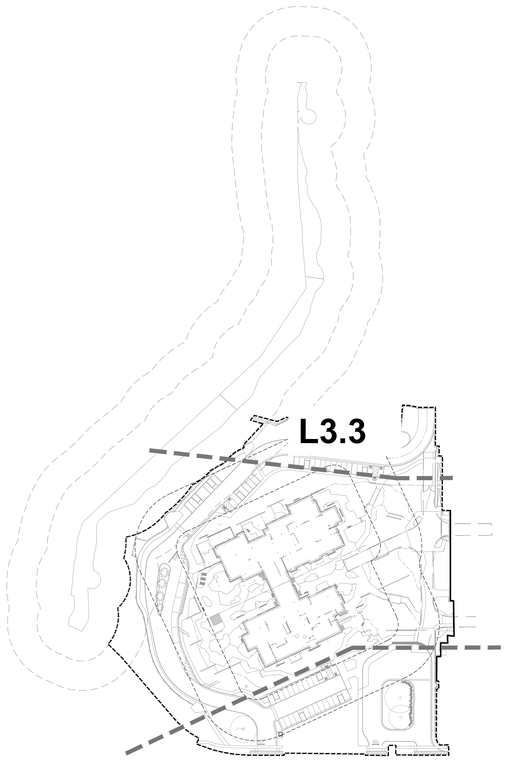

KEYMAP
SCALE: 1"=100'

PLANT LEGEND

TREES	BOTANICAL / COMMON NAME
	EXISTING TREE TO REMAIN
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	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE
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CG	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER
CO	CERCIS OCCIDENTALIS * WESTERN REDBUD
DW	DASYLIRION WHEELERI GREY DESERT SPOON
DM	DRACAENA MARGINATA RED EDGED DRACAENA
EC	ERIOGONUM CINEREUM * ASHYLEAF BUCKWHEAT
HP	HESPERALOE PARVIFLORA RED YUCCA
JE	JUNCUS EFFUSUS COMMON RUSH
LC	LEYMUS CONDENSATUS 'CANYON PRINCE' CANYON PRINCE WILD RYE
MR	MUHLENBERGIA RIGENS * DEER GRASS
NC	NASSELLA CERNUA * NODDING NEEDLEGRASS
R	RHAMNUS CALIFORNICA * CALIFORNIA COFFEEBERRY
RC	ROSA CALIFORNICA * WILD CALIFORNIA ROSE
SU	SALVIA LEUCOPHYLLA * PURPLE SAGE
YB	YUCCA BRIGHT STAR BRIGHT STAR YUCCA
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SEED MIX	BOTANICAL / COMMON NAME
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ROOT BARRIER

PERCOLATIONS TEST AND SOILS TESTING LOCATIONS

LIMIT OF WORK

NOTES:

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PLANTING PLAN

L3.3

REFERENCE FROM SHEET L3.4

PERMEABLE REQUIREMENTS PER LIP 3.9(A)(3)

NET LOT AREA: 49.18 ACRES

PERMEABLE AREA: 38.314

PROPOSED: 78%>25% COMPLIANT

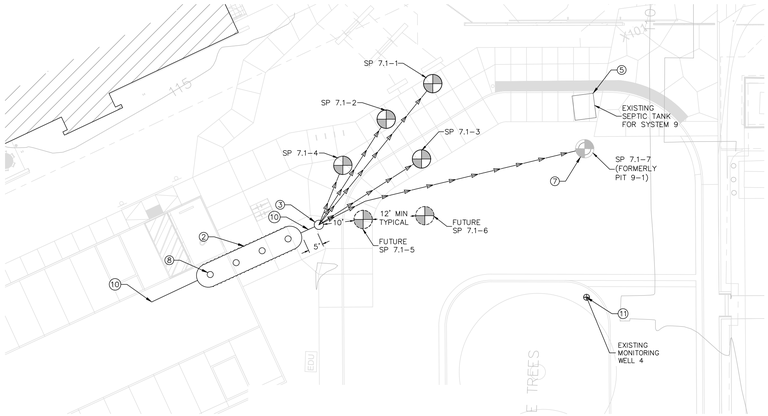
LANDSCAPE AND SITE PERMEABILITY TABLE

AREA TYPE	SF	% OF LOT SIZE (LOT = 49.18 NET ACRES)	
LANDSCAPE AREA (NON-ESHA)	103,183 SF	4.7%	PHASE 1 ONLY
ESHA LANDSCAPE AREA	88,427 SF	4.1%	PHASE 1 ONLY
TOTAL LANDSCAPE AREA	191,610 SF	8.8%	PHASE 1 ONLY
PERVIOUS SURFACES (NON-PLANTING)	5,503 SF	0.2%	PHASE 1 ONLY



MALIBU HIGH SCHOOL PHASE 1
LANDSCAPE AND PERMEABLE SURFACES

02/24/22



N

0' 20 40

2 WASTE WATER SYSTEM - DETAIL VIEW
Scale: 1 : 20

ACCESSIBILITY NOTES:

1. SITE WALKWAYS SHALL PROVIDE A BARRIER FREE PATH OF TRAVEL FOR A PERSON IN A WHEELCHAIR. THE PATH OF TRAVEL SHALL BE A HARD, DURABLE AND SLIP RESISTANT ROUTE A MINIMUM OF 48 INCHES IN WIDTH (11B-403.5.1 EXCEPTION 3) AND WITH A MAXIMUM GRADIENT SLOPE OF 5% AND MAXIMUM CROSS SLOPE OF 2% (11B-403.3) ABRUPT CHANGES IN LEVEL SHALL NOT EXCEED A BEVELED SLOPE OF 1:2 WITH A 1/2" IN VERTICAL HEIGHT AND 1/4" MAXIMUM IN VERTICAL DIFFERENTIAL LEVELS. CONCRETE FINISH SHALL BE STABLE, FIRM AND SLIP-RESISTANT (11B-302).
2. PATH OF TRAVEL (P.O.T) AS INDICATED, IS A COMMON BARRIER FREE EGRESS/ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. PASSING SPACE (11B-403.5.3) AT LEAST 60"X60" ARE LOCATED NOT MORE THAN 200' APART. PARTS OF P.O.T. WITH CONTINUOUS GRADIENTS HAVE 60" LEVEL AREAS (11B-403.7) NOT MORE THAN 400' APART. THE CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL AND IS LESS THAN 5% UNLESS OTHERWISE INDICATED. (P.O.T) SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80" (11B-307.2). ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE P.O.T.
3. GATES IN PATH OF TRAVEL SHALL HAVE ACCESSIBLE HARDWARE AND KICK PLATES.
4. FOR ALL SITE GRADIENTS SEE CIVIL PLANS
5. WILDLAND-URBAN IN TERRACE: NONE

LEGEND

- PLANTING AREA, PER LANDSCAPE
- BUILDING
- EXISTING BUILDING
- EXISTING FIRE LANE
- PROPOSED FIRE LANE
- CAMPUS BOUNDARY
- SCOPE OF WORK
- ACCESSIBLE PATH OF TRAVEL
- LINE OF ROOF/CANOPY ABOVE
- ESHA 50' SET BACK
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT

1 A1.02X ENLARGED SITE PLAN

50' ESHA SETBACK

1. PROVIDE 1 VAN AND 2 PASSANGER VEHICLE ACCESSIBLE SPACES
2. PROVIDE TOTAL OF 6 CLEAN AIR. PARKING - CHARGING STATION WILL BE INSTALLED AT 4/6 CLEAN AIR PARKING STALLS

TRUE NORTH / PLAN NORTH

1 CAMPUS CODE SITE PLAN
Scale: 1" = 80'-0"

FILE No.: A#: 03-121943 (INC-2)

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MALIBU HIGH SCHOOL - PHASE 1

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OVERALL CAMPUS SITE PLAN

G2.03X

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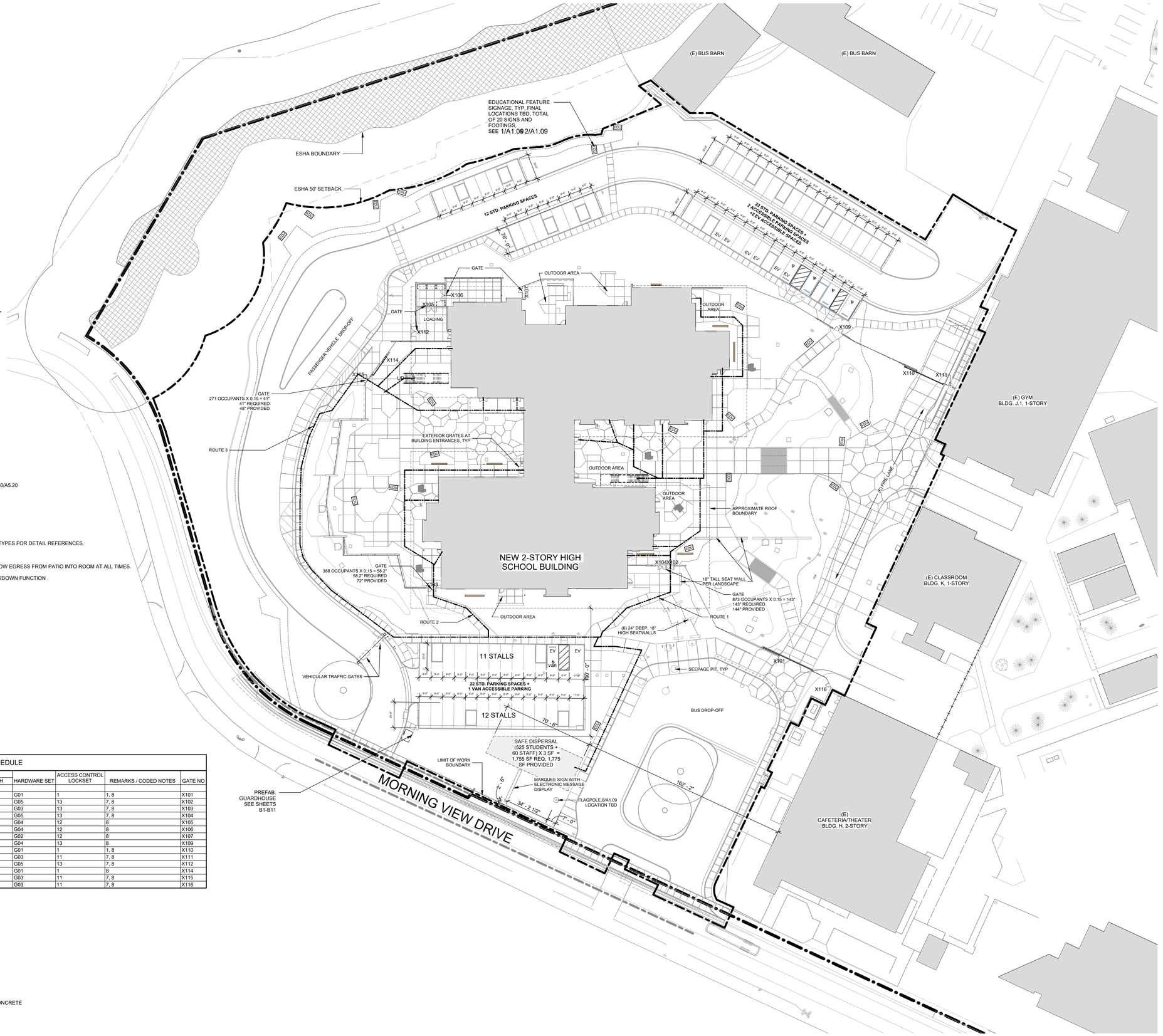

CHPS SS 3.1 MINIMIZE SITE DISTURBANCE

BUILDING GROSS SQUARE FOOTAGE	67,584 SF
BUILDING FOOTPRINT	34,824 SF

FLOOR AREA RATIO:1.94

DOOR & GATE CODED NOTES

1. FIRE LOCK BOX WITH KNOX PADLOCK MOUNTED ON WALL ADJACENT TO GATE
2. NO CENTER MULLION.
3. NO CLOSER.
4. ENERGY-EFFICIENT EXTERIOR OPENING.
5. NOT USED.
6. LOUVERS IN DOOR.
7. PANIC HARDWARE.
8. ACCESS CONTROL.
9. ACOUSTICAL SEALS AND AUTOMATIC DOOR BOTTOM, SEE DETAILS 29/A5.20 & 30/A5.20
10. NOT USED.
11. NOT USED.
12. ACTIVE LEAF 36" WIDE, BALANCE OF WIDTH AT INACTIVE LEAF.
13. NOT USED.
14. ALL-GLASS ENTRANCE AND STOREFRONT. REFER TO INTERIOR STOREFRONT TYPES FOR DETAIL REFERENCES.
15. DEADBOLT LOCKING ONLY; FREE PASSAGE OTHERWISE.
16. LOCKSET TO PREVENT UNAUTHORIZED ACCESS TO EXTERIOR PATIO, AND ALLOW EGRESS FROM PATIO INTO ROOM AT ALL TIMES.
17. MAGNETIC HOLD OPEN WITH AUTOMATIC RELEASE BY ACCESS CONTROL LOCKDOWN FUNCTION .
18. NOT USED.
19. NOT USED.
20. NOT USED.
21. NOT USED.
22. NOT USED.
23. NOT USED.
24. NOT USED.
25. NOT USED.
26. NO PANIC HARDWARE. AUTOMATIC LATCH WITH PULL EACH SIDE.
27. NOT USED.
28. NOT USED.
29. UNDERCUT DOOR 3/4".
30. REFER TO EXTERIOR ELEVATIONS FOR DETAIL REFERENCES.
31. ACCESS CONTROL PADLOCK.

GATE SCHEDULE

GATE NO	PR	GATE LEAF A	GATE LEAF B	GATE HT	GATE TYPE	GATE MATERIAL	GATE FINISH	HARDWARE SET	ACCESS CONTROL LOCKSET	REMARKS / CODED NOTES	GATE NO
X101		28'-0"	0"	7'-0"	STL GATE	STL	PT	G01	1	1, 8	X101
X102	PR	3'-0"	3'-0"	7'-0"	STL GATE	STL	PT	G05	13	7, 8	X102
X103		3'-0"	0"	7'-0"	STL GATE	STL	PT	G03	13	7, 8	X103
X104	PR	3'-0"	3'-0"	7'-0"	STL GATE	STL	PT	G05	13	7, 8	X104
X105	PR	4'-0"	4'-0"	8'-0"	STL GATE	STL	PT	G04	12	8	X105
X106	PR	4'-0"	4'-0"	8'-0"	STL GATE	STL	PT	G04	12	8	X106
X107		3'-0"	0"	7'-0"	STL GATE	STL	PT	G02	12	8	X107
X109	PR	3'-0"	3'-0"	7'-0"	STL GATE	STL	PT	G04	13	8	X109
X110		22'-0"	0"	7'-0"	STL GATE	STL	PT	G01	1	1, 8	X110
X111		3'-0"	0"	7'-0"	STL GATE	STL	PT	G03	11	7, 8	X111
X112	PR	4'-0"	4'-0"	6'-0"	STL GATE	STL	PT	G05	13	7, 8	X112
X114		12'-0"	0"	7'-0"	STL GATE	STL	PT	G01	1	8	X114
X115		3'-0"	0"	7'-0"	STL GATE	STL	PT	G03	11	7, 8	X115
X116		3'-0"	0"	7'-0"	STL GATE	STL	PT	G03	11	7, 8	X116

LEGEND

- NEW BUILDING
- EXIST BUILDING
- ORNAMENTAL MTL FENCE AND GATE, SEE A1.03
- ROUTE- # — SAFE DISPERSAL AREA ACCESS ROUTE

SITE GENERAL NOTES

1. WATER REPELLENT ON ALL EXPOSED CONCRETE WALLS AND PRECAST CONCRETE

1 ENLARGED SITE PLAN
Scale: 1" = 30'-0"

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ENLARGED SITE PLAN

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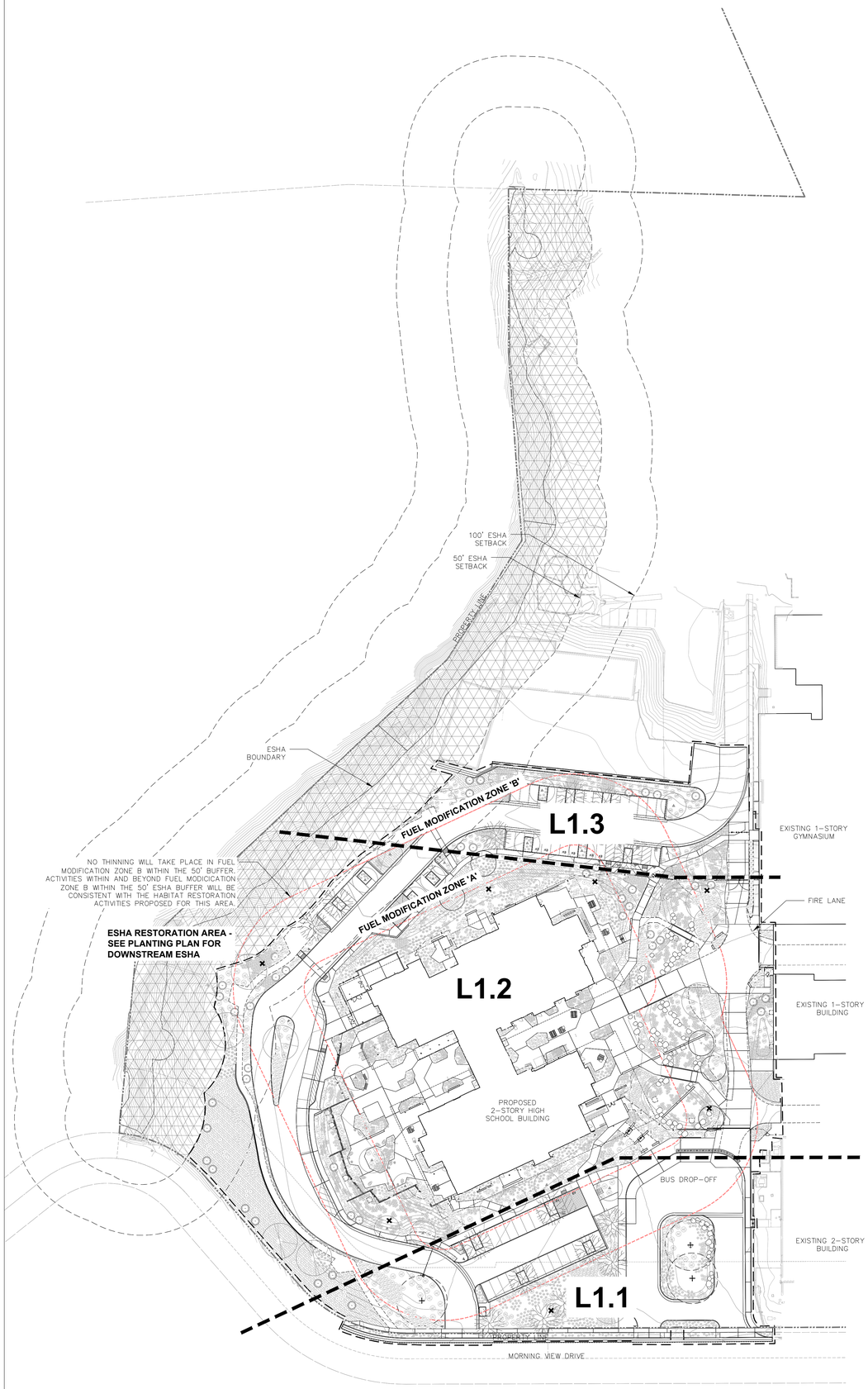

PROJECT SITE KEY PLAN
SCALE: 1"=50'

FUEL MODIFICATION PLANS FOR:

MALIBU HIGH SCHOOL PHASE 1

PROJECT LOCATION

THE PROJECT SITE IS ON THE SMMUSD PROPERTY. MALIBU MIDDLE SCHOOL AND HIGH SCHOOL ARE LOCATED AT 30215 MORNING VIEW DRIVE (ASSESSOR'S PARCEL MAP NUMBERS 4469-017-900, 4469-018-900, 4469-018-901, 4469-081-902, 4469-018-903, 4459-018-904, 4469-019-900, 4469-019-901, 4469-019-902 (9 PARCELS) IN THE CITY OF MALIBU, LOS ANGELES COUNTY, CALIFORNIA.

THE HIGH SCHOOL WOULD BE DEVELOPED WITHIN THE EXISTING MMHS CAMPUS ON THE FORMER JCES CAMPUS IN THE WESTERN POTION OF THE PROPERTY. THE MMHS CAMPUS IS APPROXIMATELY 0.25 MILES NORTHEAST OF THE PACIFIC COAST HIGHWAY

FUEL MODIFICATION PLAN NOTES

ZONE A – SETBACK ZONE

- EXTENDS 30 FEET BEYOND THE EDGE OF ANY COMBUSTIBLE STRUCTURE, ACCESSORY STRUCTURE, APPENDAGE OR PROJECTION. OVERHANGS OR PARTS OF STRUCTURES NOT ACCURATELY REFLECTED ON THE PLANS MAY NEGATE THE APPROVAL OF PLANT LOCATION ON THE APPROVED PLAN.
- IRRIGATION BY AUTOMATIC OR MANUAL SYSTEMS SHALL BE PROVIDED TO MAINTAIN HEALTHY VEGETATION AND FIRE RESISTANCE.
- VEGETATION IN THIS ZONE SHALL CONSIST PRIMARILY OF GREEN LAWNS, GROUND COVERS NOT EXCEEDING 6 INCHES IN HEIGHT, AND ADEQUATELY SPACED SHRUBS. THE OVERALL LANDSCAPE CHARACTERISTICS SHALL PROVIDE ADEQUATE DEFENSIBLE SPACE IN A FIRE ENVIRONMENT.
- PLANTS IN ZONE A SHALL BE INHERENTLY HIGHLY FIRE RESISTANT AND APPROPRIATELY SPACED. SPECIES SELECTION SHOULD REFERENCE THE FUEL MODIFICATION PLANT LIST. OTHER SPECIES MAY BE USED SUBJECT TO APPROVAL. PLANS RE-SUBMITTED 6 MONTHS AFTER THE INITIAL REVIEW WILL BE EVALUATED BASED ON THE CURRENT FUEL MODIFICATION PLANT LIST, AVAILABLE FROM THE FUEL MODIFICATION UNIT.
- TREES ARE GENERALLY NOT RECOMMENDED, EXCEPT FOR DWARF VARIETIES OR MATURE TREES SMALL IN STATURE.
- TARGET SPECIES WILL TYPICALLY NOT BE ALLOWED WITHIN 30 FEET OF COMBUSTIBLE STRUCTURES AND MAY REQUIRE REMOVAL IF EXISTING.
- VINES AND CLIMBING PLANTS SHALL NOT BE ALLOWED ON ANY COMBUSTIBLE STRUCTURE REQUIRING REVIEW.

ZONE B – IRRIGATED ZONE

- EXTENDS FROM THE OUTER EDGE OF ZONE A TO 100 FEET FROM STRUCTURES.
- IRRIGATION BY AUTOMATIC OR MANUAL SYSTEMS SHALL BE PROVIDED TO MAINTAIN HEALTHY VEGETATION AND FIRE RESISTANCE.
- VEGETATION IN THIS ZONE SHALL PRIMARILY CONSIST OF GREEN LAWNS, GROUND COVERS, AND ADEQUATELY SPACED SHRUBS AND TREES.
- UNLESS OTHERWISE APPROVED, GROUND COVERS SHALL BE MAINTAINED AT A HEIGHT NOT TO EXCEED 6 INCHES. ON SLOPES, 12 INCHES IS ACCEPTABLE WITHIN 50 FEET OF A STRUCTURE, AND 18 INCHES BEYOND 50 FEET. THE OVERALL LANDSCAPE CHARACTERISTICS SHALL PROVIDE ADEQUATE DEFENSIBLE SPACE IN A FIRE ENVIRONMENT. SPECIMEN NATIVE PLANTS MAY BE APPROVED TO REMAIN IF PROPERLY MAINTAINED FOR ADEQUATE DEFENSIBLE SPACE. ANNUAL GRASSES OR WEEDS SHALL BE MAINTAINED AT A HEIGHT NOT TO EXCEED 3 INCHES.
- PLANTS SHALL BE FIRE RESISTANT AND APPROPRIATELY SPACED. PLANT SELECTION SHOULD REFERENCE THE FUEL MODIFICATION PLANT LIST. OTHER PLANTS MAY BE USED SUBJECT TO APPROVAL.
- REPLACEMENT PLANTING TO MEET MINIMUM CITY OR COUNTY SLOPE COVERAGE REQUIREMENTS OR ORDINANCES WILL BE CONSIDERED. IN ALL CASES, THE OVERALL LANDSCAPE CHARACTERISTICS SHALL PROVIDE ADEQUATE DEFENSIBLE SPACE IN A FIRE ENVIRONMENT.
- TARGET SPECIES MAY REQUIRE REMOVAL WITHIN 50 FEET OF STRUCTURES, DEPENDING ON SITE CONDITIONS.
- ALL TREES, UNLESS OTHERWISE APPROVED, SHALL BE PLANTED FAR ENOUGH FROM STRUCTURES AND FIRE ACCESS ROADS, AS TO NOT OVERHANG ANY STRUCTURE OR ACCESS AT MATURITY.

ZONE B – IRRIGATED ZONE

- EXTENDS FROM THE OUTER EDGE OF ZONE B UP TO 200 FEET FROM STRUCTURES OR TO THE PROPERTY LINE.
- REQUIRED THINNING AND CLEARANCE WILL BE DETERMINED UPON INSPECTION.
- IRRIGATION SYSTEMS ARE NOT REQUIRED.
- VEGETATION MAY CONSIST OF MODIFIED EXISTING NATIVE PLANTS, ADEQUATELY SPACED ORNAMENTAL SHRUBS AND TREES, OR BOTH. REPLACEMENT PLANTING TO MEET MINIMUM CITY OR COUNTY SLOPE COVERAGE REQUIREMENTS OR ORDINANCES WILL BE CONSIDERED. IN ALL CASES, THE OVERALL LANDSCAPE CHARACTERISTICS SHALL PROVIDE ADEQUATE DEFENSIBLE SPACE IN A FIRE ENVIRONMENT.
- PLANTS SHALL BE SPACED APPROPRIATELY. EXISTING NATIVE VEGETATION SHALL BE MODIFIED BY THINNING AND REMOVAL OF PLANTS CONSTITUTING A FIRE RISK; THESE INCLUDE, BUT ARE NOT LIMITED TO: CHAMISE, SAGE, SAGE BRUSH, AND BUCKWHEAT.
- ANNUAL GRASSES AND WEEDS SHALL BE MAINTAINED AT A HEIGHT NOT TO EXCEED 3 INCHES.
- GENERAL SPACING FOR EXISTING NATIVE SHRUBS OR GROUPS OF SHRUBS IS 15 FEET BETWEEN CANOPIES. NATIVE PLANTS MAY BE THINNED BY REDUCED AMOUNTS AS THE DISTANCE FROM DEVELOPMENT INCREASES.
- GENERAL SPACING FOR EXISTING NATIVE TREES OR GROUPS OF TREES IS 30 FEET BETWEEN CANOPIES. THISDISTANCE MAY VARY DEPENDING ON THE SLOPE, ARRANGEMENT OF TREES IN RELATION TO SLOPE, AND THE TREE SPECIES.

FIRE ACCESS ROAD ZONE

- EXTENDS A MINIMUM OF 10 FEET FROM THE EDGE OF ANY PUBLIC OR PRIVATE ROAD USED BY FIRE-FIGHTING RESOURCES.
- CLEAR AND REMOVE FLAMMABLE GROWTH FOR A MINIMUM OF 10 FEET ON EACH SIDE OF FIRE ACCESS ROADS. (FIRE CODE 325.10) ADDITIONAL CLEARANCE BEYOND 10 FEET MAY BE REQUIRED UPON INSPECTION.
- FIRE ACCESS ROADS, DRIVEWAYS AND TURNAROUNDS SHALL BE MAINTAINED IN ACCORDANCE WITH FIRE CODE. FIRE ACCESS ROADS SHALL HAVE UNOBSTRUCTED VERTICAL CLEARANCE CLEAR TO THE SKY FOR A WIDTH OF 20 FEET. (FIRE CODE 503.2.1)
- REMAINING PLANTS SHALL BE APPROPRIATELY SPACED AND MAINTAINED TO PROVIDE SAFE EGRESS IN WILDLAND FIRE ENVIRONMENTS.
- ALL TREES, UNLESS OTHERWISE APPROVED, SHALL BE PLANTED FAR ENOUGH FROM STRUCTURES AND FIRE ACCESS ROADS, AS TO NOT OVERHANG ANY STRUCTURE OR ACCESS AT MATURITY.

MAINTENANCE

ROUTINE MAINTENANCE SHALL BE REGULARLY PERFORMED IN ALL ZONES. REQUIREMENTS INCLUDE ITEMS IN THE FUEL MODIFICATION GUIDELINES AND THOSE OUTLINED BELOW:

- REMOVAL OR THINNING OF UNDESIRABLE COMBUSTIBLE VEGETATION AND REMOVAL OF DEAD OR DYING PLANTS TO MEET MINIMUM BRUSH CLEARANCE REQUIREMENTS.
- PRUNING AND THINNING TO REDUCE THE OVERALL FUEL LOAD AND CONTINUITY OF FUELS.
- FUEL LOADS SHALL BE REDUCED BY PRUNING LOWER BRANCHES OF TREES AND TREE-FORM SHRUBS TO 1/3 OF THEIR HEIGHT, OR 6 FEET FROM LOWEST HANGING BRANCHES TO THE GROUND, TO HELP PREVENT FIRE FROM SPREADING AND MAKE MAINTENANCE EASIER. TREES WITH UNDERSTORY PLANTS SHOULD BE LIMBED UP AT LEAST THREE TIMES THE HEIGHT OF THE UNDERLYING VEGETATION OR UP TO ONE THIRD THE HEIGHT OF THE TREE, WHICHEVER IS LESS, TO HELP PREVENT FIRE FROM SPREADING UPWARD INTO THE CROWN.
- ACCUMULATED PLANT LITTER AND DEAD WOOD SHALL BE REMOVED. DEBRIS AND TRIMMINGS PRODUCED BY MAINTENANCE SHOULD BE REMOVED FROM THE SITE OR CHIPPED AND EVENLY DISPERSED IN THE SAME AREA TO A MAXIMUM DEPTH OF 6 INCHES.
- ALL INVASIVE SPECIES AND THEIR PARTS SHOULD BE REMOVED FROM THE SITE.
- MANUAL AND AUTOMATIC IRRIGATION SYSTEMS SHALL BE MAINTAINED FOR OPERATIONAL INTEGRITY AND PROGRAMMING. EFFECTIVENESS SHOULD BE REGULARLY EVALUATED TO AVOID OVER OR UNDER-WATERING.
- COMPLIANCE WITH THE FIRE CODE IS A YEAR-ROUND RESPONSIBILITY. ENFORCEMENT WILL OCCUR FOLLOWING INSPECTION BY THE FIRE DEPARTMENT. ANNUAL INSPECTIONS FOR BRUSH CLEARANCE CODE REQUIREMENTS ARE CONDUCTED FOLLOWING THE NATURAL DRYING OF GRASSES AND FINE FUELS, BETWEEN THE MONTHS OF APRIL AND JUNE DEPENDING ON GEOGRAPHIC REGION. INSPECTION FOR COMPLIANCE WITH AN APPROVED FUEL MODIFICATION PLAN MAY OCCUR AT ANY TIME OF YEAR.
- BRUSH CLEARANCE ENFORCEMENT ISSUES ON ADJACENT PROPERTIES SHOULD BE DIRECTED TO THE COUNTY OF LOS ANGELES FIRE DEPARTMENT'S BRUSH CLEARANCE UNIT AT (626) 969-2375.
- ALL FUTURE PLANTINGS SHALL BE IN ACCORDANCE WITH THE COUNTY OF LOS ANGELES FIRE DEPARTMENT FUEL MODIFICATION GUIDELINES AND APPROVED PRIOR TO INSTALLATION. CHANGES TO THE APPROVED PLAN WHICH REQUIRE AN ADDITIONAL PLAN REVIEW WILL INCUR A PLAN REVIEW FEE.
- QUESTIONS REGARDING LANDSCAPE PLANTING AND MAINTENANCE WITH REGARD TO FIRE SAFETY SHOULD BE DIRECTED TO THE FIRE DEPARTMENT'S FUEL MODIFICATION UNIT AT (626) 969-5205.

SHEET INDEX

L1.0	**TITLE SHEET**
L1.1	**PLANTING PLAN**
L1.2	**PLANTING PLAN**
L1.3	**PLANTING PLAN**
L1.4	**PLANTING LEGEND**
L2.0	**OVERALL IRRIGATION PLAN**
L2.1	**IRRIGATION PLAN**
L2.2	**IRRIGATION PLAN**
L2.3	**IRRIGATION PLAN**
L2.4	**IRRIGATION LEGEND AND NOTES**
APPENDIX 1	**PLANTING PLAN FOR DOWNSTREAM ESHA**

FILE No.: A#: 03-121943(INC-2)

SANTA MONICA – MALIBU UNIFIED SCHOOL DISTRICT
MALIBU HIGH SCHOOL – PHASE 1
30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project #
161-20062

SMMUSD
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FUEL MODIFICATION PLAN RESUBMITTAL

FUEL MODIFICATION PLAN TITLE SHEET

L1.0

ATTACHMENT 6

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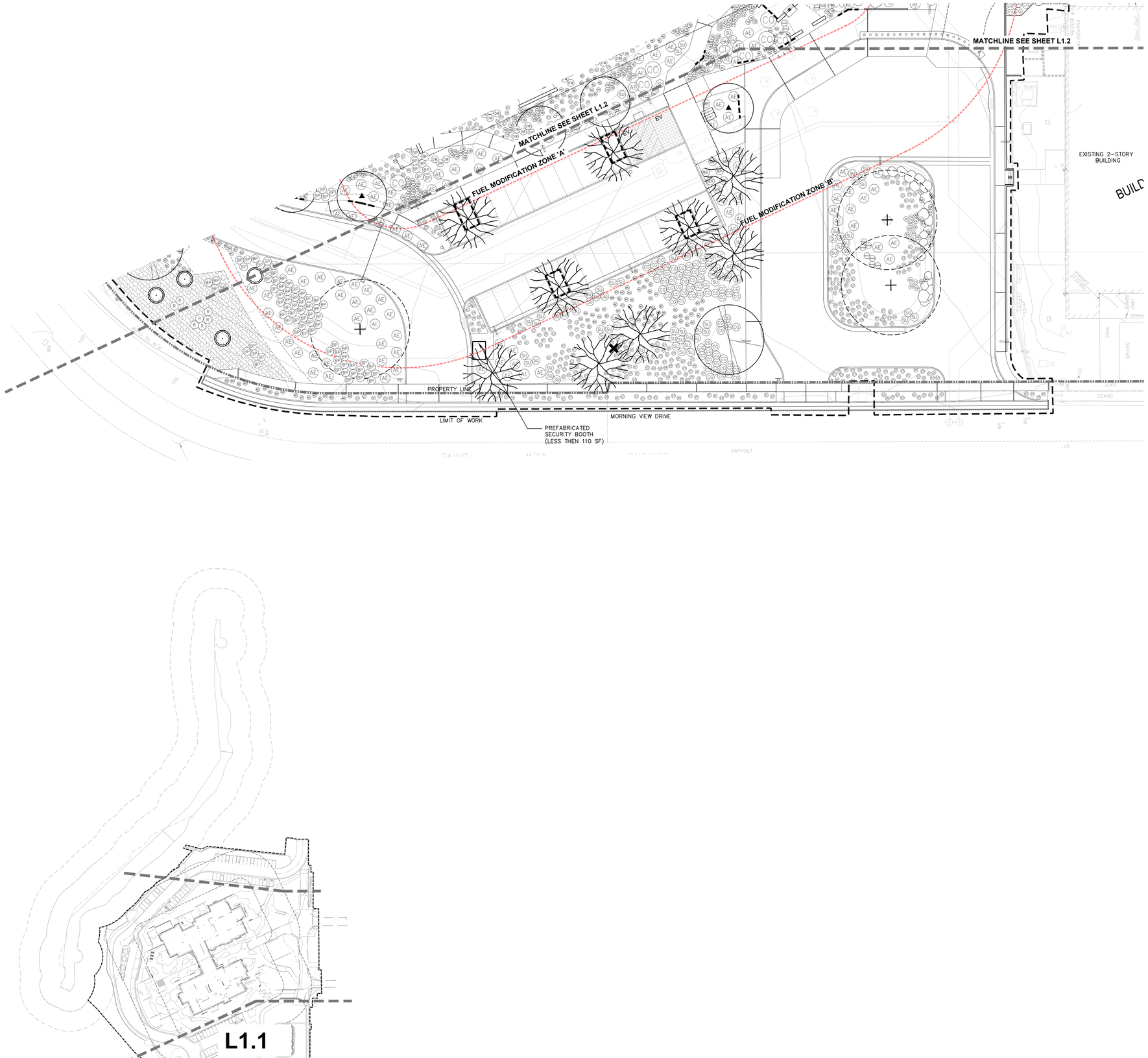

KEYMAP
SCALE: 1"=100'

PLANT LEGEND

TREES	BOTANICAL / COMMON NAME	
+	EXISTING TREE TO REMAIN	
AB	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE	
▲	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE	
HA	HETEROMELES ARBUTIFOLIA TOYON *	1
PR	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *	
PR	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *	
QA	QUERCUS AGRIFOLIA COAST LIVE OAK *	

SHRUBS	BOTANICAL / COMMON NAME	
AE	AGAVE ATTENUATA 'NOVA' BLUE FOXTAIL AGAVE	
AR	ALOE RUDIKOPPE LITTLE RED RIDING HOOD ALOE	
AV	ALOE VERA MEDICINAL ALOE	
AE	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR' * CARMEL SUR MANZANITA	
BP	BACCHARIS PILULARIS 'PIGEON POINT' * PIGEON PT DWARF COYOTE BRUSH	
C	CAREX TUMULICOLA * FOOTHILL SEDGE	
CG	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER	
CO	CERCIS OCCIDENTALIS * WESTERN REDBUD	
DW	DASYLIRION WHEELERI GREY DESERT SPOON	1
DM	DRACAENA MARGINATA RED EDGED DRACAENA	1
EC	ERIOGONUM CINEREUM * ASHYLEAF BUCKWHEAT	1
HP	HESPERALOE PARVIFLORA RED YUCCA	
JE	JUNCUS EFFUSUS COMMON RUSH	
LC	LEYMUS CONDENSATUS 'CANYON PRINCE' CANYON PRINCE WILD RYE	
MR	MUHLENBERGIA RIGENS * DEER GRASS	
NC	NASSELLA CERNUA * NODDING NEEDLEGRASS	
R	RHAMNUS CALIFORNICA * CALIFORNIA COFFEEBERRY	
RC	ROSA CALIFORNICA * WILD CALIFORNIA ROSE	
SU	SALVIA LEUCOPHYLLA * PURPLE SAGE	
YB	YUCCA BRIGHT STAR BRIGHT STAR YUCCA	1
YR	YUCCA RECURVIFOLIA CURVE-LEAF YUCCA	

SEED MIX	BOTANICAL / COMMON NAME	
	HYDROSEED MIX * SANTA MONICA COVER MIX	

ROOT BARRIER

PERCOLATIONS TEST AND SOILS TESTING LOCATIONS

LIMIT OF WORK

NOTE:
SEE SHEET L1.4 FOR EXPANDED PLANTING LEGEND

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MALIBU HIGH SCHOOL – PHASE 1
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FUEL MODIFICATION PLAN RESUBMITTAL

PLANTING PLAN

L1.1

PROPERTY LINE

ESHA BOUNDARY

ESHA RESTORATION AREA – SEE PLANTING PLAN FOR DOWNSTREAM ESHA

50' ESHA SETBACK

FUEL MODIFICATION ZONE 'B'

FUEL MODIFICATION ZONE 'A'

MATCHLINE SEE SHEET L1.3

PROPOSED 2–STORY HIGH SCHOOL BUILDING

TOTAL ENCLOSED AREAS: 67,690 SF
TOTAL AREA INCLUDING UNENCLOSED EXTERIOR AREAS UNDER ROOF: 71,600 SF.

EXISTING 1–STORY BUILDING

NOTE:
CAREX TUMULICOLA IN SMALL COURTYARD PLANTERS ARE SPACED 24" O.C., IN GROUPS OF 15 PLANTS MAX. EACH GROUP OF PLANTS IS SURROUNDED BY MIN. 9' –12' OF CONCRETE PAVING.

NOTE:
CAREX TUMULICOLA IN SMALL COURTYARD PLANTERS ARE SPACED 24" O.C., IN GROUPS OF 18 PLANTS MAX. EACH GROUP OF PLANTS IS SURROUNDED BY MIN. 9' –12' OF CONCRETE PAVING.

NOTE:
CAREX TUMULICOLA IN SMALL COURTYARD PLANTERS ARE SPACED 24" O.C., IN GROUPS OF 15 PLANTS MAX. EACH GROUP OF PLANTS IS SURROUNDED BY MIN. 9' –12' OF CONCRETE PAVING.

MATCHLINE SEE SHEET L1.1

MATCHLINE SEE SHEET L1.1

MORNING VIEW DRIVE

20' 10' 0' 20'

L1.2

KEYMAP
SCALE: 1"=100'

PLANT LEGEND

TREES	BOTANICAL / COMMON NAME
	EXISTING TREE TO REMAIN
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE
	HETEROMELES ARBUTIFOLIA TOYON *
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *
	QUERCUS AGRIFOLIA COAST LIVE OAK *

SHRUBS	BOTANICAL / COMMON NAME
	AGAVE ATTENUATA 'NOVA' BLUE FOXTAIL AGAVE
	ALOE RUDIKOPPE LITTLE RED RIDING HOOD ALOE
	ALOE VERA MEDICINAL ALOE
AE	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR' CARMEL SUR MANZANITA *
BP	BACCHARIS PILULARIS 'PIGEON POINT' PIGEON PT DWARF COYOTE BRUSH *
	CAREX TUMULICOLA FOOTHILL SEDGE *
CG	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER
CO	CERCIS OCCIDENTALIS WESTERN REDBUD *
DW	DASYLIRION WHEELERI GREY DESERT SPOON
DM	DRACAENA MARGINATA RED EDGED DRACAENA
EC	ERIOGONUM CINEREUM ASHYLEAF BUCKWHEAT *
HP	HESPERALOE PARVIFLORA RED YUCCA
	JUNCUS EFFUSUS COMMON RUSH
	LEYMUS CONDENSATUS 'CANYON PRINCE' CANYON PRINCE WILD RYE
MR	MUHLENBERGIA RIGENS DEER GRASS *
NC	NASSELLA CERNUA NODDING NEEDLEGRASS *
R	RHAMNUS CALIFORNICA CALIFORNIA COFFEEBERRY *
RC	ROSA CALIFORNICA WILD CALIFORNIA ROSE *
SU	SALVIA LEUCOPHYLLA PURPLE SAGE *
YB	YUCCA BRIGHT STAR BRIGHT STAR YUCCA
YR	YUCCA RECURVIFOLIA CURVE–LEAF YUCCA

SEED MIX	BOTANICAL / COMMON NAME
	HYDROSEED MIX SANTA MONICA COVER MIX *

ROOT BARRIER

PERCOLATIONS TEST AND SOILS TESTING LOCATIONS

LIMIT OF WORK

NOTE:
SEE SHEET L1.4 FOR EXPANDED PLANTING LEGEND

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FILE No.: A#: 03-121943(INC-2)

SANTA MONICA – MALIBU UNIFIED SCHOOL DISTRICT
MALIBU HIGH SCHOOL – PHASE 1
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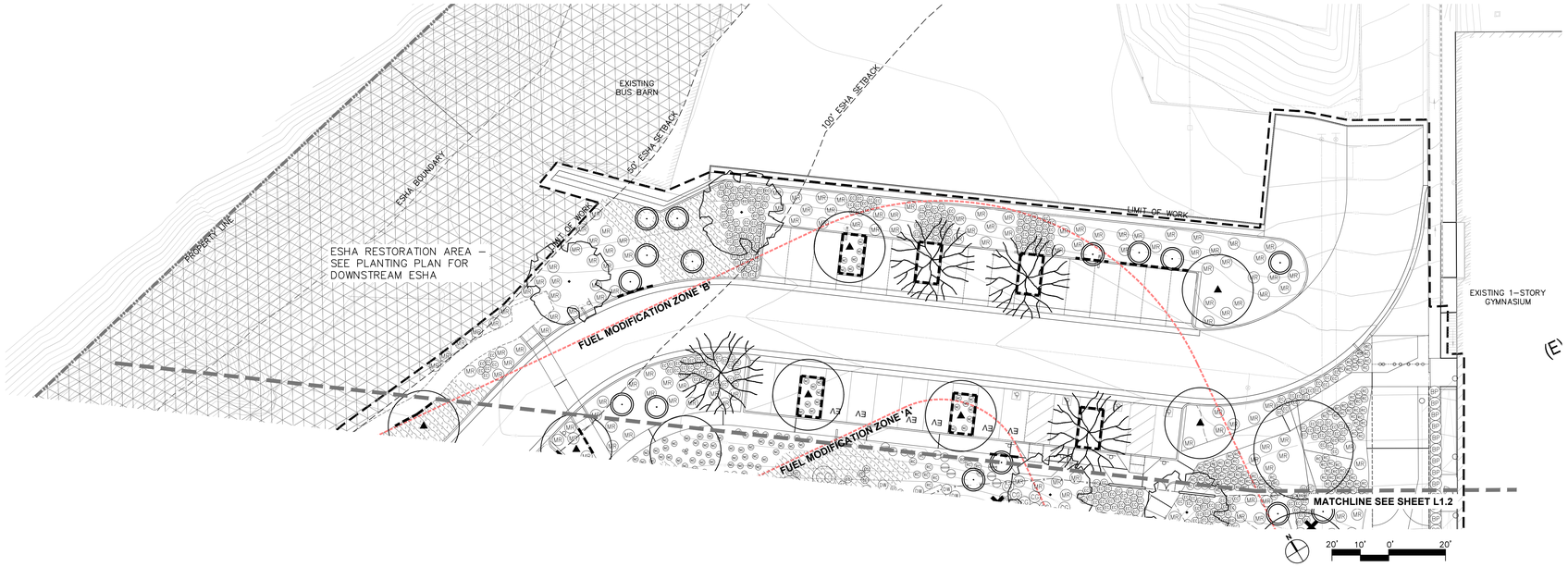
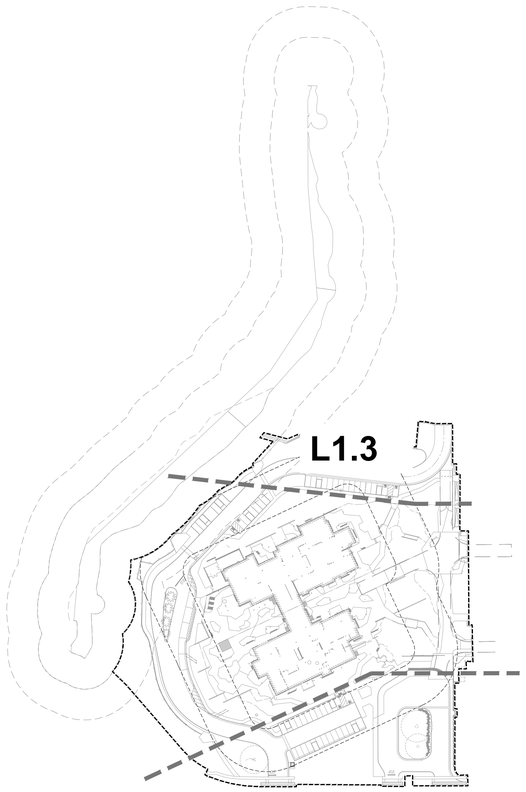
FUEL MODIFICATION PLAN RESUBMITTAL

PLANTING PLAN

L1.2





KEYMAP
SCALE: 1"=100'

PLANT LEGEND

TREES	BOTANICAL / COMMON NAME	
+	EXISTING TREE TO REMAIN	
AM	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE	
AM	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE	
HA	HETEROMELES ARBUTIFOLIA TOYON *	
PR	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *	
PR	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *	
QA	QUERCUS AGRIFOLIA COAST LIVE OAK *	

SHRUBS	BOTANICAL / COMMON NAME	
AA	AGAVE ATTENUATA 'NOVA' BLUE FOXTAIL AGAVE	
AR	ALOE RUDIKOPPE LITTLE RED RIDING HOOD ALOE	
AV	ALOE VERA MEDICINAL ALOE	
AE	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR' CARMEL SUR MANZANITA *	
BP	BACCHARIS PILULARIS 'PIGEON POINT' PIGEON PT DWARF COYOTE BRUSH *	
C	CAREX TUMULICOLA FOOTHILL SEDGE *	
CG	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER	
CO	CERCIS OCCIDENTALIS WESTERN REDBUD *	
DW	DASYLIRION WHEELERI GREY DESERT SPOON	
DM	DRACAENA MARGINATA RED EDGED DRACAENA	
EC	ERIOGONUM CINEREUM ASHYLEAF BUCKWHEAT *	
HP	HESPERALOE PARVIFLORA RED YUCCA	
JE	JUNCUS EFFUSUS COMMON RUSH	
LC	LEYMUS CONDENSATUS 'CANYON PRINCE' CANYON PRINCE WILD RYE	
MR	MUHLENBERGIA RIGENS DEER GRASS *	
NC	NASSELLA CERNUA NODDING NEEDLEGRASS *	
R	RHAMNUS CALIFORNICA CALIFORNIA COFFEEBERRY *	
RC	ROSA CALIFORNICA WILD CALIFORNIA ROSE *	
SU	SALVIA LEUCOPHYLLA PURPLE SAGE *	
YB	YUCCA BRIGHT STAR BRIGHT STAR YUCCA	
YR	YUCCA RECURVIFOLIA CURVE-LEAF YUCCA	

SEED MIX	BOTANICAL / COMMON NAME	
	HYDROSEED MIX SANTA MONICA COVER MIX *	

ROOT BARRIER

PERCOLATIONS TEST AND SOILS TESTING LOCATIONS

LIMIT OF WORK

NOTE:
SEE SHEET L1.4 FOR EXPANDED PLANTING LEGEND

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SANTA MONICA – MALIBU UNIFIED SCHOOL DISTRICT
MALIBU HIGH SCHOOL – PHASE 1
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FUEL MODIFICATION PLAN RESUBMITTAL

PLANTING PLAN

L1.3

PLANT LEGEND

TREES	BOTANICAL / COMMON NAME	CONTAINER	MATURE SIZE	FUEL MOD.	WATER USE	FORM	
	_EXISTING TREE TO REMAIN	N/A					3
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE	48" BOX	30' H X 30' W	ZONE A, B	LOW	MULTI-TRUNK	5
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE	48" BOX	30' H X 30' W	ZONE A, B	LOW	STANDARD	18
	HETEROMELES ARBUTIFOLIA TOYON *	15 GAL	10' H X 10' W	ZONE A, B, C	LOW	STANDARD LOW BRANCH	49
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *	48" BOX	40' H X 30' W	ZONE B, C	LOW	MULTI-TRUNK	4
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE *	48" BOX	40' H X 30' W	ZONE B, C	LOW	STANDARD	15
	QUERCUS AGRIFOLIA COAST LIVE OAK *	60" BOX	35' H X 35' W	ZONE B	LOW	STANDARD	10

SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	MATURE SIZE	OC SPACING	PAV OFFSET	WATER	FM	QTY
AGAVE	AGAVE ATTENUATA 'NOVA' BLUE FOXTAIL AGAVE	5 GAL	3-4'H X 3-4'W	36"	30"	LOW	ZONE A	178
AM	ALOE RUDIKOPPE LITTLE RED RIDING HOOD ALOE	5 GAL	1'-2' H X 2'-3" W	30"	18"	LOW	ZONE A, B	116
AV	ALOE VERA MEDICINAL ALOE	5 GAL	2'H X 2'-6"W	36"	18"	LOW	ZONE A	45
AE	ARCTOSTAPHYLOS EDMUNDSII 'CARMEL SUR' CARMEL SUR MANZANITA *	5 GAL	6" H X 3'-5" W	108"	4'-6"	LOW	ZONE A, B, C	190
BP	BACCHARIS PILULARIS 'PIGEON POINT' PIGEON PT DWARF COYOTE BRUSH *	5 GAL	2' H X 6'-8' W	48"	36"	LOW	ZONE A, B	346
C	CAREX TUMULICOLA FOOTHILL SEDGE *	5 GAL	1' H X 1'-2' W	48"	12"	MED	ZONE A, B	919
CG	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER	5 GAL	2'-3' H X 6'-8' W	48"	42"	LOW	ZONE A, B	254
CO	CERCIS OCCIDENTALIS WESTERN REDBUD *	36" BOX	12' H X 12' W	PER PLAN	72"	LOW	ZONE A, B, C	44
DW	DASYLIRION WHEELERI GREY DESERT SPOON	15 GAL	2'-4' H X 2'-4" W	AS SHOWN	24"	LOW	ZONE A	83
DM	DRACAENA MARGINATA RED EDGED DRACAENA	15 GAL	6'-8'H X 3'-8'W	72"	30"	MODERATE	ZONE A	8
EC	ERIOGONUM CINEREUM ASHYLEAF BUCKWHEAT *	1 GAL	2'-4' H X 3'-5" W	30"	28"	LOW	ZONE A, B	535
HP	HESPERALOE PARVIFLORA RED YUCCA	5 GAL	2-3'H X 2-3'W	30"	18"	LOW	ZONE A	116
JE	JUNCUS EFFUSUS COMMON RUSH	5 GAL	2-4'H X 2-4'W	24"	18"	MED	ZONE A, B	256
LP	LEYMUS CONDENSATUS 'CANYON PRINCE' CANYON PRINCE WILD RYE	5 GAL	2'-4' H X 2'-4' W (SPREADING)	24"	36"	LOW	ZONE A, B	797
MR	MUHLENBERGIA RIGENS DEER GRASS *	5 GAL	4' H X 4' W	84"	30"	LOW	ZONE A, B, C	189
NC	NASSELLA CERNUA NODDING NEEDLEGRASS *	5 GAL	2'-3' H X 1'-2" W	18"	9"	LOW	ZONE A, B	562
R	RHAMNUS CALIFORNICA CALIFORNIA COFFEEBERRY *	5 GAL	6'-8' H X 6'-8' W	48"	48"	LOW	ZONE B	35
RC	ROSA CALIFORNICA WILD CALIFORNIA ROSE *	5 GAL	3' H X 3' W	30"	18"	MODERATE	ZONE A, B	302
SU	SALVIA LEUCOPHYLLA PURPLE SAGE *	5 GAL	2'-5' H X 3'-6' W	48"	30"	MODERATE	ZONE A, B	115
YB	YUCCA BRIGHT STAR BRIGHT STAR YUCCA	15 GAL	1'-2' H X 3'-5" W	30"	30"	LOW	ZONE A, B	201
YR	YUCCA RECURVIFOLIA CURVE-LEAF YUCCA	5 GAL	6' H X 3' W	PER PLAN	4'	LOW	ZONE A	23

SEED MIX	BOTANICAL / COMMON NAME	CONTAINER	MATURE SIZE	O.C. SPACING	PAV OFFSET	WATER USE	FIELD6	QTY
	HYDROSEED MIX SANTA MONICA COVER MIX *	HYDROSEED					ZONE B, C	15,084 SF

HYDROSEED MIX

DESCRIPTION	BOTANICAL NAME	COMMON NAME	APPLICATION RATE (LBS / ACRE)	WATER USE	SUPPLIER
SANTA MONICA COVER MIX	ARTEMESIA CALIFORNICA	CALIFORNIA SAGEBRUSH	2.00	LOW	S+S SEEDS
	BROMUS CARINATUS	CALIFORNIA BROME	4.00	LOW	
	BROMUS CARINATUS 'CUCAMONGA'	CUCAMONGA BROME	6.00	LOW	
	CAMISSONIOPSIS CHEIRANTHIFOLIA	BEACH EVENING PRIMROSE	1.00	LOW	
	CLARKIA PURPUREA	WINE CUP CLARKIA	1.00	LOW	
	ENCELIA CALIFORNICA	BUSH SUNFLOWER	3.00	LOW	
	ERIOGONUM CINERUM	COASTAL BUCKWHEAT	2.00	LOW	
	ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	7.00	LOW	
	ERIOPHYLLUM CONFERTIFLORUM	GOLDEN YARROW	3.00	LOW	
	ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	2.00	LOW	
	LUPINUS SUCCULENTUS	ARROYO LUPINE	5.00	LOW	
	MELICA IMPERFECTA	COAST RANGE MELIC	2.00	LOW	
	MIMULUS AURANTIACUS LONGIFLORUS	STICKY MONKEYFLOWER	2.00	LOW	
	PENSTEMON SPECTABILIS	ROYAL PENSTEMON	1.00	LOW	
	STIPA LEPIDA	FOOTHILL NEEDLEGRASS	2.00	LOW	
	STIPA PULCHRA	PURPLE NEEDLEGRASS	4.00	LOW	
	VERBENA LASIOSTACHYS	COMMON VERVAIN	1.00	LOW	

------ ROOT BARRIER

× PERCOLATIONS TEST AND SOILS TESTING LOCATIONS

NOTE:
1. PROVIDE MINIMUM 3" OF BARK MULCH (CLEAN OF WEEDS, SEEDS AND PATHOGENS) FOR ALL PLANTING AREAS UNLESS OTHERWISE NOTED AS ROCK MULCH
2. ROOT BARRIERS TO BE INSTALLED IN ALL INSTANCES WHERE A TREE WILL BE PLANTED WITHIN 10' OF CURBS, SIDEWALKS, WALLS OR ANY FLATWORK OR HARDSCAPE.
3. PLANT QUANTITIES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANT MATERIALS SUFFICIENT TO COVER.

FILE No.: A#: 03-121943(INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT
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NAC PROJECT #
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FUEL MODIFICATION PLAN RESUBMITTAL

PLANTING LEGEND

L1.4

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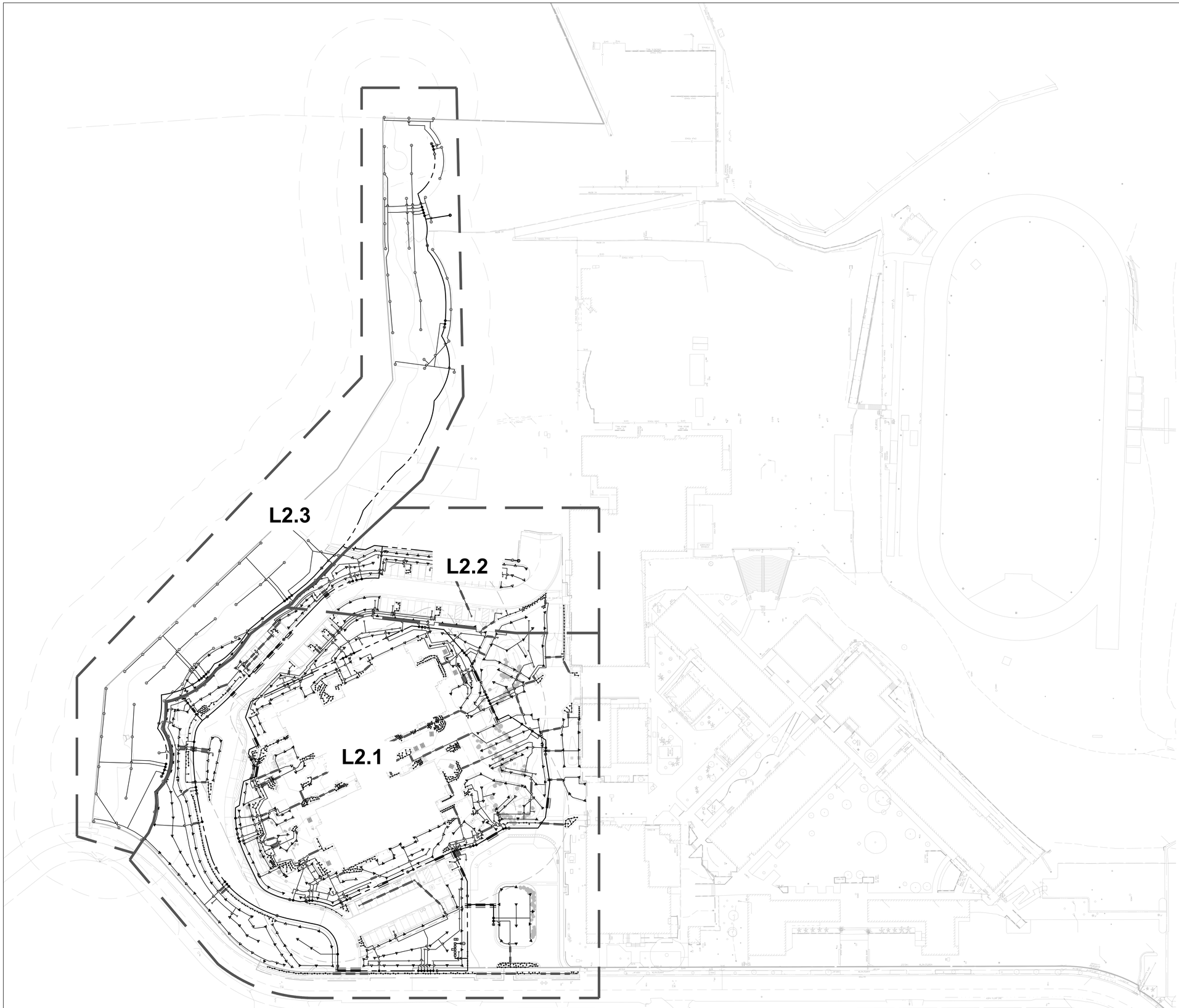

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50' 25' 0' 50'

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLANS.

811

sweeney + associates
IRRIGATION DESIGN AND CONSULTING
S+A
38730 Sky Canyon Drive, Suite C
Murrieta, Ca 92563
e: info@sweeneyassoc.com t: (951) 461-6830
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FILE No.: A#: 03-121943(INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL - PHASE 1

30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161-20008

SMMUSD
SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

NAC
ARCHITECTURE
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LOS ANGELES, CA 90012
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KoningEizenberg
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Tel: 310.828.6131
www.kearch.com

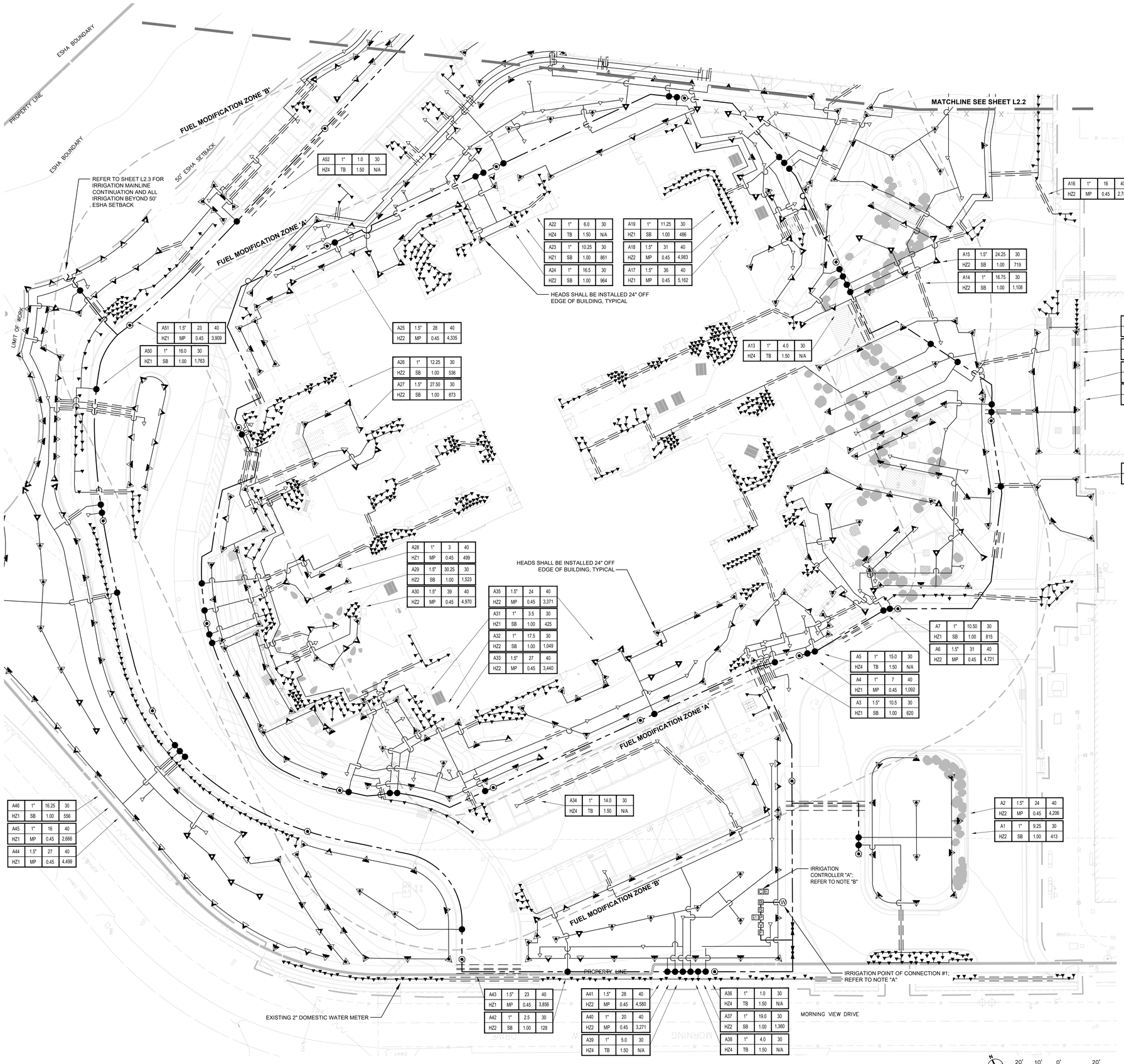
NOT FOR CONSTRUCTION PURPOSES

DATE 4/18/2022

FUEL MODIFICATION PLAN
RESUBMITTAL

OVERALL IRRIGATION PLAN

L2.0



NOTE A:
POINT OF CONNECTION (POC) #1 SHALL BE A 3" IRRIGATION MAINLINE STUB-OUT, PROVIDED BY OTHERS, DOWNSTREAM OF THE EXISTING 2" DOMESTIC WATER METER. THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION, WATER TYPE, METER SIZE AND WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. MEASUREMENT OF THE STATIC (NO WATER MOVING) WATER PRESSURE IS ACCEPTABLE FOR POTABLE WATER SYSTEMS WHERE NO PUMP HAS BEEN INDICATED ON THESE PLANS. WHEN USING RECYCLED WATER, OR ON POTABLE WATER SYSTEMS REQUIRING A PUMP, ONLY THE MEASUREMENT OF DYNAMIC (WATER MOVING THROUGH THE METER) WATER PRESSURE, SHALL BE ACCEPTABLE. THE DYNAMIC WATER PRESSURE SHALL BE MEASURED AT THE MAXIMUM SYSTEM DEMAND AS INDICATED BELOW. IF ANY OF THE POC INFORMATION SHOWN ON THESE DRAWING IS FOUND TO BE DIFFERENT THAN THE ACTUAL POC INFORMATION GATHERED IN THE FIELD, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT. SHOULD THE CONTRACTOR FAIL TO VERIFY THE POC INFORMATION AS SHOWN HEREIN, ANY CHANGES REQUIRED BY LOW PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

WATER PRESSURE AT POC:	80	PSI (STATIC / DYNAMIC)
DESIGN WATER PRESSURE:	99	PSI
MAXIMUM SYSTEM DEMAND:	48	GPM
PRESSURE BOOST REQUIRED:	38	PSI

NOTE B:
CONTROLLER "A" SHALL BE OF THE BRAND, MODEL AND STATION SIZE AS INDICATED ON THE IRRIGATION MATERIALS LEGEND. THE CONTROLLER SHALL BE INSTALLED IN THE APPROXIMATE LOCATION SHOWN. THE CONTRACTOR SHALL COORDINATE THE REQUIRED ELECTRICAL POWER SUPPLY AT THIS LOCATION WITH THE OWNER'S AUTHORIZED REPRESENTATIVE. FINAL LOCATION OF CONTROLLER AND ELECTRICAL POINT OF CONNECTION SHALL BE CONFIRMED WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

NOTE C:
THESE PLANS ARE DIAGRAMMATIC, THE MAINLINE AND RELATED IRRIGATION EQUIPMENT IS SHOWN WITHIN THE PAVING FOR CLARITY ONLY. THE ACTUAL LOCATION OF MAINLINE AND RELATED IRRIGATION EQUIPMENT SHALL BE WITHIN PLANTER AND A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES, TYPICAL.

NOTE D:
CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR IN THE LANDSCAPE, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, TREES, ETC. WHEN A SLIGHT RELOCATION OF THE HEAD IS NOT SUFFICIENT TO CLEAR THE OBSTACLE, OR IF IT NEGATIVELY AFFECTS THE COVERAGE, AN ADDITIONAL HEAD SHALL BE INSTALLED TO PLACE ONE HEAD ON EITHER SIDE OF THE OBSTACLE. THE NOZZLES OF THESE TWO HEADS SHALL HAVE ARC PATTERNS THAT ADD UP TO THE ORIGINAL ARC PATTERN OF THE HEAD INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY ALL HEAD LAYOUT WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

NOTE E:
THESE PLANS ARE DIAGRAMMATIC, TREE BUBBLERS AND LATERAL LINES ARE SHOWN WITHIN THE PAVING FOR CLARITY ONLY, THE ACTUAL LOCATIONS SHALL BE WITHIN THE PLANTER. THE TREE BUBBLERS SHALL BE ALIGNED WITH TREES AS SHOWN ON THE PLANTING PLANS, AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL CONFIRM ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

NOTE F:
PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE OWNER AND LANDSCAPE ARCHITECT A SCALED SHOP DRAWING INDICATING THE PROPOSED LOCATIONS FOR THE IRRIGATION EQUIPMENT LISTED BELOW. THE SHOP DRAWING SHALL BE PREPARED TO THE SATISFACTION OF THE OWNER AND LANDSCAPE ARCHITECT. SHOP DRAWINGS MUST INCLUDE THE PROPOSED LOCATIONS FOR THE FOLLOWING ITEMS:

1. POINT OF CONNECTION (INCLUDING WATER POC, BACK FLOW DEVICES, MASTER CONTROL VALVES, FLOW SENSORS, ETC.)
2. ISOLATION VALVES
3. AUTOMATIC CONTROL VALVES (INDICATE STATION NUMBER)
4. QUICK COUPLING VALVES
5. IRRIGATION CONTROLLER(S)
6. RELATED EQUIPMENT (AS MAY BE DIRECTED).

EACH PIECE OF AFOREMENTIONED EQUIPMENT SHALL HAVE IT'S PROPOSED INSTALLED LOCATION SHOWN ON THE SHOP DRAWINGS. THE SYMBOL FOR EACH PRODUCT SHALL BE A SCALED REPRESENTATION OF THE FOOTPRINT OF THE EQUIPMENT OR THE VALVE BOX IN WHICH THE EQUIPMENT IS INSTALLED. CONTRACTOR SHALL INSTALL ALL VALVE BOXES AND RELATED EQUIPMENT PER THE OWNER APPROVED SHOP DRAWINGS. ONCE THE SHOP DRAWING LOCATIONS ARE APPROVED, THE LANDSCAPE ARCHITECT OR OWNER'S AUTHORIZED REPRESENTATIVE WILL ALLOW NO ADJUSTMENTS TO THE APPROVED VALVE BOX PLACEMENT WITHOUT PRIOR WRITTEN ACCEPTANCE. ANY IRRIGATION EQUIPMENT INSTALLED WITHOUT PRIOR APPROVAL WITH SHOP DRAWINGS WILL BE SUBJECT TO RELOCATION BASED ON DIRECTION BY THE LANDSCAPE ARCHITECT AT THE CONTRACTOR'S EXPENSE.

IRRIGATION CONTROLLER IS A WEATHER BASED CONTROLLER.

BUILDINGS ON SITES WITH OVER 2,500 SQ. FT. OF CUMULATIVE IRRIGATED LANDSCAPED AREAS SHALL HAVE IRRIGATION CONTROLLERS WHICH ARE EITHER WEATHER OR SOIL BASED (PER SECTION 4.304.2)

FOR PROJECTS THAT INCLUDE LANDSCAPE WORK, THE LANDSCAPE CERTIFICATION, FORM GRN 12, SHALL BE COMPLETED PRIOR TO FINAL INSPECTION APPROVAL. (PER STATE ASSEMBLY BILL NO. 1881)

AN OPERATION AND MAINTENANCE MANUAL INCLUDING, AT MINIMUM, THE ITEMS LISTED IN SECTION 4.410.1, SHALL BE COMPLETED AND PLACED IN THE BUILDING AT THE TIME OF FINAL INSPECTION.

PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES.

NO OVERHEAD IRRIGATION WITHIN 24" OF ANY NON-PERMEABLE SURFACE

CHECK VALVES OR ANTI-DRAIN VALVES ARE REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD OCCUR.

A CERTIFICATION OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED EITHER BY THE DESIGNER OF THE LANDSCAPE PLANS, IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT.

A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.

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UNLESS CONTRADICTED BY A SOILS TESTS, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.

DEDICATED WATER SERVICE METERS OR PRIVATE SUB-METERS ARE TO INSTALLED FOR ALL NON RESIDENTIAL IRRIGATED LANDSCAPES 1,000 SQUARE FEET UP TO 5,000 SQUARE FEET AND RESIDENTIAL IRRIGATED LANDSCAPES OF 5,000 SQUARE FEET OR GREATER.

ALL IRRIGATION EMISSION DEVICES WILL MEET THE CRITERIA AS SET FORTH IN MWELO SECTION 492.7(a)(1)(M) AND SHALL BE INSTALLED AND OPERATED ACCORDING TO MANUFACTURER'S INSTRUCTIONS/RECOMENDATIONS.

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CONTRACTOR TO PROTECT AND PRESERVE IN PLACE ALL EXISTING SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE RESET BY A LICENSED LAND SURVEYOR AND THE APPROPRIATE CORNER RECORD MUST BE FILED WITH THE COUNTY OF LOS ANGELES.

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE

SIGNATURE: DATE: 01/04/2022

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLANS.

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FUEL MODIFICATION PLAN RESUBMITTAL

IRRIGATION PLAN

L2.1

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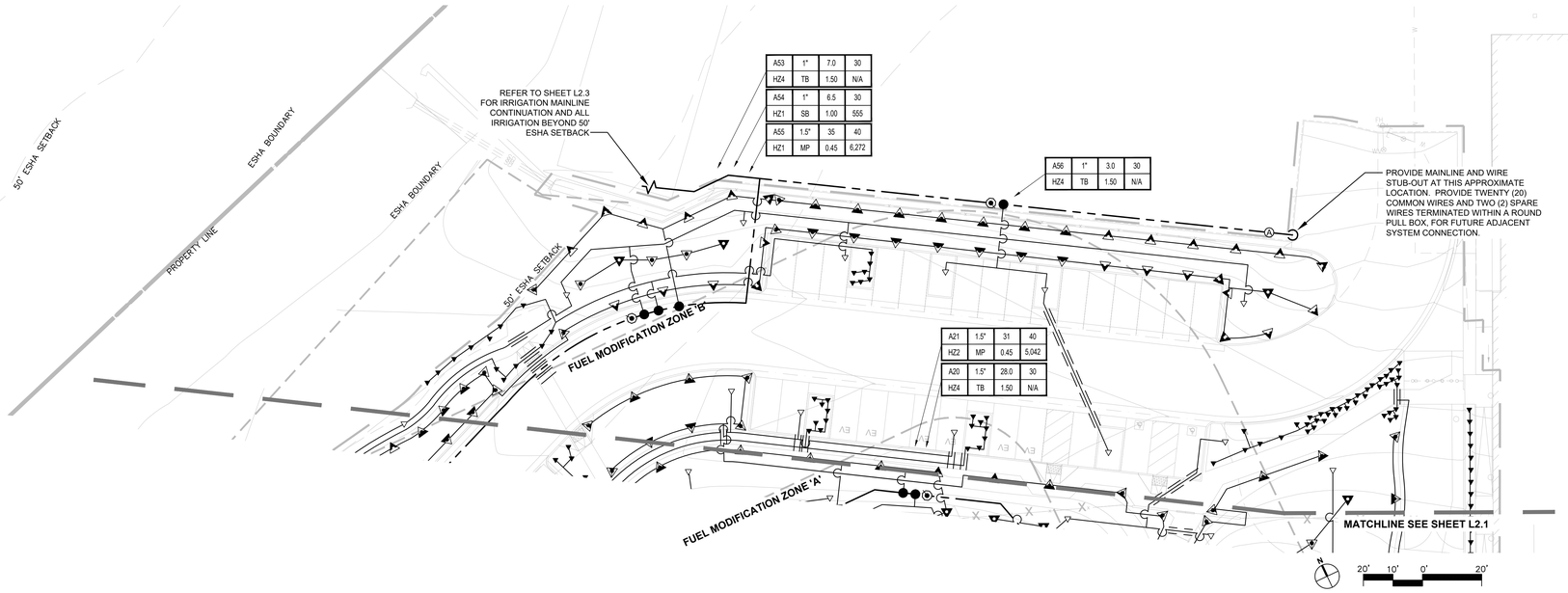

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WATER PRESSURE LOSS CALCULATIONS

WATER METER NUMBER	1	WATER METER SIZE (Inches)	2.00
HYDRAULIC GRADE LINE (FT)		WATER METER ELEVATION (FT)	110
ELEVATION DIFFERENCE (FT)		STATIC PRESSURE (PSI)	80.0
REMOTE CONTROL VALVE #	A73	REMOTE CONTROL VALVE SIZE (In.)	1.50
R.C.V. DEMAND (GPM)	48	TOTAL DEMAND (GPM)	48
HIGHEST HEAD SERVED (FT)	160	STATIC PRESSURE AT HIGHEST HEAD	

sweeney + associates
IRRIGATION DESIGN AND CONSULTING

PRESSURE LOSS CALCULATION IS PROVIDED FOR THIS PROJECT BY SWEENEY & ASSOCIATES, INC. UNAUTHORIZED USE BY ANY OTHER PERSON, COMPANY OR PROJECT IS FORBIDDEN WITHOUT WRITTEN PERMISSION.

SIZE (Inches)	DESCRIPTION	FLOW	#	LOSS	
2.00	SERVICE LINE (50 FT OF TYPE K COPPER)	48	1	1.19	PSI
2.00	WATER METER (X000 TYPE)	48	2	1.70	PSI
2.00	BACKFLOW PREVENTER (R/P TYPE)	48	3	13.50	PSI
2.00	FILTRATION (WYE FILTER)	48	4	1.00	PSI
2.00	BFD ASSEMBLY PIPING (BRASS W/ 4 ELLS)	48	6	0.59	PSI
2.00	MASTER CONTROL VALVE	48	7	2.50	PSI
2.00	FLOW SENSOR	48	8	1.00	PSI
3.00	ISOLATION VALVES (BALL TYPE)	48	9	2.00	PSI
3.00	1,620 FEET OF MAINLINE: CL. 315 PVC	48	10	4.37	PSI
3.00	15 - 90 DEGREE ELBOWS	48	13	0.69	PSI
1.50	REMOTE CONTROL VALVE ASSEMBLY	48	14	3.50	PSI
10%	LATERAL LINE LOSSES	48	15	4.00	PSI
20%	FITTING LOSS (IN ADDITION TO ELBOWS SHOWN)	N/A	16	0.87	PSI
50.00	ELEVATION CHANGE (P.O.C. TO HIGHEST HEAD)	N/A	17	21.65	PSI
TOTAL SYSTEM PRESSURE LOSS (SUM OF #1 THRU #17)			18	58.6	PSI
PRESSURE REQUIRED AT HEAD (OPERATING PRESSURE)			19	40.0	PSI
TOTAL PRESSURE REQUIRED (SUM OF #18 AND #19)			20	98.6	PSI
STATIC WATER PRESSURE (FROM ABOVE)			21	80.0	PSI
RESIDUAL PRESSURE (SUBTRACT #20 FROM #21)			22	-18.6	PSI
SET PRV OR MCV AT (#20 PLUS 10 PSI)			23	N/A	PSI
PRESSURE BOOST, IF REQUIRED (SET TO ACHIEVE 20 PSI RESIDUAL)			24	38.6	PSI

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FUEL MODIFICATION PLAN RESUBMITTAL

IRRIGATION PLAN

L2.2

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irrigation design and consulting

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2.00	BFD ASSEMBLY PIPING (BRASS W/ 4 ELLS)	48	6	0.59	PSI
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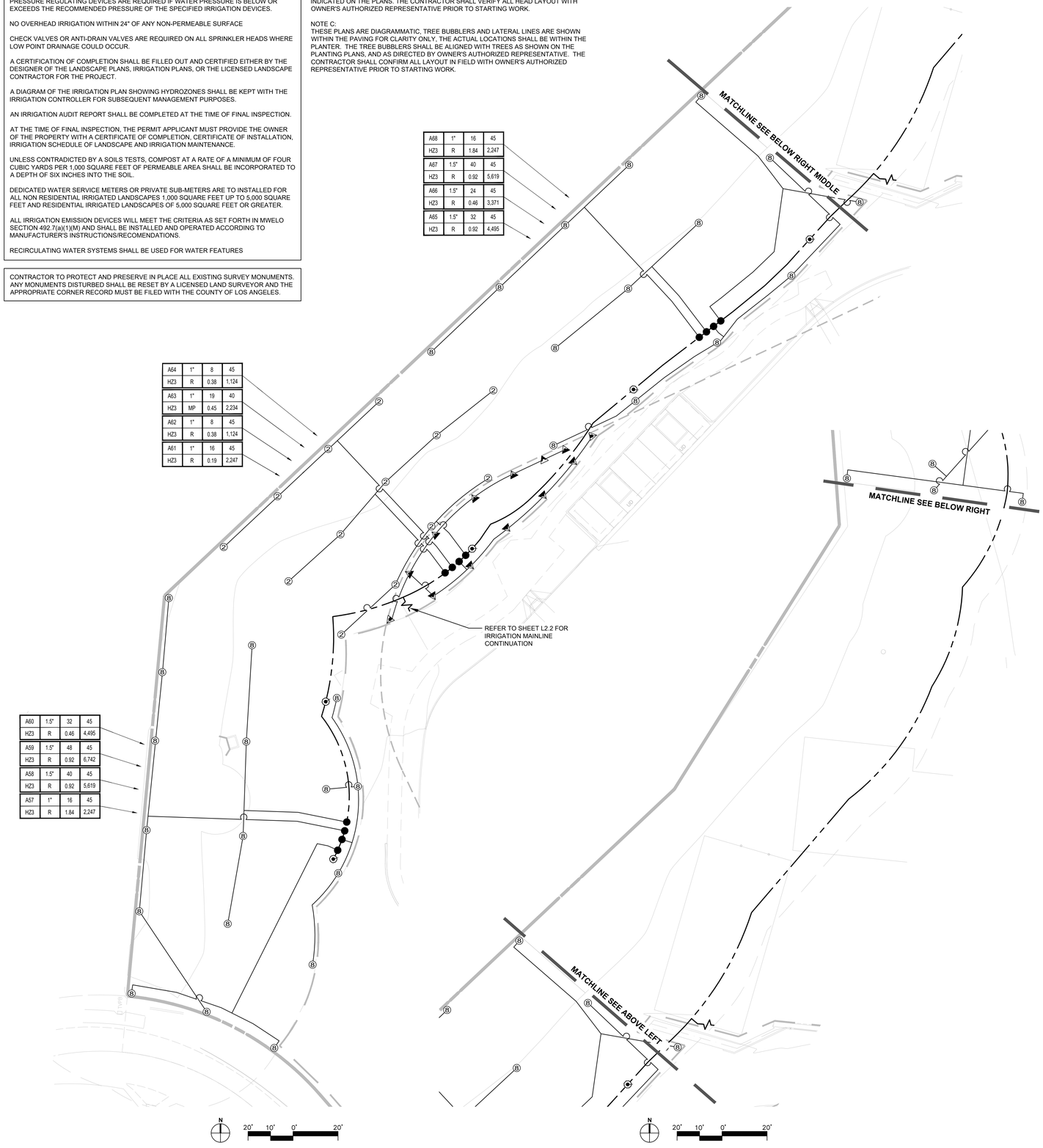
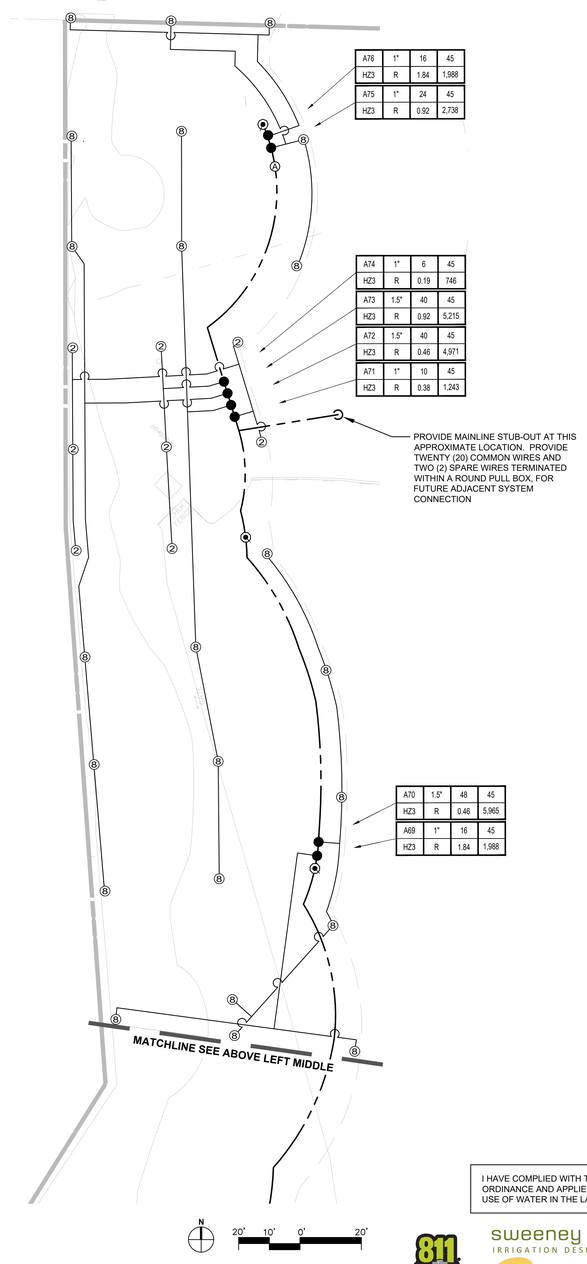
3.00	1,620 FEET OF MAINLINE, CL. 315 PVC	48	10	4.37	PSI
3.00	15 - 90 DEGREE ELBOWS	48	13	0.69	PSI
1.50	REMOTE CONTROL VALVE ASSEMBLY	48	14	3.50	PSI
10%	LATERAL LINE LOSSES	48	15	4.00	PSI
20%	FITTING LOSS (IN ADDITION TO ELBOWS SHOWN)	N/A	16	0.87	PSI
50.00	ELEVATION CHANGE (P.O.C. TO HIGHEST HEAD)	N/A	17	21.65	PSI
TOTAL SYSTEM PRESSURE LOSS (SUM OF #1 THRU #17)			18	58.6	PSI
PRESSURE REQUIRED AT HEAD (OPERATING PRESSURE)			19	40.0	PSI
TOTAL PRESSURE REQUIRED (SUM OF #18 AND #19)			20	98.6	PSI
STATIC WATER PRESSURE (FROM ABOVE)			21	80.0	PSI
RESIDUAL PRESSURE (SUBTRACT #20 FROM #21)			22	-18.6	PSI
SET PRV OR MCV AT (#20 PLUS 10 PSI)			23	N/A	PSI
PRESSURE BOOST, IF REQUIRED (SET TO ACHIEVE 20 PSI RESIDUAL)			24	38.6	PSI





I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLANS.

811

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FILE No.: A#: 03-121943(INC-2)

SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

MALIBU HIGH SCHOOL - PHASE 1

30215 MORNING VIEW DR, MALIBU, CA 90265
NAC Project # 161/20008

SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

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NOT FOR CONSTRUCTION PURPOSES

DATE 4/18/2022

FUEL MODIFICATION PLAN RESUBMITTAL

IRRIGATION PLAN

L2.3

WATER AUDIT AND MAINTENANCE SCHEDULE

THE CONTRACTOR WILL CONDUCT AN IRRIGATION AUDIT USING A CERTIFIED IRRIGATION AUDITOR, AFTER THE FINAL FIELD OBSERVATION HAS BEEN COMPLETED AND ALL IRRIGATION COMPONENTS ARE INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND THE IRRIGATION SYSTEM IS ACCEPTED BY THE PROJECT ARCHITECT FOR MAINTENANCE.

THE IRRIGATION AUDIT WILL BE CONDUCTED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

1. PLACE FLAGS AT EACH HEAD IN THE ZONE
2. MEASURE SPACING AND MARK MID POINTS BETWEEN HEADS.
3. PLACE WATER MEASURING RECEPTACLES.
4. TAKE READINGS OF WATER LEVEL IN RECEPTACLES AND RECORD RESULTS.
5. MEASURE HEAD PRESSURE IN EACH ZONE AND RECORD RESULTS.
6. AFTER COMPLETING ZONE ADVANCE TO NEXT ZONE AND REPEAT PROCEDURE.
7. SUBMIT THE RESULTS OF THE AUDIT TO THE PROJECT ARCHITECT.

THE IRRIGATION MAINTENANCE SCHEDULE TASKS LISTED BELOW ARE INTENDED AS MINIMUM STANDARDS AND MORE FREQUENT ATTENTION MAY BE REQUIRED DEPENDING ON THE PARTICULAR SITE CONDITIONS.

MAINTENANCE TASK

1. CONTROLLER CABINET - OPEN CABINET AND CLEAN OUT DEBRIS AND REPLACE BATTERY AS NECESSARY. CHECK WIRING AND REPAIR AS NEEDED AND CHECK CLOCK AND RESET IF NECESSARY.
FREQUENCY: QUARTERLY

2. IRRIGATION SCHEDULE - ADJUST SCHEDULE FOR SEASONAL VARIATIONS AND OTHER CONDITIONS WHICH MAY AFFECT THE AMOUNT OF WATER NEEDED TO MAINTAIN PLANT HEALTH ADJUST AS NECESSARY.
FREQUENCY: MONTHLY

3. POC - VISUALLY INSPECT COMPONENTS FOR LEAKS, PRESSURE SETTINGS, SETTLEMENT OR OTHER DAMAGE AFFECTING THE OPERATION OF A COMPONENT. REPAIR AS NEEDED.
FREQUENCY: QUARTERLY

4. REMOTE CONTROL VALVES, ISOLATION VALVES AND QUICK COUPLER VALVES - VISUALLY INSPECT FOR LEAKS, SETTLEMENT, WIRE CONNECTIONS AND PRESSURE SETTINGS. REPAIR OR ADJUST AS NEEDED.
FREQUENCY: QUARTERLY

5. MAINLINE & LATERALS - VISUALLY INSPECT FOR LEAKS OR SETTLEMENT OF TRENCH.
FREQUENCY: QUARTERLY

6. SPRINKLERS - VISUALLY CHECK FOR ANY BROKEN MISALIGNED OR CLOGGED HEADS. HEADS WITH INCORRECT ARC, INADEQUATE COVERAGE OR OVERSPRAY AND LOW HEAD DRAINAGE. REPAIR AS NEEDED.
FREQUENCY: WEEKLY

7. FILTERS AND STRAINERS - VISUALLY CHECK FOR LEAKS, BROKEN FITTING, CLEAN AND FLUSH SCREENS.

AUDIT SHALL BE IN ACCORDANCE WITH THE LATEST STATE OF CALIFORNIA LANDSCAPE WATER MANAGEMENT PROGRAM AS DESCRIBED IN THE LATEST LANDSCAPE IRRIGATION AUDITOR HANDBOOK. THE LANDSCAPE IRRIGATION AUDITS TO BE CONDUCTED BY A QUALIFIED INDIVIDUAL AND THE AUDIT SCHEDULE SHALL BE CONDUCTED AT LEAST ONCE EVERY FIVE YEARS IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 20, DIVISION 1 OF THE LOS ANGELES COUNTY CODE.

MAINTENANCE SCHEDULES:
MAINTENANCE SCHEDULES. A REGULAR MAINTENANCE SCHEDULE SATISFYING THE FOLLOWING CONDITIONS SHALL BE SUBMITTED AS PART OF THE LANDSCAPE DOCUMENTATION PACKAGE.

LANDSCAPE SHALL BE MAINTAINED TO ENSURE WATER EFFICIENCY. A REGULAR MAINTENANCE SCHEDULE SHALL INCLUDE, BUT NOT BE LIMITED TO, CHECKING, ADJUSTING, AND REPAIRING IRRIGATION EQUIPMENT, RESETTING THE AUTOMATIC CONTROLLER, AERATING AND DETHATCHING TURF AREAS, REPLENISHING MULCH, FERTILIZING, PRUNING, AND WEEDING IN ALL LANDSCAPE AREAS.

WHENEVER POSSIBLE, REPAIR OF IRRIGATION EQUIPMENT SHALL BE DONE WITH THE ORIGINALLY SPECIFIED MATERIALS OR THEIR EQUIVALENTS.

A LANDSCAPE IRRIGATION AUDIT SCHEDULE AS REQUIRED IN CHAPTER 20.09 OF TITLE 20 MAY BE RECOMMENDED. THE MAXIMUM PERIOD BETWEEN AUDITS SHALL BE FIVE YEARS.

IRRIGATION AUDIT SCHEDULES:
LANDSCAPE IRRIGATION AUDIT SCHEDULES. A SCHEDULE OF LANDSCAPE IRRIGATION AUDITS OF AT LEAST EVERY FIVE YEARS MUST BE ESTABLISHED, FOR ALL BUT SINGLE-FAMILY RESIDENCES, AND OTHER PROJECTS WITH LANDSCAPE AREA LESS THAN 1 ACRE (0.405 HA), AS REQUIRED IN CHAPTER 20.09 OF TITLE 20 (UTILITY CODES), AN AUDIT SATISFYING THE FOLLOWING CONDITIONS SHALL BE SUBMITTED TO THE COUNTY AS PART OF THE LANDSCAPE DOCUMENTATION PACKAGE.

AT A MINIMUM, AUDITS SHALL BE IN ACCORDANCE WITH THE LATEST STATE OF CALIFORNIA LANDSCAPE WATER MANAGEMENT PROGRAM AS DESCRIBED IN THE LANDSCAPE IRRIGATION AUDITOR HANDBOOK, PREPARED FOR THE CALIFORNIA DEPARTMENT OF WATER RESOURCES, WATER CONSERVATION OFFICE, THE ENTIRE DOCUMENT, WHICH IS HEREBY INCORPORATED BY REFERENCE.

THE SCHEDULE SHALL PROVIDE FOR LANDSCAPE IRRIGATION AUDITS TO BE CONDUCTED BY A QUALIFIED INDIVIDUAL AS DETERMINED BY THE DIRECTOR AT LEAST ONCE EVERY FIVE YEARS IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 20, DIVISION 1 OF THE LOS ANGELES COUNTY CODE.

IRRIGATION NOTES

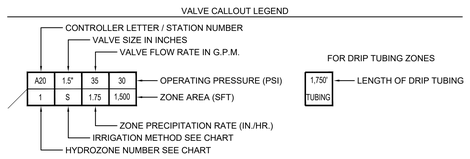
1. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
5. THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARITY ONLY AND IS TO BE INSTALLED WITHIN PLANTING AREAS.
6. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE OWNER.
7. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.
8. ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTER AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
9. CONTRACTOR IS TO PROVIDE AN ADDITIONAL PILOT WIRE FROM CONTROLLER ALONG ENTIRETY OF MAIN LINE TO THE LAST RCV ON EACH AND EVERY LEG OF MAIN LINE. LABEL SPARE WIRES AT BOTH ENDS.
10. ALL PIPE UNDER PAVED AREAS TO BE INSTALLED IN SLEEVING TWICE THE DIAMETER OF THE PIPE CARRIED. SEE LEGEND FOR TYPE. ALL WIRE UNDER PAVED AREAS TO BE INSTALLED IN A SCH. 40 SLEEVE THE SIZE REQUIRED TO EASILY PULL WIRE THROUGH. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVING DETAILS. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.
11. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL ALL QUICK COUPLER AND REMOTE CONTROL VALVES WITHIN 18" OF HARDSCAPE.
12. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCES AND HARDSCAPE. THIS INCLUDES, BUT NOT LIMITED TO, ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW, REPLACEMENT OF PRESSURE COMPENSATING SCREENS, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS.
13. CONTRACTOR SHALL INSTALL ADDITIONAL CHECK VALVES TO HEADS AND LATERALS AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.
14. THE CONTRACTOR SHALL USE PROPER GROUNDING TECHNIQUES FOR GROUNDING THE CONTROLLER AND RELATED EQUIPMENT PER MANUFACTURERS SPECIFICATIONS. SWEENEY AND ASSOCIATES RECOMMENDS MEASURING FOR PROPER GROUND AT LEAST ONCE ANNUALLY, AND NECESSARY ADJUSTMENTS MADE TO COMPLY WITH MANUFACTURER SPECIFICATIONS.
15. THE CONTRACTOR IS REQUIRED TO CONTACT DIGALERT OR 811 A MINIMUM OF TWO (2) DAYS PRIOR TO THE START OF ANY EXCAVATIONS ON THE PROJECT AND SPECIFICALLY PRIOR TO THE INSTALLATION OF ANY GROUNDING RODS. DIAL 811 OR LOG ONTO WWW.DIGALERT.ORG TO START A PROJECT TICKET. DIGALERT AND 811 IS A FREE SERVICE PROVIDED TO THE PROJECT. FAILURE TO CONTACT AND HAVE THE EXISTING UTILITIES IDENTIFIED, LOCATED AND MARKED SHALL MAKE THE CONTRACTOR SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGES.

IRRIGATION MATERIAL LEGEND

SYMBOL Q	T	H	F	MANUFACTURER	MODEL NO. / DESCRIPTION	FLOW RATE (GPM)	PSI	RADIUS	PR. RATE	DETAIL
◭	◣	▼	▽	HUNTER	PROS-12-PRS40-CV 12" POP-UP SHRUB HEAD WITH A MP1000-90(Q/T/H)/360 ADJUSTABLE NOZZLE	.19, .28, .37, .75	40	14 FT	0.45 IN./HR.	A
◭	◣	▼	▽	HUNTER	PROS-12-PRS40-CV 12" POP-UP SHRUB HEAD WITH A MP2000-90(Q/T/H)/360 ADJUSTABLE NOZZLE	.40, .57, .74, 1.47	40	20 FT	0.45 IN./HR.	A
◭	◣	▼	▽	HUNTER	PROS-12-PRS40-CV 12" POP-UP SHRUB HEAD WITH A MP3000-90(Q/T/H)/360 ADJUSTABLE NOZZLE	.86, 1.34, 1.82, 3.64	40	30 FT	0.45 IN./HR.	A
②				HUNTER	PGP-12-CV 12" POP-UP SHRUB ROTOR WITH #2 NOZZLE (BLUE)	2.0	45	34 FT	0.76 IN./HR. (Q) 0.38 IN./HR. (H) 0.19 IN./HR. (F)	C
⑧				HUNTER	PGP-12-CV 12" POP-UP SHRUB ROTOR WITH #8 NOZZLE (BLUE)	8.0	45	44 FT	1.84 IN./HR. (Q) 0.92 IN./HR. (H) 0.46 IN./HR. (F)	C
▽				HUNTER	PROS-06-PRS30-CV 6" POP-UP BUBBLER HEAD WITH A MSBN-50G PRESSURE COMPENSATING STREAM BUBBLER NOZZLE. EACH SYMBOL REPRESENTS TWO (2) BUBBLERS PER TREE OR PALM. PLACE THE BUBBLER HEADS 6" FROM THE EDGE OF THE ROOT BALL OF THE TREE OR PALM AND ON OPPOSITE SIDES OF THE TREE OR PALM, TYPICAL. ADJUST BUBBLER STREAMS TO WET THE ROOT BALL AND ADJACENT AMENDED SOIL WITHOUT HITTING THE TRUNK OF THE TREE OR PALM.	.50 (1.0 TOTAL)	30	1.5 FT	1.50 IN./HR.	A,B
▼				HUNTER	PROS-06-PRS30-CV 6" POP-UP BUBBLER HEAD WITH A MSBN-25Q PRESSURE COMPENSATING STREAM BUBBLER NOZZLE. EACH SYMBOL REPRESENTS ONE (1) BUBBLERS PER SHRUB.	.25	30	1 FT	1.00 IN./HR.	A
Ⓦ				P.O.C.	3" DOMESTIC WATER STUB-OUT FOR IRRIGATION, DOWNSTREAM OF EXISTING 2" POTABLE (DOMESTIC) WATER METER WITH 2" SERVICE LINE. VERIFY SIZE, LOCATION AND PRESSURE IN FIELD.					N/A
Ⓑ				WILKINS	975XLUS, 2" R/P BACK FLOW PREVENTION DEVICE WITH WYE STRAINER, INSTALL WITH BRASS NIPPLES, UNIONS AND FITTINGS, SIZED PER DEVICE					D
NO SYMBOL				V.I.T.	STRONG BOX SBBC-45SS "SMOOTH TOUCH" STAINLESS STEEL BACK FLOW DEVICE ENCLOSURE					D
Ⓢ				NETAFIM	WM-200-0.1-ER 2" LANDSCAPE WATER SUB-METER. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.					E
Ⓟ				B.E.P.	BARRETT IRRIGATION BOOSTER PUMP, MOD. # IBGA6-3-2-2/VFD-F, SEE DETAIL. INSTALL PUMP ASSEMBLY PER THE MANUFACTURER'S RECOMMENDATIONS. CONTACT DARYL GREEN @ GPS (949) 584-7311. THE CONTRACTOR SHALL VERIFY EXISTING DYNAMIC (WATER FLOWING AT DESIGN FLOW) WATER PRESSURE, STATIC (NO WATER MOVEMENT) WATER PRESSURE AND THE ELECTRICAL POWER SUPPLY PRIOR TO ORDERING THE PUMP.					F
Ⓥ				BUCKNER	3200-200 2" NORMALLY CLOSED, BRASS MASTER CONTROL VALVE. WIRE MCV TO THE CONTROLLER USING A SEPARATE PILOT AND GROUND WIRE, ROUTE INSIDE 1 1/4" SCH. 40 PVC (GRAY) ELECTRICAL CONDUIT. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.					G
Ⓕ				CALSENSE	FM-2B, 2" FLOW SENSOR IN A BRONZE TEE (AS PART OF CONTROLLER MODEL NUMBER), WIRE TO CONTROLLER USING #18 AWG WIRE IN 1 1/4" SCH. 40 PVC (GRAY) ELECTRICAL CONDUIT, INSTALL PER MANUFACTURER'S RECOMMENDATIONS.					H
▶◀				LASCO	V27101N-SC 2 1/2" SLO-CLOSE SCH. 80 PVC, TRUE-UNION BALL VALVE WITH SOLVENT WELD SOCKET CONNECTIONS, LINE SIZE PER MAINLINE. INSTALL INSIDE A 10" ROUND VALVE BOX.					I
Ⓐ				CRISPIN	AR-10 LOW VOLUME, MAINLINE PRESSURE AIR RELEASE VALVE, 1" SIZE, INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX					J
◉				RAIN BIRD	44LRC 1" QUICK COUPLER VALVE WITH LOCKING VINYL COVER AND A LASCO G13S-218 SWING JOINT. INSTALL INSIDE A 10" ROUND VALVE BOX.					K
●				SUPERIOR	950XXXPRSRW PRESSURE REGULATING, BRASS REMOTE CONTROL VALVE (RCV), SIZE AS SHOWN (1" AND 1 1/2" SIZES), SET AS-ADJ PRESSURE REGULATOR TO PROVIDE THE OPERATING PRESSURE OF THE SPRINKLER / BUBBLER HEAD TO THE HIGHEST OR FARTHEST HEAD ON THE CONTROL VALVE ZONE. INSTALL THE RCV INSIDE A STANDARD RECTANGULAR VALVE BOX.					L
Ⓒ				I.T.S./CALSENSE	IMPERIAL TECHNICAL SERVICES CALSENSE CONTROLLER ASSEMBLY, MODEL # ICA2-CS3-48+48/CSTP110/CS3GRK(3)CS3M/COMM-5Y-2/FM-1.5/RSE/CS3WK(2)CSFL. CONTROLLER SHALL HAVE CELLULAR COMMUNICATION AND SHALL BE INSTALLED WITHIN PEDESTAL ENCLOSURE, AS PART OF ASSEMBLY. CONTROLLER SHALL BE CERTIFIED BY A CALSENSE REPRESENTATIVE, PROVIDE WRITTEN CERTIFICATION TO CITY.					M
NO SYMBOL				PAIGE ELECTRIC	THE CONTROLLER SHALL BE GROUNDED USING A #182000 5/8" X 8 FOOT COPPER CLAD GROUND ROD, A #182005 CAST BRONZE ROD CLAMP AND THE REQUIRED LENGTH OF #6AWG BARE, SINGLE STRAND COPPER GROUND WIRE. INSTALL INSIDE A 10" ROUND VALVE BOX.					N
E				N/A	120 VOLT ELECTRICAL POWER FOR CONTROLLER, PROVIDED BY ELECTRICIAN, VERIFY ACTUAL LOCATION IN FIELD					N/A
E1				N/A	230 VOLT (SINGLE/THREE) PHASE ELECTRICAL POWER FOR BOOSTER PUMP SYSTEM, PROVIDED BY ELECTRICIAN, VERIFY ACTUAL LOCATION IN FIELD					N/A
———				AS APPROVED	PVC PIPE 3/4" - 3" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, AS LATERAL LINES INSTALLED 12" BELOW FINISHED GRADE					O
— — —				AS APPROVED	PVC PIPE 3" CL. 315, SOLVENT WELD WITH SCH. 80 PVC FITTINGS, AS MAINLINES INSTALLED 24" BELOW FINISHED GRADE					O,Q
— — — —				AS APPROVED	PVC PIPE SCH. 40 AS SLEEVING, 2 TIMES THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED (2" MINIMUM SIZE) INSTALL ALL PIPE AND WIRE UNDER PAVING, HARDSCAPE, ETC. (OR AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE) INSIDE SLEEVES. SLEEVES UNDER PEDESTRIAN PAVING SHALL BE INSTALLED 24" BELOW FINISHED GRADE. SLEEVES UNDER VEHICULAR PAVING SHALL BE INSTALLED 36" BELOW FINISHED GRADE.					P
NO SYMBOL				LASCO	ALL FITTINGS USED WITH SOLVENT WELD MAINLINE PIPE SHALL BE SCH. 80 PVC FITTINGS, GRAY IN COLOR, AND SIZED TO MATCH THE MAINLINE PIPE. ALL FITTINGS USED WITH SOLVENT WELD LATERAL LINE PIPE SHALL BE SCH. 40 PVC, WHITE IN COLOR, AND SIZED TO MATCH THE LATERAL LINE PIPE. ALL THREADED PVC NIPPLES SHALL BE SCH. 80 PVC PIPE, DARK GRAY IN COLOR, WITH MOLDED THREADS.					N/A
NO SYMBOL				WELD-ON	ALL SOLVENT WELD CONNECTIONS FOR BOTH MAINLINE AND LATERAL LINE SHALL BE MADE USING THE TWO-STEP PROCESS OF PRIMER AND SOLVENT CEMENT. PRIMER SHALL BE P-68 LOW VOC "PURPLE PRIMER". SOLVENT CEMENT SHALL BE 705 LOW VOC, GRAY COLORED "MEDIUM BODIED" CEMENT. USE DAUBERS SIZED AT LEAST ONE-HALF THE SIZE OF THE LARGEST PIPE BEING JOINED. ALL SOLVENT CEMENTED JOINTS SHALL BE MADE PER THE PIPE AND FITTING MANUFACTURER'S RECOMMENDATIONS.					N/A
NO SYMBOL				AS APPROVED	ALL SOLVENT WELD MAINLINES ABOVE 2" IN SIZE SHALL HAVE CONCRETE THRUST BLOCKING INSTALLED AT ALL DIRECTIONAL CHANGES INCLUDING (/%2:6 ' … $1' ' … $1' 7((6 08.1/.1(3.3(6 81'(5 6.=($1' $// /$7(5$/ /.1(6 '2 127 5(48,5(7+5867 %/2&.,1*					Q
NO SYMBOL				AS APPROVED	1 1/4" SCH. 40 PVC, GRAY ELECTRICAL CONDUIT FOR FLOW SENSOR / MASTER VALVE WIRES, PROVIDE PULL BOX AT A MAXIMUM OF 200 FEET ON CENTER FOR A 3 FOOT WIRE LOOP OR ANY SPLICES. INSTALL INSIDE A STANDARD RECTANGULAR VALVE BOX.					N/A
NO SYMBOL				PAIGE ELECTRIC	P7079D POLYETHYLENE INSULATED, SOLID COPPER CONDUCTOR IRRIGATION CONTROL WIRE #14UF AWG DIRECT BURIAL (U.L. APPROVED). PILOT WIRES SHALL BE RED IN COLOR, COMMON GROUND WIRE SHALL BE WHITE IN COLOR, SPARE WIRES SHALL BE YELLOW IN COLOR. THE CONTRACTOR SHALL ROUTE TWO (2) SPARE CONTROL WIRES (YELLOW) FROM THE CONTROLLER ALONG THE MAINLINE IN ALL DIRECTIONS AWAY FROM THE CONTROLLER. LOOP SPARE WIRES UP AND INTO EACH VALVE BOX ALONG THE MAINLINE, PROVIDING A 3 FOOT MINIMUM LOOP. WHERE MULTIPLE CONTROLLERS ARE USED ON THE PROJECT, EACH CONTROLLER SHALL HAVE A DIFFERENT COLOR FOR PILOT WIRES.					O,P,R
NO SYMBOL				GPH IRRIGATION	GDBRY6 DIRECT BURIAL, 100% SILICONE GEL, WATER-PROOF WIRE CONNECTORS FOR USE ON ALL WIRE SPLICES AND CONNECTIONS					R
NO SYMBOL				NDS (K.B.I.)	KSC-XXX-S SWING CHECK VALVE, LATERAL LINE SIZE, INSTALL ONE (1) ON THE DOWNSTREAM SIDE OF EACH RCV WHEN THE RCV IS LOWER THAN THE SPRINKLERS, BUBBLERS OR DRIP EMITTERS. INSTALL WITHIN SPRINKLER / BUBBLER ZONES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.					N/A
NO SYMBOL				NDS (K.B.I.)	KC-XXX-S SPRING CHECK VALVE, LATERAL LINE SIZE, INSTALL ONE (1) ON THE DOWNSTREAM SIDE OF EACH RCV WHEN THE RCV IS HIGHER THAN THE SPRINKLERS, BUBBLERS OR DRIP EMITTERS. INSTALL WITHIN SPRINKLER / BUBBLER ZONES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.					N/A
NO SYMBOL				RAIN BIRD	ALL VALVE BOXES SHALL BE VB SERIES, PLASTIC TYPE WITH OVERLAPPING LIDS. VALVE BOXES SHALL HAVE BLACK BODIES AND GREEN LIEDS. ALL BOXES SHALL BE SECURED WITH A RAIN BIRD VB-LOCK-H HEXAGON HEAD BOLT, WASHER AND CLIP. BOXES SHALL BE AS SHOWN BELOW:					S

DESCRIPTION	MODEL #
10" ROUND BOXES	VB10RND
STANDARD RECTANGULAR BOXES	VBSTD
JUMBO RECTANGULAR BOXES	VBJMB

VALVE CALLOUT LEGEND



HYDROZONE DESCRIPTION CHART			
NUMBER	DESCRIPTION OF THE HYDROZONE	WUCOLS	PLANT FACTOR
HZ 1	LOW WATER USE PLANTINGS	L	0.20
HZ 2	MODERATE WATER USE PLANTINGS	M	0.40
HZ 3	LOW WATER USE ESHA PLANTINGS	L	0.20
HZ 4	LOW WATER USE TREES	L	0.20

IRRIGATION METHOD DESCRIPTION CHART			
LETTERS	DESCRIPTION OF THE IRRIGATION	TYPE	IR. EFFICIENCY
SB	SHRUB BUBBLERS	SPRAY	0.75
TB	TREE BUBBLERS	SPRAY	0.75
MP	MP ROTATORS	SPRAY	0.75
R	ROTORS	SPRAY	0.75

IRRIGATION CONTROLLER RUN TIMES

POC or Controller		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total / Avg.
A	ETo / Month (Inches):	1.80	2.10	3.30	4.50	4.70	5.00	5.40	5.40	3.90	3.50	2.40	2.20	44.20
	ETo / Day (Inches):	0.06	0.08	0.11	0.15	0.15	0.17	0.17	0.17	0.13	0.11	0.08	0.07	0.12
	Irrigation Days / Week:	7	7	7	7	7	7	7	7	7	7	7	7	

Plant / Irrig. Type	AKc	Pr Rate	IE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Low Shrubs ESHA	0.20	1.84	0.75	0.5	0.7	0.9	1.3	1.3	1.4	1.5	1.5	1.1	1.0	0.7	0.6	Min./Day/Zone
Rotors (Q)	Number of Zones:		4	2.0	2.6	3.7	5.2	5.3	5.8	6.1	6.1	4.5	3.9	2.8	2.5	Total Min./Day
Low Shrubs ESHA	0.20	0.92	0.75	1.0	1.3	1.9	2.6	2.6	2.9	3.0	3.0	2.3	2.0	1.4	1.2	Min./Day/Zone
Rotors (H)	Number of Zones:		8	8.1	10.4	14.8	20.9	21.1	23.2	24.2	24.2	18.1	15.7	11.1	9.9	Total Min./Day
Low Shrubs ESHA	0.20	0.46	0.75	2.0	2.6	3.7	5.2	5.3	5.8	6.1	6.1	4.5	3.9	2.8	2.5	Min./Day/Zone
Rotors (F)	Number of Zones:		7	14.1	18.3	25.9	36.5	36.9	40.6	42.4	42.4	31.7	27.5	19.5	17.3	Total Min./Day
Low Shrubs	0.20	0.45	0.75	2.1	2.7	3.8	5.3	5.4	5.9	6.2	6.2	4.6	4.0	2.8	2.5	Min./Day/Zone
MP Rotators	Number of Zones:		10	20.6	26.7	37.8	53.3	53.9	59.3	61.9	61.9	46.2	40.1	28.4	25.2	Total Min./Day
Low Shrubs	0.20	1.00	0.75	0.9	1.2	1.7	2.4	2.4	2.7	2.8	2.8	2.1	1.8	1.3	1.1	Min./Day/Zone
Bubblers	Number of Zones:		8	7.4	9.6	13.6	19.2	19.4	21.3	22.3	22.3	16.6	14.5	10.2	9.1	Total Min./Day
Moderate Shrubs	0.40	0.45	0.75	4.1	5.3	7.6	10.7	10.8	11.9	12.4	12.4	9.2	8.0	5.7	5.0	Min./Day/Zone
MP Rotators	Number of Zones:		13	53.7	69.3	98.4	138.7	140.2	154.1	161.0	161.0	120.2	104.4	74.0	65.6	Total Min./Day
Moderate Shrubs	0.40	1.00	0.75	1.9	2.4	3.4	4.8	4.9	5.3	5.6	5.6	4.2	3.6	2.6	2.3	Min./Day/Zone
Bubblers	Number of Zones:		12	22.3	28.8	40.9	57.6	58.2	64.0	66.9	66.9	49.9	43.4	30.7	27.3	Total Min./Day
Low Shrubs ESHA	0.20	0.45	0.75	2.1	2.7	3.8	5.3	5.4	5.9	6.2	6.2	4.6	4.0	2.8	2.5	Min./Day/Zone
MP Rotators	Number of Zones:		1	2.1	2.7	3.8	5.3	5.4	5.9	6.2	6.2	4.6	4.0	2.8	2.5	Total Min./Day
Low Trees	0.20	1.50	0.75	0.6	0.8	1.1	1.6	1.6	1.8	1.9	1.9	1.4	1.2	0.9	0.8	Min./Day/Zone
Bubblers	Number of Zones:		13	8.1	10.4	14.8	20.8	21.0	23.1	24.2	24.2	18.0	15.7	11.1	9.8	Total Min./Day
	Total Number of Zones:		76	138	179	254	358	361	397	415	415	310	269	191	169	Total Min./Day
	Total Controller Run Time in Hours:			2.31	2.98	4.23	5.96	6.02	6.62	6.92	6.92	5.16	4.49	3.18	2.82	Total Hrs./Day
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	

Note: These schedules are intended only for compliance with local municipal codes and the water efficient landscape ordinance. These calculations represent the MAXIMUM REASONABLE run times and are used to ensure that all irrigation may be completed during the specific watering window allowed. These schedules do not include rainfall, site soil types, specific exposures (shade versus sun), actual irrigation days, or specific slope position. It is solely the responsibility of the irrigation contractor to program the controller as required to apply the correct amount of irrigation water for the landscape. All smart controllers shall be programmed using the specified ET or weather sensing equipment, satellite provided ET data, soil moisture sensors, and rain shut off devices as required. Contractor shall provide a controller schedule inside the controller cabinet prior to final turnover of the project to the owner.

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package

Project Name: Malibu HS Ph 1
Project Address: 30215 Morning View Dr, Malibu, CA 90265

sweeney + associates IRRIGATION DESIGN AND CONSULTING

Reference Evapotranspiration (ETo) 44.2 In./Yr. **Residential Project?** No

Hydrozone # / Planting Description[a]	Plant Factor	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF / IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
1. Low Water Use Plantings	0.20	Overhead	0.75	0.27	38,983	10,525	288,438
2. Medium Water Use Plantings	0.40	Overhead	0.75

Study Area/Property

ESHA

ESHA Buffer (50 ft)

ESHA Buffer (100 ft)

Downstream ESHA

Riparian Restoration (0.37 acre)
i. Weed Abatement
ii. Apply Riparian Seed Mix/Plant Willows

Upland Restoration (0.60 acre)
i. Weed Abatement
ii. Apply Upland Seed Mix/Plantings

Middle ESHA

Riparian Stabilization (0.17 acre)
i. Weed Abatement

Upland Restoration (0.32 acre)
i. Weed Abatement

Upstream ESHA

Riparian Restoration (0.14 acre)
i. Weed Abatement
ii. Plant Grasses in Wetland (1,234 sq ft)

Upland Restoration (0.43 acre)
i. Weed Abatement
ii. Apply Upland Seed Mix (9,566 sq ft)

Fuel Modification

Specific Plan Improvements

Phase 1

Phase 4

Planting Types

A California fuchsia *(Epilobium canum)*; ashyleaf buckwheat *(Eriogonum cinereum)*, purple sage *(Salvia leucophylla)*

B coastal goldenbush *(Isocoma menziesii)*, Coyote bush *(Baccharis pilularis)*, bladderpod *(Peritoma arborea)*

C black sage *(Salvia mellifera)*, California sagebrush *(Artemisia californica)*, bladderpod *(Peritoma arborea)*

D ashyleaf buckwheat *(Eriogonum cinereum)*, bladderpod *(Peritoma arborea)*, deergrass *(Muhlenbergia rigens)*

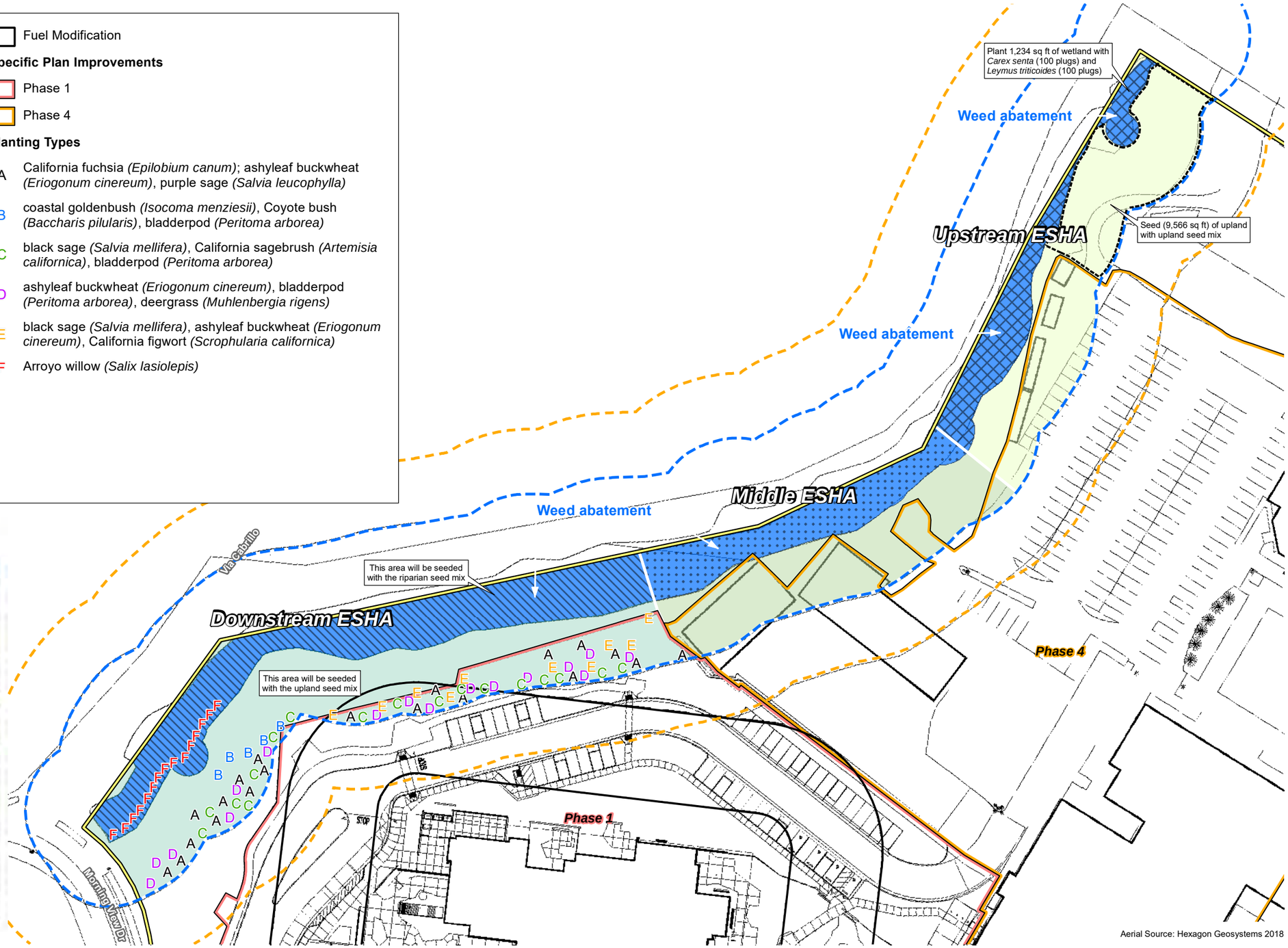
E black sage *(Salvia mellifera)*, ashyleaf buckwheat *(Eriogonum cinereum)*, California figwort *(Scrophularia californica)*

F Arroyo willow *(Salix lasiolepis)*

Table 1
Downstream ESHA Plant Palette- Phase 1

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone			
Salix lasiolepis	Arroyo willow	1	15-20
Upland Zone			
Planting Group A: 20 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	20
Eriogonum cinereum	ashyleaf buckwheat	1	20
Salvia leucophylla	purple sage	1	20
Planting Group B: 5 groups of 3 plants each planted 4 feet OC			
Isocoma menziesii	coastal goldenbush	1	5
Baccharis pilularis	Coyote bush	1	5
Peritoma arborea	bladderpod	1	5
Planting Group C: 17 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	17
Artemisia californica	California sagebrush	1	17
Peritoma arborea	bladderpod	1	17
Planting Group D: 16 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	16
Peritoma arborea	bladderpod	1	16
Muhlenbergia rigens	deergrass	1	16
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophulsria californica	California figwort	1	10
		Total Plants*	224

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.



Aerial Source: Hexagon Geosystems 2018

Planting Plan for Downstream ESHA (Phase 1)

Malibu Middle and High School Specific Plan and LCP Amendment Project

APPENDIX 1

PSOMAS

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PSOMAS

Balancing the Natural and Built Environment

September 29, 2021

Noemi Avila-Zamudio
Deputy Bond Program Manager
Bond Construction Program
Santa Monica-Malibu Unified School District
Facility Improvement Projects
2828 Fourth Street
Santa Monica, California 90405

VIA EMAIL
navila-zamudio@smmusd.org

Subject: Habitat Restoration Plan for an Environmentally Sensitive Habitat Area in Support of the Malibu Middle and High School Campus Specific Plan and Local Coastal Plan Amendment Project, Malibu, California

Dear Noemi Avila-Zamudio:

This Habitat Restoration Plan (Plan) has been prepared for the Santa Monica-Malibu Unified School District (District) as a component of the Malibu Middle and High School Campus Specific Plan and Local Coastal Program (LCP) Amendment Project (proposed project). The Plan describes restoration efforts for the Environmentally Sensitive Habitat Area (ESHA), and adjacent buffer located on District property comprised of the former Juan Cabrillo Elementary School and Malibu Middle and High Schools, collectively referred to as the Malibu Campus. This Plan describes the following:

- Project location and a brief project description;
- Regulatory framework;
- Existing conditions for biological and jurisdictional resources;
- Hydrological/hydraulics studies for the ESHA; and
- Restoration program, including site preparation, plant/seed palettes, planting/seeding plan and recommended maintenance and monitoring procedures over a 2-year period.

PROJECT LOCATION

The Malibu Campus is located at 30215 Morning View Drive in the City of Malibu, Los Angeles County, California (**Exhibit 1**, Regional Location). It is located east of Via Cabrillo, north of Morning View Drive, west of Merritt Drive, and south of Heights Road, approximately 0.25-mile northeast of Pacific Coast Highway. The Study Area is depicted on the U.S. Geological Survey's (USGS') Point Dume 7.5-minute topographic quadrangle of the San Bernardino Meridian in Township 02 South, Range 19 West, Section 01 (**Exhibit 2**, USGS 7.5 Minute Digital Quadrangle). The Study Area considered in this Plan consists of the Specific Plan boundary and includes the entire property owned by the District. It is within the Santa Monica Bay Watershed (Hydrologic Unit Code 18070104). The Specific Plan area shares the District's property with the former Cabrillo Elementary School to the west and Malibu Equestrian Park to the east and is set among rolling

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hills with its buildings and athletic fields terraced into the hillside setting. A drainage designated as an ESHA by the California Coastal Commission (CCC), pursuant to California Coastal Act extends for approximately 1,100-feet along the western property boundary (**Exhibit 3**, Location of ESHA).

PROJECT DESCRIPTION

The District seeks to redevelop the Malibu Campus to create a new campus for the Middle and High School with core areas that provide separate learning spaces for the middle and high school students as well as shared amenities. The proposed project would result in the demolition of 18 existing buildings. The recently completed buildings (Buildings A, B, and E), the existing athletic fields, and Malibu Equestrian Park would remain largely unchanged. Implementation of the proposed project would not result in an increase in student enrollment or capacity.

The proposed project site is currently the subject of a Specific Plan that will guide redevelopment of the campus when adopted by the City of Malibu (Malibu) and will serve as the foundation for the phased development of the campus consistent with the regulations, standards, and design guidelines specified therein. The scope of restoration efforts as described in this Plan is consistent with the District's goals and objectives for the proposed project.

Environmental studies both past and present, including those related to biological resources in support of the Malibu Middle and High School Campus Specific Plan and LCP Amendment Project have verified the presence of a drainage along the western boundary of the District's property line. Pursuant to Malibu's Local Coastal Program, this drainage is designated as an ESHA (City of Malibu 2002, GLA 2009, Psomas 2021a).

Consistent with guidelines provided in the Local Coastal Implementation Plan, Psomas delineated the ESHA boundary as the outer edge of the canopy of riparian vegetation and where riparian vegetation was not present, the ESHA boundary was determined by the top of bank. While the LCP ESHA overlay zone specifies a buffer to "ensure continued protection of the habitat areas" and for new development specifically references a 100 foot buffer "from the outer edge of the bank of the subject stream as the area within the top of bank and outer riparian canopy boundaries", it was noted that over 85% of the ESHA's 100 foot buffer had been developed in the years prior to the enactment of the California Coastal Act of 1972.

During the early stages of the specific planning process, among other project objectives, the District recognized that the ESHA offered opportunities to enhance their educational goals of providing for outdoor learning spaces and interpretive opportunities; as well as providing an opportunity to restore the natural environment and improve campus connectivity through the development of the proposed pedestrian pathways. The District recognized that the existing conditions included incompatible development into the edge of the ESHA bank as well as the degraded nature of the ESHA itself. In discussions with the CCC, the District decided that it could restore the degraded drainage comprised of approximately 0.7 acres as well as 1.35 acres of upland areas within the ESHA's 50-foot buffer, and still meet the educational and design goals for the campus. In addition, within the remaining 50 feet beyond the 50-foot ESHA buffer, the proposed project would include land uses compatible with the natural habitat that would not incur in significant disruption of the natural habitat including a looping trail, interpretive stations overlooking the ESHA, and largely native landscaping within the campus itself contributing to the high scenic quality of the area.

The ecological benefits of the restoration will increase the diversity and cover of native riparian and upland plants within the ESHA and its 50-foot buffer by the removing non-native species (including those rated by the California Invasive Plant Council); improve conditions for wildlife species including

pollinator species that rely on wetland, riparian, and adjacent upland habitats for food and shelter; and reduce erosion and sedimentation. The students and local residents that will use the loop trail and the educational nodes will not only be able to enjoy the natural surroundings but they will also be able to learn about the plants that reside in the riparian and upland zones as well as the local and seasonal wildlife that will undoubtedly frequent the site.

REGULATORY FRAMEWORK

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (Corps) Regulatory Branch regulates activities that discharge dredged or fill materials into waters of the United States (WOTUS) under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Its authority applies to all WOTUS where the material (1) replaces any portion of a water of the United States with dry land or (2) changes the bottom elevation of any portion of any WOTUS. Activities that result in fill or dredge of WOTUS require a permit from the Corps. Presently, WOTUS are defined to include territorial seas and Traditional Navigable Waters (TNWs)[1]; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters (USACE and USEPA 2010).

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB), in conjunction with the nine Regional Water Quality Control Boards (RWQCBs), is the primary agency responsible for protecting water quality in California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The SWRCB's and RWQCB's jurisdictions extend to all WOTUS, but also to waters of the State that are outside federal jurisdiction, including wetlands.

On August 28, 2019, the Office of Administrative Law approved the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to waters of the State. The procedures went into effect on May 28, 2020. Under these new regulations, the SWRCB and its nine RWQCBs assert jurisdiction over all existing WOTUS, and all waters that would have been considered WOTUS under the 2015 Rule. Thus, the WOTUS that would no longer be under Corps jurisdiction would be under SWRCB jurisdiction.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) regulates activities that may affect rivers, streams, and lakes pursuant to the *California Fish and Game Code* (§§1600–1616). According to Section 1602 of the *California Fish and Game Code,* the CDFW has jurisdictional authority over any work that will (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

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[1] Traditional Navigable Waters are "all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide" (33 *Code of Federal Regulations* § 328.3).

California Coastal Commission

The CCC, in partnership with coastal Cities and Counties, plans and regulates the use of land and water in the Coastal Zone, an area covering a 3-mile-wide band of ocean and extending inland from the mean high tide line to a variable distance based on surrounding land cover. Development in the Coastal Zone requires a Coastal Development Permit issued by either the CCC or a local government with a certified LCP.

Malibu has a certified LCP that provides for protection and preservation of ESHAs. An ESHA is defined as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem which could be easily disturbed or degraded by human activities and developments". ESHAs include rare or valuable habitat, habitat that contributes to the viability of plant or animal species that are designated or are candidates for listing under State or Federal law, habitat that contributes to the viability of species that are designated as "fully protected" or "species of special concern" under State law, habitat that contributes to the viability of species for which there is other compelling evidence of rarity (e.g., species with a California Rare Plant Rank of 1 or 2), designated Areas of Special Biological Significance, or Marine Protected Area, and Streams.

EXISTING CONDITIONS

The ESHA consists of an approximately 1,100-foot long drainage along the western edge of the Campus (**Exhibit 3)**. It receives flow from an undeveloped lot north of the property, road runoff, and runoff from an adjacent parking lot. A culvert at the cul-de-sac of Clover Heights Avenue also carries flow underground and into this drainage. At the downstream end, the drainage flows into a corrugated pipe culvert under Morning View Drive. Based on aerial imagery and USGS topographic contours, this drainage continues primarily above ground until it is undergrounded at Pacific Coast Highway and discharges onto Zuma Beach at the Pacific Ocean.

The drainage is unlined along its entire length in the Study Area. The upstream end of the drainage has a broad, concave cross-section with no abrupt break in bank slope. Soils in this area were saturated and surface water was present during multiple site visits. The middle and downstream end of the drainage is more incised, with steep slopes and a narrow channel bed. Some banks are eroded or undercut. Surface water was not present during multiple site visits and the soils were not saturated near the surface along the middle and downstream portions of the drainage.

The ESHA and surrounding areas burned in the 2018 Woolsey fire. Some vegetation experienced mortality as a result of the fire while other vegetation is recovering.

Vegetation Types

Vegetation types within the ESHA and 50-foot buffer consist of riparian herb and arroyo willow thicket in the drainage bottom transitioning to coyote brush – California sagebrush scrub/upland mustards, upland mustards, and ornamental – native planting. Each is type is further detailed below:

Riparian herb vegetation grows along the drainage bed. This area contains a mix of native species typical of a riparian understory and non-native species. The upstream end is heavily dominated by the non-native Saint Augustine grass (*Stenotaphrum secundatum*) extending out from the drainage centerline with the native watercress (*Nasturtium officinale*) growing in the center, wetter portion of the drainage. Other species in this area include flatsedge (*Cyperus* sp.), bristly ox-tongue (*Helminthotheca echoioides*), common plantain (*Plantago major*), and cheeseweed (*Malva parviflora*). Downstream, as the drainage banks become steeper and the substrate becomes drier, herbaceous vegetation becomes sparser in the

drainage. The middle and downstream portions of the drainage have more patchily distributed watercress with species such as California rose (*Rosa californica*), California blackberry (*Rubus ursinus*), castor bean (*Ricinus communis*), tree tobacco (*Nicotiana glauca*), and garden nasturtium (*Tropaeolum majus*) present. No single species is dominant throughout the length of the drainage.

Arroyo willow thicket occurs along the drainage and consists of individuals and patches of arroyo willows (*Salix lasiolepis*) with a small amount of western sycamore (*Platanus racemosa*). Prior to the Woolsey fire, this vegetation was more extensive. Many of the trees burned and some are regrowing while others remain as dead standing snags. Understory vegetation, where present, is similar in composition to the riparian herb vegetation, described above. The downstream end is degraded by the presence of castor bean.

Coyote brush – California sagebrush scrub/upland mustards occurs in upland areas at the downstream end of the drainage. This vegetation type has approximately 15 to 20 percent cover of native species, primarily coyote brush (*Baccharis pilularis* ssp. *consanguinea*) and laurel sumac (*Malosma laurina*). It has been heavily degraded by the presence of non-native, weedy species such as shortpod mustard (*Hirschfeldia incana*), castor bean, tree tobacco, and non-native grasses such as bromes (*Bromus* spp.) or oats (*Avena* spp.).

Upland mustards occur in upland areas in the central and northern portion of the drainage. This vegetation type is dominated by non-native, weedy species—primarily shortpod mustard with fennel and Russian thistle (*Salsola tragus*).

Ornamental – native planting occurs in the central and northern portion of the drainage. This vegetation type is very heterogeneous and consists of a mix of native and non-native planted individuals and naturalized weedy species. The vegetation isn't closely associated with structures and doesn't appear "formally landscaped", even though many of the species appear to have been planted. These areas burned during the Woolsey fire. Species observed include natives such as laurel sumac and Coulter's matilija poppy (*Romneya coulteri*), and non-natives such as petty spurge (*Euphorbia peplus*), shortpod mustard, castor bean, curly dock (*Rumex crispus*), red valerian (*Centranthus ruber*), myoporum (*Myoporum laetum*), ornamental sage (*Salvia microphylla*), pride of Madeira (*Echium candicans*), cape honeysuckle (*Tecoma capensis*), and tree tobacco.

Jurisdictional Resources

A jurisdictional delineation was performed to determine the type and extent of water resources under the regulatory authority of the Corps, the RWQCB, the CDFW, and the CCC for the entire Study Area (Psomas 2021a); however, for the purpose of this Plan, the jurisdictional resources are described are limited to the ESHA and do not include all jurisdictional waters in the Study Area.

WOTUS under regulatory authority of the Corps were determined to be present in the ESHA drainage. Given that the drainage ultimately discharges into the Pacific Ocean, it has connectivity to a TNW. Relatively permanent waters connected to a TNW are considered WOTUS. Since surface water and soil saturation were observed at the upstream end of the drainage on multiple site visits that were not preceded by rainfall events, the drainage is considered to exhibit surface flow more than just ephemerally. Therefore, it is considered a WOTUS under the regulatory authority of the Corps. The extent of WOTUS was based on indicators of Ordinary High-Water Mark and included a change in sediment texture, a change in vegetation species and cover, and a break in bank slope. A total of 0.070 acre of WOTUS are present. Of this, 0.007 acre was determined to be wetland WOTUS based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. **Table 1** summarizes the type and extent of Corps and

RWQCB jurisdictional waters for the ESHA (**Exhibit 4,** Jurisdictional Resources: Ordinary High-Water Mark).

TABLE 1
SUMMARY OF ESHA JURISDICTIONAL RESOURCES

Regulatory Authority	Amount in Study Area (acres)
Corps Waters of the United States	
Wetlands	0.007
Non-wetland Waters	0.063
Total Corps Waters of the United States	**0.070**
RWCQB Waters of the State	
Wetlands	0.007
Non-wetland Waters	0.063
Total RWQCB Waters of the State	**0.070**
Total CDFW Jurisdictional Resources	**0.68**
Total CCC Jurisdictional Resources	**0.68**
Corps: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife; CCC: California Coastal Commission	

Waters under the regulatory authority of the Corps are also subject to the jurisdictional of the RWQCB and considered waters of the State. Therefore, approximately 0.070 acre of waters of the State are present. Of this, 0.007 acre was determined to be wetland waters of the State.

Streams are under the regulatory authority of the CDFW. The drainage has a defined bed and banks, with a riparian canopy over portions of its length. Therefore, approximately 0.68 acre of waters subject to the regulatory authority of the CDFW are present (**Exhibit 5**, Top of Bank/Riparian Canopy).

Because the CCC uses a one parameter approach to identify the limits of jurisdictional wetlands, the drainage is subject to CCC jurisdiction. Approximately 0.68 acre of wetlands subject to the regulatory authority of the CCC are present (**Exhibit 5**). The drainage is considered an ESHA in Malibu's LCP because it encompasses both wetland and riparian habitat and is consistent with its consideration as a designated ESHA in previous biological assessments (GLA 2009).

HYDROLOGICAL AND HYDROLICS STUDY

A hydrologic analysis was conducted utilizing the Los Angeles County hydrologic methodology to establish flow rates for various storm events up to the 50-year event contributing runoff to the ESHA. A total drainage area of approximately 320 acres contributes stormwater runoff to the ESHA, of which, half is moderate urban development and the other half mountainous area. Hydrologic soil groups found within the drainage area are comprised of Type C and Type D, indicating a high amount of runoff and minimal infiltration into the soil. Additionally, the area is subject to wildfires which increases the total runoff as well as sediment and debris flows.

A hydraulic analysis of the ESHA was performed using HEC-RAS and the peak flow rates established during the hydrologic study. Flow depths and velocity results from the model were used to identify the extents of improvements required to stabilize the channel and prevent future erosion. Potential improvements may include slope reductions, bank protection, drop structures, and revegetation, or a combination thereof. Improvements were designed to be permanent and self-sustaining to the extent

possible, while maintaining a balance between the natural and built environment, encouraging wildlife passage, and reestablishing habitat (Psomas 2021b).

RESPONSIBLE ENTITIES

Responsible entities are those individuals or entities responsible for the successful implementation of the Plan. These entities include but are not limited to, the District as property owner, the Landscape Contractor, the Project Engineer, the Biological Monitor, and the Resource Agencies.

The District, or its designees, are responsible for retaining the following qualified entities:

- Landscape Contractor to install and maintain the habitat restoration areas, including any stabilization features for the ESHA;
- Project Engineer to oversee the stabilization measures that result from the hydrological and hydraulics studies of the ESHA; and
- Biological Monitor to monitor program installation, long-term maintenance, and long-term site performance.

The Landscape Contractor (Contractor) will be responsible for performing all site preparation to address vegetation and soil procedures, ESHA stabilization measures, container species planting, seed mix application, and long-term maintenance tasks. The Landscape Contractor is also responsible for coordinating with the Biological Monitor regarding implementation status.

The Project Engineer will be responsible for overseeing implementation of ESHA stabilization measures in coordination with the Landscape Contractor.

The Biological Monitor will be responsible for monitoring all implementation activities and for facilitating compliance with specifications and resource agency requirements. The Biological Monitor will also coordinate with the District, the Landscape Contractor, the Project Engineer, and the Resource Agencies regarding site status.

Outreach to Resource Agencies including the CCC, Corps, CDFW, and RQWCB took place as part of early coordination efforts to refine and finalize early conceptual features of this Plan and to determine regulatory permits that would be required prior to implementation of the restoration. The final version of this Plan will become a component of the proposed project that will require approval by the District as lead agency pursuant to the California Environmental Quality Act (CEQA) as well as Malibu in coordination with the CCC pursuant to the LCP Amendment.

RESTORATION OPPORTUNITIES

Opportunities for restoration are present at Upstream, Middle and Downstream portions of the ESHA, in undeveloped areas within the 50-foot buffer of the ESHA, as well as in areas that are currently developed and scheduled for demolition during later phases of the proposed project (**Exhibit 6**, ESHA Restoration Areas). The ESHA restoration areas are also depicted in relation to the proposed project in **Exhibit 7**, ESHA Restoration Areas. While restoration efforts will include planting/seeding at Upstream and Downstream ESHA, the efforts for the Middle ESHA will focus on weed abatement and stabilization due to the incised nature of the drainage. Upland restoration of the Middle ESHA will take place once the bus storage facility known as the “bus barns” are demolished during Phase 4 of the proposed project. The restoration will significantly improve the habitat conditions of the drainage and provide educational opportunities to both middle and high school students as well as for local residents that use the trail.

A field study conducted in July 2021 revealed a significant number of native species in varying stages of recovery from the Woolsey fire that swept through the area in November 2018 (**Exhibit 8a–d**, Upstream, Middle and Downstream ESHA Photos). Mature and sapling native riparian trees and shrubs were observed along the entire ESHA intermixed with non-native weedy species as well as species escaped from a landscaped setting (**Exhibit 8a,** Upstream ESHA Photos and **Exhibit 8b,** Middle ESHA Photos). Upland native scrub species dominated more open portions of the drainage particularly in the Downstream ESHA (**Exhibit 8c**, Downstream ESHA Photos). The significant cover of native riparian and upland vegetation served to guide a restoration approach that focusses on enhancing the native species present primarily with seeding and using plantings to a lesser degree to enhance existing native vegetation, especially adjacent to the looping trail and for erosion control (**Table 2**, ESHA Restoration Opportunities and Approach).

TABLE 2
ESHA RESTORATION OPPORTUNITIES AND APPROACH

ESHA Restoration Area	Restoration Approach	Implementation Schedule
Upstream ESHA		
Riparian	Enhance native trees and shrubs present with weed abatement and removal of woody debris; plant native grasses and sedges for erosion control in wetland area at this location. Banks at this location may require an erosion control blanket.	Phase 1
Upland	Enhance native plantings present with weed abatement; seed non-developed areas with coastal sage scrub species to supplement existing native plantings and to attract and support invertebrates and native birds that reside on the property; include flowing species to support butterflies. Combine plantings and seeding to complement landscaped plantings along the trail; restore developed portions of buffer with coastal sage scrub species in Phase 4.	Phase 1 and 4
Middle ESHA		
Riparian	Focus on weed abatement and stabilization (if needed) of incised portion of drainage; consider girdling any non-native tree(s) to remain in place as snag(s) for wildlife use consistent with stabilization measure(s). Stabilization will likely include the placement of an erosion control blanket.	Phase 1
Upland	Plant native coastal sage scrub shrubs to complement landscaped plantings along the trail; an understory of native shrubs will add diversity of canopy structure and provide opportunities for use as outdoor classroom; developed portions of buffer to be restored in Phase 4.	Phase 4
Downstream ESHA		
Riparian	Enhance native trees and shrubs present with weed abatement; plant shrubby willow saplings in openings after removal of non-natives and dead woody debris; seed openings with riparian mix for a diverse understory; include flowering species to attract birds and invertebrates including butterflies. Banks at this location may require an erosion control blanket.	Phase 1
Upland	Plant and seed native coastal sage scrub to complement plantings along the trail to add diversity of color, texture, and canopy structure and provide opportunities for use as outdoor classroom. Slopes at this location will likely require erosion control measures that can be addressed with contouring associated with the removal of pavement prior to planting native coastal sage scrub.	Phase 1

The following restoration activities are scheduled to take place during Phase 1 construction scheduled for summer 2024 (**Table 3**, Phase 1 ESHA Restoration Activities).

TABLE 3
PHASE 1 ESHA RESTORATION ACTIVITIES

Restoration Activity	Riparian Zone	Upland Zone
Upstream ESHA		
Weed abatement; assess snags	x	x
Install erosion control measure as needed	x	x
Plant swamp sedge (*Carex senta*) see **Table 6** and **Exhibit 9**	x	
Plant beard grass (*Leymus triticoides*) see **Table 6** and **Exhibit 9**	x	
Seed upland zone with applicable seed mix		x
Middle ESHA		
Weed abatement; assess snags; girdle myoporum tree	x	x
Install erosion control measure, as needed	x	x
Downstream ESHA		
Remove pavement; contour slope; optimize soils for planting		x
weed abatement; assess snags	x	
Install erosion control measure, as needed	x	x
Plant arroyo willow (*Salix lasiolepis*) see **Table 5** and **Exhibit 9**	x	
Plant coastal sage scrub species see **Table 5** and **Exhibit 9**		x
Seed each zone with applicable seed mix	x	x

The following restoration activities are scheduled to take place during Phase 4 construction scheduled for 2032 **(Table 4,** Phase 4 ESHA Restoration Activities). Seed mixes are specified in **Appendix 2**.

TABLE 4
PHASE 4 ESHA RESTORATION ACTIVITIES

Restoration Activity	Riparian Zone	Upland Zone
Upstream ESHA		
Remove pavement; contour slope; optimize soils for planting		x
Weed abatement; assess snags	x	x
Install erosion control measure, as needed	x	x
Plant coastal sage scrub species as per **Table 6** and **Exhibit 9**		x
Seed each zone with applicable seed mix, as needed	x	x
Middle ESHA		
Remove structures; contour slope; optimize soils for planting		x
Weed abatement; assess snags	x	x
Install erosion control measure, as needed	x	x
Plant coastal sage scrub species as per **Table 6** and **Exhibit 9**		x
Seed each zone with applicable seed mix, as needed	x	x
Downstream ESHA		
weed abatement; assess snags	x	x

IMPLEMENTATION

Site Preparation

Initial preparation will include testing of soils and bank stability, assessment, and selection of suitable bank stabilization/erosion control materials (with emphasis on natural materials such as logs, boulders, etc., if feasible) and temporary irrigation system design (as deemed necessary).

Soils and Bank Stability: A review of the U.S. Department of Agriculture Natural Resources Conservation Service Soil Survey identified the ESHA (defined as the Area of Interest) as containing 98 percent of the Cropley (coastal 40 percent); Xerorthents (landscaped 30 percent); and Urban land (25 percent) with minor components contributing 5 percent to the map unit.

The Cropley coastal soils are found on alluvial fans and basins; the parent material is comprised of alluvium derived from shale. Substrates are comprised of clay in the upper horizons and silty clay loam in the deeper horizons. Xerorthents are dry shallow skeletal soils that at this location are comprised of colluvium and residuum derived from sedimentary rock and other mixed sources. The substrates are loam in the upper layers and weathered bedrock in the deeper layers (greater than 4 feet). The Urban land component of this soil map unit refers to soils in areas of high population density in the largely built environment. These soils can be significantly changed by human-transported materials, human-altered materials, or minimally altered or intact "native" soils. Soils in urban areas exhibit a wide variety of conditions and properties and may have impervious surfaces, such as buildings and pavement. At this location, the ESHA directly abuts developed areas; however, the extant native vegetation intermixed with non-native vegetation suggests that the soils are likely native. This is consistent with the anecdotal observations of the clay substrates observed during field studies and surveys conducted at the ESHA.

Portions of the Upstream, Middle, and Downstream ESHA, however, contain paved areas within the 50-foot buffer that will be demolished in support of the restoration effort consistent with the proposed project phasing:

- **Upstream ESHA:** Of the 0.43 acres of upland restoration at the Upstream ESHA, approximately 0.15 acres contain pavement to be demolished as well as any base material that may be present during Phase 4 construction efforts. The pavement and base material will be broken up, excavated as needed, and removed for proper disposal. The removal site will be back-filled with adjacent parent material from the restoration site and contoured to remediate any existing erosion of the slope such that the grade where pavement was removed transitions gently to match the adjacent natural grade of the restoration area. Subsequent to the removal of the pavement and the base layer, should the exposed native soils show evidence of compaction, the compacted area will be disced and amended as needed to optimize the substrate for planting and seeding (**Exhibit 7)**. Soil testing is recommended to ensure that proper amendments are applied if needed.
- **Middle ESHA:** Of the 0.32 acres of upland restoration at the Middle ESHA, approximately 0.19 acres contain developed areas consisting of the bus depot, pavement, and a storm basin to be demolished during Phase 4 construction efforts. The structures, foundation, and any pavement and base material that may be present will be broken up, excavated as needed, and removed for proper disposal. The removal site will be back-filled with adjacent parent material from the restoration site and contoured to remediate any existing erosion of the slope such that the grade where the structures were removed transition gently to match the adjacent natural grade of the restoration area. Subsequent to the removal of the structures and associated base layers, should the exposed native soils show evidence of compaction, the compacted area will be disced and

amended as needed to optimize the substrate for planting and seeding (**Exhibit 7)**. Soil testing is recommended to ensure that proper amendments are applied if needed.

- **Downstream ESHA:** Of the 0.6 acres of upland restoration at the Downstream ESHA, approximately 0.17 acres contain pavement to be demolished as well as any base material that may be present during Phase 1 construction efforts. The pavement and base material will be broken up, excavated as needed, and removed for proper disposal. The removal site will be back-filled with adjacent parent material from the restoration site and contoured to remediate any existing erosion of the slope such that the grade where pavement was removed transitions gently to match the adjacent natural grade of the restoration area. Subsequent to the removal of the pavement and the base layer, should the exposed native soils show evidence of compaction, the compacted area will be disced and amended as needed to optimize the substrate for planting and seeding (**Exhibit 7)**. Soil testing is recommended to ensure that proper amendments are applied if needed.

Erosion Control Materials: Erosion control measures such as an erosion control blanket will be put into place prior to planting and seeding the ESHA restoration areas for the purpose of limiting soil erosion along the banks of the ESHA, retaining soil moisture to promote seed germination and protect seed/seedlings and planting stock during heavy rainfall or winds enabling better vegetation establishment (Erosion Control Technology Council.org). Due to the presence of native vegetation to be retained on the banks of the EHSA placement of the erosion control measure shall be determined in coordination with the Biological Monitor. The erosion control product shall be weed free, wildlife friendly, and consist only of natural components (i.e. wood fibers, straw, jute, and/or coir), and shall be 100 percent biodegradable.

Temporary Irrigation Design: Irrigation will be provided to the restoration site during the two-year maintenance and monitoring period to ensure the successful establishment of native plant species. Irrigation of the ESHA restoration areas with a temporary irrigation system will require a design by an irrigation specialist who will provide construction drawings for use by the Landscape Contractor for implementation, operation, and maintenance. The Landscape Contractor will be responsible for providing irrigation to the restoration site in order to optimize plant establishment, health, and longevity. The irrigation system design and specified components will be consistent with site conditions (i.e., soils, steep banks, presence of erosions control features, etc.). The water source will come from the school campus.

While it is recommended that a temporary irrigation system be installed, another option for on-site irrigation is the use of a water truck or water buffalo. A water truck (or other vehicle-mounted/tank water source) would be used to apply supplemental water to establish container plant species and seeded areas during installation, the 90-day maintenance period, and during the 2-year maintenance and monitoring period. Such irrigation shall not be broadly sprayed onto the site at high pressure from the truck/tank but shall only be applied via hoses fitted with low-force wands and/or via a temporary drip irrigation system. Watering hoses (and/or a temporary drip irrigation system) shall be operated in a manner that avoids damaging existing native plants and other biological resources.

On-site Preparation

On-site preparation will consist of the designation of staging areas, the staking of restoration site boundaries, assessment of existing standing snags for removal or to be retained in place, protective flagging of native species including snags or other woody debris to be retained in place, placement of salvaged woody debris as deemed feasible, initial weed clearing, staking of temporary irrigation line and head locations and irrigation system installation, placement of bank stabilization and/or erosion control materials, and installation of protective/educational signage, as needed.

Staging and Access: The Contractor shall obtain advance approval from the District for the location(s) of storage/staging areas for trucks, dumpsters, and any other equipment, in addition to appropriate/necessary access roads, parking permits, and other forms of approval. Construction equipment, vehicles, and materials shall not be stored in existing drainages.

Staking of Restoration Site: The Biological Monitor will stake the riparian boundaries and the 50-foot buffer using a navigable Geographic Information System (GIS) map of the Upstream, Middle, and Downstream Restoration Areas prior to the start of installation work in each of these sites. Stakes shall be checked on a regular basis to ensure that the riparian and upland areas are clearly demarcated.

Assessment of Snags: The 2018 Woolsey fire burned significant portions of the ESHA, including the majority of the trees. Dead trees tend to fall at more frequent rates than live trees, creating a potential hazard for persons working in the area or in close proximity to these trees. A tree risk assessment shall be performed by a Certified Arborist to identify any trees (burned or unburned) that present a safety hazard. The Certified Arborist shall determine when a tree can be retained in place or present a fall or limb-drop hazard thus posing unsafe working conditions for field personnel implementing and/or monitoring tasks associated with ESHA restoration efforts. All trees located in the riparian boundary of the ESHA to be retained in place shall be trimmed by a tree service contractor to remove excess deadwood, while leaving the main tree structure in place in consultation with the certified arborist. Trimming excess deadwood removes unstable vegetative debris that can drop unexpectedly and reduces the likelihood of tree failure under normal weather conditions. Due to the dry vegetation in the work area all gas powered equipment used must have spark arresters to minimize the risk of fire. Any snag to be retained in place will provide valuable habitat for numerous ecosystem niches that are otherwise unavailable if removed.

Trimming of riparian trees coupled with weed abatement (see below) also plays an important role in allowing the flow of water to pass through the ESHA unimpeded towards the culvert under Morning View Drive and on to the Pacific Ocean.

Protection of Native Vegetation: Due to the presence of significant stands of native vegetation and native riparian trees and saplings, a Biological Monitor knowledgeable of the riparian and upland vegetation of the ESHA shall place protective flagging on all native plant individuals to be retained in place. Likewise, a Certified Arborist shall place protective flagging on all riparian trees and saplings and also on snags to be retained in place based on the results of the tree risk assessment. Protective flagging of native species will inform the Landscape Contractor the areas where care shall be taken to avoid damage to existing native habitat. Coordination between the certified arborist and Biological Monitor will ensue that protective flagging of plants and trees, saplings, and snags can take place concurrently to ensure that work efforts are as efficient as possible.

Initial Weed Control: The weed control measures described in this section shall be implemented by the Landscape Contractor to ensure weed-free conditions along the entire length of the ESHA drainage prior to initiating planting and seeding activities during Phase 1 and Phase 4 restoration efforts. Weed eradication will include hand-pulling of weeds, use of weed whips, and/or foliar treatments of appropriate herbicides, as determined by the Landscape Contractor coordination with the Contractor's licensed Agricultural Pest Control Advisor. The use of herbicides will be avoided and/or minimized to the extent practicable. The Landscape Contractor shall be responsible for posting of all herbicide applications, including time of safe re-entry. Only herbicides approved by the U.S. Environmental Protection Agency

(USEPA) for wetlands areas shall be used within the ESHA boundaries. The following weed abatement priorities for the ESHA are recommended based on multiple site visits conducted in support of this Plan:

- **Upstream ESHA:** non-native species include St. Augustine grass, shortpod mustard, Russian thistle, saltcedar (*Tamarix* spp.), flatsedge, common plantain, bristly ox-tongue, garden nasturtium, cheeseweed, and common non-native annual grasses. The focus of weed abatement efforts at this location is St. Augustine grass as it dominates the swale area of the upstream ESHA.
- **Middle ESHA:** non-native species include an extensive patch of prickly pears that dominates both banks of the ESHA behind the bus depot, myoporum (*Myoporum laetum*), and Spanish bayonet (*Yucca aloifolia*), shortpod mustard, tree tobacco, castor bean with a focus on removing the above-ground portions of the prickly pear, and Spanish bayonet so that the below-ground portions can continue to provide some bank stabilization. All tree tobacco and castorbean will require removal and the area patrolled for sprouts of these invasive weed species on a regular basis. While weed abatement will benefit the growth and establishment of the exiting riparian trees, it will take a year or more for the native riparian overstory to develop. Therefore, it is recommended that the myoporum tree in the drainage be girdled and left as a snag for wildlife use.
- **Downstream ESHA:** non-native species at this location include many of the ones already listed. Castorbean is dominate here and should be the focus of weed abatement efforts. Also, willows downed as a result of past winter storms and the Woolsey Fire have resulted in piles of large woody debris that should be evaluated by a Certified Arborist.

Vegetation disturbance consisting of weed abatement and tree trimming/removal shall take place outside the nesting bird season (i.e., February 1– August 31). Weed abatement and/or tree trimming performed during the nesting bird season shall be performed once a Biologist has determined that no active nests are present following a nesting bird survey within 72 hours of the disturbance of vegetation. All vegetation removed during weed abatement should be disposed of at a landfill.

Staking of Irrigation Line/Installation: The Landscape Contractor will be responsible for installation of the system as per the construction drawings. The Landscape Contractor will secure all required municipal permits for installation and maintenance of the irrigation system and arrange for any required municipal inspections. Copies of all irrigation system permits and/or inspection documentation will be provided to the District. Container plants and seed mix will be temporarily irrigated to facilitate plant establishment and seed germination. Irrigation techniques and best management practices for restoration of riparian and upland habitats in southern California shall be employed for restoration of the ESHA. Irrigation techniques that encourages deep root growth instead of surface root development will be used (i.e. infrequent deep watering rather than daily light watering). The supplemental irrigation regime will be determined together by the Landscape Contractor and the Biological Monitor and will depend on site and weather conditions, although the typical irrigation regime is to encourage the plants to adapt to a natural water regime by supplementing winter precipitation between October and April.

Bank Stabilization/Erosion Control: The Contractor shall install suitable erosion control measures immediately following the completion of any contouring to take place subsequent to demolition of exiting pavement during Phase 1 and Phase 4 construction in accordance with Best Management Practices. Erosion control measures may include mid-slope straw wattles (fully natural and biodegradable; (i.e., 'photo-degradable' products are unacceptable), or other equivalent measures. Mid-slope straw wattles shall be placed at a suitable vertical spacing to minimize erosion especially on the upland slopes in the Downstream ESHA and may remain in place following project completion (e.g., straw wattles). Erosion

control measures may also include Erosion Control Blankets to be installed on portions along the entire ESHA with unvegetated banks.

The Contractor shall monitor the 5-day weather forecast. If it is forecasted for any precipitation, work activities shall involve the securing of the site so as no materials may enter or be washed into the drainage. The site shall be completely secured one day prior to precipitation events. During periods of precipitation, no construction activities may occur, except for those involving the prevention of materials from entering drainages.

Protective/Educational Signage: Once the Phase 1 and Phase 4 restoration plantings and seedings have been installed, the site will be vulnerable to trampling. Signage will provide educational and interpretive opportunities for the District to inform the students and the public of the restoration as well as of the need to stay on the trail due to the sensitivity of the upland and riparian habitats.

Plant and Seed Palettes

Restoration plantings will consist of container plants and seed appropriate for riparian as well as upland habitats. Container plants and seed mixes are specified in this section; however, prior to implementation, they will be finalized based on availability and subject to substitutions as deemed applicable and in coordination with the Biological Monitor. Materials will be locally sourced from the area and in general from the same watershed in order to preserve regional genetic integrity. There are several options for the use of locally sourced seed. Many reputable nurseries that specialize in native species record the sources of seed they propagate and can be a good source for locally sourced plant material. The California Native Plant Society's (CNPS's) Calscape website lists reputable native plant nurseries for the plant palettes specified in this Plan (CNPS 2021, also see **Appendix 1**). Reputable sources of seed include S&S Seed and the Theodore Payne Foundation. Alternatively, seed can be collected from native patches of vegetation on site or can be contract grown by professional seed collectors and/or students supervised by knowledgeable biologists.

The plant and/or seed palettes for the Upstream, Middle, and Downstream ESHA together with the assigned Phase for installation can be found in Tables 5 through 7. The species used are consistent with recommendations provide by the Los Angeles/Santa Monica Mountains Chapter of the CNPS for landscaping in the Santa Monica Mountains and species names have been updated to reflect the current scientific and common name changes designated by the Jepson Herbarium. Species that have no assigned common name by the Jepson Herbarium, follow the Calflora website.

TABLE 5
DOWNSTREAM ESHA PLANT PALETTE- PHASE 1

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone			
Salix lasiolepis	Arroyo willow	1	20
Upland Zone			
Planting Group A: 20 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	20
Eriogonum cinereum	ashyleaf buckwheat	1	20
Salvia leucophylla	purple sage	1	20
Planting Group B: 5 groups of 3 plants each planted 4 feet OC			
Isocoma menziesii	coastal goldenbush	1	5
Baccharis pilularis	Coyote bush	1	5
Peritoma arborea	bladderpod	1	5
Planting Group C: 17 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	17
Artemisia californica	California sagebrush	1	17
Peritoma arborea	bladderpod	1	17
Planting Group D: 16 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	16
Peritoma arborea	bladderpod	1	16
Muhlenbergia rigens	deergrass	1	16
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	**224**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.
OC: On Center

TABLE 6
UPSTREAM ESHA PLANT PALETTE–PHASE 1 AND 4

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone–Phase 1			
Carex senta	swamp sedge	2" plug	**100**
Leymus triticoides	creeping wild rye	2" plug	**100**
Upland Zone–Phase 4			
Planting Group A: 10 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Salvia leucophylla	purple sage	1	10
Planting Group C: 8 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	8
Artemisia californica	California sagebrush	1	8
Peritoma arborea	bladderpod	1	8
Planting Group D: 8 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	8
Peritoma arborea	bladderpod	1	8
Muhlenbergia rigens	deergrass	1	8
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	**308**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.
OC: On Center

TABLE 7
MIDDLE ESHA PLANT PALETTE-PHASE 4

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Planting Group A: 10 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Salvia leucophylla	purple sage	1	10
Planting Group C: 10 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	10
Artemisia californica	California sagebrush	1	10
Peritoma arborea	bladderpod	1	10
Planting Group D: 10 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	10
Peritoma arborea	bladderpod	1	10
Muhlenbergia rigens	deergrass	1	10
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	**120**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.
OC: On Center

Recommendations for Planting and Seeding

Plants purchased and/or contract grown from a reputable native plant nursery should be installed generally between October and March during periods when weather and soil conditions are suitable. In this way, seasonal rains can be used to facilitate appropriate establishment and germination. The planting locations at the Upstream and Downstream ESHA locations will be determined by the Biological Monitor in coordination with the Landscape Contractor and will be generally consistent with **Exhibit 9,** Planting Plan for Downstream, Middle, and Upstream ESHA. An overview of the restoration is also provided in relation to the project (**Exhibit 10**, Planting Plan for Downstream, Middle, and Upstream ESHA). Container plants will be distributed throughout the restoration site using colored flagging. Since Phase 4 construction is planned for approximately a decade after Phase 1, planting trees in the riparian zones of the Middle and Downstream ESHA will be considered if needed and will be based on established performance goals as described below.

Contractor staffing and container plants delivery shall be coordinated to facilitate immediate installation (same day) and no materials shall be stored uninstalled onsite overnight.

The Contractor shall follow the specific container plant installation methods described below. Alternate planting methods may be used (e.g., hand digging rather than augering of planting holes in rocky or moist soils) with the prior approval of Biological Monitor. No chemical soil amendments or mulch shall be used in the container planting holes or basins.

- Planting holes shall be machine augered to a suitable width and depth prior to container plant installation. The typical planting hole is approximately twice the width and depth of the rootball.
- Planting holes shall be filled with water immediately prior to plant installation, and the water shall be allowed to percolate fully into the soil prior to planting.
- Plants shall be removed from the containers in a manner that avoids damage to the rootball. Extended tap root development and minor rootbound conditions shall be appropriately treated via pinching and loosening of appropriate portions of the rootball prior to planting.
- Each plant shall be installed so that the "collar" or soil level is slightly higher than the surrounding finished grade, to allow for partial plant settling over time.
- The excavated soil backfill material shall be placed into the planting hole to the existing grade, and gently compacted around the rootball.
- A temporary watering basin approximately two- to three-feet in diameter shall be created around each plant to facilitate the initial watering-in of the plants. The exposed upper sides of the rootball shall be covered with backfill material sloping down into the basin.
- Each plant shall be initially watered-in by hand; the watering basins shall be filled using a hose fitted with a low-force wand. The water spray shall be directed to the outer part of the watering basin to avoid damage to the plant roots or crown.

Native seed mixes will be applied to the site via hand broadcast and generally performed between October and January during periods when weather and soil conditions are suitable. Riparian zones in Upstream, Middle, and Downstream ESHA will be seeded according to phase in openings within existing riparian vegetation (**Appendix 2,** see Riparian Seed Mix). Upland zones in the Upstream and Downstream ESHA will be seeded with care to avoid existing upland vegetation (**Appendix 2,** see Santa Monica Mountains Seed Mix). Seed will be applied to the erosion control blanket according to the directions supplied by the manufacturer where applicable. Since Phase 4 construction is planned for approximately a decade after Phase 1, seeding during Phase 4 will be performed if needed and will be based on established performance goals as described below.

Maintenance Plan

90-Day Site Maintenance: The primary goal of the 90-day maintenance period is to control non-native plant species successfully establish the specified native plant species in each site. Weed species shall not be allowed to mature; set seed; or otherwise inhibit the germination, growth, and establishment of native plant species at any time during the 90-day maintenance period.

The 90-day maintenance period shall begin immediately after the installation site has been accepted as complete and shall extend for 90 days. The 90-day maintenance period shall be performed along the entire ESHA.

- The Contractor shall conduct non-native weed control activities in a manner that avoids damaging planted/seeded native plants, native plant recruits, and onsite/adjacent biological resources. Weed control shall primarily consist of hand-pulling; however, other methods such as weed whipping

seedlings can be used. The use of herbicides shall be avoided or minimized to the extent practicable. All green waste shall be immediately disposed of (same day as removed) in a landfill off site.

- The Contractor shall be responsible for ensuring successful establishment of container plant species and seed mixes and shall reseed/replant using approved species in order to compensate for subsequent plant failure and/or poor health. Plant replacement will occur prior to between October 15 and April 1 during periods when weather and soil conditions are suitable for plant germination and establishment. The Biological Monitor will make regular inspections of the work to assess the condition of all plants and to determine any remedial measures necessary to provide adequate survival and coverage.
- Insects, plant disease, herbivores, and other pests shall be closely monitored during the maintenance period. Diseased or infected plants shall be immediately disposed of offsite at an appropriate landfill to prevent infection of on-site resources. Where possible, biological controls shall be used instead of pesticides or herbicides. Pesticide use will comply with local codes and regulations and shall only occur with the permission of the District.

Long-term Maintenance: Maintenance will be performed on a monthly basis for two years to optimize native habitat establishment and to prevent the growth and dispersal of weed seeds on the restoration site. Avoidance measures will be implemented to protect wildlife (e.g., amphibians, nesting birds) during maintenance tasks. The Biological Monitor will coordinate with the Contractor on appropriate maintenance methods to optimize site performance while avoiding adverse impacts to wildlife species. The use of herbicides or other pest-control measures will be minimized to the extent feasible and performed by professional applicators holding valid certifications and or licenses. Standing snags retained on site for wildlife value will be assessed so as to not create a safety issue. Maintenance tasks include the following:

- **Weed control:** Weeds will be removed on a regular basis, as necessary, before they set seed and/or before they reach approximately 12 inches in height. The existing exotic ruderal vegetation must be removed to prevent further invasion. Use of hand tools, chainsaws, and weed whippers will likely be the preferred methods for weed removal. All weeded material shall be removed from the site.
- **Site repair/erosion control/irrigation system:** The Contractor will be responsible for providing erosion control as appropriate, to prevent damage to the ESHA and immediately adjacent areas. Both the riparian and upland zones will be stabilized with erosion control features prior to planting and seeding to encourage the establishment of stabilizing vegetation. Should significant storm events occur that cause scouring and accumulation of vegetation, the installation of additional erosion control measures may be required and, in extreme cases, may include planting additional riparian and upland vegetation. In consultation with the District and the Contractor, the assigned Biological Monitor will determine the need for and approve any additional or necessary erosion control measures and plantings. The Contractor will also be responsible for the maintenance and upkeep of the temporary irrigation system.
- **Trash removal:** The Contractor will keep the restoration area free of all trash and debris. All trash will be moved off the site and deposited at an appropriate location.
- **Pest and disease control**: It is not anticipated that local wildlife (e.g., rabbits, pocket gophers, and ground squirrels) will cause any serious damage to enhancement plantings within the ESHA restoration areas; however, if the Contractor determines that plantings are being jeopardized by wildlife, corrective measures such as organic, nontoxic deterrents and fencing/plant cages may be used. Likewise, if the Contractor identifies potential diseased vegetation that could jeopardize the

health of any enhancement plantings, an arborist or other expert will be contracted to identify potential issues before any permanent occurs.

- **Site protection:** Site protection of the ESHA will continue to be a priority after the implementation of restoration efforts. The District in coordination with the Contractor will provide adequate protection of the restored zones against herbivores, traffic, vandalism, or other intrusions by erecting signage along the looping trail. Damaged areas will be repaired within two weeks. Maintenance paths through planted areas will be created to minimize damage.

Biological Monitoring: The Biological Monitor will oversee preliminary plant material coordination (e.g., container plant purchases, seed mix purchases, and/or plant/cuttings/seed collection, container plant propagation); restoration site preparation; installation; and long-term performance during all phases of construction. Monitoring will consist of monthly site inspections for two years after installation in each portion of the drainage: Downstream, Middle, and Upstream ESHA. The Biological Monitor will also be responsible for providing site status documentation and for facilitating the protection of natural resources during long-term maintenance activities for the site. Since Phase 4 construction is planned for approximately a decade after Phase 1, the Biological Monitor will determine the need for planting additional trees in the riparian zones of the Middle and Upstream ESHA based on the evaluation of performance goals. Biological monitoring tasks include the following:

Baseline Data Collection and Mapping: Baseline transect data collection will take place prior to project implementation to inform performance goals. The approach for informing performance goals will be to use a combination of quantitative and qualitative data due to the heterogeneity of the habitats at each ESHA location. Mapping of transects will be GIS-based and rectified for loading onto field computers. Thus, two 100-foot transects will be located in each ESHA restoration location: Upstream, Middle, and Downstream. Transect #1 will be located on the pavement to be demolished and revegetated. Transect #2 will located in the upland portion of the ESHA. To evaluate the riparian zone of each ESHA restoration site, permanent photographic documentation stations will be established to record habitat improvement qualitatively. The approach for setting performance goals based on the described preliminary transects and their locations may be modified to accurately inform the subject goals. The following performance goals are proposed:

- For transect #1 (hardscape demo area):
    - The native cover class shall reach 20 percent in Year 1 and 40 percent in Year 2 with the native cover class comprised of both woody and herbaceous native species.
    - The non-native cover class shall be 10 percent or less and 0 percent of species listed by the California Exotic Pest Plant Council in Year 1 and Year 2.
    - The diversity of native species shall be at least 5 in Year 1 and greater than 5 in Year 2.
- For transect #2 (upland restoration):
    - The native cover class shall be at least 40 percent in Year 1 and greater than 40 percent in Year 2 with the native cover class comprised of both woody and herbaceous native species.
    - The non-native cover class shall be 10 percent or less and 0 percent of species listed by the California Exotic Pest Plant Council in Year 1 and Year 2.
    - The diversity of native species shall be at least 5 in Year 1 and greater than 5 in Year 2.

- For the riparian zone: performance will be based on photo-documentation of the riparian zone at each ESHA location. Year 1 qualitative description of the site shall include the number of native woody species/riparian trees, number of individuals of each species, approximate height/canopy diameter/health, and a description of understory species (woody and/or herbaceous). For Year 2, the data collected in Year 1 shall be repeated showing an increase in tree height and canopy diameter, good health, and continued presence of understory species, including woody understory species.

Maintenance Monitoring: The Biological Monitor will monitor the maintenance activities performed by the Contractor to ensure successful site enhancement. The Biological Monitor will meet with the Contractor, as necessary, during regularly scheduled monthly site visits to discuss site conditions and recommended remedial measures. Potential remedial maintenance measures may include the following:

- The Biological Monitor will discuss with the field crews, as deemed necessary, the differences between invasive, problem weed species and desired native species (frequency will be based on field personnel changes and field conditions).
- The Biological Monitor will coordinate with the Contractor on an ongoing basis regarding appropriate weed control measures to facilitate the successful control of weed species and establishment of native plant species.
- In the event of herbivore damage, erosion damage, vandalism, or other types of site damage, the Biological Monitor will make appropriate recommendations to minimize future damage to the site. Possible protection measures may include additional fencing, straw bales, and/or signage.
- The Biological Monitor will coordinate with the Contractor regarding appropriate revegetation measures in the event that large open areas devoid of vegetation are created as a result of weed abatement activities, such as the use of seed collected from on-site plantings.
- The Biological Monitor will coordinate with the Contractor regarding the control of insects, ground squirrels, and other herbivores, along with fungi, rust, and other plant diseases and infestations. Recommended control measures will include, but will not be limited to, biological control methods and herbicides. No chemical or mechanical pest control will be performed without prior coordination with the Biological Monitor.

Performance Monitoring: The Biological Monitor will evaluate the performance of the habitat enhancement effort against the performance goals as described above or modified based on the results of baseline data collection.

Annual Reporting: The Biological Monitor will be responsible for coordinating with the District, its Contractor, and all applicable resource agencies regarding site conditions, vegetation performance, and potential remedial measures. For this, annual monitoring reports will be prepared based on quantitative/qualitative surveys (e.g., vegetation transects) to document improvement of habitat functions and values of the restoration site.

Psomas appreciates the opportunity to assist with this project. If you have any questions, please contact Irena Mendez, PhD at 310.488.5645 or Irena.Mendez@Psomas.com.

Sincerely,

PSOMAS

Ann M. Johnston
Vice President/Principal

Irena Mendez, PhD
Senior Project Manager

Attachments: Exhibits 1 through 10
Appendices 1 and 2

R:\Projects\1SAN\082310\ESHA Restoration\ESHA Restoration Plan-092921.docx

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Project Location

Exhibit 1

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

850 425 0 850 Feet

PSOMAS

(Rev: 4-29-2021 MMD) R:\Projects\1SAN\082310\Graphics\ESHA_Restoration\Conceptual_Plan\ex_ProjectLocation_LV_RL.pdf



Source: USGS 7.5 Minute Quadrangle
Point Dume
Township: 02S
Range: 19W
Section: 01

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USGS 7.5-Minute Digital Quadrangle

Exhibit 2

Malibu Middle and High School Specific Plan and LCP Amendment Project

N
W E
S

2,000 1,000 0 2,000
Feet

PSOMAS

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Aerial Source: Hexagon Geosystems 2018

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Location of ESHA

Exhibit 3

Malibu Middle and High School Specific Plan and LCP Amendment Project

N
W E
S

500 250 0 500

Feet

PSOMAS

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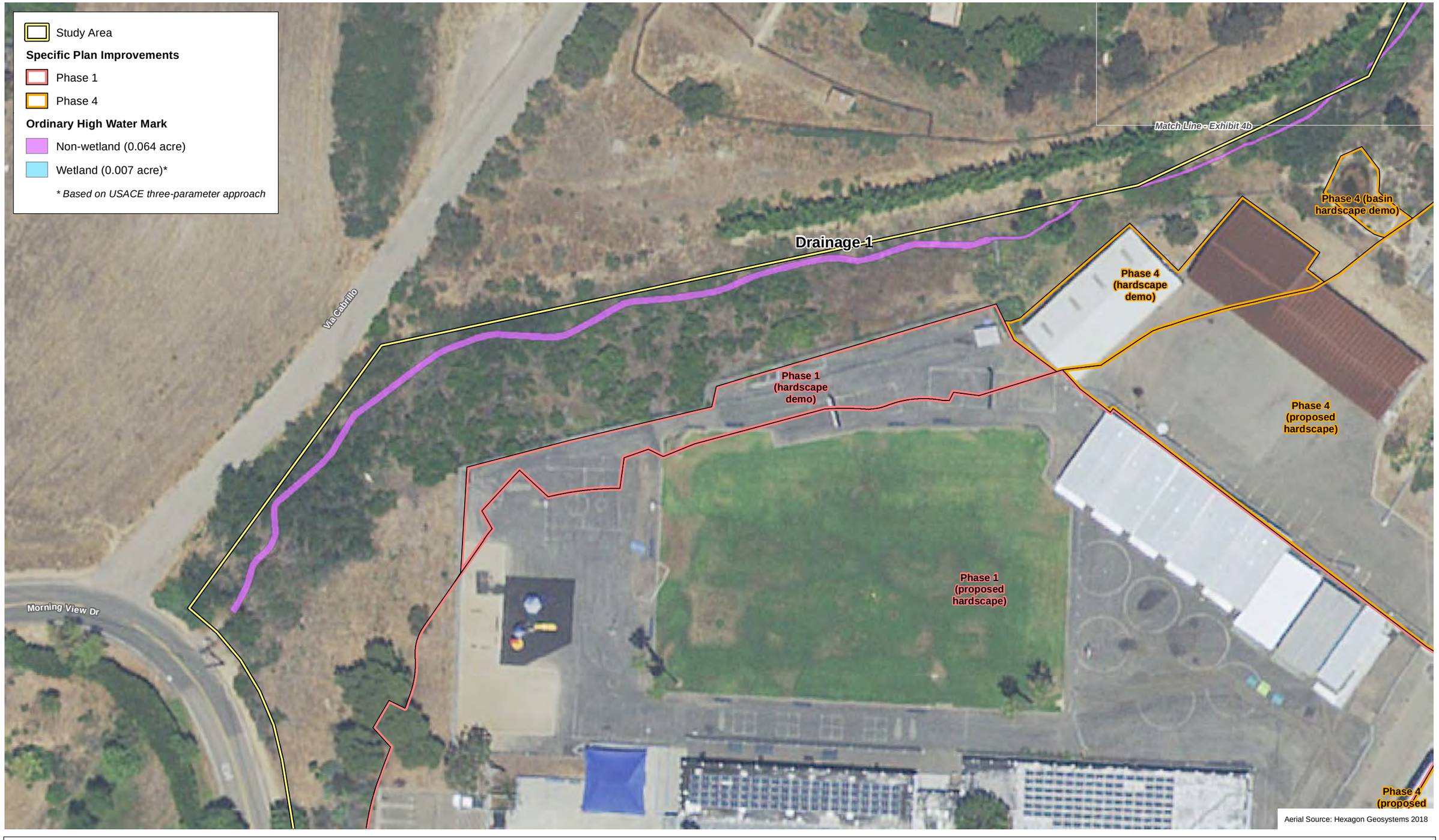

Aerial Source: Hexagon Geosystems 2018

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Jurisdictional Resources – Ordinary High Water Mark

Exhibit 4a

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

(Rev: 09/28/2021 MMD) R:\Projects\1SAN\082310\Graphics\ESHA_Restoration\Final_Plan\ex_OHWM_JD.pdf

Study Area

Specific Plan Improvements

Phase 1

Phase 4

Ordinary High Water Mark

Non-wetland (0.064 acre)

Wetland (0.007 acre)*

** Based on USACE three-parameter approach*

Drainage 1

Phase 4 (hardscape demo)

Phase 4 (proposed hardscape)

Match Line - Exhibit 4a

Aerial Source: Hexagon Geosystems 2018

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Jurisdictional Resources – Ordinary High Water Mark

Exhibit 4b

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50

Feet

PSOMAS

(Rev: 09/28/2021 MMD) R:\Projects\1SAN\082310\Graphics\ESHA_Restoration\Final_Plan\ex_OHWM_JD.pdf

Study Area

Top of Bank/Riparian Canopy (0.69 acre)

Specific Plan Improvements

Phase 1

Phase 4

Match Line - Exhibit 5b

ESHA

Via Cabrillo

Morning View Dr

Phase 4 (basin hardscape demo)

Phase 4 (hardscape demo)

Phase 1 (hardscape demo)

Phase 4 (proposed hardscape)

Phase 1 (proposed hardscape)

Phase 4 (proposed

Aerial Source: Hexagon Geosystems 2018

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Jurisdictional Resources – Top of Bank/Riparian Canopy

Exhibit 5a

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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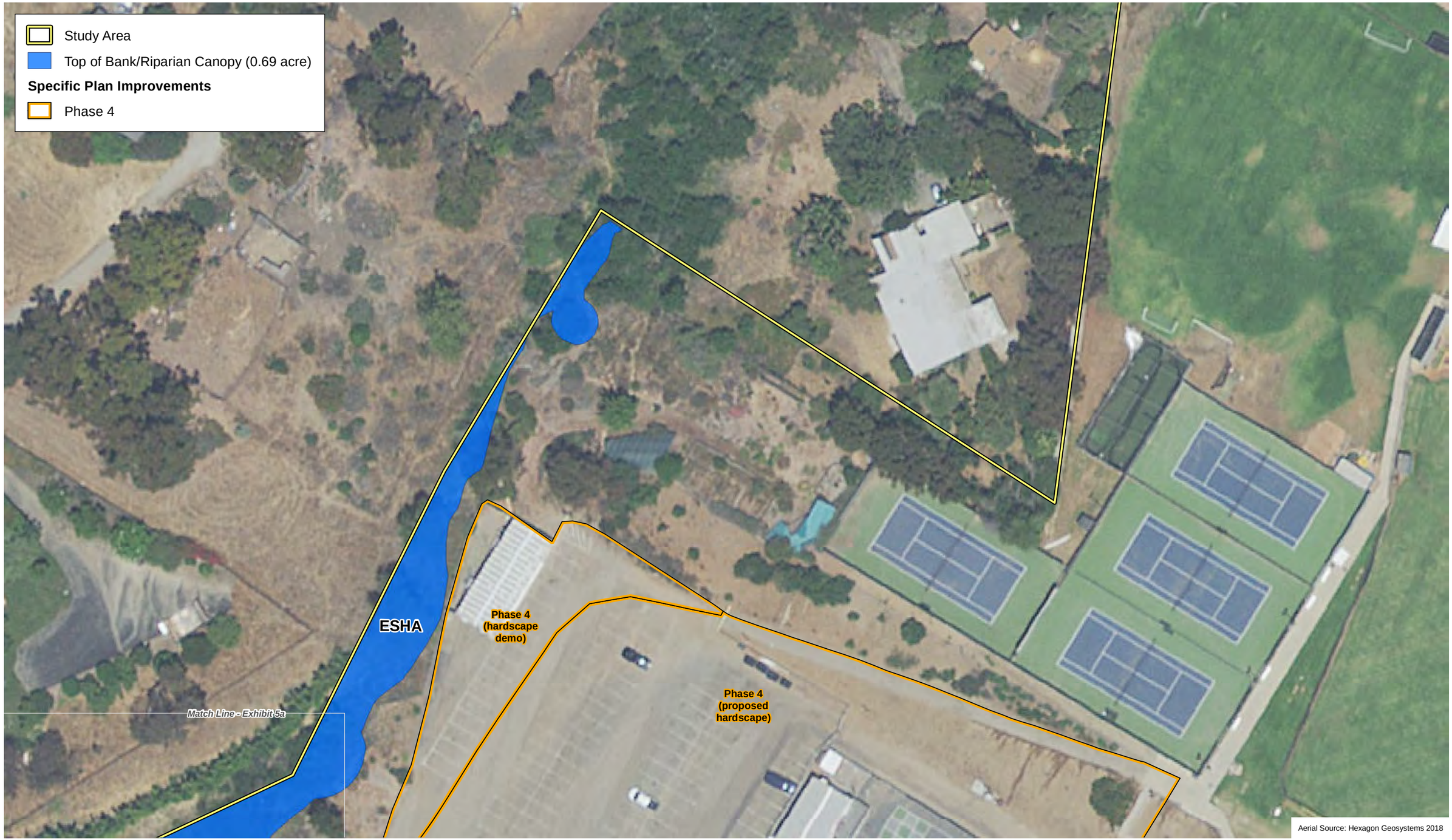

Aerial Source: Hexagon Geosystems 2018

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Jurisdictional Resources – Top of Bank/Riparian Canopy

Exhibit 5b

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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ESHA Restoration Areas

Exhibit 6a

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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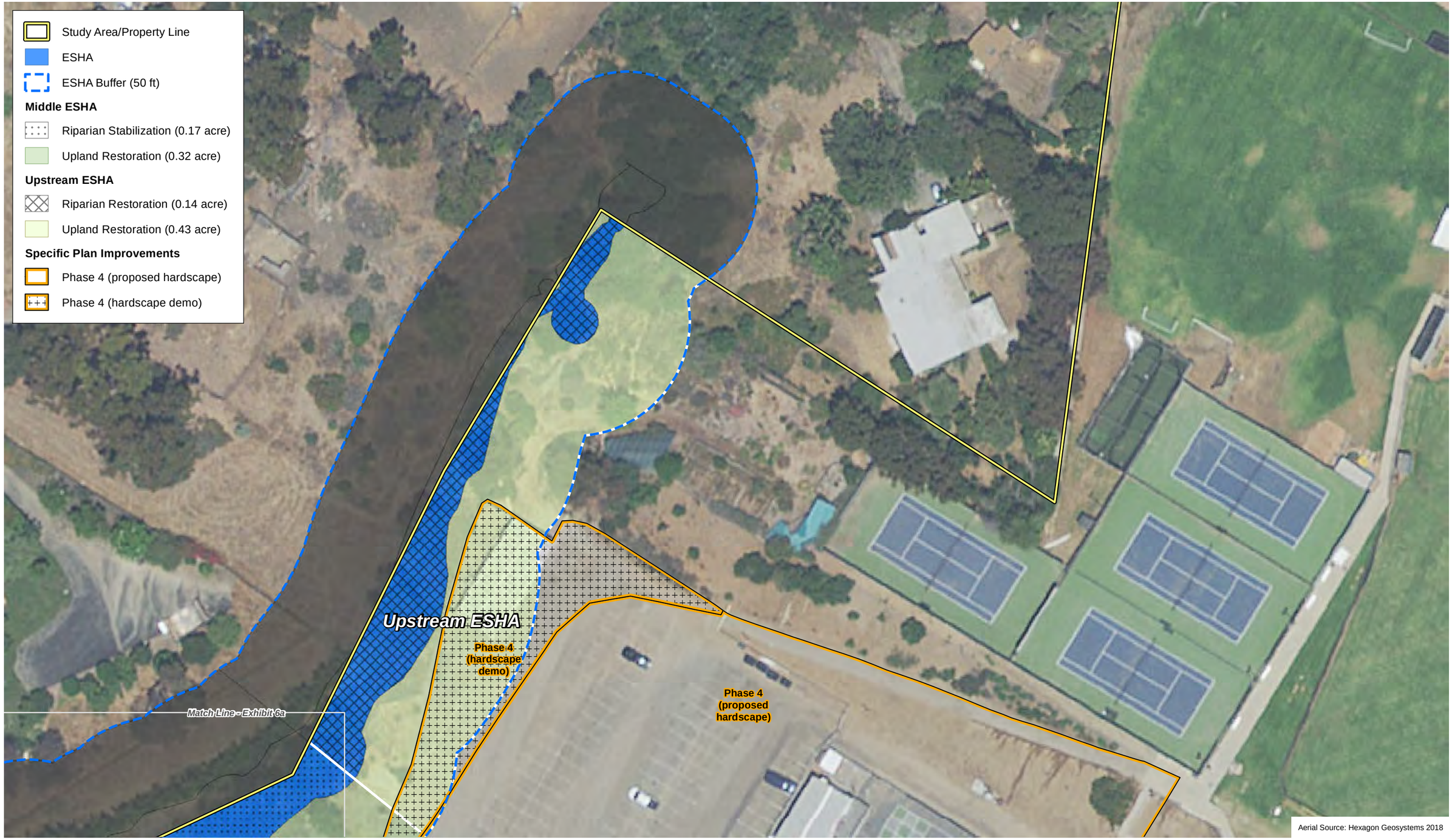

Aerial Source: Hexagon Geosystems 2018

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ESHA Restoration Areas

Exhibit 6b

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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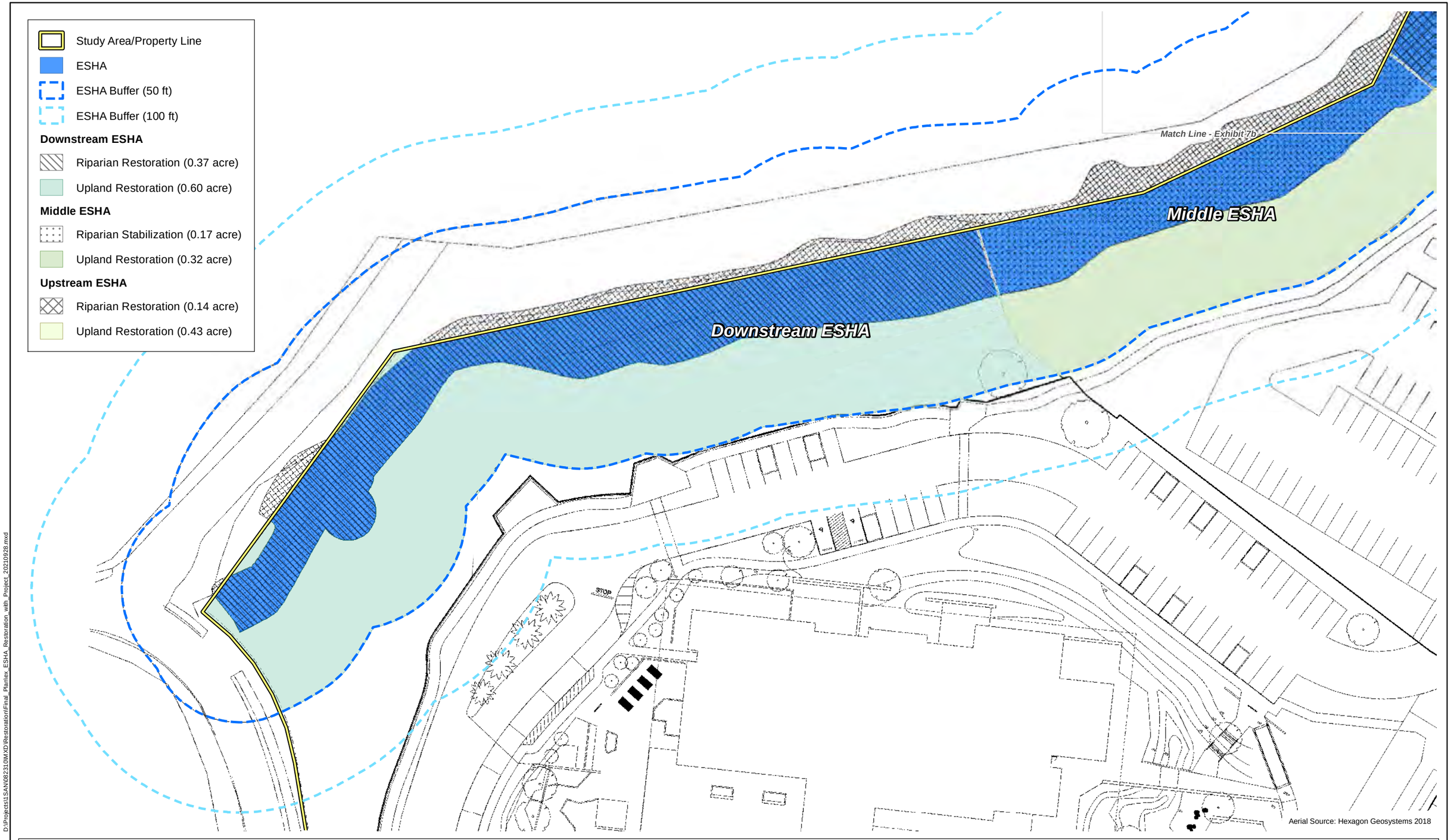

Aerial Source: Hexagon Geosystems 2018

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ESHA Restoration Areas

Exhibit 7a

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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Aerial Source: Hexagon Geosystems 2018

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ESHA Restoration Areas

Exhibit 7b

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50

Feet

PSOMAS

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Photo 2


Photo 1


Photo 4


Photo 3


Photo 5

Upstream ESHA

Phase 4 (hardscape demo)

Phase 4 (proposed hardscape)

Study Area/Property Line
ESHA
ESHA Buffer (50 ft)
Specific Plan Improvements
Phase 4 (proposed hardscape)
Phase 4 (hardscape demo)

Aerial Source: Hexagon Geosystems 2018

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Upstream ESHA

Exhibit 8a

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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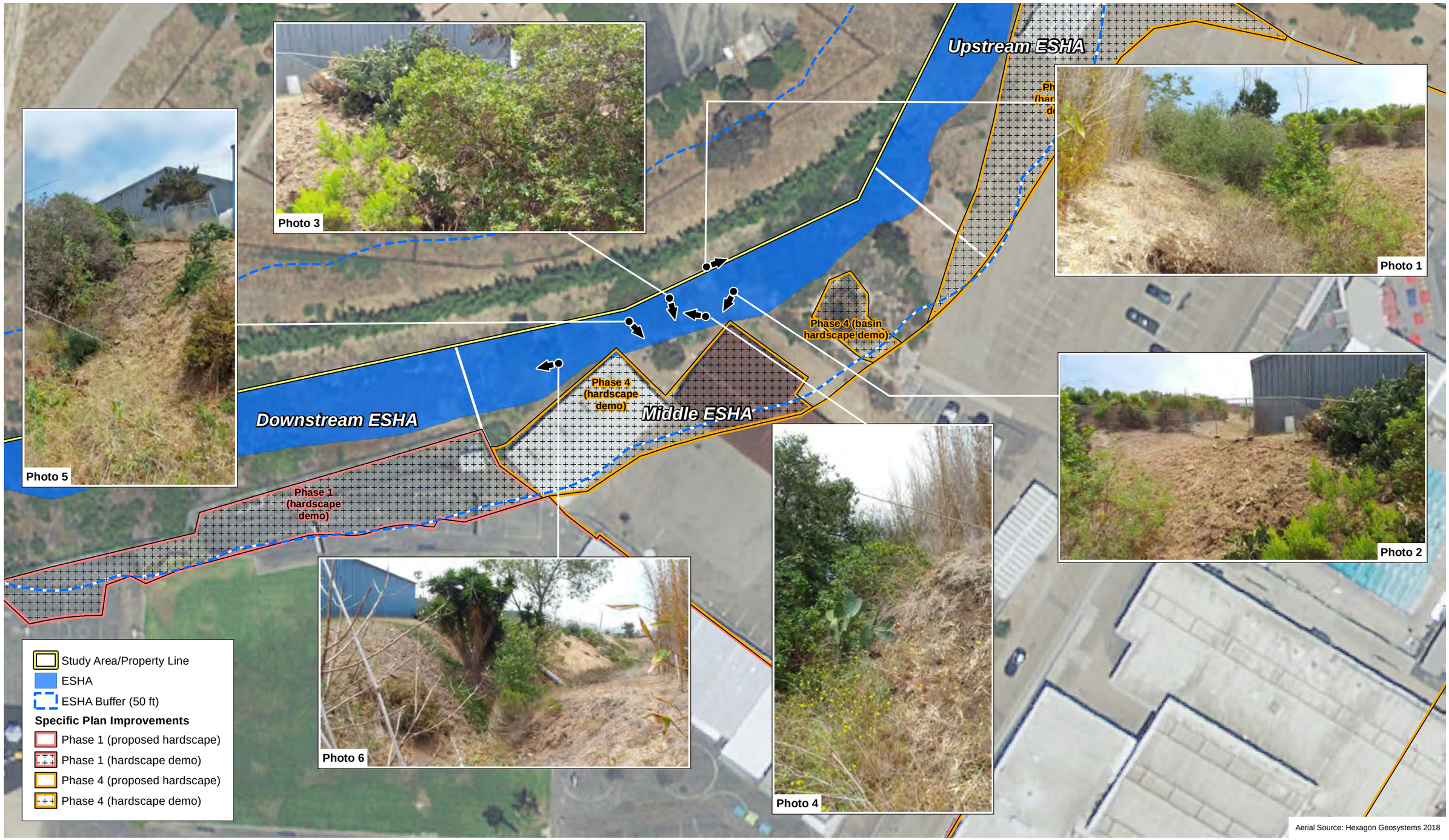

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Middle ESHA

Malibu Middle and High School Specific Plan and LCP Amendment Project

Exhibit 8b

N W E S 50 25 0 50 Feet

PSOMAS

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Downstream ESHA

Exhibit 8c

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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Downstream ESHA

Exhibit 8d

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

(Rev: 09/28/2021 MMD) R:\Projects\1SAN\082310\Graphics\ESHA_Restoration\Final_Plan\ex_ESHA_Photos.pdf

Study Area/Property Line

ESHA

ESHA Buffer (50 ft)

ESHA Buffer (100 ft)

Downstream ESHA

Riparian Restoration (0.37 acre)

Upland Restoration (0.60 acre)

Middle ESHA

Riparian Stabilization (0.17 acre)

Upland Restoration (0.32 acre)

Specific Plan Improvements

Phase 1

Phase 4

Planting Types

A California fuchsia *(Epilobium canum)*; ashyleaf buckwheat *(Eriogonum cinereum)*, purple sage *(Salvia leucophylla)*

B coastal goldenbush *(Isocoma menziesii)*, Coyote bush *(Baccharis pilularis)*, bladderpod *(Peritoma arborea)*

C black sage *(Salvia mellifera)*, California sagebrush *(Artemisia californica)*, bladderpod *(Peritoma arborea)*

D ashyleaf buckwheat *(Eriogonum cinereum)*, bladderpod *(Peritoma arborea)*, deergrass *(Muhlenbergia rigens)*

E black sage *(Salvia mellifera)*, ashyleaf buckwheat *(Eriogonum cinereum)*, California figwort *(Scrophularia californica)*

F Arroyo willow *(Salix lasiolepis)*

This area will be seeded with the riparian seed mix

This area will be seeded with the upland seed mix

Downstream ESHA

Phase 4

Phase 1

Table 1
Downstream ESHA Plant Palette- Phase 1

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone			
Salix lasiolepis	Arroyo willow	1	15-20
Upland Zone			
Planting Group A: 20 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	20
Eriogonum cinereum	ashyleaf buckwheat	1	20
Salvia leucophylla	purple sage	1	20
Planting Group B: 5 groups of 3 plants each planted 4 feet OC			
Isocoma menziesii	coastal goldenbush	1	5
Baccharis pilularis	Coyote bush	1	5
Peritoma arborea	bladderpod	1	5
Planting Group C: 17 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	17
Artemisia californica	California sagebrush	1	17
Peritoma arborea	bladderpod	1	17
Planting Group D: 16 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	16
Peritoma arborea	bladderpod	1	16
Muhlenbergia rigens	deergrass	1	16
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	**224**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.

Aerial Source: Hexagon Geosystems 2018

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Planting Plan for Downstream ESHA

Exhibit 9a

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

(Rev: 09/28/2021 MMD) R:\Projects\1SAN\082310\Graphics\ESHA_Restoration\Final_Plan\ex_Planting_Plan_Downstream.pdf

Study Area/Property Line

ESHA

ESHA Buffer (50 ft)

ESHA Buffer (100 ft)

Downstream ESHA

Riparian Restoration (0.37 acre)

Upland Restoration (0.60 acre)

Middle ESHA

Riparian Stabilization (0.17 acre)

Upland Restoration (0.32 acre)

Upstream ESHA

Riparian Restoration (0.14 acre)

Upland Restoration (0.43 acre)

Specific Plan Improvements

Phase 1

Phase 4

Planting Types

A California fuchsia *(Epilobium canum)*; ashyleaf buckwheat *(Eriogonum cinereum)*, purple sage *(Salvia leucophylla)*

C black sage *(Salvia mellifera)*, California sagebrush *(Artemisia californica)*, bladderpod *(Peritoma arborea)*

D ashyleaf buckwheat *(Eriogonum cinereum)*, bladderpod *(Peritoma arborea)*, deergrass *(Muhlenbergia rigens)*

E black sage *(Salvia mellifera)*, ashyleaf buckwheat *(Eriogonum cinereum)*, California figwort *(Scrophularia californica)*

Table 2
Middle ESHA Plant Palette-Phase 4

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Planting Group A: 10 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Salvia leucophylla	purple sage	1	10
Planting Group C: 10 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	10
Artemisia californica	California sagebrush	1	10
Peritoma arborea	bladderpod	1	10
Planting Group D: 10 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	10
Peritoma arborea	bladderpod	1	10
Muhlenbergia rigens	deergrass	1	10
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	**120**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.

Upstream ESHA

Middle ESHA

Downstream ESHA

Phase 1

Phase 4

Aerial Source: Hexagon Geosystems 2018

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Planting Plan for Middle ESHA

Exhibit 9b

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

(Rev: 09/28/2021 MMD) R:\Projects\1SAN\082310\Graphics\ESHA_Restoration\Final_Plan\ex_Planting_Plan_Middle.pdf

Study Area/Property Line

ESHA

ESHA Buffer (50 ft)

ESHA Buffer (100 ft)

Downstream ESHA

Riparian Restoration (0.37 acre)

Middle ESHA

Riparian Stabilization (0.17 acre)

Upland Restoration (0.32 acre)

Upstream ESHA

Riparian Restoration (0.14 acre)

Upland Restoration (0.43 acre)

Specific Plan Improvements

Phase 4

Planting Types

A California fuchsia *(Epilobium canum)*; ashyleaf buckwheat *(Eriogonum cinereum)*, purple sage *(Salvia leucophylla)*

C black sage *(Salvia mellifera)*, California sagebrush *(Artemisia californica)*, bladderpod *(Peritoma arborea)*

D ashyleaf buckwheat *(Eriogonum cinereum)*, bladderpod *(Peritoma arborea)*, deergrass *(Muhlenbergia rigens)*

E black sage *(Salvia mellifera)*, ashyleaf buckwheat *(Eriogonum cinereum)*, California figwort *(Scrophularia californica)*

The wetland area will be planted with *Carex senta* and *Leymus triticoides*

This area will be seeded with the upland seed mix

Upstream ESHA

Middle ESHA

Phase 4

Phase 4

Phase 4

Table 3
Upstream ESHA Plant Palette-Phase 1 and 4

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone-Phase 1			
Carex senta	swamp sedge	2" plug	100
Leymus triticoides	beardless wild rye	2" plug	100
Upland Zone-Phase 4			
Planting Group A: 10 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuschia	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Salvia leucophylla	purple sage	1	10
Planting Group C: 8 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	8
Artemisia californica	California sagebrush	1	8
Peritoma arborea	bladderpod	1	8
Planting Group D: 8 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	8
Peritoma arborea	bladderpod	1	8
Muhlenbergia rigens	deergrass	1	8
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	**308**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.

Aerial Source: Hexagon Geosystems 2018

Planting Plan for Upstream ESHA

Exhibit 9c

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

(Rev: 09/28/2021 MMD) R:\Projects\1SAN\082310\Graphics\ESHA_Restoration\Final_Plan\ex_Planting_Plan_Upstream.pdf

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Study Area/Property Line

ESHA

ESHA Buffer (50 ft)

ESHA Buffer (100 ft)

Downstream ESHA

Riparian Restoration (0.37 acre)

Upland Restoration (0.60 acre)

Middle ESHA

Riparian Stabilization (0.17 acre)

Upland Restoration (0.32 acre)

Specific Plan Improvements

Phase 1

Phase 4

Planting Types

A California fuchsia *(Epilobium canum)*; ashyleaf buckwheat *(Eriogonum cinereum)*, purple sage *(Salvia leucophylla)*

B coastal goldenbush *(Isocoma menziesii)*, Coyote bush *(Baccharis pilularis)*, bladderpod *(Peritoma arborea)*

C black sage *(Salvia mellifera)*, California sagebrush *(Artemisia californica)*, bladderpod *(Peritoma arborea)*

D ashyleaf buckwheat *(Eriogonum cinereum)*, bladderpod *(Peritoma arborea)*, deergrass *(Muhlenbergia rigens)*

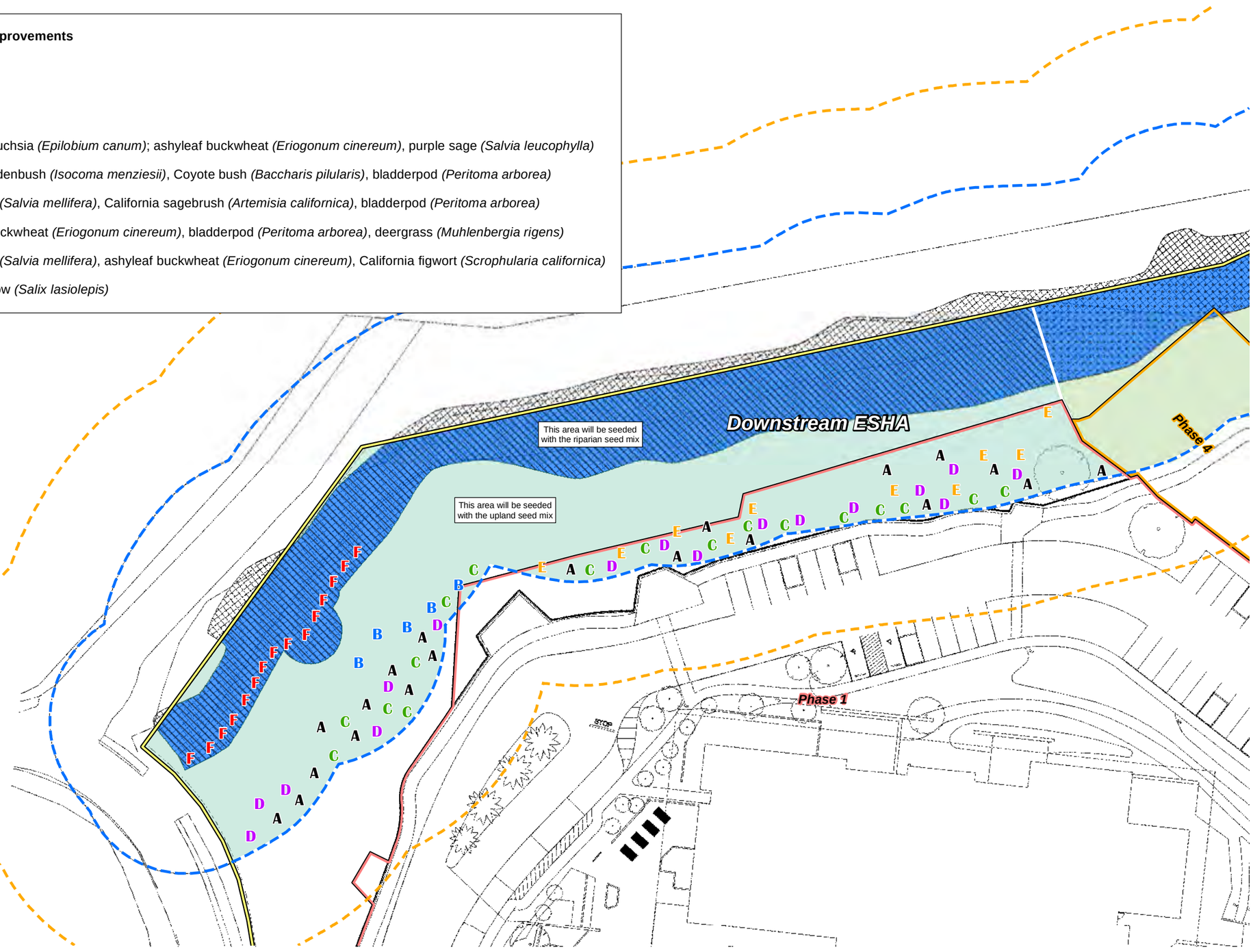
E black sage *(Salvia mellifera)*, ashyleaf buckwheat *(Eriogonum cinereum)*, California figwort *(Scrophularia californica)*

F Arroyo willow *(Salix lasiolepis)*

Table 1
Downstream ESHA Plant Palette- Phase 1

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone			
Salix lasiolepis	Arroyo willow	1	15-20
Upland Zone			
Planting Group A: 20 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	20
Eriogonum cinereum	ashyleaf buckwheat	1	20
Salvia leucophylla	purple sage	1	20
Planting Group B: 5 groups of 3 plants each planted 4 feet OC			
Isocoma menziesii	coastal goldenbush	1	5
Baccharis pilularis	Coyote bush	1	5
Peritoma arborea	bladderpod	1	5
Planting Group C: 17 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	17
Artemisia californica	California sagebrush	1	17
Peritoma arborea	bladderpod	1	17
Planting Group D: 16 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	16
Peritoma arborea	bladderpod	1	16
Muhlenbergia rigens	deergrass	1	16
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	**224**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.



Planting Plan for Downstream ESHA

Exhibit 10a

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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Study Area/Property Line

ESHA

ESHA Buffer (50 ft)

ESHA Buffer (100 ft)

Downstream ESHA

Riparian Restoration (0.37 acre)

Upland Restoration (0.60 acre)

Middle ESHA

Riparian Stabilization (0.17 acre)

Upland Restoration (0.32 acre)

Upstream ESHA

Riparian Restoration (0.14 acre)

Upland Restoration (0.43 acre)

Specific Plan Improvements

Phase 1

Phase 4

Planting Types

A California fuchsia *(Epilobium canum)*; ashyleaf buckwheat *(Eriogonum cinereum)*, purple sage *(Salvia leucophylla)*

C black sage *(Salvia mellifera)*, California sagebrush *(Artemisia californica)*, bladderpod *(Peritoma arborea)*

D ashyleaf buckwheat *(Eriogonum cinereum)*, bladderpod *(Peritoma arborea)*, deergrass *(Muhlenbergia rigens)*

E black sage *(Salvia mellifera)*, ashyleaf buckwheat *(Eriogonum cinereum)*, California figwort *(Scrophularia californica)*

Table 2
Middle ESHA Plant Palette-Phase 4

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Planting Group A: 10 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuchsia	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Salvia leucophylla	purple sage	1	10
Planting Group C: 10 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	10
Artemisia californica	California sagebrush	1	10
Peritoma arborea	bladderpod	1	10
Planting Group D: 10 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	10
Peritoma arborea	bladderpod	1	10
Muhlenbergia rigens	deergrass	1	10
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	120

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.

Upstream ESHA

Middle ESHA

Downstream ESHA

Phase 1

Phase 4

Planting Plan for Middle ESHA

Exhibit 10b

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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Study Area/Property Line

ESHA

ESHA Buffer (50 ft)

ESHA Buffer (100 ft)

Downstream ESHA

Riparian Restoration (0.37 acre)

Middle ESHA

Riparian Stabilization (0.17 acre)

Upland Restoration (0.32 acre)

Upstream ESHA

Riparian Restoration (0.14 acre)

Upland Restoration (0.43 acre)

Specific Plan Improvements

Phase 4

Planting Types

A California fuchsia *(Epilobium canum)*; ashyleaf buckwheat *(Eriogonum cinereum)*, purple sage *(Salvia leucophylla)*

C black sage *(Salvia mellifera)*, California sagebrush *(Artemisia californica)*, bladderpod *(Peritoma arborea)*

D ashyleaf buckwheat *(Eriogonum cinereum)*, bladderpod *(Peritoma arborea)*, deergrass *(Muhlenbergia rigens)*

E black sage *(Salvia mellifera)*, ashyleaf buckwheat *(Eriogonum cinereum)*, California figwort *(Scrophularia californica)*

The wetland area will be planted with *Carex senta* and *Leymus triticoides*

This area will be seeded with the upland seed mix

Upstream ESHA

Middle ESHA

Phase 4

Phase 4

Phase 4

Table 3
Upstream ESHA Plant Palette-Phase 1 and 4

Scientific Name	Common Name	Size (gallon)*	Number of Plants*
Riparian Zone-Phase 1			
Carex senta	swamp sedge	2" plug	100
Leymus triticoides	beardless wild rye	2" plug	100
Upland Zone-Phase 4			
Planting Group A: 10 groupings of 3 plants each planted 3 feet OC			
Epilobium canum	California fuschia	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Salvia leucophylla	purple sage	1	10
Planting Group C: 8 groups of 3 plants 3 feet OC			
Salvia mellifera	black sage	1	8
Artemisia californica	California sagebrush	1	8
Peritoma arborea	bladderpod	1	8
Planting Group D: 8 groups of 3 plants 4 feet OC			
Eriogonum cinereum	ashyleaf buckwheat	1	8
Peritoma arborea	bladderpod	1	8
Muhlenbergia rigens	deergrass	1	8
Planting Group E: 10 groups of 3 plants 4 feet OC			
Salvia mellifera	black sage	1	10
Eriogonum cinereum	ashyleaf buckwheat	1	10
Scrophularia californica	California figwort	1	10
		Total Plants*	**308**

*NOTE: Plant palette substitutions and planting quantities may be revised based on stock availability and in consultation with the Biological Monitor.

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Planting Plan for Upstream ESHA

Exhibit 10c

Malibu Middle and High School Specific Plan and LCP Amendment Project

N W E S

50 25 0 50 Feet

PSOMAS

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APPENDIX 1

PLANT PALETTES

About Calscape

Our goal at Calscape is to help Californians restore nature and save water one garden at a time. We do this by showing people which plants are really native to any location in the state, helping them figure out which ones they want, and where to buy them and how to grow them.

California is an extremely environmentally diverse state. Different California native plants evolved to grow in areas of the state with very different temperatures, rainfall levels, summer drought periods, air moisture levels, and marine influences, among other factors. Because of this, it's always best to grow California native plants in the areas in which they evolved. They are easier to grow, healthier and require little or no artificial irrigation when they are planted in an area in which they evolved and naturally belong. Native California plants that aren't really native to that location will often struggle or die no matter how much you water them.

True native plants are the foundation for nature restoration. They attract butterflies, birds, reptiles, amphibians, small mammals, bees and other pollinators that evolved with those plants, and over time create a working natural ecosystem, without pesticides, and without artificial fertilizers. The butterfly and bird life in particular in a true natural garden is often spectacular. With the right plants, it's not hard for homeowners to create small patches of nature throughout even the developed part of the state.

Thanks to U.C. Berkeley and in particular the Jepson Flora Project for their support to make Calscape possible.

Our estimates for which plants naturally grow in any given location in California are based on almost 2 million field occurrences of native California plant species collected over the last 150 years by the participants of the California Consortia of Herbaria (CCH). For a given location to be included in a given plant's geographic range, a natural specimen of that plant needs to have been observed by a CCH botanist within 10 miles of that location, and the location must be within the elevation, annual precipitation, summer precipitation, coldest month average temperature, hottest month average temperature, and humidity ranges in which that plant grows in the Jepson geographic subdivision in which the location falls. Special thanks to the Jepson Flora Project at U.C. Berkeley for their help in analyzing this data and creating the Calscape plant range maps. Note that for successful native plant landscaping and nature restoration, it's important to grow plants that are native to your location AND placed in spots with the right soil, sun and water conditions. Before you finalize which native plants to grow and exactly where to place them, please review the Calscape plant descriptions to make you place them in spots with the conditions they require.

Our estimates for the natural geographic range of butterfly and moth species in California are based on approximately 200,000 geo-referenced field observations provided through GBIF (GBIF.org (27 August 2019) GBIF Occurrence Download https://doi.org/10.15468/dl.rywrmh), iDigBio, the Symbiota Collections of Arthropods Network and Butterflies and Moths of North America, aggregating digitized collections of 40 universities, entomological museums and other institutions, and research grade observations from iNaturalist. For a given square mile to be included in the estimated geographic range of a particular butterfly or moth species, that species must have been observed within 50 miles of that square mile, and that square mile must fall within annual precipitation, summer precipitation, coldest month average temperature, hottest month average temperature, and humidity ranges in which that species has been observed in the state.

Climate data used in creation of plant and butterfly/moth range maps is from PRISM Climate Group, Oregon State University, using 30 year (1981-2010) annual normals at an 800 meter spatial resolution.

Sources for genus level butterfly and moth host plant information include; The National Wildlife Federation's Native Plant Finder, with thanks to Doug Tallamy and Kimberley Shropshire for researching and sharing this information, the National History Museum's Database of the World's Lepidopteran Hostplants, and Butterflies and Moths of North America. Special thanks to Calscape volunteer

Bridget Kelley for her tireless work aggregating host plant data from all these sources. Plants shown as hosts for a particular butterfly or moth species must meet two requirements: 1. the genus of that plant species must be a known host for that species of butterfly or moth, AND 2. the natural geographic range of that plant species must overlap with the natural geographic range of that butterfly or moth species.

All geographic data is structured using the Google Maps API, with special thanks to Google Non-Profits for their generous grant support.

Sources of plant and butterfly and moth photos include Calphotos, GBIF (GBIF.org (27 August 2019), iDigBio, the Symbiota Collections of Arthropods Network and dozens of amazing plant photographers who have agreed to share their photos with Calscape. Special thanks for Calphotos for their invaluable help in acquiring these images. Authorship and copyright information is shown under each plant photo.

Other sources include Wikipedia, which is an important source for the "About" sections in the Calscape plant pages. In many cases the sections have been edited and built on by Calscape volunteer editors. Please note that all text shown in the "About" section is available for reuse under the Creative Commons Attribution-ShareAlike License. Wikipedia is also a source for a number of plant photos available through Wikimedia Commons. All photographs on Calscape that were originally from Wikimedia Commons are available for reuse under conditions set by the authors and described in each photo.

Sunset information was provided was provided by The Jepson Flora Project. Propagation from seed information was provided by the Santa Barbara Botanical Garden from "Seed Propagation of Native California Plants" by Dara E. Emery. Other general sources of information include Calflora, CNPS Manual of Vegetation Online, Jepson eFlora, Las Pilitas, Theodore Payne, Tree of Life, The Xerces Society, and information provided by CNPS volunteer editors, with special thanks to Don Rideout.

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CALIFORNIA NATIVE PLANT SOCIETY
Calscape
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California Fuchsia
Epilobium canum



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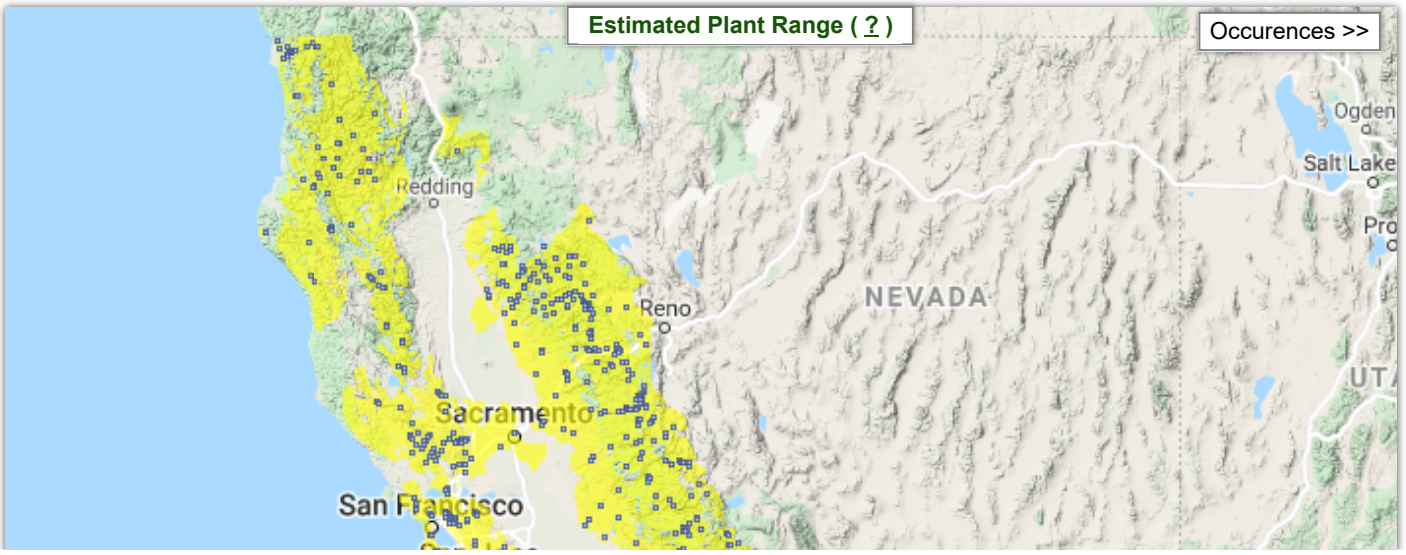

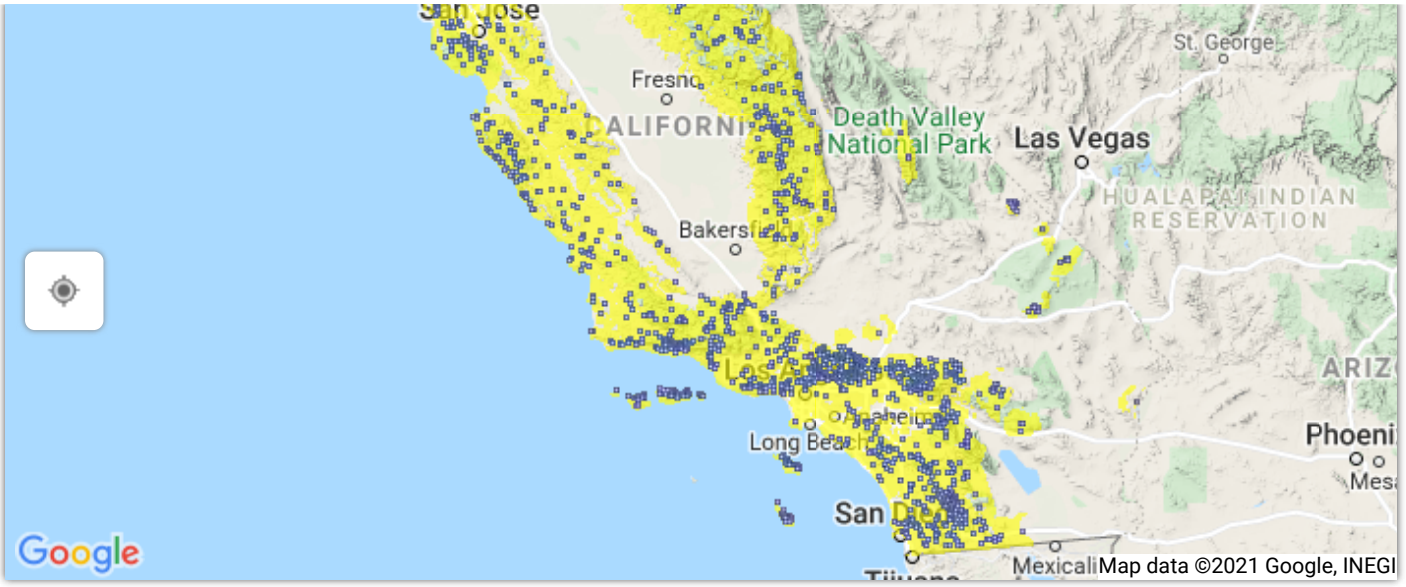

64 Nurseries Carry This Plant

About California Fuchsia (Epilobium canum)

Epilobium canum is beautiful species of willowherb, native to the California foothills and coastal areas. It is a perennial plant, notable for the profusion of bright scarlet flowers in summer and autumn - it's usually the only native California plant in an area flowering at the height of summer. They tend to die back and go dormant in the winter. Other common names include California-fuchsia (from the resemblance of the flowers to those of Fuchsias), Hummingbird Flower, and Hummingbird Trumpet (the flowers are very attractive to hummingbirds). Epilobium canum is often found by seasonal creeks, seeps and spring, particularly in the drier southern part of it's range.

California Fuchsia is easy to grow. It does best and will flower most profusely in full sun. In the wetter, northern part of it's range or near the coast, this plant will typically require no supplemental water after established. In the drier, hotter, inland southern areas, it will often die without summer water unless planted close to an irrigated or other wet area. You can water it 1x/month without much danger. Plants tend to get straggly after flowering by late fall or early winter. Best to cut them back to the ground as soon as the flowers are spent, and they'll come back back lush and healthy in the spring. Otherwise, they'll look straggly and unhealthy the next year, and are more likely to die. This plant will readily self-seed, so once you get this species established, it will usually start springing up around your garden. It also spreads by rhizomes. There's probably no better California native plant for attracting hummingbirds.

This plant is on several fire resistant plant lists, including FireSafe Marin and County of San Diego.

Plant Description

Plant Type
Perennial herb

Size
0.25 - 1.5 ft tall
2-3 ft wide

Form
Spreading

Growth Rate
Fast

Dormancy
Winter Semi-Deciduous

Fragrance
None

Flower Color
Red

Flowering Season
Summer, Fall

Wildlife Supported

Hummingbirds

Butterflies & moths hosted (15 likely *) SHOW ALL



White-lined Sphinx
Hyles lineata



Black-Banded Carpet
Antepirrhoe semiatrata



Elegant Aristotelia Moth
Aristotelia elegantella



Yellow-Banded Day Sphinx
Proserpinus flavofasciata

Landscaping Information

Sun
Full Sun

Moisture
Very Low, Low

Summer Irrigation
Max 1x / month once established

Nurseries
Carried by 64

Ease of Care
Very Easy, Moderately Easy

Cold Tolerance
Tolerates cold to 0° F

Soil Drainage
Fast, Medium, Slow

Soil Description
Tolerates clay and sand. Tolerates Serpentine Soil. Soil PH: 6.0 - 8.0

Common uses
Groundcovers, Deer Resistant, Bird Gardens, Hummingbird Gardens, Butterfly Gardens

Companion Plants
Milkweed (Asclepias species), Giant Wild Rye (Elymus condensatus), Sand Aster (Corethrogyne filaginifolia), Sagebrush (Artemisia californica), Monkeyflower (Mimulus species), Encelia californica, Buckwheat (Eriogonum species), Heartleaf Keckiella (Keckiella cordifolia), Penstemon species, Salvia species, Blue-eyed Grass (Sisyrinchium bellum)

Maintenance
Cut or mow to base in fall or early winter to stimulate for new growth. Unwanted rhizomes can be pulled at any time.

Propagation?
Self-seeds readily. Rhizomes can be transplanted in winter or spring.

Natural Setting

Site Type
This species is found in a number of natural settings over a large part of the state. Near the coast it is found on slopes, bluffs or canyons as part of chaparral or coastal sage scrub. In more inland areas including the Sierras it is found in slightly damper slopes and flats, often near seasonal creeks, often as part of pine or fir forest.

Climate
Annual Precipitation: 2.7" - 124.0", Summer Precipitation: 0.14" - 4.46", Coldest Month: 19.7" - 59.6", Hottest Month: 41.1" - 88.1", Humidity: 0.28" - 40.93", Elevation: -714" - 12228"

Alternative Names

Botanical Names: Zauschneria californica,Zauschneria canum
Common Names: Hummingbird Trumpet

Sources include: Wikipedia. All text shown in the "About" section of these pages is available under the Creative Commons Attribution-ShareAlike License. Plant observation data provided by the participants of the California Consortia of Herbaria, Sunset information provided by Jepson Flora Project. Propogation from seed information provided by the Santa Barbara Botanical Garden from "Seed Propagation of Native California Plants" by Dara E. Emery. Sources of plant photos include CalPhotos, Wikimedia Commons, and independent plant photographers who have agreed to share their images with Calscape. Other general sources of information include Calflora, CNPS Manual of Vegetation Online, Jepson Flora Project, Las Pilitas, Theodore Payne, Tree of Life, The Xerces Society, and information provided by CNPS volunteer editors, with special thanks to Don Rideout. Climate data used in creation of plant range maps is from PRISM Climate Group, Oregon State University, using 30 year (1981-2010) annual "normals" at an 800 meter spatial resolution.

Links: Jepson eFlora Taxon Page CalPhotos Wikipedia Calflora

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California Native Plant Society Calscape
Restore Nature One Garden at a Time

Purple Sage
Salvia leucophylla



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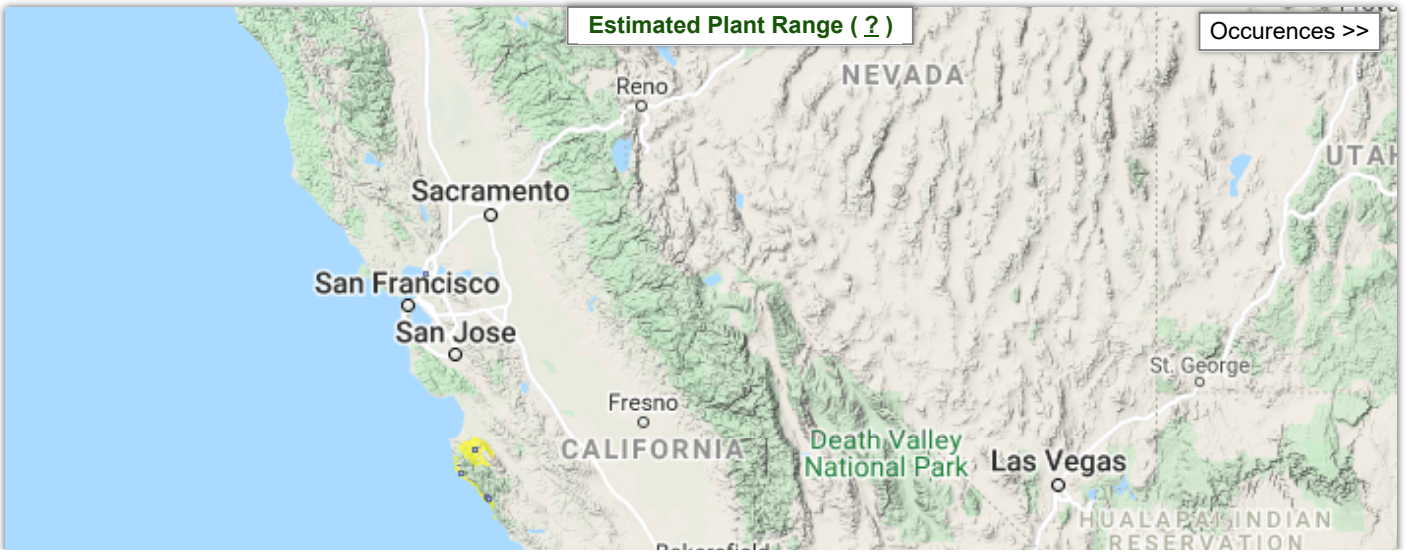
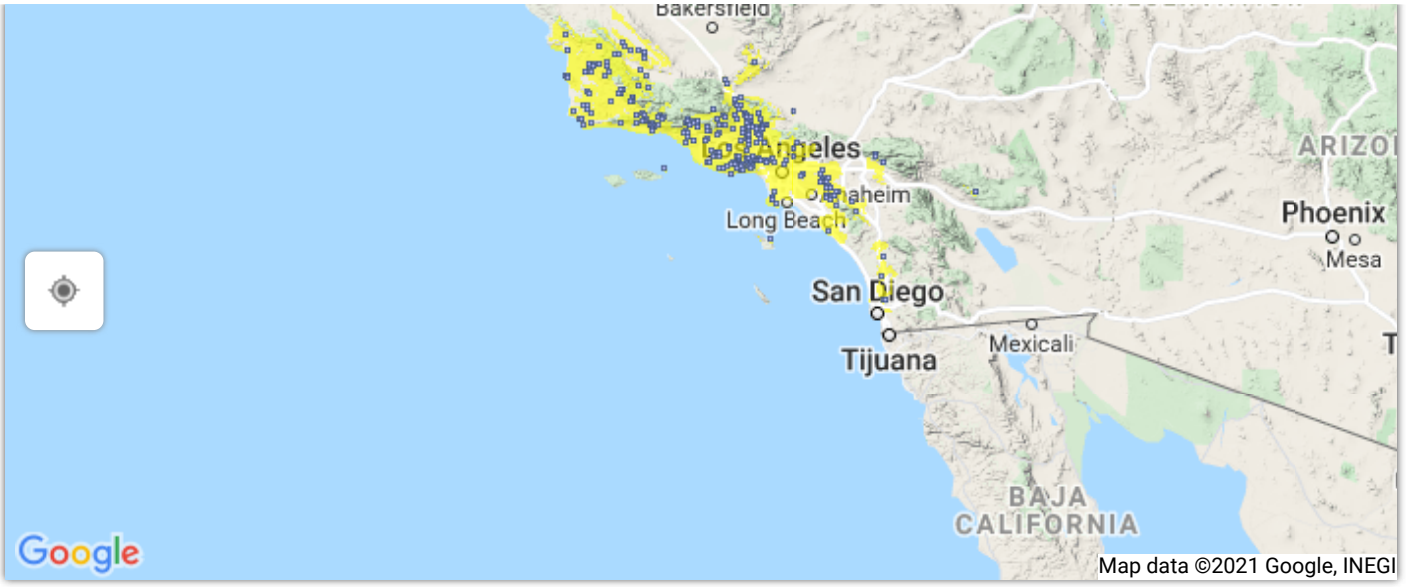




58 Nurseries Carry This Plant

About Purple Sage (Salvia leucophylla)

Purple Sage is an aromatic sage native to the southern coast of California and Baja California, with a range stretching from Santa Maria southward, at 50-800 meters altitude. It is a shrub growing up to 1.5 meters tall on dry, open hillsides. The leaves are grayish, 2-8 centimeters long, with a puckered surface. The large spikes bear whorls of purple flowers, 6-13 millimeters long. The flowers are highly aromatic and attract a variety of birds and insects. One variety of Purple Sage, Salvia leucophylla Point Sal, makes a great groundcover, usually growing over 10 feet wide and only 2-4 feet high.

This plant is tough, easy to grow and beautiful. It is amazingly drought tolerant, though it can also tolerate light water up to twice per month in the summer to keep it looking a little greener. Beautiful purple flowers and grey green folliage.

Plant Description

Plant Type
Shrub

Size
2 - 5 ft tall
3 - 10 ft wide

Form
Mounding, Rounded, Spreading

Growth Rate
Fast

Dormancy
Evergreen, Summer Semi-Deciduous

Fragrance
Fragrant - Pleasant

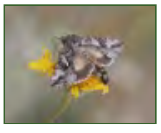
Flower Color
Purple, Lavender, Pink

Flowering Season
Spring, Summer

Wildlife Supported

Bees, hummingbirds, other pollinators

Butterflies & moths hosted (1 confirmed ✓, 8 likely *) SHOW ALL

✓ 
Alfalfa Looper Moth
Autographa californica

* 
Bilobed Looper Moth
Megalographa biloba

* 
Virginian Tiger Moth
Spilosoma virginica

* 
Wavy-Lined Emerald
Synchlora aerata

Landscaping Information

Sun
Full Sun

Moisture
Extremely Low, Very Low

Summer Irrigation
Max 2x / month once established

Nurseries
Carried by 58

Ease of Care

Cold Tolerance

Soil Drainage

Ease of Care
Very Easy

Cold Tolerance
Tolerates cold to 0 - 10° F

Soil Drainage
Fast, Medium

Soil Description
Variable. Soil PH: 5 - 8

Common uses
Bank Stabilization, Groundcovers, Hedges, Deer Resistant, Bird Gardens, Butterfly Gardens, Bee Gardens

Companion Plants
Cleveland Sage, California Buckwheat, Lemonade Berry

Propagation?
For propagating by seed: No treatment.

Sunset Zones?
8, 9, 14*, 15*, 16*, 17*, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
Dry open slopes

Climate
Annual Precipitation: 7.4" - 37.3", Summer Precipitation: 0.14" - 1.43", Coldest Month: 40.5" - 56.1", Hottest Month: 62.3" - 80.3", Humidity: 0.72" - 27.58", Elevation: 11" - 5843"

Alternative Names

Common Names: San Luis Purple Sage

Sources include: Wikipedia. All text shown in the "About" section of these pages is available under the Creative Commons Attribution-ShareAlike License. Plant observation data provided by the participants of the California Consortia of Herbaria, Sunset information provided by Jepson Flora Project. Propogation from seed information provided by the Santa Barbara Botanical Garden from "Seed Propagation of Native California Plants" by Dara E. Emery. Sources of plant photos include CalPhotos, Wikimedia Commons, and independent plant photographers who have agreed to share their images with Calscape. Other general sources of information include Calflora, CNPS Manual of Vegetation Online, Jepson Flora Project, Las Pilitas, Theodore Payne, Tree of Life, The Xerces Society, and information provided by CNPS volunteer editors, with special thanks to Don Rideout. Climate data used in creation of plant range maps is from PRISM Climate Group, Oregon State University, using 30 year (1981-2010) annual "normals" at an 800 meter spatial resolution.

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Ashyleaf Buckwheat
Eriogonum cinereum



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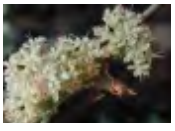
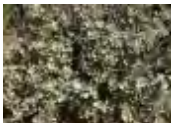
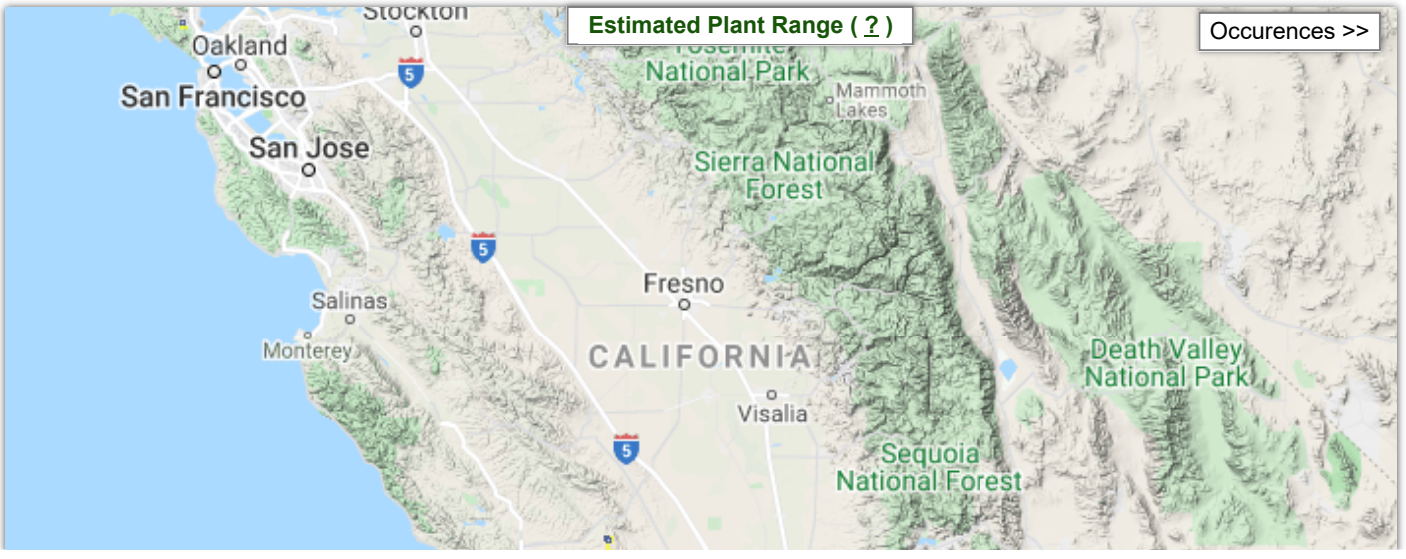








28 Nurseries Carry This Plant

About Ashyleaf Buckwheat (Eriogonum cinereum)

Eriogonum cinereum is a species of wild buckwheat known by the common names coastal buckwheat and ashyleaf buckwheat. This shrub is endemic to the coastline of California, where it grows on beaches and bluffs and in coastal scrub and chaparral. This plant may reach up over a meter in height and width and is light silvery gray in color due to the woolly hairs on its stems and foliage. The leaves are wavy-edged ovals one to three centimeters long. The flower clusters stick out from the plant, each with one to several heads of tiny tightly-packed frilly flowers which are usually light brownish-pink in color and quite hairy. This is the foodplant for Euphilotes bernardino, the Bernardino dotted blue butterfly.

Plant Description

Plant Type
Shrub

Size
2 - 4 ft tall
3 - 5 ft wide

Form
Rounded

Growth Rate
Fast

Dormancy
Evergreen

Flower Color
Brown, Yellow

Flowering Season
Winter, Spring, Summer, Fall

Wildlife Supported

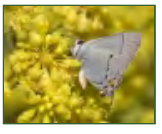
Many butterfly species (including Euphilotes bernardino, the Bernardino dotted blue butterfly) and other pollinators including wasps which prey on harmful garden pests! They may attract small mammals and birds who eat the seeds.

Butterflies & moths hosted (3 confirmed ✓, 41 likely *) SHOW ALL

✓ 
Mormon Metalmark
Apodemia mormo

✓ 
Square-spotted Blue
Euphilotes battoides

✓ 
Bernardino Blue
Euphilotes bernardino

* 
Gray Hairstreak
Strymon melinus

Landscaping Information

Sun
Full Sun

Moisture
Extremely Low, Very Low

Summer Irrigation
Max 1x / month once established

Nurseries
Carried by 28

Ease of Care
Moderately Easy

Cold Tolerance
Tolerates cold to 15 - 25° F

Soil Drainage
Fast, Medium, Slow

Soil Description
Adaptable. Soil PH: 6 - 8

Common uses
Bird Gardens, Butterfly Gardens, Bee Gardens

Companion Plants
Plant alongside other natives of the California coastal scrub region, such as California Larkspur (Delphinium californicum), Common Tidy Tips (Layia platyglossa), Maritime Brome (Bromus maritimus), and Monterey Indian Paintbrush (Castilleja latifolia).

Maintenance
Remove dead seed heads in late fall and dead branches during the growing season. Older untidy plants can be pruned back to 8 inches in the fall to reestablish shape.

Propagation?
For propagating by seed: No treatment.

Sunset Zones?
5, 14*, 15*, 16*, 17*, 19, 20, 21, 22*, 23*, 24*

Natural Setting

Site Type
Beaches, bluffs

Climate
Annual Precipitation: 11.4" - 39.3", Summer Precipitation: 0.14" - 1.97", Coldest Month: 35.4" - 56.6", Hottest Month: 61.1" - 77.0", Humidity: 0.93" - 23.07", Elevation: -25" - 8222"

Alternative Names

Common Names: Coastal Buckwheat

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Links: Jepson eFlora Taxon Page CalPhotos Wikipedia Calflora

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California Native Plant Society Calscape
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Coyote Bush
Baccharis pilularis



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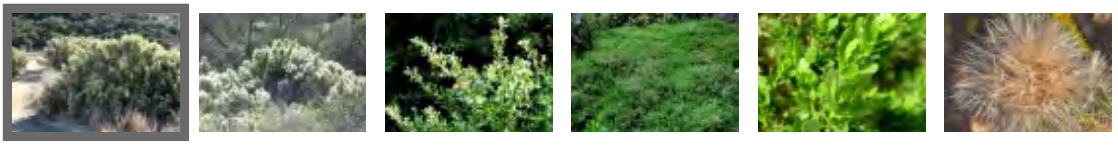
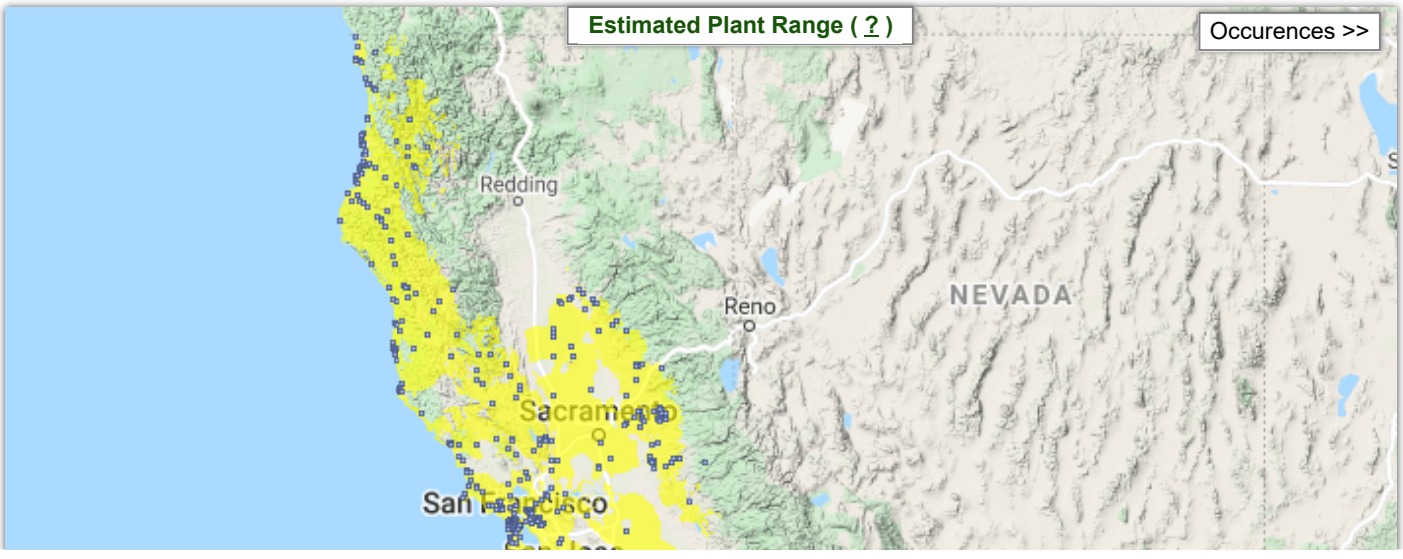
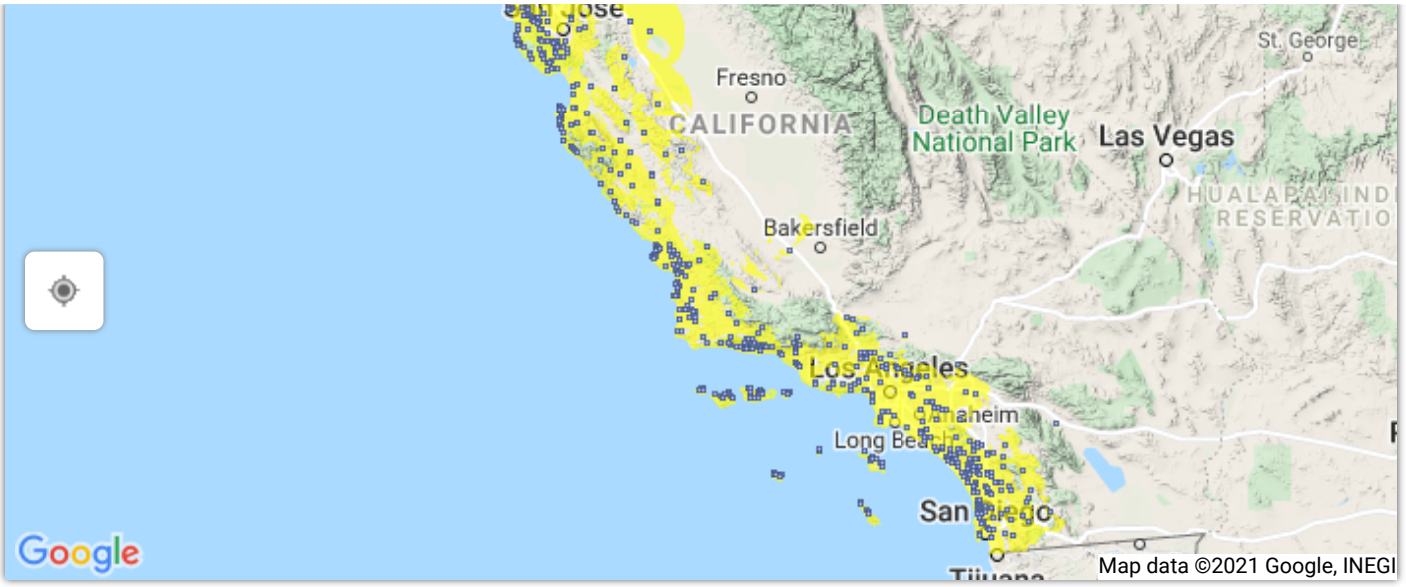






67 Nurseries Carry This Plant

About Coyote Bush (Baccharis pilularis)

Names include Coyote Brush (or Bush), Chaparral Broom, and Bush Baccharis. It is a common shrub in the Asteraceae that grows in California, Oregon, and Baja California. There are two subspecies. Ssp. pilularis is more common along the central coast. Ssp. consanguinea is found all along the coast and inland to the Coast Ranges and the foothills of the Sierras. All forms of this shrub are generally 1-3 meters in height. It is smooth and generally sticky. The stems are prostrate to erect which branches spreading or ascending. The leaves are 8-55 millimeters long with three principal veins and have profuse, white or yellow, rayless flowers that bloom in early winter. They are found in a variety of habitats, from coastal bluffs to oak woodlands.

Coyote Brush is extremely easy to grow in landscape applications. It tolerates summer water up to weekly, but naturalizes easily also. It is said to be fire resistant. The form is highly variable, ranging from upright to mounding to prostrate. Several forms available in native plant nurseries make an excellent groundcover. Named varieties include 'Twin Peaks', 'Santa Ana' and 'Pigeon Point'.Tolerant of recycled water.
To learn more, visit the Jepson Herbarium's YouTube channel and watch a short video about this species.
https://www.youtube.com/watch?v=NFE8DNjGUnE&t=11s

Plant Description

Plant Type
Shrub

Size
1.5 - 10 ft tall
12 ft wide

Form
Mounding, Spreading

Growth Rate
Fast, Moderate

Dormancy
Evergreen

Fragrance
None

Flower Color
Yellow, Cream, White

Flowering Season
Spring, Winter, Summer, Fall

Wildlife Supported

Very attractive to insects, especially when in flower. It is common to find wasp galls on leaves.

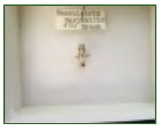
Butterflies & moths hosted (11 confirmed ✓, 18 likely *) SHOW ALL



✓ **Coyote Brush Gall Moth**
Gnorimoschema baccharisella



✓ **Orange Tortrix Moth**
Argyrotaenia franciscana



✓ Bucculatrix variabilis



✓ **Tamarack Looper**
Eupithecia misturata

Landscaping Information

Sun Moisture Summer Irrigation Nurseries

Sun
Full Sun, Part Shade

Moisture
Very Low, Low

Summer Irrigation
Max 1x / week once established

Nurseries
Carried by 67

Ease of Care
Very Easy

Soil Drainage
Fast, Medium, Slow

Soil Description
Tolerant of a variety of soils including sand, clay and alkaline. Soil PH: 5.0 - 8.0

Common uses
Bank Stabilization, Groundcovers, Hedges, Butterfly Gardens, Deer Resistant, Bird Gardens, Bee Gardens

Companion Plants
Good with oaks, Toyon, Coffeeberry species, Manzanita species, Ceanothus species, sages, and most other chaparral species

Maintenance
The upright form can be pruned to be tree-like if desired. The ground cover forms should be pruned annually if a neat appearance is desired. Some may even be mowed.

Propagation?
Nursery plants are usually male clones to avoid the fluffy plumes which some people may be allergic to. If you have both male and female plants in close proximity, you will get seedlings. For propagating by seed: No treatment.

Sunset Zones?
5*, 7, 8, 9, 14*, 15*, 16*, 17*, 18, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
Bluffs, hills, foothills and flats as a component of chaparral or coastal sage scrub

Climate
Annual Precipitation: 3.6" - 123.6", Summer Precipitation: 0.15" - 3.72", Coldest Month: 39.7" - 59.0", Hottest Month: 56.7" - 87.9", Humidity: 0.01" - 38.93", Elevation: -152" - 6046"

Alternative Names

Common Names: Coyote Brush, Coyotebrush, Dwarf Chaparral Broom

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Menzies' Goldenbush
Isocoma menziesii



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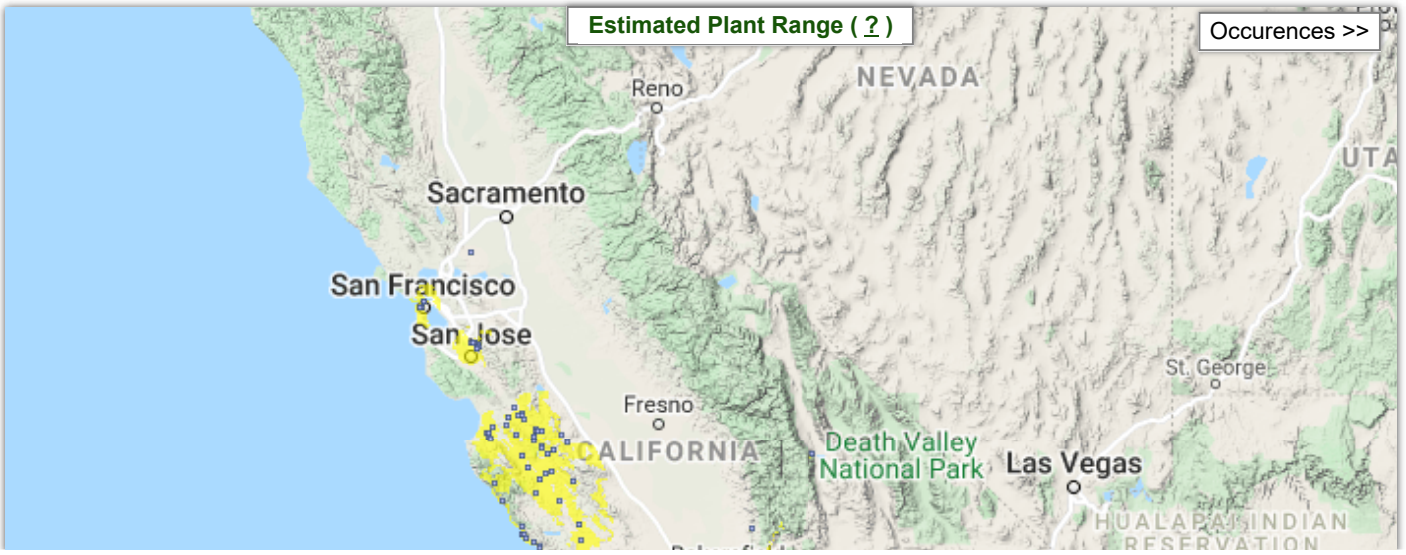
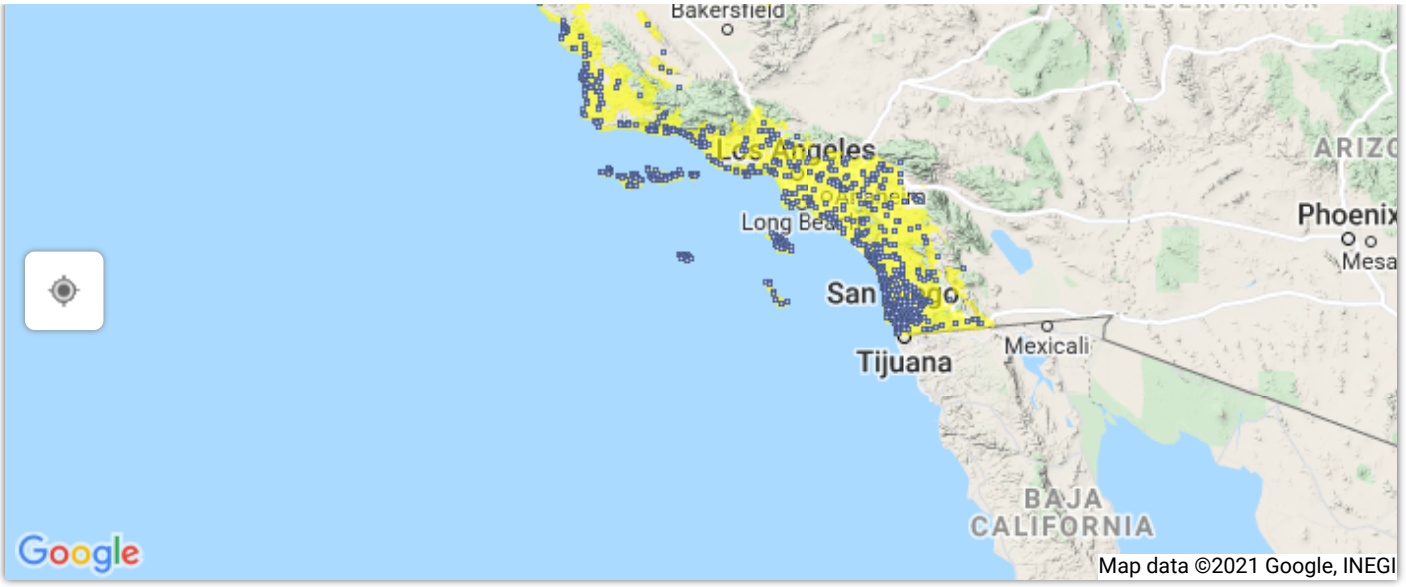




18 Nurseries Carry This Plant

About Menzies' Goldenbush (Isocoma menziesii)

Isocoma menziesii is a species of flowering plant in the Asteraceae (Sunflower) family known by the common name Menzies' goldenbush. It is native to central and southern California and Baja, where it grows in coastal and inland habitat such as coastal strand and coastal sage scrub, particularly in sandy soils. This is a subshrub forming a matted bush reaching up to one meter tall. The erect branching stems may be hairless to woolly, are generally hairy, and vary in color from gray-green to reddish-brown. The leaves are oval-shaped to somewhat rectangular, gray-green and sometimes hairy, and 1 to 5 centimeters long with stumpy teeth along the edges. The abundant flowers are held in clusters of thick flower heads. Each head is a capsule with layers of thick, pointed, greenish phyllaries. The head is filled with large, protruding, cylindrical yellow disc florets with long stigmas. It is useful in restoration projects. Because of it very long bloom time it is a good choice for coastal gardens in the southern part of the state.

Plant Description

Plant Type
Shrub

Size
1.6 - 3.3 ft tall
5 ft wide

Form
Spreading

Dormancy
Summer Semi-Deciduous

Flower Color
Yellow

Flowering Season
Spring, Summer, Fall

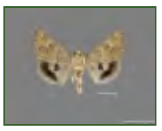
Wildlife Supported

Numerous insects including butterflies

Butterflies & moths hosted (7 likely *) SHOW ALL


* **Sunflower Moth**
Homoeosoma electella


* **Orange Tortrix Moth**
Argyrotaenia franciscana


* Schinia erosa


* Sonia vovana

Landscaping Information

Sun
Part Shade, Full Sun

Moisture
Low

Summer Irrigation
Max 2x / month once established

Nurseries
Carried by 18

Ease of Care
Very Easy

Cold Tolerance
Tolerates cold to 0°

Soil Drainage
Fast, Medium

F

Soil Description
Typically sandy. Soil PH: 6.0 - 7.5

Common uses
Groundcovers, Butterfly Gardens, Bee Gardens

Companion Plants
Use with low growing coastal species such as Verbena (Abronia sp.), Sagebrush (Artemisia californica or pycnocephala), Morningglory (Calystegia macrostegia or soldanella), PrimRose (Camissoniopsis sp.), Cobweb Thistle (Cirsium occidentale), Clarkia sp., Seacliff Buckwheat (Eriogonum parvifolium), Western Wallflower (Erysimum capitatum), Lupine (Lupinus sp.), and Cardinal Catchfly (Silene laciniata)

Natural Setting

Site Type
Coastal bluffs and other sandy places near the coast and extending to some inland canyons and slopes

Climate
Annual Precipitation: 7.2" - 46.5", Summer Precipitation: 0.14" - 1.65", Coldest Month: 37.7" - 57.3", Hottest Month: 60.0" - 83.4", Humidity: 0.68" - 34.96", Elevation: -30" - 5181"

Alternative Names

Botanical Names: Haplopappus venetus
Common Names: White-flowered Goldenbush

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Bladderpod
Peritoma arborea



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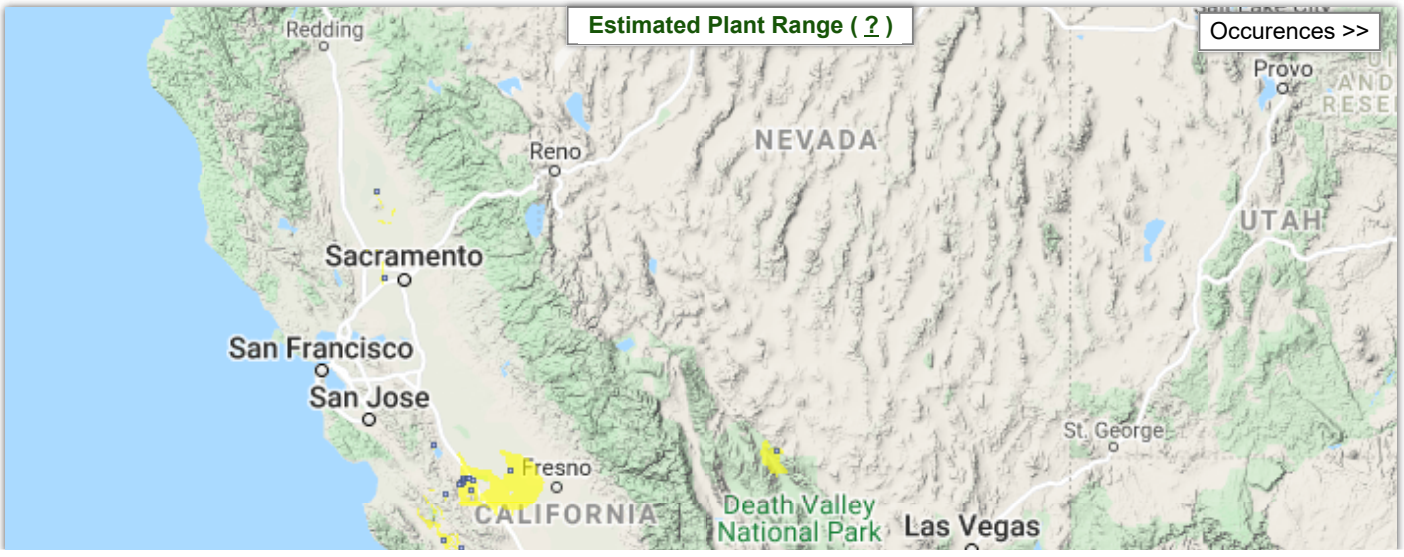
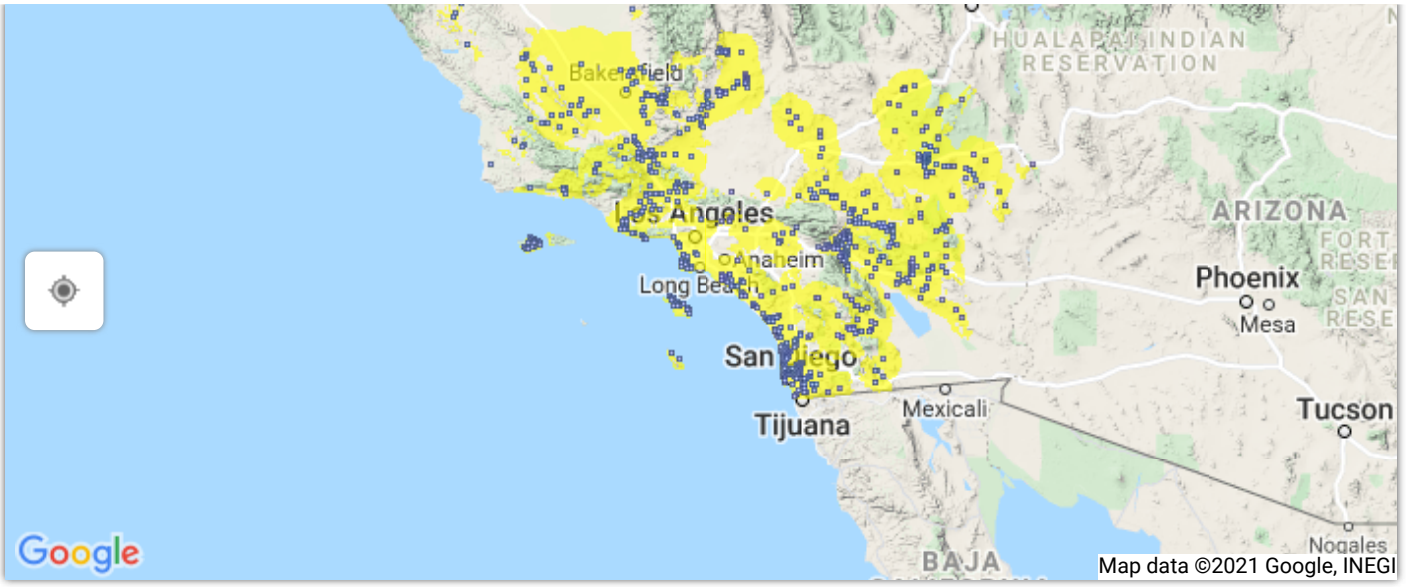




40 Nurseries Carry This Plant

About Bladderpod (Peritoma arborea)

Bladder Pod is a species of the Caper family also known by the common names burrofat, and California Cleome. It is native to California (primarily southern) and Baja California where it grows in a variety of habitats from coastal bluffs to desert arroyos. It is a densely branching shrub reaching one half to two meters in height. Its leaves are made up of three equal leaf-like leaflets, each a long, pointed oval one to four centimeters long. The plant produces abundant flower clusters at the ends of the stem branches, each a cluster of bright yellow flowers. Each flower has usually four petals and six whiskery protruding stamens with curling tips holding the anthers. At the middle is a long, protruding style which holds the developing fruit at its tip. The fruit is an inflated capsule about 4 centimeters long. It is edible. It is smooth and green when new, aging to light brown. A typical flower cluster bears a number of unopened flower buds at its tip, open flowers proximal to the buds, and maturing fruits which have shed their flowers below these.

Bladderpod is one of the easiest California natives to grow in landscape applications. It tolerates weekly summer water but can also get by with only natural rainfall. They are easy to grow from seeds, usually growing in a year to 3 feet tall. The readily self seed, and once you have a few mature plants in your garden, expect new seedlings to pop up each winter. This tough plant grows well even on south-facing slopes, alkaline soils and salty conditions. The flowers are beautiful, bright yellow, and stay on the plant most of the year, and attract bees, butterflies and hummingbirds. It is highly fragrant, though the public is divided on whether it is pleasant or unpleasant.

Plant Description

Plant Type
Shrub

Size
1.6 - 6.6 ft tall
6 ft wide

Form
Mounding

Growth Rate
Fast

Dormancy
Evergreen

Fragrance
Fragrant - Pleasant, Fragrant - Unpleasant

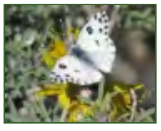
Flower Color
Yellow

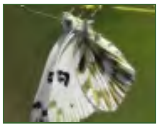
Flowering Season
Spring, Summer, Fall, Winter

Wildlife Supported

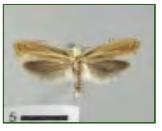
It particularly attracts harlequin beetles which eat the leaves

Butterflies & moths hosted (4 likely *) SHOW ALL

* 
Checkered White
Pontia protodice

* 
Becker's White
Pontia beckerii

* 
Western White
Pontia occidentalis

* 
Eidophasia dammersi

Landscaping Information

Sun
Full Sun

Moisture
Very Low, Low

Summer Irrigation
Max 1x / month
once established

Nurseries
Carried by 40

Ease of Care
Very Easy

Soil Drainage
Fast

Soil Description
Prefers well drained soils such as sand or decomposed granite. Tolerates Saline Soil. Soil PH: 7.0 - 9.0

Common uses
Bank Stabilization, Deer Resistant, Bird Gardens, Hummingbird Gardens, Butterfly Gardens

Companion Plants
A huge range of potential companions including Sand Verbena (Abronia species), California Sea Lavender (Limonium californicum), California Sagebrush (Artemisia californica), Chamise (Adenostema fasciculatum), Brittlebush (Encelia species), Joshua Tree (Yucca brevifolia), Indian Mallow (Abutilon palmeri), Rush Milkweed (Asclepias subulata), Buckwheat (Eriogonum species), Ocotillo (Fouquieria splendens), Chuparosa (Justicia californica), Apricot Mallow (Sphaeralcea ambigua), Yucca species, numerous cactus species

Maintenance
If harlequin beetles become a problem they can be removed by hand or sprayed off with a garden hose. It is usually not possible to eliminate them entirely.

Propagation?
By seed.

Sunset Zones?
8, 9, 12, 13, 14*, 15, 16, 17, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
This plant is unique in occurring in the immediate vicinity of the seashore, inland valleys and foothills, as well as in high desert and low desert. Near the coast it is typically found on dry slopes in coastal sage scrub. In the high desert - Joshua Tree woodland. In the low desert - Creosote Bush scrub

Climate
Annual Precipitation: 3.0" - 37.4", Summer Precipitation: 0.13" - 2.67", Coldest Month: 34.3" - 60.8", Hottest Month: 61.8" - 89.1", Humidity: 0.88" - 41.57", Elevation: -136" - 6023"

Alternative Names

Botanical Names: Isomeris arborea,Cleome arborea,Cleome isomeris
Common Names: Bladder Pod, Burrofat, California Cleome, Coastal Bladderpod

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Black Sage
Salvia mellifera



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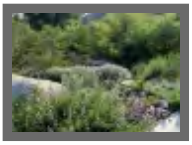
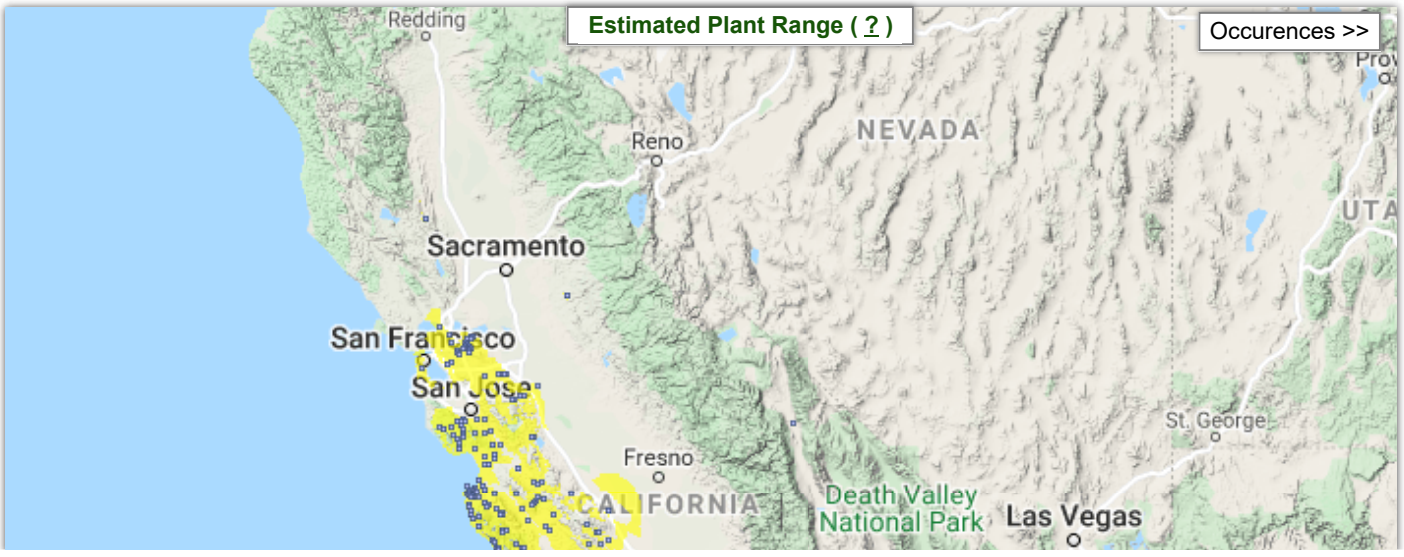
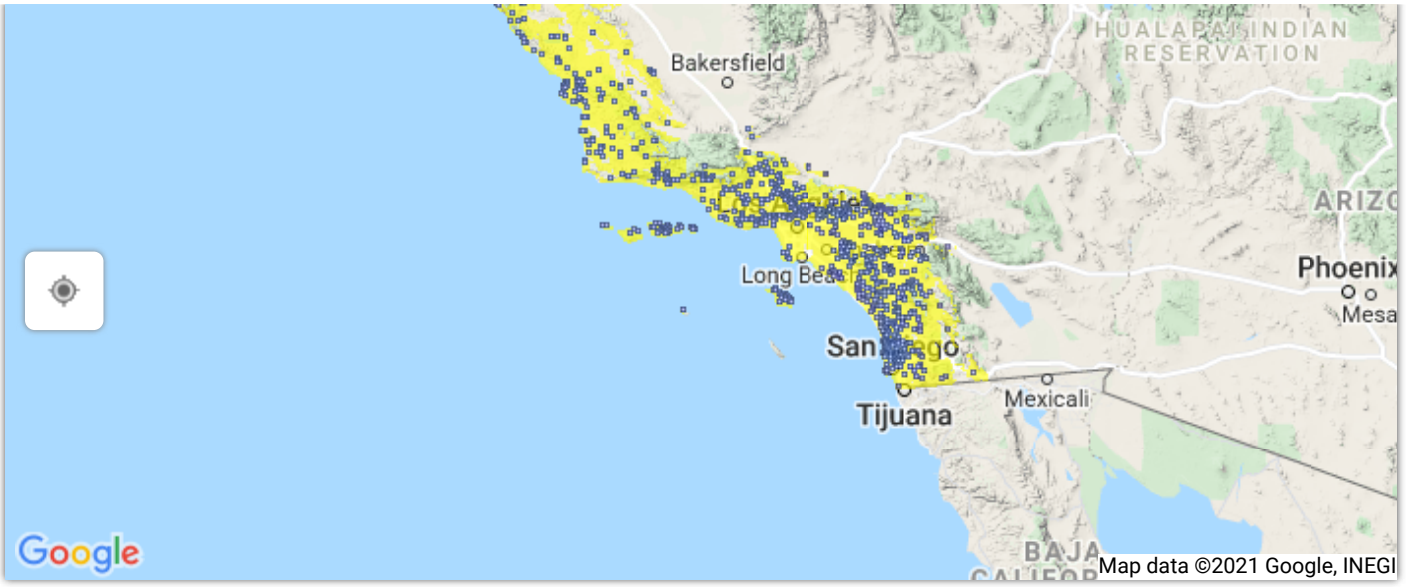






65 Nurseries Carry This Plant

About Black Sage (Salvia mellifera)

Black sage is the most common sage in California, and one of the keystone species of the coastal sage scrub plant community in the southern half of the state. Black sages grows quickly up to 3 feet in height, but mature specimens can reach up to 6 feet in height and 10 feet in width. The plant has attractive dark green leaves, with raised texture that looks somewhat like a fingerprint pattern when viewed closely. The leaves are 1-3 inches long. The upper surface of the leaf is somewhat smooth, while the lower surface of the leaf is hairy. It is semi-deciduous, depending on the location and severity of drought. Leaves curl during the summer drought instead of dropping off. The plant is highly aromatic. Flower occurs in.5-1.5" wide clusters. Flower colors vary from white, to pale blue, to lavender, or rarely to pale rose color. The plant flowers are an important food source for butterflies and hummingbirds. The seeds are an important food for quail and other birds.

Black sage is able to grow on a variety of different soils, including sandstone, shale, granite, serpentinite, and gabbro or basalt. It requires a minimum of 15" and a maximum of 40" of rain per year. In the drier part of its range, black sage is happier on flats, mesas or slope bottoms where there is slightly more moisture retained in the soil. Black sages tend to turn yellow and eventually die in poorly draining sites. The plant prefers sun, but tolerates part shade. The normal form of black sage can get very large. Prostrate forms of black sage grow to just 1-2 feet tall by 6 feet in width and tend to be denser than the normal form, making an excellent ground cover.

Plant Description

Plant Type
Shrub

Size
3 - 6 ft tall
10 ft wide

Form
Mounding

Growth Rate
Moderate

Dormancy
Evergreen, Summer Semi-Deciduous, Summer Deciduous,

Fragrance
Fragrant - Pleasant

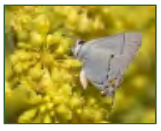
Flower Color
Blue, Lavender, White

Flowering Season
Winter, Spring, Summer

Wildlife Supported

Insects, especially bees and butterflies, and hummingbirds are attracted to the flowers. Quail, Towhees and other birds are attracted to the seeds.

Butterflies & moths hosted (2 confirmed ✓, 8 likely *) SHOW ALL

✓ 
Gray Hairstreak
Strymon melinus

✓ 
Pherne subpunctata

* 
Alfalfa Looper Moth
Autographa californica

* 
Bilobed Looper Moth
Megalographa biloba

Landscaping Information

Sun
Full Sun

Moisture
Extremely Low, Very Low

Summer Irrigation
Max 2x / month once established

Nurseries
Carried by 65

Ease of Care
Very Easy

Cold Tolerance
Tolerates cold to 30° F

Soil Drainage
Fast, Medium

Soil Description
Tolerates a variety of soils although it is happier with good drainage. Tolerates Gabro Soil,Tolerates Serpentine Soil. Soil PH: 4.0 - 8.0

Common uses
Bank Stabilization, Groundcovers, Hedges, Deer Resistant, Bird Gardens, Butterfly Gardens, Bee Gardens

Companion Plants
Laurel Sumac (Malosma laurina), Lemonade Berry (Rhus integrifolia), Coast Live Oak (Quercus agrifolia), Scrub Oak (Quercus berberidifolia), Woolly Bluecurls (Trichostema lanatum), Climbing Penstemon (Keckiella cordifolia), California Encelia (Encelia californica), California Buckwheat (Eriogonum fasciculatum), Coast Sagebrush (Artemisia californica), California Adolphia (Adolphia californica), Diplacus puniceus, Chaparral Bush Mallow, White Coast Ceanothus (Ceanothus verrucosus) Hollyleaf Redberry (Rhamnus species), Manzanita (Arctostaphylos species), Yucca species, Dudleya species and cactus species

Propagation?
For propagating by seed: No treatment; sow outdoors in early fall. Germination may be poor. The following alternative treatments may improve germination: stratify 3 mos. or soak in 400 ppm GA3 1 hr., then dry and sow (Betty Atwater, personal communication 1981).

Sunset Zones?
7*, 8, 9, 14*, 15*, 16*, 17*, 18, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
Flats, mesas, foothills, canyons, shallow slopes, and slope bottoms as part of coastal sage scrub and chaparral

Climate
Annual Precipitation: 4.5" - 51.2", Summer Precipitation: 0.14" - 2.64", Coldest Month: 34.4" - 60.4", Hottest Month: 58.6" - 88.3", Humidity: 0.41" - 42.82", Elevation: -18" - 6692"

Sources include: Wikipedia. All text shown in the "About" section of these pages is available under the Creative Commons Attribution-ShareAlike License. Plant observation data provided by the participants of the California Consortia of Herbaria, Sunset information provided by Jepson Flora Project. Propogation from seed information provided by the Santa Barbara Botanical Garden from "Seed Propagation of Native California Plants" by Dara E. Emery. Sources of plant photos include CalPhotos, Wikimedia Commons, and independent plant photographers who have agreed to share their images with Calscape. Other general sources of information include Calflora, CNPS Manual of Vegetation Online, Jepson Flora Project, Las Pilitas, Theodore Payne, Tree of Life, The Xerces Society, and information provided by CNPS volunteer editors, with special thanks to Don Rideout. Climate data used in creation of plant range maps is from PRISM Climate Group, Oregon State University, using 30 year (1981-2010) annual "normals" at an 800 meter spatial resolution.

Links: Jepson eFlora Taxon Page CalPhotos Wikipedia Calflora

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California Sagebrush
Artemisia californica



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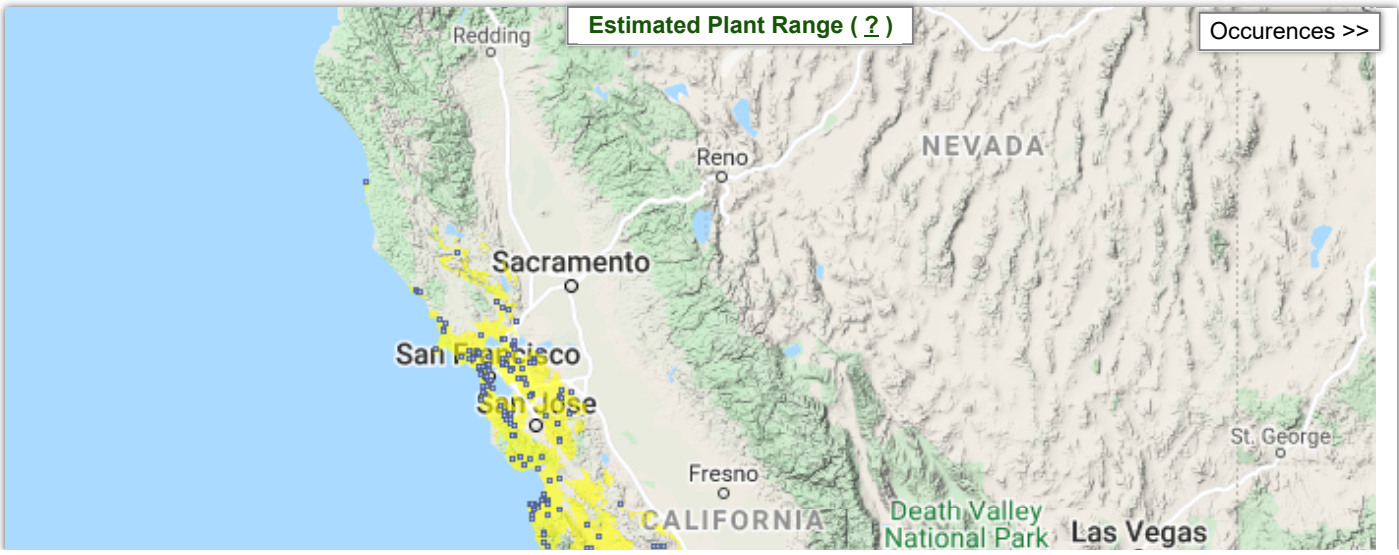

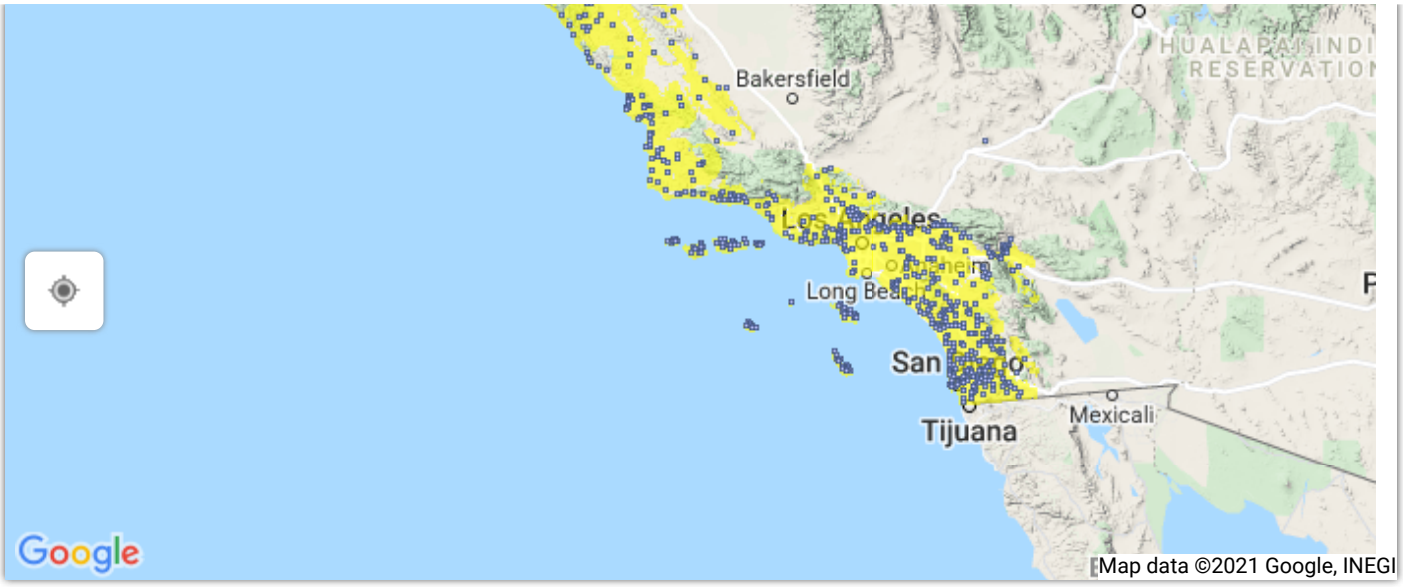

61 Nurseries Carry This Plant

About California Sagebrush (Artemisia californica)

California sagebrush, of the Asteraceae family, is a highly aromatic shrub that grows in coastal sage scrub, coastal strand, chaparral, and dry foothill communities, from sea level to 1000 meters (3300 feet). It is native to California and Baja California. The plant branches from the base and grows out from there, becoming rounded. Plant height varies significantly, ranging from low growing forms as little as.3 meters (1 foot) tall up to towering forms of up to 2.5 meters (8 feet) tall. The stems of the plant are slender, flexible, and smooth (hairless) or canescent (fuzzy). The leaves range from one to 10 centimeters long and are divided with 2-4 threadlike lobes less than five centimeters long. Their leaves are hairy and light green to gray in color; the margins of the leaves curl under. The flower clusters are leafy, narrow, and sparse. The pistillate flowers range in number from 6 to 10 and the disk flowers range from 15 to 30, and they are generally yellowish in appearance, but sometimes red. The fruits produced are resinous achenes up to 1.5 millimeters long.

This plant is extremely drought tolerant, and will often be the only plant growing on the driest, south-facing slopes in the driest parts of it's range. It's tough and easy to grow, fast growing up to 3 feet tall. It can handle occasional summer water, or no water at all during the summer. It can get weedy, but its foliage is a beautiful silvery color when backlit by the sun. This is one of the foundation plants of the coastal sage scrub community and the preferred plant of the California gnatcatcher, a threatened species. There are several selections available for the garden, some of which can be used as groundcovers.

Plant Description

Plant Type
Shrub

Size
1 - 8 ft tall
4 ft wide

Form
Mounding, Rounded, Spreading

Growth Rate
Fast

Dormancy
Summer Deciduous

Fragrance
Fragrant - Pleasant

Flower Color
Cream, White, Yellow

Flowering Season
Spring, Summer, Fall

Wildlife Supported

California Gnatcatcher, Quail, various other birds, insects

Butterflies & moths hosted (5 confirmed ✓, 21 likely *) SHOW ALL


✓ Pero macdunnoughi


✓ Plataea personaria


✓ Aseptis susquesa


✓ Eupithecia acutipennis

Landscaping Information

Sun
Full Sun

Moisture
Extremely Low, Very Low

Summer Irrigation
Max 1x / month once established

Nurseries
Carried by 61

Ease of Care
Very Easy

Cold Tolerance
Tolerates cold to 20° F

Soil Drainage
Fast, Medium, Slow

Soil Description
Usually found on very dry slopes or sandy soil with low nutrient content, although it is also said to tolerate clay.
Soil PH: 5.0 - 8.0

Common uses
Bank Stabilization, Groundcovers, Butterfly Gardens, Deer Resistant, Bird Gardens

Companion Plants
Black Sage, White Sage, California Encelia, Chamise, Coyote Brush, California Buckwheat, Sticky Monkeyflower, Woolly Bluecurls, Scrub Oaks, Toyon, Lemonadeberry, Yucca spp, various cactus species

Sunset Zones?
7, 8, 9, 14*, 15*, 16*, 17*, 18*, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
Dry slopes and flats, often south facing.

Climate
Annual Precipitation: 3.4" - 63.5", Summer Precipitation: 0.14" - 1.67", Coldest Month: 39.8" - 59.4", Hottest Month: 57.7" - 87.8", Humidity: 0.29" - 38.63", Elevation: -22" - 4748"

Alternative Names

Common Names: Coast Sagebrush, Coastal Sage Brush, Coastal Sagebrush

Sources include: Wikipedia. All text shown in the "About" section of these pages is available under the Creative Commons Attribution-ShareAlike License. Plant observation data provided by the participants of the California Consortia of Herbaria, Sunset information provided by Jepson Flora Project. Propogation from seed information provided by the Santa Barbara Botanical Garden from "Seed Propagation of Native California Plants" by Dara E. Emery. Sources of plant photos include CalPhotos, Wikimedia Commons, and independent plant photographers who have agreed to share their images with Calscape. Other general sources of information include Calflora, CNPS Manual of Vegetation Online, Jepson Flora Project, Las Pilitas, Theodore Payne, Tree of Life, The Xerces Society, and information provided by CNPS volunteer editors, with special thanks to Don Rideout. Climate data used in creation of plant range maps is from PRISM Climate Group, Oregon State University, using 30 year (1981-2010) annual "normals" at an 800 meter spatial resolution.

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Bladderpod
Peritoma arborea



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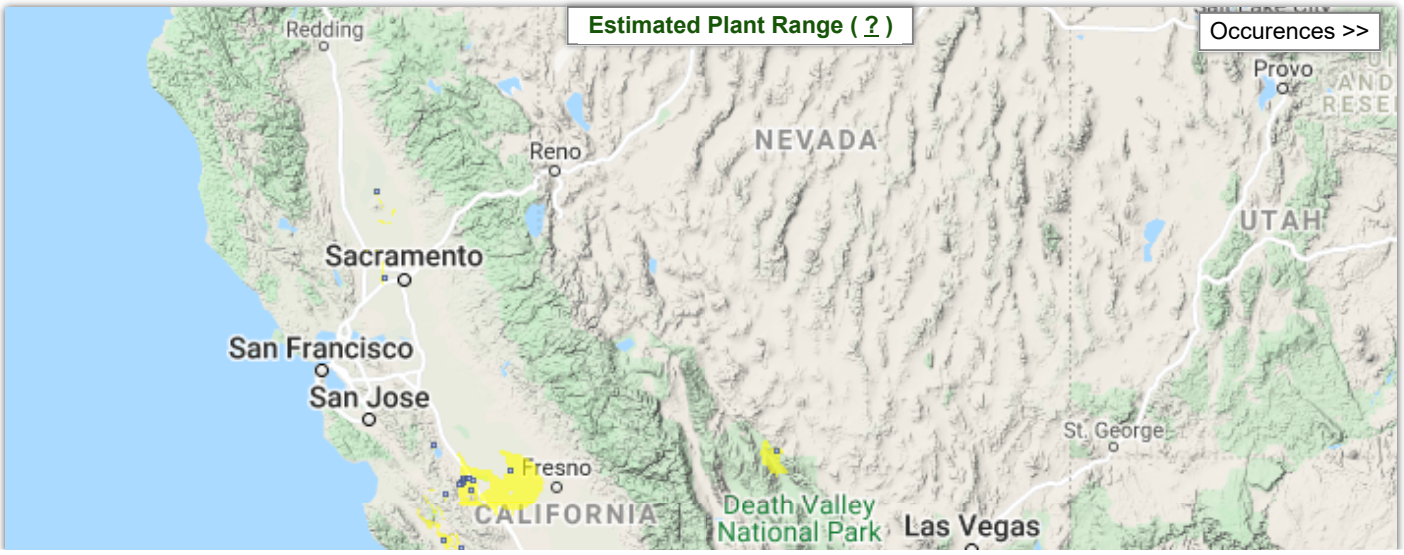
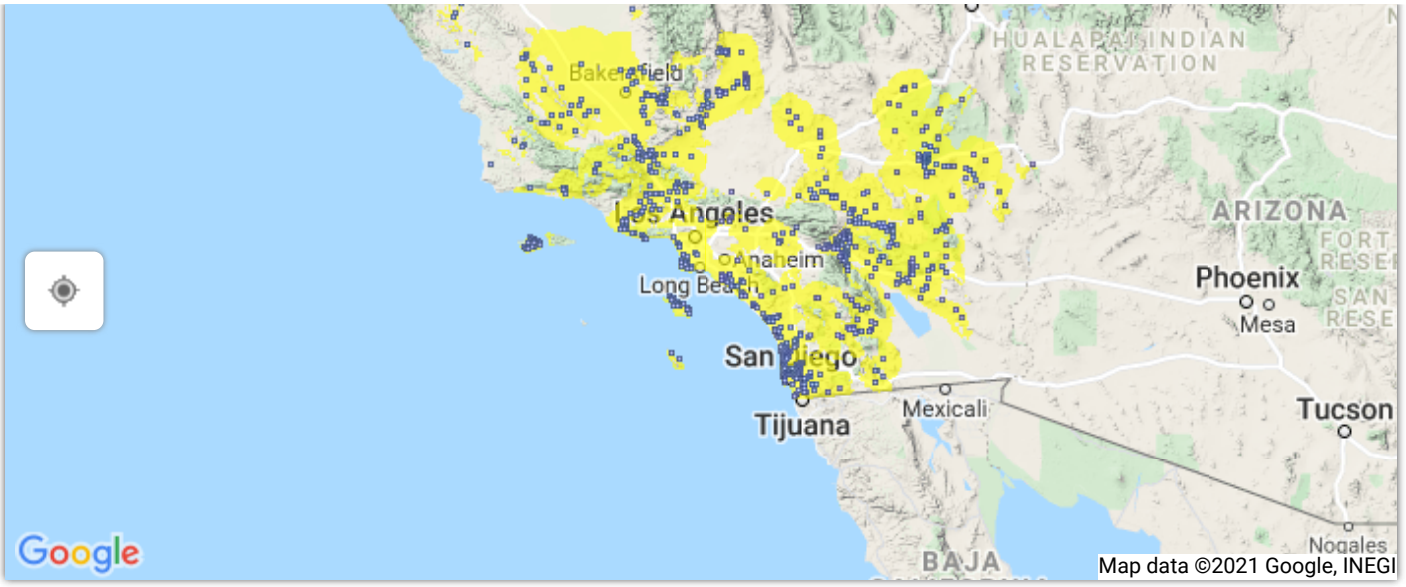




40 Nurseries Carry This Plant

About Bladderpod (Peritoma arborea)

Bladder Pod is a species of the Caper family also known by the common names burrofat, and California Cleome. It is native to California (primarily southern) and Baja California where it grows in a variety of habitats from coastal bluffs to desert arroyos. It is a densely branching shrub reaching one half to two meters in height. Its leaves are made up of three equal leaf-like leaflets, each a long, pointed oval one to four centimeters long. The plant produces abundant flower clusters at the ends of the stem branches, each a cluster of bright yellow flowers. Each flower has usually four petals and six whiskery protruding stamens with curling tips holding the anthers. At the middle is a long, protruding style which holds the developing fruit at its tip. The fruit is an inflated capsule about 4 centimeters long. It is edible. It is smooth and green when new, aging to light brown. A typical flower cluster bears a number of unopened flower buds at its tip, open flowers proximal to the buds, and maturing fruits which have shed their flowers below these.

Bladderpod is one of the easiest California natives to grow in landscape applications. It tolerates weekly summer water but can also get by with only natural rainfall. They are easy to grow from seeds, usually growing in a year to 3 feet tall. The readily self seed, and once you have a few mature plants in your garden, expect new seedlings to pop up each winter. This tough plant grows well even on south-facing slopes, alkaline soils and salty conditions. The flowers are beautiful, bright yellow, and stay on the plant most of the year, and attract bees, butterflies and hummingbirds. It is highly fragrant, though the public is divided on whether it is pleasant or unpleasant.

Plant Description

Plant Type
Shrub

Size
1.6 - 6.6 ft tall
6 ft wide

Form
Mounding

Growth Rate
Fast

Dormancy
Evergreen

Fragrance
Fragrant - Pleasant, Fragrant - Unpleasant

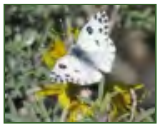
Flower Color
Yellow

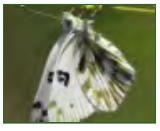
Flowering Season
Spring, Summer, Fall, Winter

Wildlife Supported

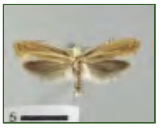
It particularly attracts harlequin beetles which eat the leaves

Butterflies & moths hosted (4 likely *) SHOW ALL

* 
Checkered White
Pontia protodice

* 
Becker's White
Pontia beckerii

* 
Western White
Pontia occidentalis

* 
Eidophasia dammersi

Landscaping Information

Sun
Full Sun

Moisture
Very Low, Low

Summer Irrigation
Max 1x / month
once established

Nurseries
Carried by 40

Ease of Care
Very Easy

Soil Drainage
Fast

Soil Description
Prefers well drained soils such as sand or decomposed granite. Tolerates Saline Soil. Soil PH: 7.0 - 9.0

Common uses
Bank Stabilization, Deer Resistant, Bird Gardens, Hummingbird Gardens, Butterfly Gardens

Companion Plants
A huge range of potential companions including Sand Verbena (Abronia species), California Sea Lavender (Limonium californicum), California Sagebrush (Artemisia californica), Chamise (Adenostema fasciculatum), Brittlebush (Encelia species), Joshua Tree (Yucca brevifolia), Indian Mallow (Abutilon palmeri), Rush Milkweed (Asclepias subulata), Buckwheat (Eriogonum species), Ocotillo (Fouquieria splendens), Chuparosa (Justicia californica), Apricot Mallow (Sphaeralcea ambigua), Yucca species, numerous cactus species

Maintenance
If harlequin beetles become a problem they can be removed by hand or sprayed off with a garden hose. It is usually not possible to eliminate them entirely.

Propagation?
By seed.

Sunset Zones?
8, 9, 12, 13, 14*, 15, 16, 17, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
This plant is unique in occurring in the immediate vicinity of the seashore, inland valleys and foothills, as well as in high desert and low desert. Near the coast it is typically found on dry slopes in coastal sage scrub. In the high desert - Joshua Tree woodland. In the low desert - Creosote Bush scrub

Climate
Annual Precipitation: 3.0" - 37.4", Summer Precipitation: 0.13" - 2.67", Coldest Month: 34.3" - 60.8", Hottest Month: 61.8" - 89.1", Humidity: 0.88" - 41.57", Elevation: -136" - 6023"

Alternative Names

Botanical Names: Isomeris arborea,Cleome arborea,Cleome isomeris
Common Names: Bladder Pod, Burrofat, California Cleome, Coastal Bladderpod

Sources include: Wikipedia. All text shown in the "About" section of these pages is available under the Creative Commons Attribution-ShareAlike License. Plant observation data provided by the participants of the California Consortia of Herbaria, Sunset information provided by Jepson Flora Project. Propogation from seed information provided by the Santa Barbara Botanical Garden from "Seed Propagation of Native California Plants" by Dara E. Emery. Sources of plant photos include CalPhotos, Wikimedia Commons, and independent plant photographers who have agreed to share their images with Calscape. Other general sources of information include Calflora, CNPS Manual of Vegetation Online, Jepson Flora Project, Las Pilitas, Theodore Payne, Tree of Life, The Xerces Society, and information provided by CNPS volunteer editors, with special thanks to Don Rideout. Climate data used in creation of plant range maps is from PRISM Climate Group, Oregon State University, using 30 year (1981-2010) annual "normals" at an 800 meter spatial resolution.

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Ashyleaf Buckwheat
Eriogonum cinereum



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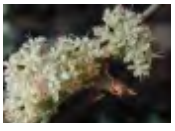
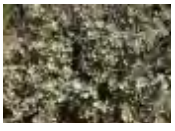
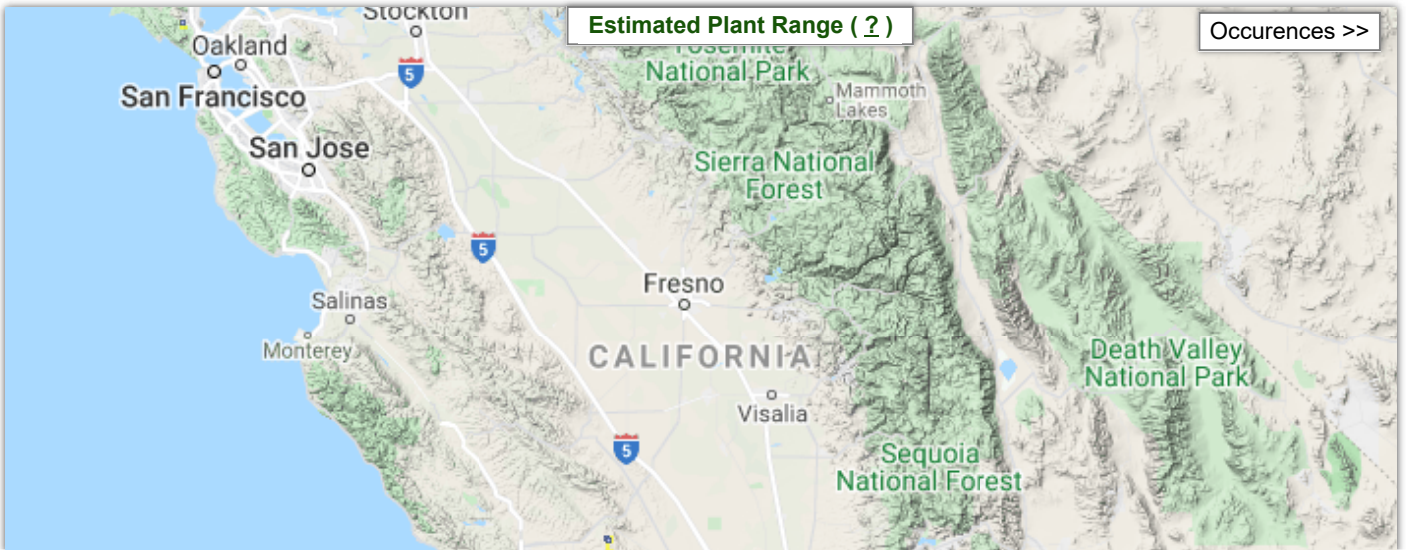








28 Nurseries Carry This Plant

About Ashyleaf Buckwheat (Eriogonum cinereum)

Eriogonum cinereum is a species of wild buckwheat known by the common names coastal buckwheat and ashyleaf buckwheat. This shrub is endemic to the coastline of California, where it grows on beaches and bluffs and in coastal scrub and chaparral. This plant may reach up over a meter in height and width and is light silvery gray in color due to the woolly hairs on its stems and foliage. The leaves are wavy-edged ovals one to three centimeters long. The flower clusters stick out from the plant, each with one to several heads of tiny tightly-packed frilly flowers which are usually light brownish-pink in color and quite hairy. This is the foodplant for Euphilotes bernardino, the Bernardino dotted blue butterfly.

Plant Description

Plant Type
Shrub

Size
2 - 4 ft tall
3 - 5 ft wide

Form
Rounded

Growth Rate
Fast

Dormancy
Evergreen

Flower Color
Brown, Yellow

Flowering Season
Winter, Spring, Summer, Fall

Wildlife Supported

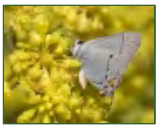
Many butterfly species (including Euphilotes bernardino, the Bernardino dotted blue butterfly) and other pollinators including wasps which prey on harmful garden pests! They may attract small mammals and birds who eat the seeds.

Butterflies & moths hosted (3 confirmed ✓, 41 likely *) SHOW ALL

✓ 
Mormon Metalmark
Apodemia mormo

✓ 
Square-spotted Blue
Euphilotes battoides

✓ 
Bernardino Blue
Euphilotes bernardino

* 
Gray Hairstreak
Strymon melinus

Landscaping Information

Sun
Full Sun

Moisture
Extremely Low, Very Low

Summer Irrigation
Max 1x / month once established

Nurseries
Carried by 28

Ease of Care
Moderately Easy

Cold Tolerance
Tolerates cold to 15 - 25° F

Soil Drainage
Fast, Medium, Slow

Soil Description
Adaptable. Soil PH: 6 - 8

Common uses
Bird Gardens, Butterfly Gardens, Bee Gardens

Companion Plants
Plant alongside other natives of the California coastal scrub region, such as California Larkspur (Delphinium californicum), Common Tidy Tips (Layia platyglossa), Maritime Brome (Bromus maritimus), and Monterey Indian Paintbrush (Castilleja latifolia).

Maintenance
Remove dead seed heads in late fall and dead branches during the growing season. Older untidy plants can be pruned back to 8 inches in the fall to reestablish shape.

Propagation?
For propagating by seed: No treatment.

Sunset Zones?
5, 14*, 15*, 16*, 17*, 19, 20, 21, 22*, 23*, 24*

Natural Setting

Site Type
Beaches, bluffs

Climate
Annual Precipitation: 11.4" - 39.3", Summer Precipitation: 0.14" - 1.97", Coldest Month: 35.4" - 56.6", Hottest Month: 61.1" - 77.0", Humidity: 0.93" - 23.07", Elevation: -25" - 8222"

Alternative Names

Common Names: Coastal Buckwheat

Sources include: Wikipedia. All text shown in the "About" section of these pages is available under the Creative Commons Attribution-ShareAlike License. Plant observation data provided by the participants of the California Consortia of Herbaria, Sunset information provided by Jepson Flora Project. Propogation from seed information provided by the Santa Barbara Botanical Garden from "Seed Propagation of Native California Plants" by Dara E. Emery. Sources of plant photos include CalPhotos, Wikimedia Commons, and independent plant photographers who have agreed to share their images with Calscape. Other general sources of information include Calflora, CNPS Manual of Vegetation Online, Jepson Flora Project, Las Pilitas, Theodore Payne, Tree of Life, The Xerces Society, and information provided by CNPS volunteer editors, with special thanks to Don Rideout. Climate data used in creation of plant range maps is from PRISM Climate Group, Oregon State University, using 30 year (1981-2010) annual "normals" at an 800 meter spatial resolution.

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Bladderpod
Peritoma arborea



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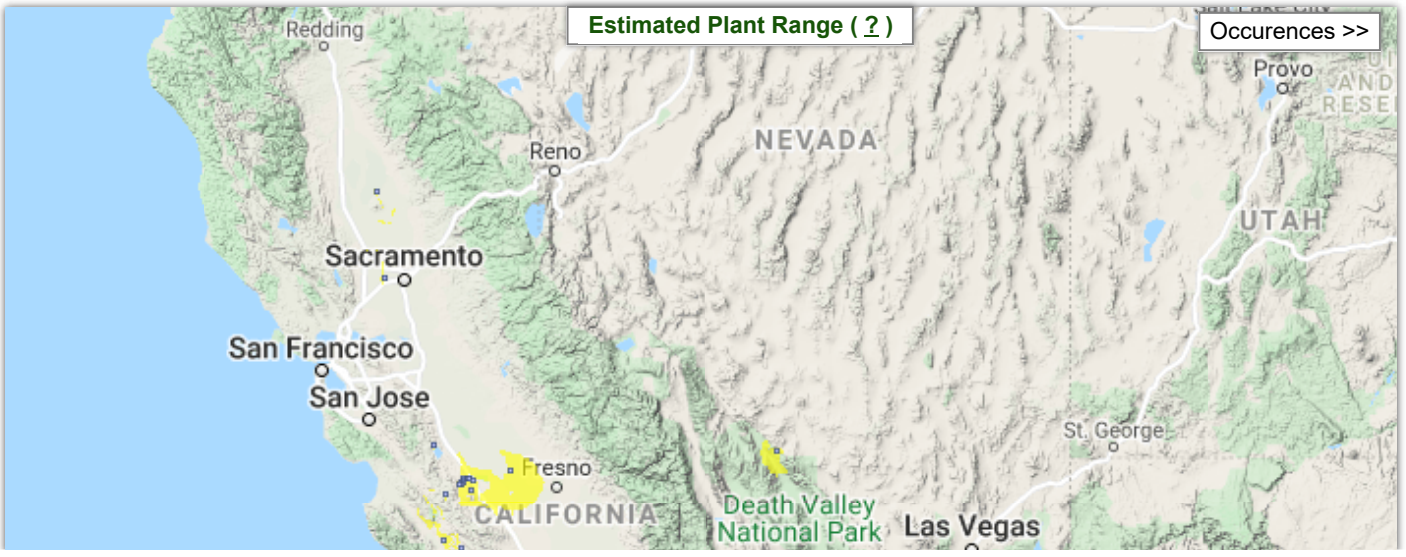
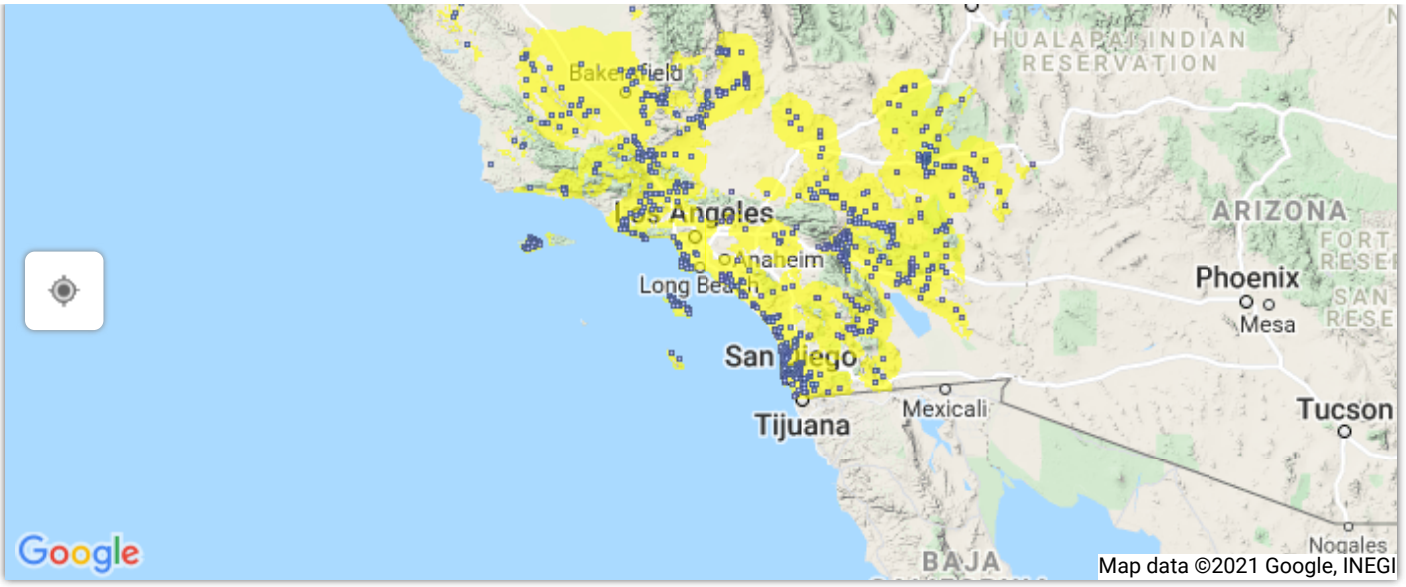




40 Nurseries Carry This Plant

About Bladderpod (Peritoma arborea)

Bladder Pod is a species of the Caper family also known by the common names burrofat, and California Cleome. It is native to California (primarily southern) and Baja California where it grows in a variety of habitats from coastal bluffs to desert arroyos. It is a densely branching shrub reaching one half to two meters in height. Its leaves are made up of three equal leaf-like leaflets, each a long, pointed oval one to four centimeters long. The plant produces abundant flower clusters at the ends of the stem branches, each a cluster of bright yellow flowers. Each flower has usually four petals and six whiskery protruding stamens with curling tips holding the anthers. At the middle is a long, protruding style which holds the developing fruit at its tip. The fruit is an inflated capsule about 4 centimeters long. It is edible. It is smooth and green when new, aging to light brown. A typical flower cluster bears a number of unopened flower buds at its tip, open flowers proximal to the buds, and maturing fruits which have shed their flowers below these.

Bladderpod is one of the easiest California natives to grow in landscape applications. It tolerates weekly summer water but can also get by with only natural rainfall. They are easy to grow from seeds, usually growing in a year to 3 feet tall. The readily self seed, and once you have a few mature plants in your garden, expect new seedlings to pop up each winter. This tough plant grows well even on south-facing slopes, alkaline soils and salty conditions. The flowers are beautiful, bright yellow, and stay on the plant most of the year, and attract bees, butterflies and hummingbirds. It is highly fragrant, though the public is divided on whether it is pleasant or unpleasant.

Plant Description

Plant Type
Shrub

Size
1.6 - 6.6 ft tall
6 ft wide

Form
Mounding

Growth Rate
Fast

Dormancy
Evergreen

Fragrance
Fragrant - Pleasant, Fragrant - Unpleasant

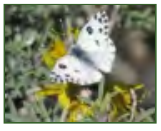
Flower Color
Yellow

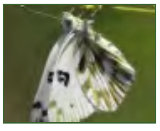
Flowering Season
Spring, Summer, Fall, Winter

Wildlife Supported

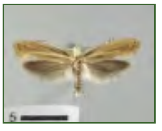
It particularly attracts harlequin beetles which eat the leaves

Butterflies & moths hosted (4 likely *) SHOW ALL

* 
Checkered White
Pontia protodice

* 
Becker's White
Pontia beckerii

* 
Western White
Pontia occidentalis

* 
Eidophasia dammersi

Landscaping Information

Sun
Full Sun

Moisture
Very Low, Low

Summer Irrigation
Max 1x / month
once established

Nurseries
Carried by 40

Ease of Care
Very Easy

Soil Drainage
Fast

Soil Description
Prefers well drained soils such as sand or decomposed granite. Tolerates Saline Soil. Soil PH: 7.0 - 9.0

Common uses
Bank Stabilization, Deer Resistant, Bird Gardens, Hummingbird Gardens, Butterfly Gardens

Companion Plants
A huge range of potential companions including Sand Verbena (Abronia species), California Sea Lavender (Limonium californicum), California Sagebrush (Artemisia californica), Chamise (Adenostema fasciculatum), Brittlebush (Encelia species), Joshua Tree (Yucca brevifolia), Indian Mallow (Abutilon palmeri), Rush Milkweed (Asclepias subulata), Buckwheat (Eriogonum species), Ocotillo (Fouquieria splendens), Chuparosa (Justicia californica), Apricot Mallow (Sphaeralcea ambigua), Yucca species, numerous cactus species

Maintenance
If harlequin beetles become a problem they can be removed by hand or sprayed off with a garden hose. It is usually not possible to eliminate them entirely.

Propagation?
By seed.

Sunset Zones?
8, 9, 12, 13, 14*, 15, 16, 17, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
This plant is unique in occurring in the immediate vicinity of the seashore, inland valleys and foothills, as well as in high desert and low desert. Near the coast it is typically found on dry slopes in coastal sage scrub. In the high desert - Joshua Tree woodland. In the low desert - Creosote Bush scrub

Climate
Annual Precipitation: 3.0" - 37.4", Summer Precipitation: 0.13" - 2.67", Coldest Month: 34.3" - 60.8", Hottest Month: 61.8" - 89.1", Humidity: 0.88" - 41.57", Elevation: -136" - 6023"

Alternative Names

Botanical Names: Isomeris arborea,Cleome arborea,Cleome isomeris
Common Names: Bladder Pod, Burrofat, California Cleome, Coastal Bladderpod

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Deergrass
Muhlenbergia rigens



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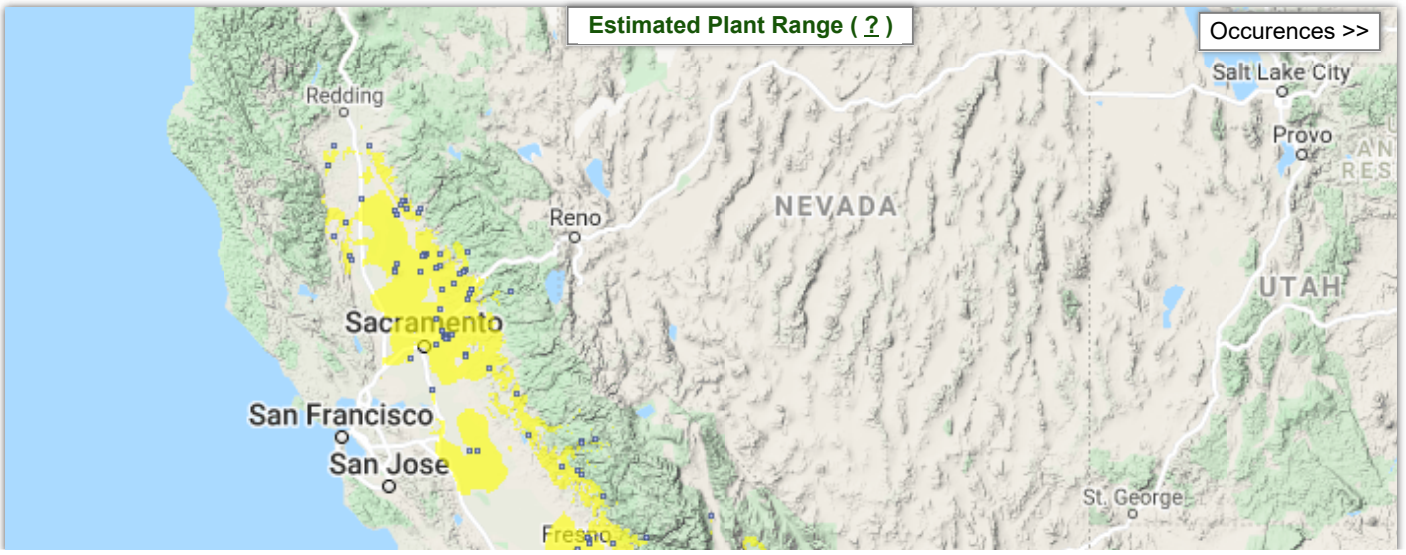

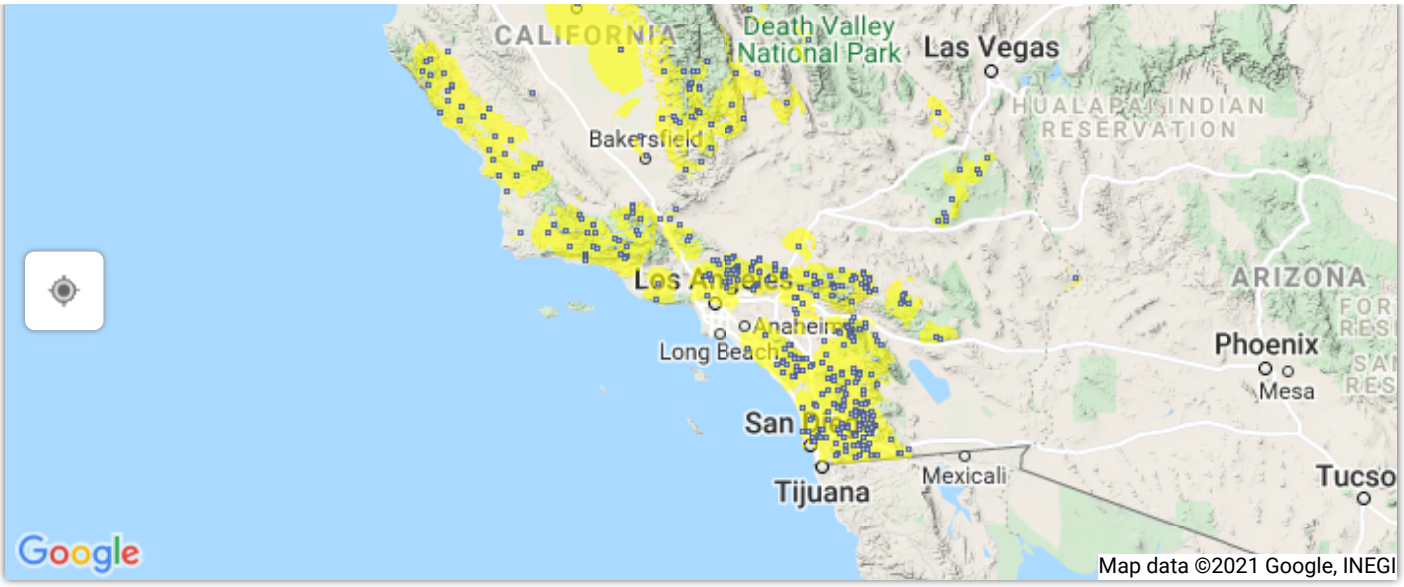

77 Nurseries Carry This Plant

About Deergrass (Muhlenbergia rigens)

Deergrass is a large perennial bunchgrass found in sandy or well drained soils below 7000 feet in elevation in the southwestern United States and parts of Mexico. In California, it grows primarily in the coast ranges of central and southern California, the Sierra and Cascade foothills, and the eastern part of the North Coast range. The plant is characterized by dense, tufted basal foliage consisting of narrow pointed leaves that reach lengths of about 3 feet and range in color from light silver-green to purple. The spike-like stems are less than half an inch wide and 3 to 4 feet in length. During bloom, the numerous flower bunches often reach heights of five feet. Deergrass is characteristic of tallgrass prairie of much of the Western United States. It inhabits a wide range of ecotypes including grassland, riparian, chaparral, mixed conifer, and oak woodland communities.

Deergrass is one of the most beautiful and probably the easiest to grow of all the native California bunchgrasses, typically reaching mature size in one or two years. It prefers sandy or gravelly soils, but does OK in almost any soil as long as it's well drained. It can handle fairly frequent summer water (up to 1x per week), but once mature, it really doesn't need any supplementary water. It prefers full sun or part shade, but handles full shade reasonably well - it just grows more slowly.

Plant Description

Plant Type
Grasses

Size
4 - 5 ft tall
4 ft wide

Form
Upright, Fountain

Growth Rate
Fast, Moderate

Dormancy
Evergreen

Fragrance
None

Flower Color
Yellow, Cream

Flowering Season
Spring

Wildlife Supported

Seed eating birds will be attracted to it in summer

Butterflies & moths hosted (1 likely *) SHOW ALL

* 

Green Cutworm Moth

Anicla infecta

Landscaping Information

Sun
Full Sun

Moisture
Low

Summer Irrigation
Max 1x / month

Nurseries
Carried by 77

once established

Ease of Care
Very Easy

Soil Drainage
Fast, Medium, Slow

Soil Description
Tolerant of sand and clay. Tolerates Serpentine Soil. Soil PH: 5.0 - 8.0

Common uses
Groundcovers, Deer Resistant

Companion Plants
This is a large clumping grass, so use with shrubs that won't be overwhelmed by it, such as Toyon (Heteromeles arbutifolia), Lemonade Berry (Rhus integrifolia), larger Ceanothus, Manzanita species, or Scrub Oaks.

Maintenance
Can be cut back in fall if it becomes unruly

Propagation?
For propagating by seed: No treatment.

Sunset Zones?
1, 2, 3, 6*, 7*, 8*, 9*, 10*, 11*, 14*, 15*, 16*, 17*, 18*, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
In southern California and along the central coast it is found in sandy gravelly places, canyons, and washes as part of the chaparral community. In inland mountain areas it may occur with Ponderosa Pine and other trees in yellow pine woodland or foothill woodland. In a few locations it may be found on seasonal stream banks or other wetland areas.

Climate
Annual Precipitation: 4.1" - 61.8", Summer Precipitation: 0.14" - 2.83", Coldest Month: 32.3" - 60.5", Hottest Month: 55.0" - 87.5", Humidity: 0.46" - 40.07", Elevation: 14" - 7694"

Alternative Names

Common Names: Deer Muhly

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Ashyleaf Buckwheat
Eriogonum cinereum



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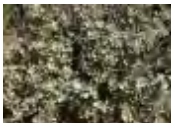
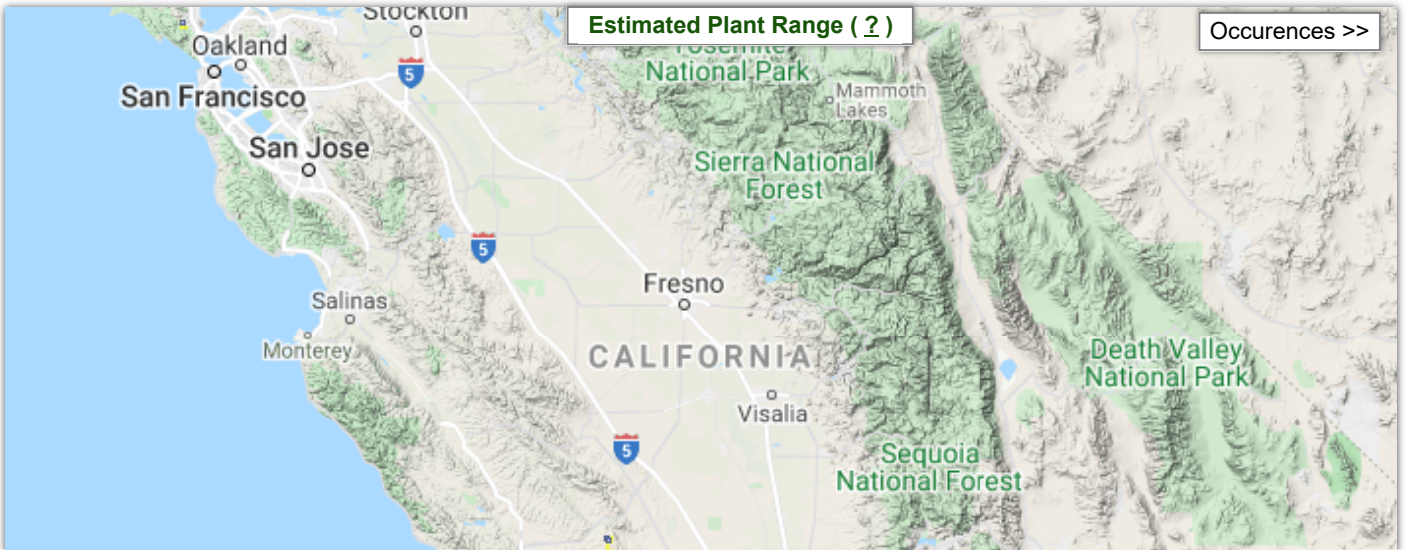








28 Nurseries Carry This Plant

About Ashyleaf Buckwheat (Eriogonum cinereum)

Eriogonum cinereum is a species of wild buckwheat known by the common names coastal buckwheat and ashyleaf buckwheat. This shrub is endemic to the coastline of California, where it grows on beaches and bluffs and in coastal scrub and chaparral. This plant may reach up over a meter in height and width and is light silvery gray in color due to the woolly hairs on its stems and foliage. The leaves are wavy-edged ovals one to three centimeters long. The flower clusters stick out from the plant, each with one to several heads of tiny tightly-packed frilly flowers which are usually light brownish-pink in color and quite hairy. This is the foodplant for Euphilotes bernardino, the Bernardino dotted blue butterfly.

Plant Description

Plant Type
Shrub

Size
2 - 4 ft tall
3 - 5 ft wide

Form
Rounded

Growth Rate
Fast

Dormancy
Evergreen

Flower Color
Brown, Yellow

Flowering Season
Winter, Spring, Summer, Fall

Wildlife Supported

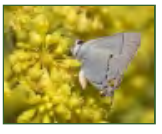
Many butterfly species (including Euphilotes bernardino, the Bernardino dotted blue butterfly) and other pollinators including wasps which prey on harmful garden pests! They may attract small mammals and birds who eat the seeds.

Butterflies & moths hosted (3 confirmed ✓, 41 likely *) SHOW ALL

✓ 
Mormon Metalmark
Apodemia mormo

✓ 
Square-spotted Blue
Euphilotes battoides

✓ 
Bernardino Blue
Euphilotes bernardino

* 
Gray Hairstreak
Strymon melinus

Landscaping Information

Sun
Full Sun

Moisture
Extremely Low, Very Low

Summer Irrigation
Max 1x / month once established

Nurseries
Carried by 28

Ease of Care
Moderately Easy

Cold Tolerance
Tolerates cold to 15 - 25° F

Soil Drainage
Fast, Medium, Slow

Soil Description
Adaptable. Soil PH: 6 - 8

Common uses
Bird Gardens, Butterfly Gardens, Bee Gardens

Companion Plants
Plant alongside other natives of the California coastal scrub region, such as California Larkspur (Delphinium californicum), Common Tidy Tips (Layia platyglossa), Maritime Brome (Bromus maritimus), and Monterey Indian Paintbrush (Castilleja latifolia).

Maintenance
Remove dead seed heads in late fall and dead branches during the growing season. Older untidy plants can be pruned back to 8 inches in the fall to reestablish shape.

Propagation?
For propagating by seed: No treatment.

Sunset Zones?
5, 14*, 15*, 16*, 17*, 19, 20, 21, 22*, 23*, 24*

Natural Setting

Site Type
Beaches, bluffs

Climate
Annual Precipitation: 11.4" - 39.3", Summer Precipitation: 0.14" - 1.97", Coldest Month: 35.4" - 56.6", Hottest Month: 61.1" - 77.0", Humidity: 0.93" - 23.07", Elevation: -25" - 8222"

Alternative Names

Common Names: Coastal Buckwheat

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Black Sage
Salvia mellifera



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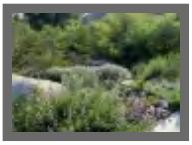
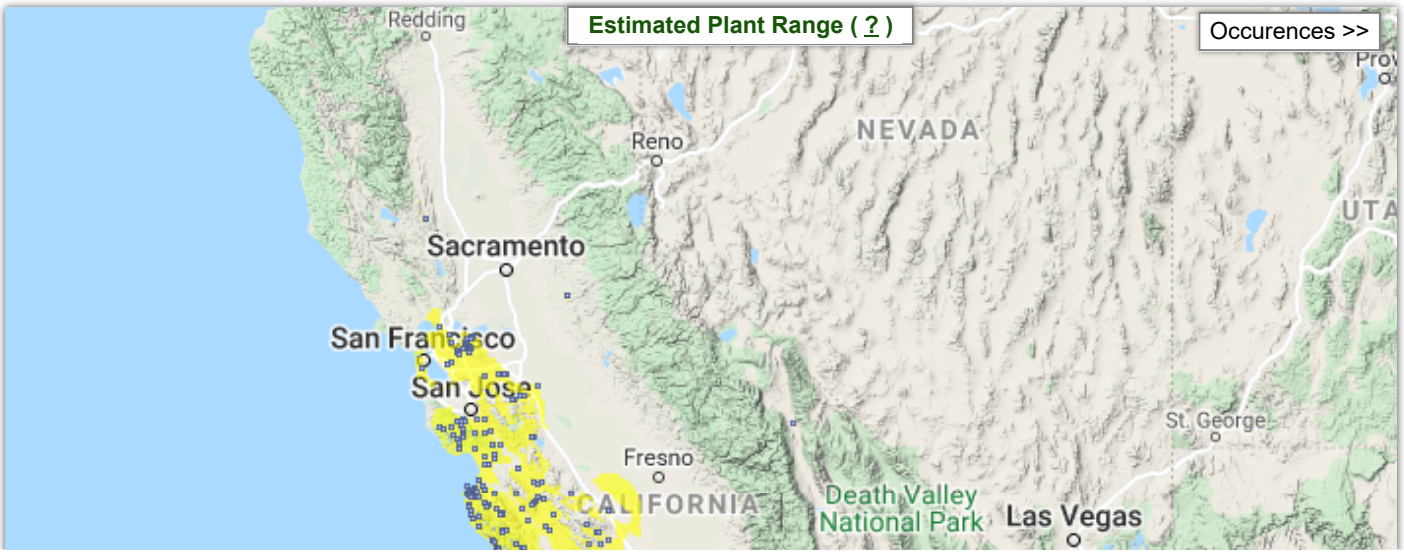
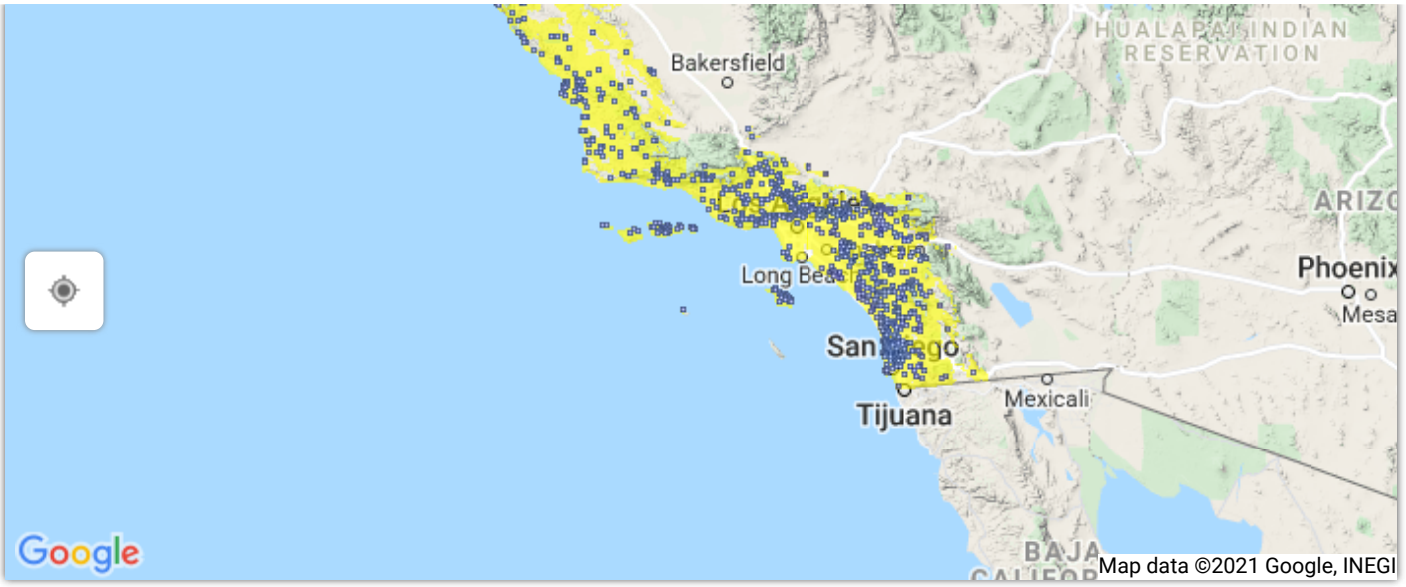






65 Nurseries Carry This Plant

About Black Sage (Salvia mellifera)

Black sage is the most common sage in California, and one of the keystone species of the coastal sage scrub plant community in the southern half of the state. Black sages grows quickly up to 3 feet in height, but mature specimens can reach up to 6 feet in height and 10 feet in width. The plant has attractive dark green leaves, with raised texture that looks somewhat like a fingerprint pattern when viewed closely. The leaves are 1-3 inches long. The upper surface of the leaf is somewhat smooth, while the lower surface of the leaf is hairy. It is semi-deciduous, depending on the location and severity of drought. Leaves curl during the summer drought instead of dropping off. The plant is highly aromatic. Flower occurs in.5-1.5" wide clusters. Flower colors vary from white, to pale blue, to lavender, or rarely to pale rose color. The plant flowers are an important food source for butterflies and hummingbirds. The seeds are an important food for quail and other birds.

Black sage is able to grow on a variety of different soils, including sandstone, shale, granite, serpentinite, and gabbro or basalt. It requires a minimum of 15" and a maximum of 40" of rain per year. In the drier part of its range, black sage is happier on flats, mesas or slope bottoms where there is slightly more moisture retained in the soil. Black sages tend to turn yellow and eventually die in poorly draining sites. The plant prefers sun, but tolerates part shade. The normal form of black sage can get very large. Prostrate forms of black sage grow to just 1-2 feet tall by 6 feet in width and tend to be denser than the normal form, making an excellent ground cover.

Plant Description

Plant Type
Shrub

Size
3 - 6 ft tall
10 ft wide

Form
Mounding

Growth Rate
Moderate

Dormancy
Evergreen, Summer Semi-Deciduous, Summer Deciduous,

Fragrance
Fragrant - Pleasant

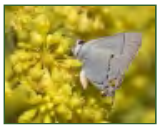
Flower Color
Blue, Lavender, White

Flowering Season
Winter, Spring, Summer

Wildlife Supported

Insects, especially bees and butterflies, and hummingbirds are attracted to the flowers. Quail, Towhees and other birds are attracted to the seeds.

Butterflies & moths hosted (2 confirmed ✓, 8 likely *) SHOW ALL

✓ 
Gray Hairstreak
Strymon melinus

✓ 
Pherne subpunctata

* 
Alfalfa Looper Moth
Autographa californica

* 
Bilobed Looper Moth
Megalographa biloba

Landscaping Information

Sun
Full Sun

Moisture
Extremely Low, Very Low

Summer Irrigation
Max 2x / month once established

Nurseries
Carried by 65

Ease of Care
Very Easy

Cold Tolerance
Tolerates cold to 30° F

Soil Drainage
Fast, Medium

Soil Description
Tolerates a variety of soils although it is happier with good drainage. Tolerates Gabro Soil,Tolerates Serpentine Soil. Soil PH: 4.0 - 8.0

Common uses
Bank Stabilization, Groundcovers, Hedges, Deer Resistant, Bird Gardens, Butterfly Gardens, Bee Gardens

Companion Plants
Laurel Sumac (Malosma laurina), Lemonade Berry (Rhus integrifolia), Coast Live Oak (Quercus agrifolia), Scrub Oak (Quercus berberidifolia), Woolly Bluecurls (Trichostema lanatum), Climbing Penstemon (Keckiella cordifolia), California Encelia (Encelia californica), California Buckwheat (Eriogonum fasciculatum), Coast Sagebrush (Artemisia californica), California Adolphia (Adolphia californica), Diplacus puniceus, Chaparral Bush Mallow, White Coast Ceanothus (Ceanothus verrucosus) Hollyleaf Redberry (Rhamnus species), Manzanita (Arctostaphylos species), Yucca species, Dudleya species and cactus species

Propagation?
For propagating by seed: No treatment; sow outdoors in early fall. Germination may be poor. The following alternative treatments may improve germination: stratify 3 mos. or soak in 400 ppm GA3 1 hr., then dry and sow (Betty Atwater, personal communication 1981).

Sunset Zones?
7*, 8, 9, 14*, 15*, 16*, 17*, 18, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
Flats, mesas, foothills, canyons, shallow slopes, and slope bottoms as part of coastal sage scrub and chaparral

Climate
Annual Precipitation: 4.5" - 51.2", Summer Precipitation: 0.14" - 2.64", Coldest Month: 34.4" - 60.4", Hottest Month: 58.6" - 88.3", Humidity: 0.41" - 42.82", Elevation: -18" - 6692"

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Bee Plant
Scrophularia californica



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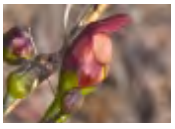

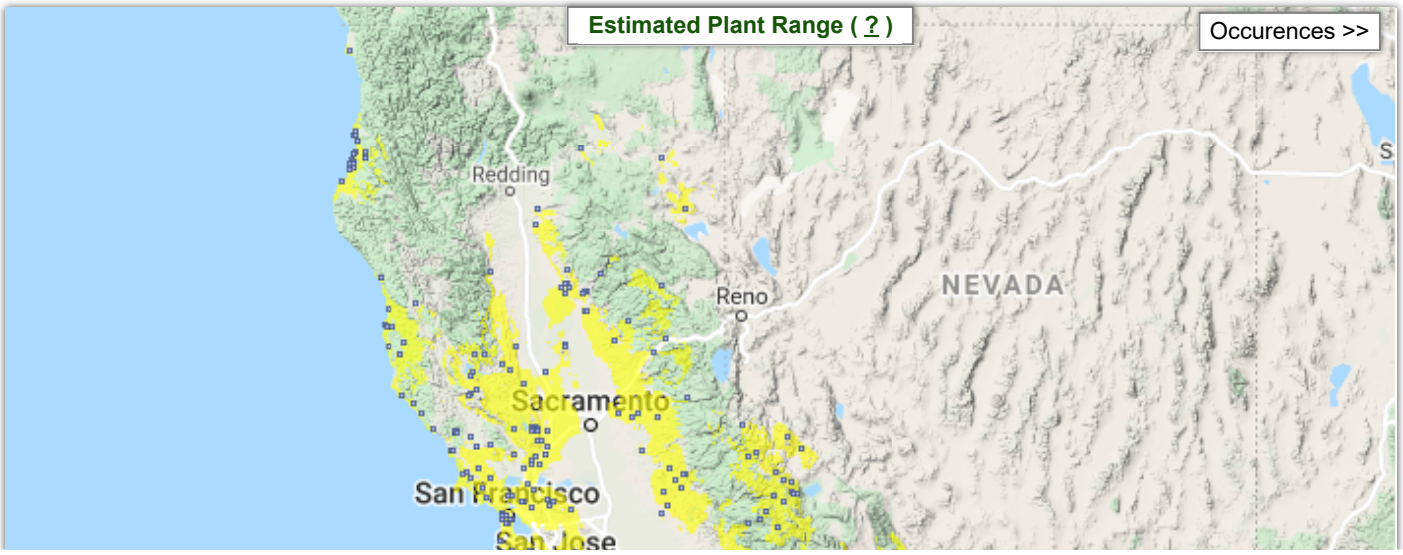

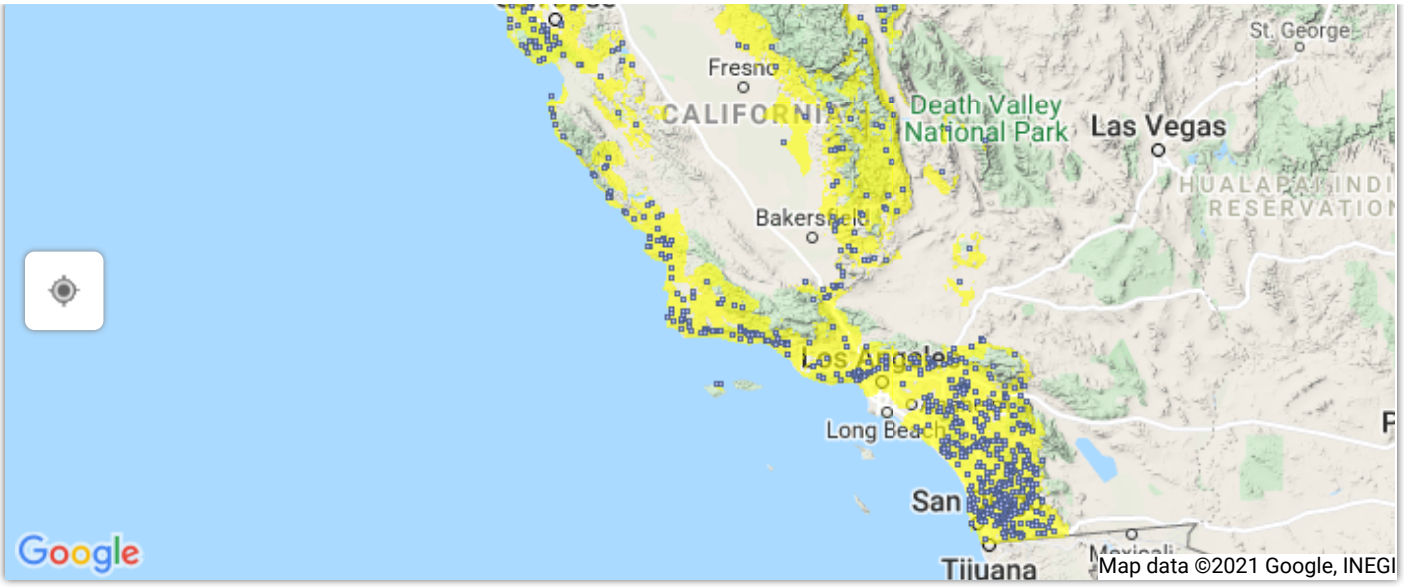

42 Nurseries Carry This Plant

About Bee Plant (Scrophularia californica)

Scrophularia californica is a flowering plant in the figwort family which is known by the common names California figwort and California bee plant. This perennial herb is native to the western United States and British Columbia. This is an unassuming plant with triangular, toothed, blue-green leaves in pairs opposite each other on a spindly, squared stem. The brownish-magenta flowers are rounded, hollow buds about a centimeter long with two long upper lobes. This species is a strong bee attractant.

Plant Description

Plant Type
Perennial herb

Size
2 - 4 ft tall
6 - 12 in wide

Form
Upright

Growth Rate
Fast

Dormancy
Evergreen

Fragrance
Slight

Flower Color
Red

Flowering Season
Winter, Spring

Wildlife Supported

Attracts bees, hummingbirds, and a species of small wasp, for which nectar is awarded. Figwort is a host plant for the butterfly larvae of Common Buckeye.

Butterflies & moths hosted (7 confirmed ✓, 5 likely *) SHOW ALL



✓ **Variable Checkerspot**
Euphydryas chalcedona



✓ **Garden Tortrix Moth**
Clepsis peritana



✓ **Geranium Plume Moth**
Amblyptilia pica



✓ **Orange Tortrix Moth**
Argyrotaenia franciscana

Landscaping Information

Sun
Part Shade

Moisture
Low

Summer Irrigation
Max 1x / month once established

Nurseries
Carried by 42

Ease of Care
Very Easy

Cold Tolerance
Tolerates cold to 20F° F

Soil Drainage
Fast, Medium

Soil Description
Adaptable to garden soils. Soil PH: 5.2 - 8.2

Adaptable to garden soils. Soil pH: 6.2 - 8.2

Common uses
Deer Resistant, Hummingbird Gardens, Bird Gardens, Butterfly Gardens, Bee Gardens

Companion Plants
Mimulus guttatis (Yellow Monkey Flower) Agrostis exarata (Bentgrass) Trifolium variegatum (Variegated Clover) Salix lasiolepis (Arroyo Willow) Asclepias fascicularis (Narrowleaf Milkweed) Alnus rhombifolia (White Alder) Ranunculus californicus (Common Buttercup) Equisetum arvense (Common Horsetail) Apocynum cannabinum (Indian Hemp) Clematis ligusticifolia (Creek Clematis) Aquilegia formosa (Columbine) Juncus balticus (Wire Rush) Salix exigua (Narrowleaf Willow) Artemisia douglasiana (California Mugwort) Salix laevigata (Red Willow) Rubus ursinus (California Blackberry) Rubus parviflorus (Thimbleberry) Rosa californica (California Wild Rose) Baccharis salicifolia (Mulefat) Golden Yarrow (Eriophyllum confertiflorum) Showy Penstemon (Penstemon spectabilis)

Sunset Zones?
4*, 5*, 6*, 7, 8, 9, 14*, 15*, 16*, 17*, 18*, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
Slope bottoms, north facing slopes, slightly moister places that receive 11-85 inches of rain per year.

Climate
Annual Precipitation: 4.4" - 71.8", Summer Precipitation: 0.14" - 4.20", Coldest Month: 21.1" - 56.4", Hottest Month: 46.0" - 83.5", Humidity: 0.01" - 34.47", Elevation: -40" - 10537"

Alternative Names

Common Names: California Bee Plant, California Bee-plant, California Figwort

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Swamp Carex
Carex senta



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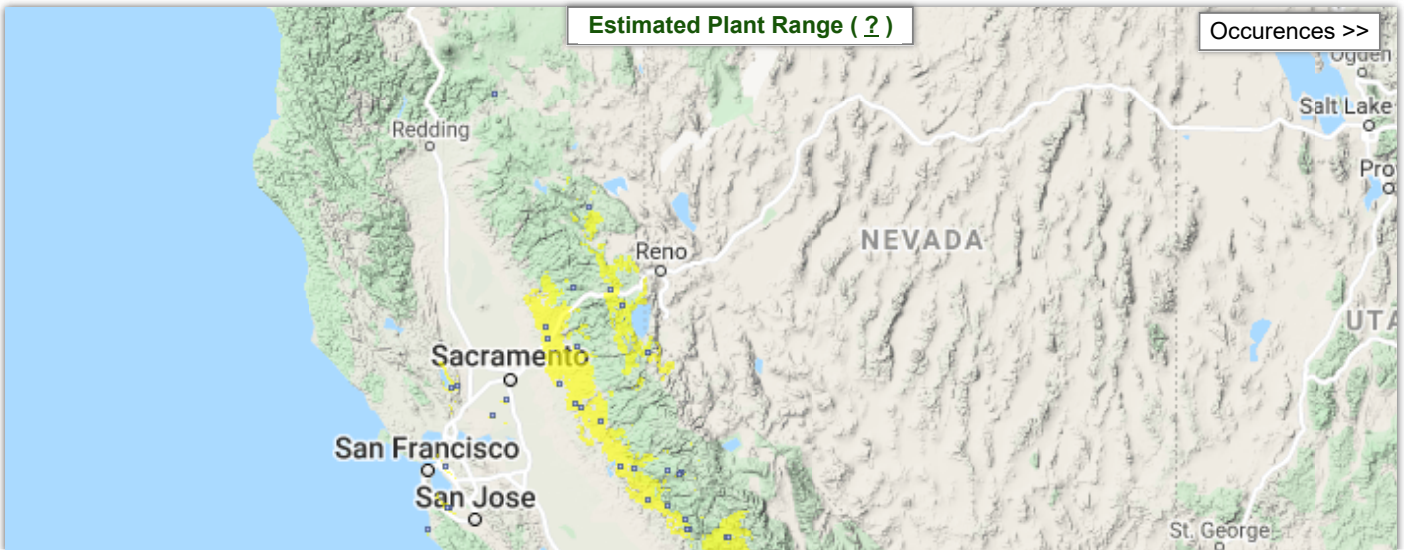



2 Nurseries Carry This Plant

About Swamp Carex (Carex senta)

Swamp Carex (Carex senta) is a native grass that grows in northern, southern and central California. It tends to grow in streambanks, marshy places and meadows, at elevations from 200-9500 feet.

Plant Description

Plant Type
Grasses

Flower Color
Brown

Wildlife Supported

Butterflies & moths hosted (7 likely *) SHOW ALL



Umber Skipper
Poanes melane



Common Ringlet
Coenonympha tullia



Dun Skipper
Euphyes vestris



American Ear Moth
Amphipoea americana

Landscaping Information

Sun
Part Shade

Moisture
Moderate - High

Nurseries
Carried by 2

Ease of Care
moderately easy

Soil Drainage
Standing

Sunset Zones?
1, 2, 3, 7*, 8*, 9*, 14*, 15*, 16*, 17, 18*, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
Streambanks, marshy places, meadows

Streambanks, marshy places, meadows

Climate
Annual Precipitation: 5.7" - 66.2", Summer Precipitation: 0.14" - 3.17", Coldest Month: 24.6" - 58.5", Hottest Month: 49.9" - 87.2", Humidity: 0.69" - 37.81", Elevation: 0" - 9656"

Alternative Names

Common Names: Swamp Sedge

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Creeping Wild Rye
Elymus triticoides



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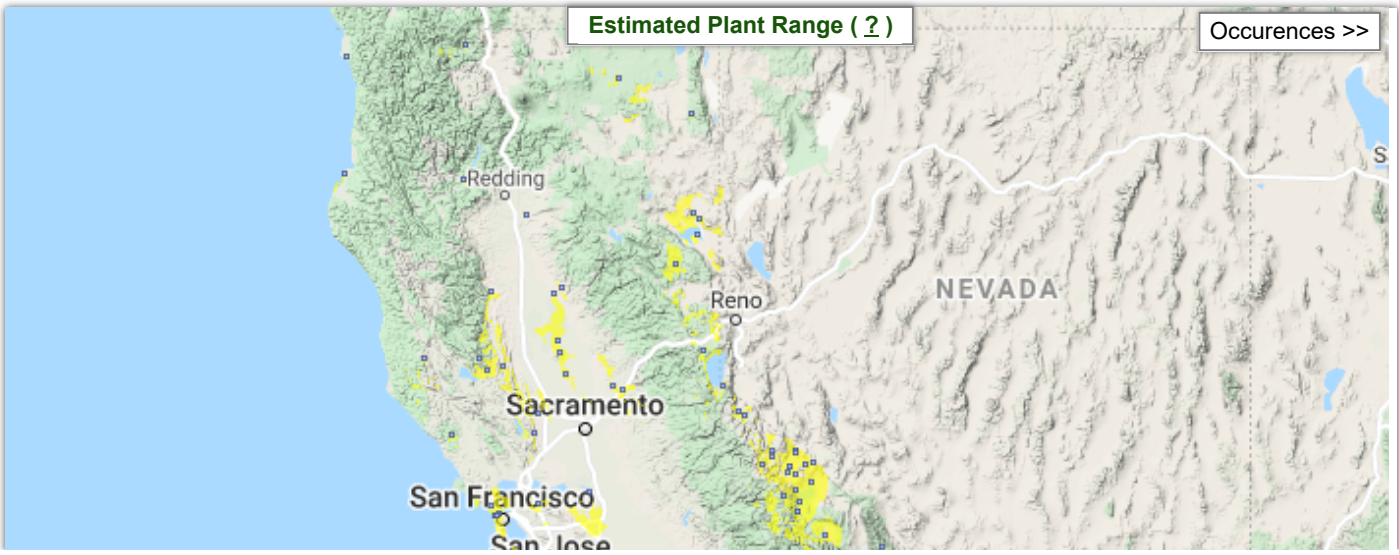



35 Nurseries Carry This Plant

About Creeping Wild Rye (Elymus triticoides)

Elymus triticoides is species in the Poaceae (Grass) family known by the common names Creeping Wild Rye and Beardless Wild Rye. It is native to western North America from British Columbia to Texas, where it often grows in moist habitat, sometimes with heavy and saline soils. It forms a solid, rhizomatous root system which allows it to grow at water's edge and prevent the soil from eroding. It reaches 1.3 meters in maximum height with stiff, slender green to blue-green leaves that stand away from the stems at an obvious angle. The flower cluster is a narrow spike up to 20 centimeters long. This grass is not frequently used in residential gardens, but it is a good range land grass for grazing, and it is used to stabilize waterways because of its soil-retaining rhizome network.

Plant Description

Plant Type
Grasses

Size
2.1 - 4.3 ft tall

Growth Rate
Fast

Dormancy
Winter Deciduous

Flower Color
Green

Wildlife Supported

This species is host plant to the Woodland Skipper butterfly

Butterflies & moths hosted (10 likely *) SHOW ALL



Woodland Skipper
Ochlodes sylvanoides



Nevada Skipper
Hesperia nevada



Armyworm Moth
Mythimna unipuncta



Bronzed Cutworm
Nephelodes minians

Landscaping Information

Sun
Part Shade

Moisture
Moderate - High

Summer Irrigation
Max 1x / month once established

Nurseries
Carried by 35

Ease of Care
Very Easy

Cold Tolerance
Tolerates cold to 0° F

Soil Drainage
Medium, Slow

Soil Description
Tolerates most soils. Tolerates Sodic Soil. Soil PH: 6.0 - 9.0

Common uses
Butterfly Gardens, Groundcovers

Companion Plants
Use under Oaks (Quercus sp.), Cottonwoods (Populus sp.), Sycamores (Platanus racemosa) and Willows (Salix sp.) along with Milkweed (Asclepias sp.), Seaside Daisy (Erigeron sp.), Coffeeberry (Frangula sp.), Toyon (Heteromeles arbutifolia), Vervain (Verbena lasiostachys), and Hollyleaf Redberry (Rhamnus ilicifolia).

Propagation?
For propagating by seed: No treatment. Germination may be poor.

Sunset Zones?
1, 2*, 3*, 4, 5*, 6*, 7*, 8*, 9*, 10*, 11, 14*, 15*, 16*, 17*, 18*, 19*, 20*, 21*, 22*, 23*, 24*

Natural Setting

Site Type
Moist, often saline, meadows and understory of various woodlands

Climate
Annual Precipitation: 5.8" - 64.4", Summer Precipitation: 0.14" - 3.37", Coldest Month: 23.8" - 56.5", Hottest Month: 46.4" - 80.9", Humidity: 0.49" - 31.51", Elevation: 3" - 10173"

Alternative Names

Common Names: Beardless Wild Rye

Sources include: Wikipedia. All text shown in the "About" section of these pages is available under the Creative Commons Attribution-ShareAlike License. Plant observation data provided by the participants of the California Consortia of Herbaria, Sunset information provided by Jepson Flora Project. Propogation from seed information provided by the Santa Barbara Botanical Garden from "Seed Propagation of Native California Plants" by Dara E. Emery. Sources of plant photos include CalPhotos, Wikimedia Commons, and independent plant photographers who have agreed to share their images with Calscape. Other general sources of information include Calflora, CNPS Manual of Vegetation Online, Jepson Flora Project, Las Pilitas, Theodore Payne, Tree of Life, The Xerces Society, and information provided by CNPS volunteer editors, with special thanks to Don Rideout. Climate data used in creation of plant range maps is from PRISM Climate Group, Oregon State University, using 30 year (1981-2010) annual "normals" at an 800 meter spatial resolution.

Links: Jepson eFlora Taxon Page CalPhotos Wikipedia Calflora

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APPENDIX 2

SEED MIXES

SANTA MONICA MOUNTAIN COVER MIX

This mix is a blend of grasses, flowers and shrubs for revegetation of soil and slopes with plant types that belong in the Santa Monica Mountain area. There is a quick start grass to protect soil and allow slower perennials to provide their permanent cover in the years to come. Designed as a non-irrigated mix, irrigation will foster establishment and prolong the blooming period.

SPECIES	COMMON NAME	BULK #'s/ACRE	MIN % PLS*
Artemisia californica	California sagebrush	2.00	18
Bromus carinatus	California brome	4.00	86
Bromus carinatus 'Cucamonga'	Cucamonga brome	6.00	86
Camissoniopsis cheiranthifolia	Beach evening primrose	1.00	86
Clarkia purpurea	Wine cup clarkia	1.00	86
Encelia californica	Bush sunflower	3.00	21
Eriogonum cinerum	Coastal buckwheat	2.00	7
Eriogonum fasciculatum	California buckwheat	7.00	10
Eriophyllum confertiflorum	Golden yarrow	3.00	36
Eschscholzia californica	California poppy	2.00	83
Lupinus succulentus	Arroyo lupine	5.00	83
Melica imperfecta	Coast range Melic	2.00	60
Mimulus aurantiacus longiflorus	Sticky monkeyflower	2.00	3
Penstemon spectabilis	Royal penstemon	1.00	81
Stipa lepida	Foothill needle grass	2.00	64
Stipa pulchra	Purple needle grass	4.00	73
Verbena lasiostachys	Common vervain	1.00	50
		48.00	

* MIN % PLS (Pure Live Seed) = Seed Purity x Germination Rate

Seed:	48 lbs per acre
Height:	12-54 inches
Emergence:	14-24 days
Establishment:	50-70 days to 90% cover after emergence

For additional plant characteristics visit the plant database portion of our website at www.ssseeds.com.

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E-MAIL:INFO@SSSEEDS.COM WEBSITE: WWW.SSSEEDS.COM

BASIC RIPARIAN MIX

SPECIES	COMMON NAME	BULK #'s/ACRE	MIN % PLS*
Anemopsis californica	Yerba mansa	2.00	44
Artemisia douglasiana	Mugwort	2.00	08
Bolboschoenus robustus	Bull tule	2.00	83
Carex spissa	Sawgrass sedge	2.00	62
Deschampsia danthonoides	Annual hairgrass	2.00	72
Festuca microstachys	Small fescue	6.00	90
Hordeum intercedens	Little barley	4.00	72
Juncus acutus	Spiny rush	2.00	76
Juncus bufonius	Toad rush	1.00	57
Oenothera elata hookerii	Monterey evening primrose	1.00	82
Typha latifolia	Broadleaf cattail	1.00	40
		25.00	

* MIN % PLS (Pure Live Seed) = Seed Purity x Germination Rate

Seeding rate: 25 lbs per acre

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