NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION
MERRITT COLLEGE HORTICULTURE COMPLEX PROJECT

PROJECT TITLE:	**Merritt College Horticulture Complex**
PROJECT LOCATION:	**12500 Campus Drive** **Oakland, CA 94619**
PROJECT SPONSOR:	**Peralta Community College District (District)**
DATE OF PUBLIC NOTICE:	**August 10, 2020**
PUBLIC REVIEW PERIOD:	**August 11 – September 9, 2020**
DATE OF BOARD OF TRUSTEES MEETING:	**September 15, 2020**
LOCATION OF PUBLIC HEARING:	**Peralta Community College District** **333 East 8th Street** **Oakland, CA 94607.5**

Project Description: The proposed Merritt College Horticulture Complex (Project) is a replacement project that would replace the existing horticulture building complex comprising about 19,000 gross square feet (gsf) with new energy efficient facilities providing six classroom labs, a library, restrooms, office space and greenhouse facilities comprising 19,032 gsf within the 2.5-acre Project site. The facilities capacity of the Horticulture Complex would not change with the proposed Project.

The Project footprint adapts to the site topography which rises steeply to the north and southwest, and drops away on the west and southeast. New retaining walls would be added to supplement existing retaining walls at the proposed parking and loop roadway. Site access and circulation would be improved to comply with the Wildland Urban Interface requirements for the Oakland Hills. The proposed buildings would range in height from 12 feet to 24 feet. Exterior building materials would include concrete masonry, wood siding, and cement plaster walls with metal roofs, alongside the greenhouses. Glazing for the buildings would be a non-reflective high-performance type. Outdoor lighting would be upgraded to provide improved safety and security. The existing irrigation system would be replaced with a more efficient system.

Environmental Review: An Initial Study (IS) has been prepared under the requirements of the California Environmental Quality Act (CEQA) for review and action by the District. The IS evaluates the potential environmental impacts of the proposed Project. Based on the results of the IS prepared according to CEQA Guidelines, it has been determined the Project will not have a significant effect on the environment and a Mitigated Negative Declaration (MND) has been prepared. The Project has been modified to incorporate mitigation measures identified in the IS that will reduce potentially significant impacts to a less-than-significant level.

Public Review: The Draft MND/IS is available for public review on the Build Peralta website at: https://build.peralta.edu/ and the Merritt College website: https://www.merritt.edu/wp/.

Any interested party may comment on the proposed MND/IS. All comments received will be considered by the District prior to finalizing the MND/IS and making a decision on the Project. Written comments must be received no later than 4:00 pm on September 9, 2020 and sent to:

Atheria Smith, Director of Planning & Development
Peralta Community College District
333 East 8th Street
Oakland, CA 94607
Email: atheriasmith@peralta.edu

MITIGATED NEGATIVE DECLARATION

PROJECT DESCRIPTION

The proposed Merritt College Horticulture Complex (Project) is a replacement project that would replace the existing horticulture building complex comprising about 19,000 gross square feet (gsf) with new energy efficient facilities providing six classroom labs, a library, restrooms, office space and greenhouse facilities comprising 19,032 gsf within the 2.5-acre Project site. The facilities capacity of the Horticulture Complex would not change with the proposed Project.

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PROJECT LOCATION

Merritt College
12500 Campus Drive
Oakland, CA 94619

PROJECT SPONSOR

Peralta Community College District (District)
333 East 8th Street
Oakland, CA 94607

FINDING

The Project will not have a significant effect on the environment based on the Initial Study prepared according to CEQA Guidelines. Mitigations have been incorporated into the Project to reduce the identified potentially significant impacts to a less-than-significant level.

POTENTIALLY SIGNIFICANT IMPACT

The attached Initial Study indicates that the Project could adversely affect the environment. Potentially significant impacts were identified and are presented below.

MITIGATION MEASURES

In the interest of reducing the potential impact to the point where the net effect of the Project is insignificant, mitigation measures are recommended. A discussion of the potential impacts of interest and the associated mitigation measures is provided below.

BIOLOGICAL RESOURCES

Impact: The removal of trees located on the Project site and on-site construction activities during bird nesting season could have a potentially significant impact on nesting birds.

Mitigation Measure:

BIO-1 Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act and State Fish and Game Code when in active use. This shall be accomplished by taking the following steps:

- If construction is proposed during the nesting season (February through August), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 14 days prior to the onset of tree removal or construction, in order to identify any active nests on the project sites and in the vicinity of proposed construction.
- If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September through February), construction may proceed with no restrictions.
- If bird nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from the California Department of Fish and Wildlife (CDFW), and may vary depending on species and sensitivity to disturbance. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated on the remainder of the construction area.
- A report of findings shall be prepared by the qualified biologist and submitted to the Peralta Community College District for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season (February through August). The report either shall confirm absence of any active nests or shall confirm that any young within a designated no-disturbance zone have fledged and construction can proceed.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

GEOLOGY AND SOILS

Impact: Strong ground shaking will likely occur at the Project site during the useful economic life of the Horticulture Complex buildings.

Mitigation Measures:

GEO-1 The design recommendations included in the Draft Geotechnical Design and Geotechnical Hazards Report Horticultural Center Merritt College 12500 Campus Drive Oakland, California shall be incorporated into the Merritt College Horticulture Complex building design developed by the project architect.

GEO-2 The retaining wall supporting the fire lane on the eastern side of the Horticulture Complex shall be replaced with a new structure designed to withstand the expected seismic forces.

Residual Impact: Less than significant with implementation of the recommended mitigation measures.

HAZARDS AND HAZARDOUS MATERIALS

Impact: Hazardous materials may be present at the Project site.

Mitigation Measure:

HAZ-1 A Phase II Environmental Assessment shall be prepared to assess the presence of hazardous materials at the project site. The recommendations included in the Phase II EA shall be implemented.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

Impact: The Merritt College campus, including the Project site, is located in a High Fire Severity Zone. Project construction and operation could increase fire risk.

Mitigation Measures:

HAZ-2 Construction contractors shall ensure the following measures are implemented to minimize the potential for accidental ignition of construction materials and vegetation:

- Flammable/combustible materials shall be stored away from vegetated areas;
- Spark arrestors shall be fitted on all construction vehicles and equipment;
- Work that generates sparks such as metal cutting, torching and welding shall only be performed in areas where vegetation has been sufficiently cleared and the ground surface has been wetted; and
- An adequate water source and fire extinguishers shall be available at all times for fire suppression.

HAZ-3 The Peralta Community College District shall develop a Vegetation Management and Fire Prevention Plan prior to the start of construction and shall implement the plan during

construction and operation of the project. The Vegetation Management and Fire Prevention Plan shall include, at a minimum, the following measures:

- Using spark arrestors on all vehicles and equipment used for vegetation management;
- Using fire-resistant plants when planting areas for erosion control;
- Pruning the lower branches of tall trees;
- Clearing out ground-level brush and debris; and
- Storing combustible materials away from vegetated areas.

Residual Impact: Less than significant with implementation of the recommended mitigation measures.

HYDROLOGY AND WATER QUALITY

Impact: Construction activities would cause ground disturbance resulting in potentially significant soil erosion and sedimentation during precipitation events.

Mitigation Measures:

HYDRO-1 Prior to Project construction, a Storm Water Pollution Prevention Plan (SWPPP) shall be prepared. The SWPPP shall include the following:

- Site map which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the Project site.
- Best Management Practices (BMPs) to protect storm water runoff and placement of those BMPs
- A visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body.

HYDRO-2 Peralta Community College District and their contractors shall implement Best Management Practices (BMPs) to control erosion and sedimentation and prevent pollutants from entering the stormwater runoff during construction. BMPs may include, but are not limited to:

- Conduct grading during dry months (April – September).
- Cover disturbed areas with soil stabilizers, mulch, fiber roles, or temporary vegetation.
- Locate construction-related equipment or processes that contain or generate pollutants in secure areas, away from storm drains and gutters.
- Prevent or contain potential leakage or spilling from sanitary facilities by surrounding them with a berm and do not allow a direct connection to the storm drainage system.
- Park, fuel and clean all vehicles and equipment in one designated and contained area.
- Designate concrete washout areas.

- Provide inlet protection, such as filters.
- Monitor the site during rainy season to replace or adjust BMPs as needed.

Residual Impact: Less than significant with implementation of the recommended mitigation measures.

NOISE

Impact: Project construction noise could be disruptive to the nearest residences.

Mitigation Measure:

NOISE-1 The following Best Management Practices shall be incorporated into the construction documents to be implemented by the Project contractor:

- Provide enclosures and noise mufflers for stationary equipment, shrouding or shielding for impact tools, and barriers around particularly noisy activity areas on the site.
- Use quietest type of construction equipment whenever possible, particularly air compressors.
- Provide sound-control devices on equipment no less effective than those provided by the manufacturer.
- Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.
- Prohibit unnecessary idling of internal combustion engines.
- Require applicable construction-related vehicles and equipment to use designated truck routes when entering/leaving the site.
- Designate a noise (and vibration) disturbance coordinator who shall be responsible for responding to complaints about noise (and vibration) during construction. The telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site. Copies of the project purpose, description and construction schedule shall also be distributed to the surrounding residences.
- Limit project construction activity to the hours of 7 am to 9 pm on weekdays as required under the *City of Oakland Municipal Code Chapter 8.18.020*.

Residual Impact: Less than significant with implementation of the recommended mitigation measure.

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MERRITT COLLEGE HORTICULTURE COMPLEX PROJECT
DRAFT INITIAL STUDY

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PROJECT INFORMATION

Project Title:	Merritt College Horticulture Complex
Lead Agency Name and Address:	Leigh Sata, Vice Chancellor of General Services Peralta Community College District 333 East 8th Street Oakland, CA 94607
Contact Person and Email Address:	Atheria Smith, Director of Planning & Development 510-587-7864 atheriasmith@peralta.edu
Project Location:	Merritt College 12500 Campus Drive Oakland, CA 94619
Project Sponsor's Name and Address:	Peralta Community College District (District) 333 East 8th Street Oakland, CA 945607
General Plan Designation:	Institutional
Zoning Designation:	RH4 Hillside Residential Zone (RH4)

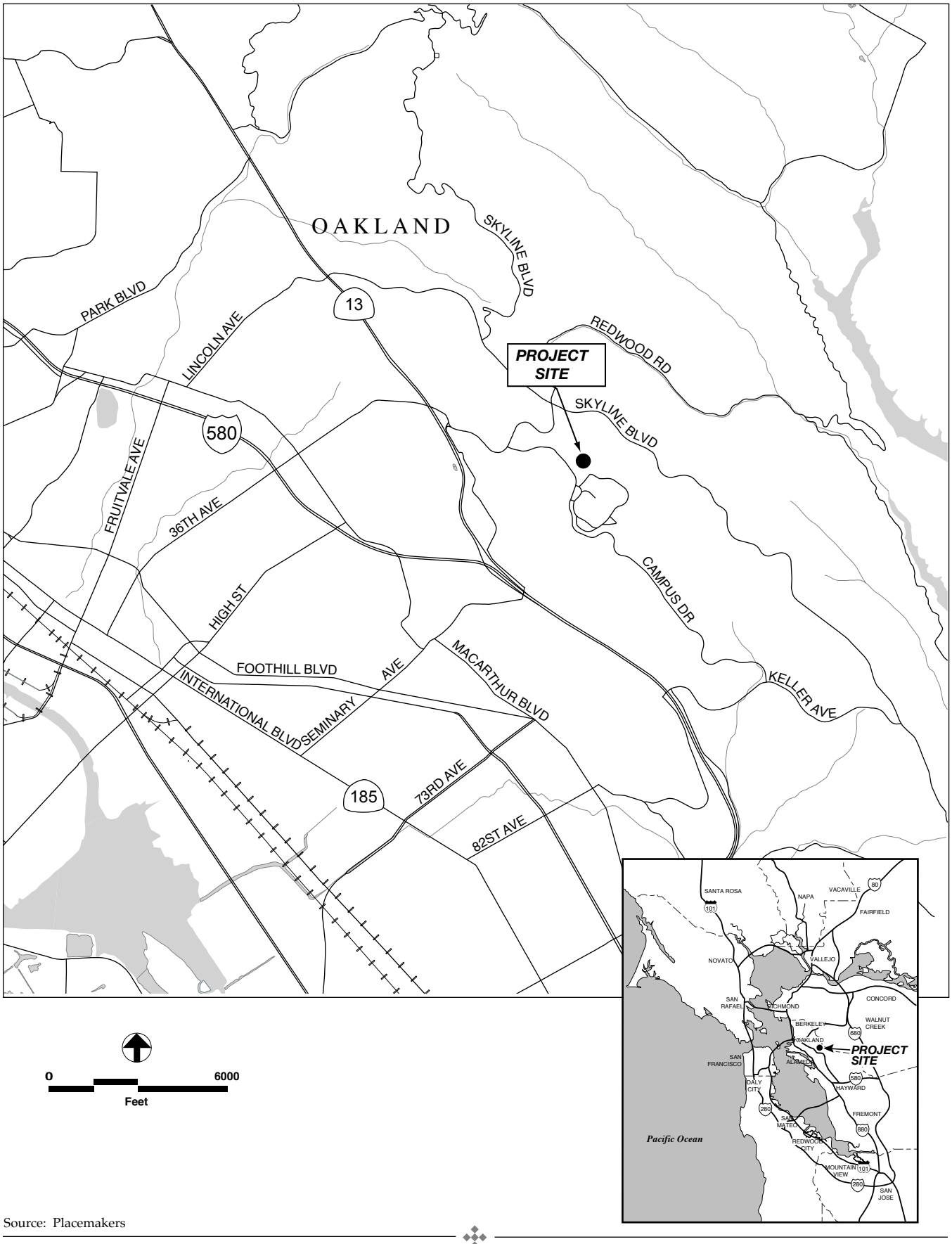
PROJECT DESCRIPTION

BACKGROUND

In 2014, the Peralta Community College District (District) published the *Peralta Community College District 2016 – 20 Five Year Construction Plan (2016 – 2017 First Funding Year*. This plan ranked the top 25 projects throughout the District requiring facilities replacement or modernization. Of the 25 projects identified, the Horticulture Complex was ranked #10. Merritt Landscape Horticulture is a vibrant program serving a range of students for credit and non-credit offerings.

PROJECT LOCATION

The Merritt College campus is located at 12500 Campus Drive in Oakland (**Figure 1 Regional and Project Location Map**). The campus is surrounded predominantly by single-family development and Leona Heights Park and Regional Open Space.



Source: Placemakers

Figure 1
Regional and Project Location Map

EXISTING CONDITIONS

Merritt College Campus

Merritt College comprises about 130 acres on a hilltop location offering panoramic views of Oakland and San Francisco Bay. The campus was built from 1968 to 1978. Buildings are centrally located on campus and grouped in clusters with a ring of landscaping, ball fields, tennis courts and parking lots. The Horticulture Complex is set apart from the central campus at a remote location due to the nature of its curriculum.

Existing Horticulture Complex Facilities

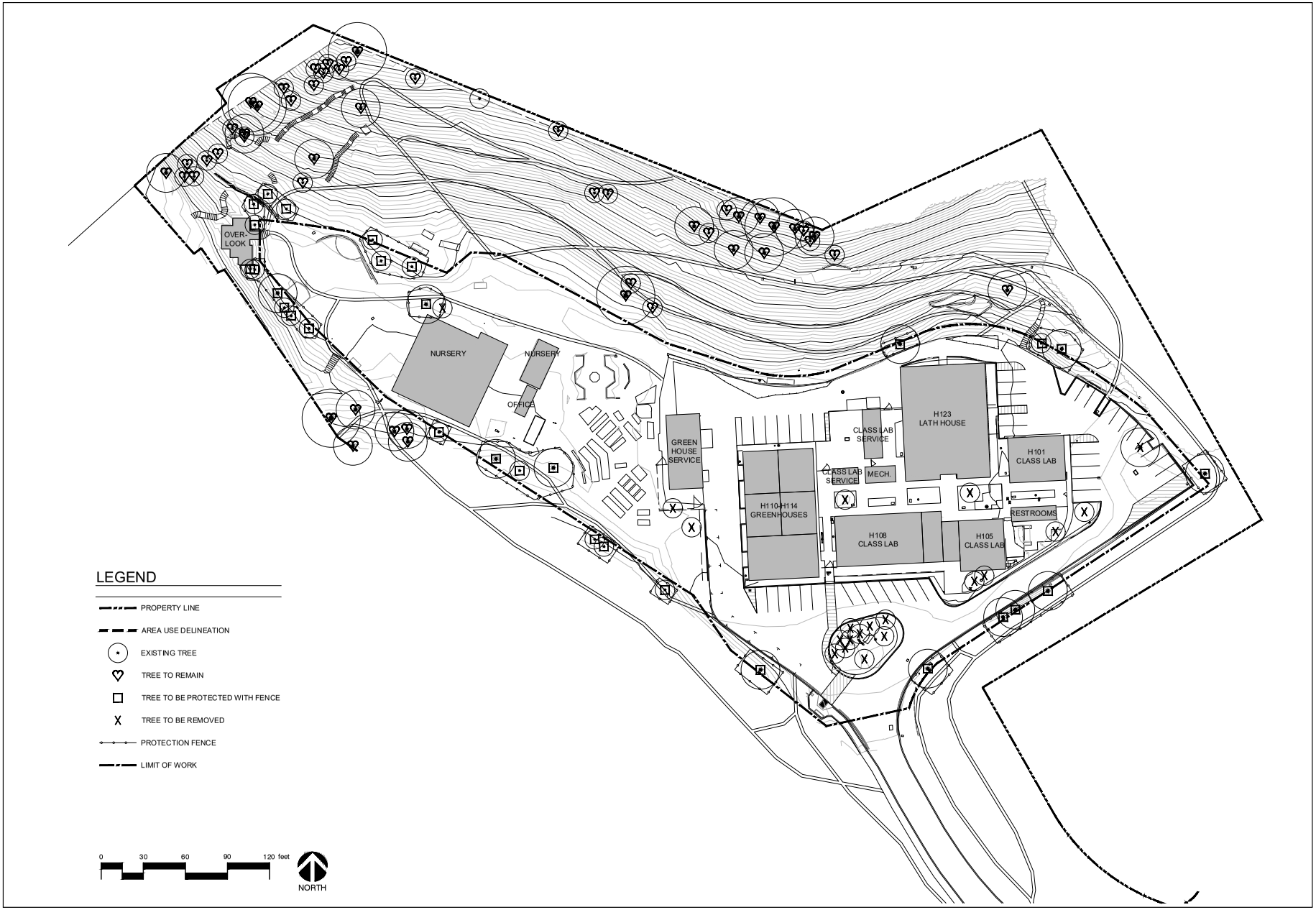
The Horticulture Complex is a group of buildings arranged around an open-air courtyard. There are four classroom/lab buildings, a restroom building, a lath house, five greenhouses, a mechanical building and two class lab service buildings. Buildings range in height from 12 feet to 19 feet. Parking surrounds the building complex. Beyond the building complex are the nursery and planting areas. There is limited outdoor lighting along the loop roadway and parking areas (**Figure 2 Current Landscape Horticulture Complex Site Plan**). The Project site comprises 2.5 acres of the five-acre Horticulture Complex.

PROPOSED PROJECT

The proposed Merritt College Horticulture Complex (Project) is a replacement project that would replace the existing horticulture building complex comprising about 19,000 gross square feet (gsf) with new energy efficient facilities providing six classroom labs, a library, restrooms and office space comprising 19,032 gsf within the 2.5-acre Project site (**Figure 3 Proposed Landscape Horticulture Complex Site Plan**). The Project footprint adapts to the site topography which rises steeply to the north and southwest, and drops away on the west and southeast. New retaining walls would be added to supplement existing retaining walls at the proposed parking and loop roadway. Site access and circulation would be improved to comply with the Wildland Urban Interface requirements for the Oakland Hills. The proposed buildings would range in height from 12 feet to 24 feet. Exterior building materials would include concrete masonry, wood siding, and cement plaster walls with metal roofs, alongside the greenhouses. Glazing for the buildings would be a non-reflective high-performance type. Outdoor lighting would be upgraded to provide improved safety and security. The existing irrigation system would be replaced with a more efficient system.

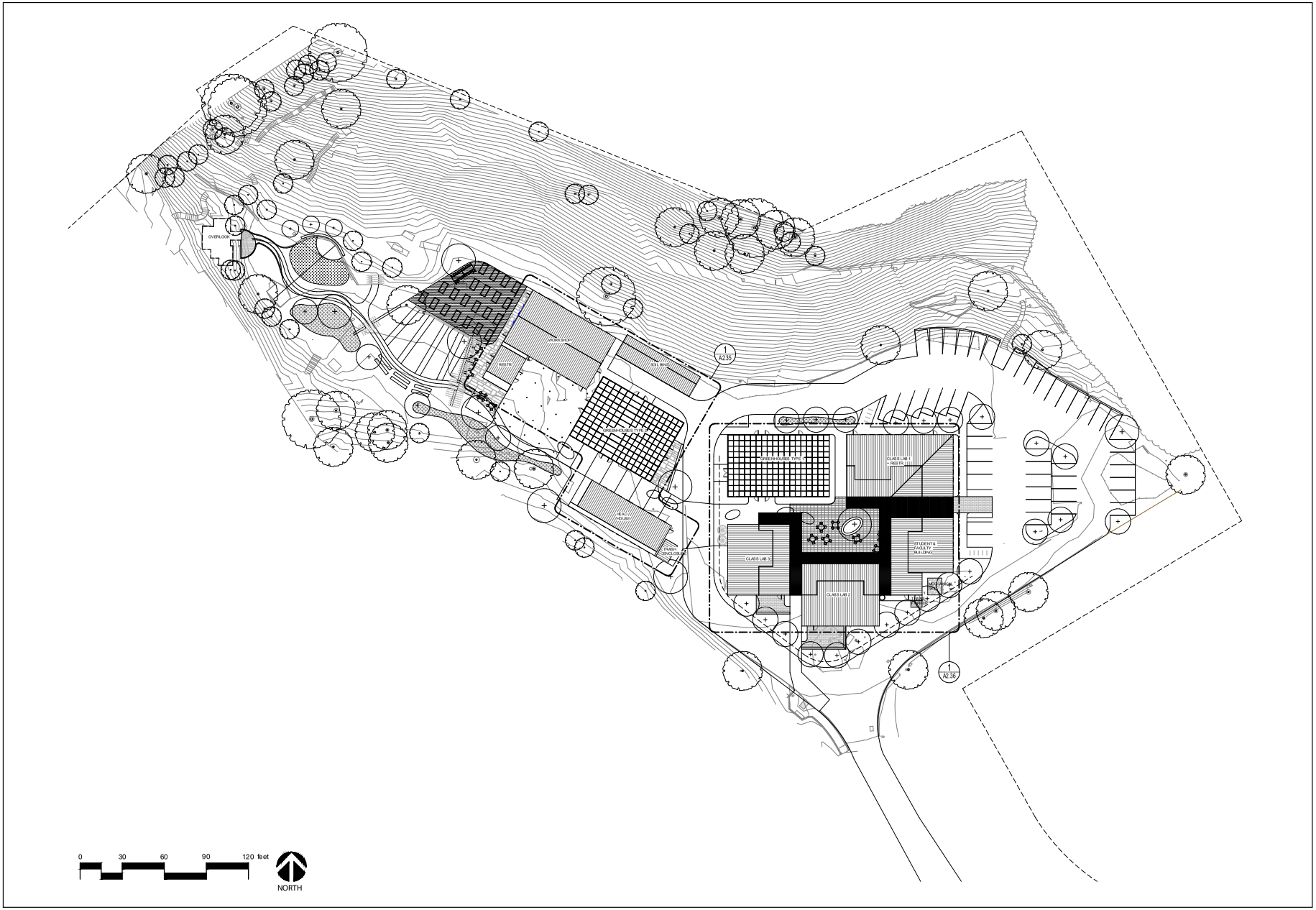
The Project would incorporate the following green and sustainable measures:

- Solar orientation of greenhouses and other buildings
- Natural daylighting
- Bicycle facilities
- Permeable pavements
- Stormwater management
- Bio-retention
- Light-colored roof and paving materials
- Sharp cut-off exterior lighting
- Recycling and composting
- Construction waste management
- Solar-ready roofs



Source: Noll & Tam Architects

Figure 2
Current Landscape Horticulture Complex Site Plan



Source: Noll & Tam Architects

Figure 3
Proposed Landscape Horticulture Complex Site Plan

The facilities capacity of the Horticulture Complex would not change with the proposed Project.

Project Schedule

Project construction is anticipated to begin in January 2022 with completion in April 2023. Construction hours would be from 7:00 am to 5:00 pm Monday through Friday.

Project Approvals

- Division of the State Architect (DSA) for building, disabled access, fire and life safety systems.
- California Department of Education for State funding.
- San Francisco Bay Regional Water Quality Control Board for NPDES General Permit and Storm Water Pollution Prevention Plan (SWPPP).
- Oakland Fire Department for site access and fire hydrants/water pressure.
- City of Oakland for C3 storm water requirements.
- Department of Toxic Substances (DTSC) for Phase I Environmental Assessment.

References

PCCD. 2014 *Peralta Community College District 2016 – 2020 Five Year Construction Plan*. July 1, 2014.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a potentially significant impact as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forestry Resources	☐ 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	☐ Mineral Resources
☒ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Atheria Smith
Atheria Smith (Aug 3, 2020 11:26 PDT)

Atheria Smith, Facilities Planning & Development Director

08/03/2020
Date

EVALUATION OF ENVIRONMENTAL IMPACTS

A brief explanation is required for all answers except "No Impact" answers if these answers are adequately supported by the information sources listed in the References section for each environmental issue.

ENVIRONMENTAL ISSUES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Existing Conditions

The Horticulture Complex is located at the northwest edge of the Merritt College campus and ranges in elevation from about 902 feet at the site entrance to about 955 feet at the northwest corner of the site where an existing overlook provides views of the downtown Oakland and San Francisco skylines, San Francisco Bay and the Marin Headlands. Due to mature tree cover surrounding the site perimeter, existing buildings and other facilities at the site are generally not visible from the campus and nearby residences located to the south/southeast. The existing Horticulture Complex facilities may be visible from residences located to the north and east above the Project site.

The building complex is situated at the lower portion of the Horticulture Complex site (902 to 906-foot elevations) and was constructed as a cluster of buildings organized around a central courtyard. Parking areas and circulation surround the buildings. Buildings range in height from 12 to 19 feet. Specimen areas are located to the north of the building complex on steep slopes ranging in elevation from about 906 feet to 950 feet. Greenhouses, lath house, nursery, tool house, work yards, various planting and horticulture areas and turf meadow are located to the west of the building complex.

Impact Discussion

The proposed Project would result in less than significant aesthetic impacts. A discussion of each environmental issue included under Section 1 is presented below.

(a) Would the project have a substantial adverse effect on a scenic vista?

The Project site is situated within the lower elevations of the Horticulture Complex and is generally screened by mature trees along the site perimeter. The Project would not adversely affect any scenic vista available from nearby residences. The nearest public recreational and open space areas are Leona Heights Park, located about 750 feet to the west; and Leona Regional Open Space located about 0.5 mile to the southeast. The proposed Project would not adversely affect views available from either of these open space areas. The Project would not have a substantial effect on a scenic vista and no mitigation measures are required.

(b) Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a scenic highway?

There are no rock outcroppings on the Project site (refer to **Section 7 Geology and Soils**) nor historic buildings (refer to **Section 5 Cultural Resources**). The Project would not damage any scenic resource. Replacement of the existing buildings with new buildings is considered a less than significant impact and no mitigation measures are required.

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

The Merritt College campus is located within an urbanized area. The campus is not located within a designated Caltrans scenic highway view shed (Caltrans 2019). Merritt College is located within the MacArthur Freeway Scenic Corridor (City of Oakland 1974). The Horticulture Complex is not visible from the MacArthur Freeway. It is noted the District is exempt from City of Oakland planning and land use regulations.

(d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Currently, the Horticulture Complex includes exterior lighting at building entrances and minimal night lighting for safety and security purposes. The Project will upgrade exterior lighting:

- All outdoor lighting shall be dark sky-compliant and consistent with California Green Building Standards Code Section 5.106.8 Light Pollution Reduction.
- All light fixtures shall include shrouds (either fixed or adjustable) or other shielding.
- Lighting that is not required for safety and security during nighttime hours shall be controlled by the use of timed switches and/or motion detector activation controls so lights are only on when necessary.

To reduce the potential for glare, glazing for the buildings would be non-reflective and building materials for exterior walls would include concrete masonry, wood siding, and cement plaster. Metal roofs would

be non-reflective. The proposed Project would minimize the potential for light and glare and is considered less than significant.

Mitigation Measures

None required.

References

Caltrans. 2019. *California Scenic Highway Mapping System*. www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/CaliforniaScenicHighwayMapping System.

City of Oakland. 1974. *Scenic Highway Element*. cao94612.s3.amazonaws.com/documents/dowdoo9021.pdf.

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

Impact Discussion

There would be no impacts to agriculture or forest resources due to the proposed Project. A discussion of each environmental issue included under Section 2 is presented below.

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

The Merritt College campus is located in an urbanized area and is zoned RH4 Hillside Residential (City of Oakland 2018). Surrounding lands are developed with residential, parks and open space. The proposed Project would not affect any prime farmland, unique farmland or farmland of statewide importance.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The proposed Project would not create zoning conflicts with agricultural land uses. There are no lands zoned for agricultural use in the vicinity of the campus and no lands under a Williamson Act contract.

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

As discussed in Subsection 2a above, the Project site is zoned RH4 and is surrounded by urban development. There are no forest lands or lands zoned Timberland Production.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The proposed Project would not result in the loss of any forest land or conversion of forest land to non-forest use.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?

The proposed Project would not result in the conversion of farmland to non-agricultural nor forest land to non-forest use.

Mitigation Measures

None required.

References

City of Oakland. 2018. *City of Oakland Zoning and Estuary Policy Plan Maps.* Cao-94612/s3/a,azpmaws/cp,/documents/Zoning_EPP_map_20181211.pdf.

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

Existing Conditions

The Project site is within the city limits of Oakland in western Alameda County, all in the Northern Alameda/Western Contra Costa climatological sub-region of the Bay Area. In most parts of this sub-region, the air pollution potential is low due to the steady westerly marine wind flow. However, Oakland's predominantly urban environment includes many stationary sources of air pollutants, several major freeways/highways and many high-traffic-volume roadways, the latter being major mobile pollutant sources. The dispersion of pollutant emissions from these local sources is constrained by the confining terrain of the East Bay hills and by regular seasonal episodes of atmospheric stability with resultant elevated ambient pollutant concentrations.

Ozone (which is formed from chemical precursors - reactive organic gases [ROG] and nitrogen oxides [NOx]) and suspended particulate matter (specifically, two types - particulate matter less than ten microns in diameter [PM_{10}] and particulate matter less than 2.5 microns in diameter [$PM_{2.5}$]) are of particular concern in the Bay Area, which is currently designated "nonattainment" for state and national ozone ambient air quality standards, for the state PM_{10} standards, and for state and national $PM_{2.5}$ standards. It is "attainment" or "unclassified" with respect to the other major air pollutants: nitrogen oxides (NO_x), carbon monoxide (CO) and sulfur dioxide (SO_2). The Bay Area Air Quality Management District (BAAQMD) maintains a number of air quality monitoring stations, which continually measure the ambient concentrations of major air pollutants throughout the Bay Area. The closest such monitoring station to the Project site is at 9925 International Boulevard in east Oakland, about three miles south of the Project site; only ozone, NO_2, and CO are monitored there. The nearest $PM_{2.5}$ monitor is at Laney College in downtown Oakland about five miles west of the Project site. **Table 1** presents a data summary from the two stations. **Table 1** shows a few violations of the ozone and $PM_{2.5}$ particulate standards, the latter having steadily become more frequent reflecting the effects of major wildfires in California in recent years.

TABLE 1: LOCAL AMBIENT AIR QUALITY MONITORING SUMMARY

Pollutant	Air Quality Standard	Maximum Concentrations and Number of Days Standards Exceeded		
		2016	2017	2018
Ozone*				
Maximum 8-hour concentration (ppm)		57	100	52
# Days 8-hour California standard exceeded	70 ppb	0	2	0
Nitrogen Dioxide (NO_2)**				
Maximum 1-hour concentration (ppb)		59	65	73
# Days national 1-hour standard exceeded	100 ppb	0	0	0
Carbon Monoxide (CO)**				
Maximum 8-hour concentration (ppm)		1.0	2.2	2.4
# Days national 24-hour standard exceeded	9 ppm	0	0	0
Suspended Fine Particulates ($PM_{2.5}$)**				
Maximum 24-hour concentration ($\mu g/m^3$)		20.2	70.8	168.2
# Days national 24-hour standard exceeded	35 $\mu g/m^3$	0	8	14

Notes:
* As monitored at the BAAQMD station at 9925 International Boulevard in East Oakland.
**As monitored at the BAAQMD station in the Laney College 8th Street parking lot.

µg/m3 = micrograms per cubic meter
ppb = parts per billion.
ppm = parts per million.

Source: BAAQMD Annual Bay Area Air Quality Summaries http://www.baaqmd.gov/about-air-quality/air-quality-summaries

Methodology and Significance Thresholds

The air quality analyses were performed using the methodologies and significance thresholds recommended in *CEQA Air Quality Guidelines* (BAAQMD 2017). The major air pollutants evaluated are: reactive organic compounds (ROG) and nitrogen dioxide (NO_2) (both being precursors to ozone formation), and PM_{10} and $PM_{2.5}$. According to the *CEQA Air Quality Guidelines*, any project would have a significant potential for causing/contributing to a local air quality standard violation or making a cumulatively considerable contribution to a regional air quality problem if its pollutant emissions would exceed any of the following thresholds during construction or operation as presented in **Table 2**.

In addition to the major air pollutants, many other chemical compounds, generally termed toxic air contaminants (TACs), pose a potential hazard to human health through airborne exposure. A wide variety of sources, stationary (e.g., dry cleaning facilities, gasoline stations, and emergency diesel-powered generators, etc.) and mobile (e.g., motor vehicles, construction equipment, etc.), emit TACs. The health effects associated with TACs are quite diverse. TACs can cause adverse health effects from long-term exposure (e.g., cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage) and/or from short-term exposure (e.g., eye watering, respiratory irritation, running nose, throat pain, and headaches). Most of the estimated carcinogenic/chronic health risk in California can be attributed to relatively few airborne compounds, the most important being particulate matter from diesel-fueled engines (DPM). The California Air Resources Board (CARB) has identified DPM as being responsible for about 70 percent of the cumulative cancer risk from all airborne TAC exposures in California (CARB).

TABLE 2: CEQA AIR QUALITY SIGNIFICANCE THRESHOLDS FOR CRITERIA AIR POLLUTANT EMISSIONS

Pollutant	Construction Average Daily (lbs./day)	Operational	
		Average Daily (lbs./day)	Maximum Annual (tons/year)
Reactive Organic Gases (ROG)	54	54	10
Oxides of Nitrogen (NO_x)	54	54	10
Inhalable Particulate Matter (PM_{10})	82 (exhaust)	82	15
Fine Inhalable Particulate Matter ($PM_{2.5}$)	54 (exhaust)	54	10
$PM_{10}/PM_{2.5}$ (Fugitive Dust)	BMPs[a]	N/A	N/A

Notes: BMPs = Best Management Practices
N/A = Not Applicable

[a] If BAAQMD Best Management Practices (BMPs) for fugitive dust control are implemented during construction, the impacts of such residual emissions are considered to be less than significant.

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

The *CEQA Air Quality Guidelines* also establish a relevant zone of influence for an assessment of project-level and cumulative health risk from TAC exposure to an area within 1,000 feet of a project site. Project construction-related or project operational TAC impacts to sensitive receptors within this "zone of influence" that exceed any of the following thresholds are considered significant:

- An excess cancer risk level of more than 10 in one million.
- A non-cancer hazard index greater than 1.0.
- An incremental increase of greater than 0.3 micrograms per cubic meter (μg/m3) for annual average $PM_{2.5}$ concentrations.

Cumulative impacts from TACs emitted from freeways, state highways or high-volume roadways (i.e., the latter defined as having traffic volumes of 10,000 vehicles or more per day or 1,000 trucks per day), and from all BAAQMD-permitted stationary sources sources within the zone to sensitive receptors within the zone that exceed any of the following thresholds are considered cumulatively significant:

- A combined excess cancer risk levels of more than 100 in one million.
- A combined non-cancer hazard index greater than 10.0.
- A combined incremental increase in annual average $PM_{2.5}$ concentrations greater than 0.8 $\mu g/m^3$.

Impact Discussion

Project construction and operational emissions of the major air pollutants, and health risks imposed by TACs emitted during Project construction would be below BAAQMD thresholds. Fugitive dust emitted from Project construction activities would have significance potential, but will be avoided with the implementation of required BAAQMD best management practices. A discussion of each environmental issue included under Section 3 is presented below.

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The BAAQMD's current *Clean Air Plan* (BAAQMD 2017), focuses on two closely-related goals: protecting public health from air pollutant/TAC exposures and reducing Bay Area emissions of heat-trapping gases (termed greenhouse gases [GHG]) that promote global climate change (Refer to **Section 8 Greenhouse Gas Emissions**).

Key elements in the *2017 Clean Air Plan* control strategies, with the underlined items having particular applicability to the Project, are:

Controls on Buildings and Energy Sources:

- Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar, wind and ground-source heat pumps.
- Support the expansion of community choice energy programs throughout the Bay Area.
- Promote energy and water efficiency in both new and existing buildings.
- Promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

The new Horticultural Complex buildings will include energy conserving design features such as solar orientation of greenhouses/buildings, natural daylighting, light-colored roofing/paving materials, sharp-cutoff exterior lighting, and solar-ready roofs, and must comply with applicable California CALGreen building energy code efficiency standards (State of California 2016). Most important, the Project would not result in an increase in facilities capacity, thus avoiding the additional motor vehicle commute trips. Thus, it would not have the potential to substantially increase regional housing, employment, and/or population levels in Alameda County or the Bay Area, which are the bases of the *Clean Air Plan* regional emission inventories and control strategies. Consequently, the proposed Project would not conflict with the *Clean Air Plan*.

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

Project Construction-Related Impacts

Project construction would generate air pollutant emissions from construction equipment, delivery/haul trucks and worker commute vehicles, and fugitive dust from equipment travel over unpaved ground and material handling. The *CEQA Air Quality Guidelines* recommend quantification of construction-related exhaust emissions and comparison of those emissions to the CEQA significance thresholds. Thus, the CalEEMod emissions model Version 2016.3.2 (California Air Pollution Control Officers Association) was used to quantify construction-related pollutant emissions.

Table 3 shows the estimated short-term Project construction emissions from equipment, delivery/haul trucks and worker commute vehicles and comparisons to the CEQA significance thresholds. Daily

emissions of air pollutants during the construction phases would be below the CEQA significance thresholds.

TABLE 3: PROJECT CONSTRUCTION POLLUTANT EMISSIONS

Year Phase	ROG	NOX	PM10	PM2.5
	Maximum lbs./day			
Demolition	0.74	6.44	0.42	0.34
Site Preparation	0.60	6.94	0.83	0.31
Grading	0.74	6.44	1.17	0.76
Building Construction	0.72	7.35	0.46	0.37
Paving	0.71	5.96	0.44	0.32
Architectural Coating	39.84	1.41	0.10	0.09
Peak Daily Total	**39.84**	**7.35**	**1.17**	**0.76**
Significance Thresholds	**54**	**54**	**82**	**54**
Significant Impact?	**No**	**No**	**No**	**No**

The *CEQA Air Quality Guidelines* require a number of construction Best Management Practices (BMPs) to control fugitive dust, and the use of paints and coatings compliant with BAAQMD volatile organic compounds (VOC) control regulations. Thus, the following measures must be implemented by the Project construction contractor:

***BAAQMD Required Dust Control Measures*:** The construction contractor shall reduce construction-related air pollutant emissions by implementing BAAQMD's basic fugitive dust control measures, including:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action with 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

Project Operational Impacts

The CalEEMod was also used to estimate emissions that would be associated with Project operation (i.e., motor vehicle use, space and water heating, maintenance equipment etc.). Estimated operational daily and annual emissions that would be produced by the Project are presented in **Tables 4** and **5** and compared with CEQA thresholds of significance. As indicated, the estimated Project operational emissions would be below the thresholds and would be less than significant.

Project-related emissions would be below the BAAQMD significance thresholds. Therefore, the Project would not make cumulatively considerable contributions to the Bay Area's regional problems with ozone or particulate matter. Cumulative emission impacts would be less than significant.

TABLE 4: NET NEW PROJECT DAILY OPERATIONAL CRITERIA POLLUTANT EMISSIONS (POUNDS PER DAY)

Project Emission Source	ROG	NOx	PM_{10}	$PM_{2.5}$
	lbs./day			
Area	0.46	0.00	<0.01	<0.01
Energy Use	0.02*	0.17*	0.01*	0.01*
Motor Vehicles	----**	----**	----**	----**
Average Daily Total	0.48	0.17	0.01	0.01
Significance Thresholds	**54**	**54**	**82**	**54**
Significant Impact?	**No**	**No**	**No**	**No**

* The Horrticculture Complex buildings will include energy conserving design features such as solar orientation of greenhouses/buildings, natural daylighting, light-colored roofing/paving materials, sharp-cutoff exterior lighting, and solar-ready roofs that will reduce energy-use emissions further from the numbers shown above.

** Modernization of the Horticulture Complex would not increase facilities capacity over existing conditions. Thus, it would not generate additional motor vehicle trips or the air pollutant emissions associated with them.

TABLE 5: NET NEW PROJECT ANNUAL OPERATIONAL CRITERIA POLLUTANT EMISSIONS (TONS PER YEAR)

Project Emission Source	ROG	NOx	PM_{10}	$PM_{2.5}$
	tons/year			
Area	0.08	0	0	0
Energy Use	<0.01*	0.03*	<0.01*	<0.01*
Motor Vehicles	----**	----**	----**	----**
Annual Total	0.09	0.03	<0.01	<0.01
Significance Thresholds	**10**	**10**	**15**	**10**
Significant Impact?	**No**	**No**	**No**	**No**

* The Horticulture Complex buildings will include energy conserving design features such as solar orientation of greenhouses/buildings, natural daylighting, light-colored rooding/paving materials, shart-cutoff exterior lighting, and solar-ready roofs that will reduce energy-use emissions further from the numbers shown.

** Modernization of the Horticulture Complex would not increase facilities capacity over exissting conditions. Thus, it would not generate additional motor vehicle trips or the air pollutant emissions associated with them.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Ambient TAC concentrations produced by Project sources and other substantial local TAC sources within 1,000 feet of a project site (i.e., termed the "zone of influence") are considerd significant if they exceed the BAAQMD CEQA health risk thresholds at senstive receptors within the zone. The Project site's zone of influence includes existing residential uses, the nearest of which are within a few hundred feet north and east of the Project construction area.

Project Construction-Related TAC Impacts

Cancer risk is the lifetime probability of developing cancer from exposure to carcinogenic substances. Following health risk assessment (HRA) guidelines established by California Office of Environmental Health Hazard Assessment (OEHHA) and the BAAQMD in *Recommended Methods for Screening and Modeling Local Risks and Hazards* (BAAQMD 2012), incremental cancer risks were estimated by applying established toxicity factors to modeled TAC concentrations. Adverse health impacts unrelated to cancer are measured using a hazard index (HI), which is defined as the ratio of the Project's incremental TAC exposure concentration to a published reference exposure level (REL) as determined by OEHHA. If the HI is greater than 1.0, then the impact is considered to be significant. The non-cancer reference exposure level for Diesel Particulate Matter (DPM) as determined by OEHHA is 5 $\mu g/m^3$.

Following HRA guidelines and significance criteria established by the BAAQMD, the Project incremental cancer risk (i.e., 1.34 additional cancer deaths per million exposed), chronic hazard index (i.e., 0.03) and annual PM2.5 concentration (i.e., 0.17 $\mu g/m^3$) from DPM emitted by construction equipment were estimated by the SCREEN3 model at the closest residential uses to the Project site. All Project construction risks/hazards fall far short of the BAAQMD project-level significance criteria.

Project Operational TAC Impacts

The Project would not add any motor vehicle traffic to local streets and freeways, nor add any new stationary TAC sources to the Merritt College campus. Thus, the cancer risk, non-cancer hazard and $PM_{2.5}$ from Project operations would be zero and less than significant.

Cumulative TAC Impacts

Determining cumulative TAC health risk/hazard requires the tallying of risk/hazard from project sources and all existing permitted stationary and major mobile sources of TACs within a 1,000 feet of a project site and adding them for comparison with the cumulative health risk thresholds. A database of risk/hazard from permitted stationary emissions sources and major roadways is available online (BAAQMD, *Stationary Source Analysis Tools and Highway Screening Analysis Tools*). There are no listed stationary TAC sources located within 1,000 feet of the Merritt College campus. State Route 13 and I-580, the strongest local mobile source of TACs, are about three quarters of a mile west/south of campus. Redwood Road (connecting with Campus Drive) is the main local access road to the campus (having a daily traffic volume greater than 20,000 per day) is about half a mile west of the campus, all well outside the 1,000-foot zone of influence for cumulative TAC evaluation. Thus, cumulative TAC risk/hazard values are equal to their project-level values, and fall even further short of the larger BAAQMD cumulative significance criteria. Thus, cumulative TAC impacts would be less than significant.

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

The BAAQMD's significance criteria for odors are based on the number of odor complaints generated by a particular odor source. Generally, the BAAQMD considers any project with the potential to frequently expose members of the public to objectionable odors to cause a significant impact. With respect to the proposed Project, diesel-fueled construction equipment exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. Post construction odors from the Horticultural Complex would be minimal. Therefore, odor impacts associated with construction and operation of the Project would be less than significant.

Mitigation Measures

None required.

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

Impact Discussion

Background and Methods

Information regarding biological resources for the Project site is based on the review of available information and field reconnaissance surveys conducted on the Project site by the consulting biologist on May 6 and 28, 2020. Background information reviewed included the proposed Project designs, including the Current Landscape Horticulture Complex Site Plan (refer to **Figure 2**) showing the location of existing trees to be removed, and the occurrence records of the California Natural Diversity Data Base (CNDDB) of the California Department of Fish and Wildlife (CDFW). The Project site has been extensively disturbed as part of construction and development of the existing Horticultural Complex, which has eliminated native vegetative cover. No sensitive habitat features such as regulated waters or sensitive natural community types were encountered during the reconnaissance surveys. Based on the absence of any essential habitat characteristics, no detailed surveys for sensitive biological resources were considered necessary by the Initial Study consulting biologist.

General Site Conditions

The Horticulture Complex is situated at the northwestern edge of the Merritt College campus in the Oakland Hills. It was extensively disturbed as part of improvements for the existing horticulture complex and now consists of structures, greenhouses, storage sheds, paved roadways and parking, pathways and ornamental landscaping. No natural habitat remains on the Project site, although a largely intact woodland dominated by coast live oak (*Quercus. agrifolia*) remains on the knoll to the southwest, mature coast redwood (*Sequoia sempervirens*) planted as part of the original landscaping around the complex occur to the southeast, and ornamental tree and shrub plantings of various sizes and conditions are scattered through the Project site. Single-family residences border the site to the north and east, surrounded by ornamental landscaping. Fencing around the perimeter of the Horticulture Complex prevents access by blacktail deer and other larger mammals. The trees on the Project site and surrounding woodland provide nesting cavities, perching and foraging opportunities, and nesting substrate for numerous species of birds, including: jays, woodpeckers, kinglets, and bushtits. No nests of any kind were observed on structures or in trees immediately adjacent to the Project site during the field reconnaissance surveys, although new nest could be constructed before Project-related grubbing and demolition begin.

The removal of trees and structures on the Project site during the bird nesting season could have a potentially significant impact on nesting birds and is considered a potentially significant impact. However, with implementation of **Mitigation Measure BIO-1**, potential impacts on nesting birds would be fully mitigated. A discussion of each environmental issue is presented below.

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

A record search conducted by the CNDDB and the other relevant information sources indicate that numerous plant and animal species with special status have either been recorded from or are suspected to occur in the Oakland Hills of Alameda County. Special-status species[1] are plants and animals that are legally protected under the State of California and/or federal Endangered Species Acts[2] or other

[1] Special-status species include:

- Officially designated (rare, threatened, or endangered) and candidate species for listing identified by the CDFW.
- Officially designated (threatened or endangered) and candidate species for listing identified by the U.S. Fish and Wildlife Service (USFWS).
- Species considered to be rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act (CEQA) Guidelines, such as those with a rank of 1 or 2 in the *Inventory of Rare and Endangered Plants of California* maintained by the California Native Plant Society (CNPS).
- Possibly other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those with a rank of 3 and 4 in the CNPS *Inventory* or identified as animal "Species of Special Concern" (SSC) by the CDFW. Species of Special Concern have no legal protective status under the CESA but are of concern to the CDFW because of severe decline in breeding populations in California.

[2] The federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of the FESA and pertains to native California species.

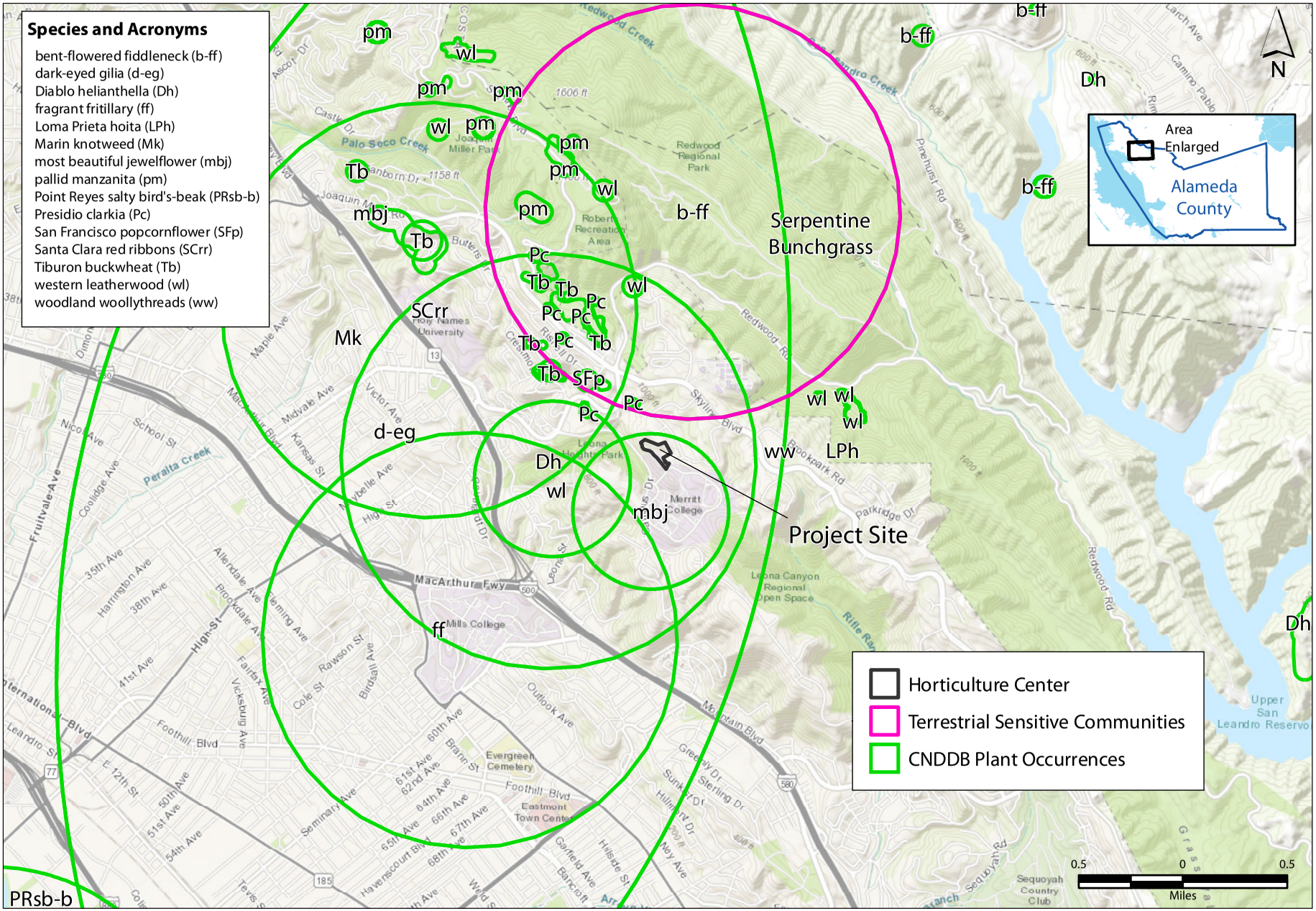
regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat.

Figures 4 and **5** show the distribution of special-status plant and animal species, respectively, as reported by the CNDDB within approximately five miles of the Project site. A table with the name and status of each of these species reported from the Oakland vicinity is contained in **Appendix A**. According to the CNDDB records, no specific occurrences of special-status plant or animal species have been reported from the Project site or immediate vicinity, but general occurrences have been recorded from the Oakland Hills. These include general occurrences of bent-flowered fiddleneck (*Amsinckia lunaris*), Presidio clarkia (*Clarkia franciscana*), dark-eyed gilia (*Gilia millefolita*), Diablo helianthella (*Helianthella castanea*), most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*), Bay checkerspot butterfly (*Euphydryas editha bayensis*), and American badger (*Taxidea taxus*), among others.

A habitat suitability analysis was conducted during Project site field surveys. Most of the special-status species reported from the Oakland Hills vicinity occur in natural habitats such as riparian woodlands, serpentine grasslands, chaparral, and forest habitats, all of which are absent from the Project site. A number of special-status plant species are known from open woodlands and grasslands of the Oakland Hills, but none are believed to be present on the Project site due to the extent of past grading and on-going maintenance activities at the horticulture complex.

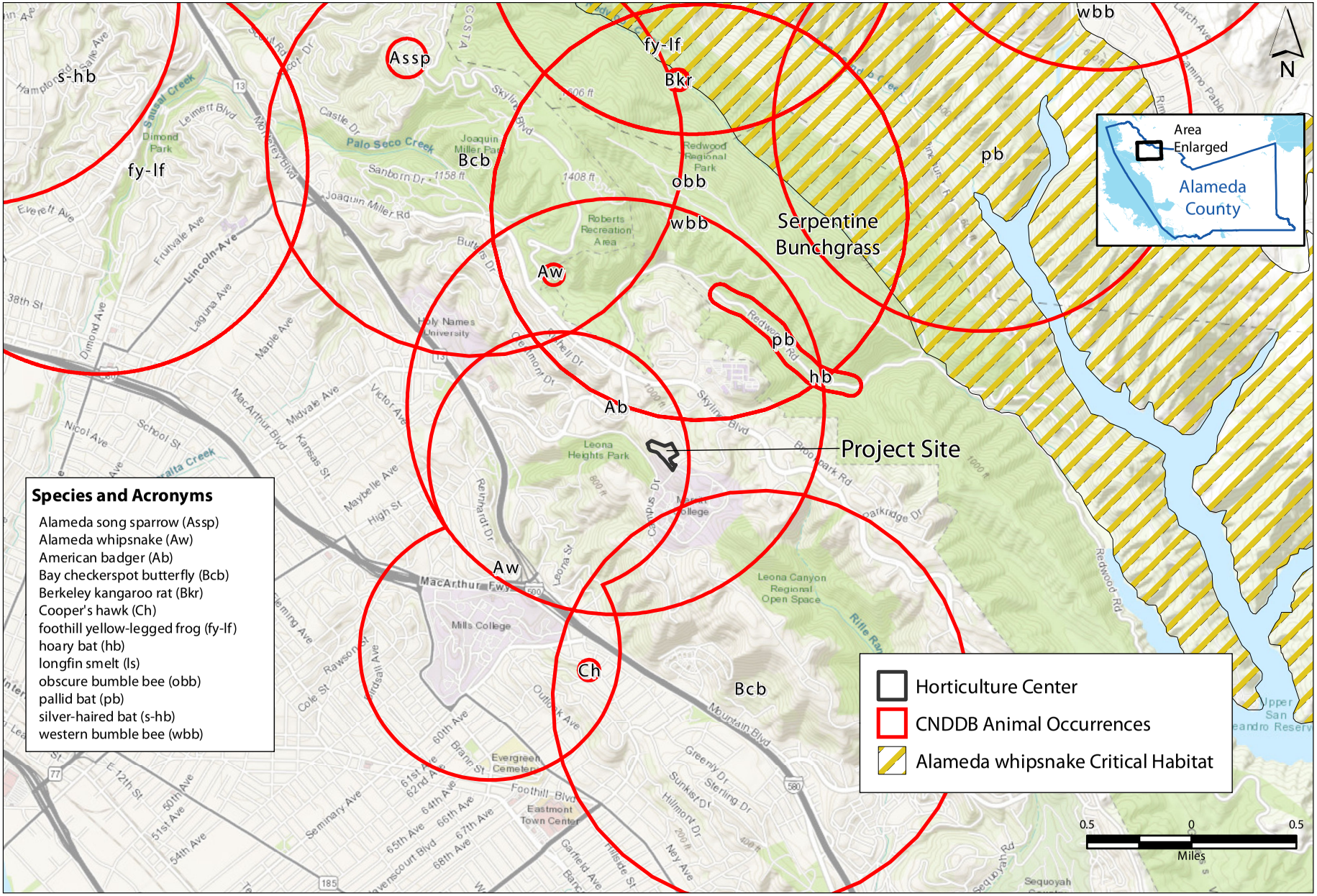
With the exception of possible presence of nesting birds protected under State and federal regulations when the nests are in active use, no special-status species are suspected to occur on the Project site. This includes absence of suitable habitat for the State and federally-threatened Alameda whipsnake (*Masticophis lateralis euryxanthus*), the federally-threatened California red-legged frog (*Rana draytonii*), and the State and federally-endangered Presidio clarkia, among other special-status plant and animal species. Critical habitat for Alameda whipsnake designated by the USFWS occurs in the watershed lands about a mile and a half to the east, but suitable habitat for this species does not occur on the Project site. The extent of surrounding development precludes the potential for dispersal by Alameda whipsnake, California red-legged frog, and other special-status animal species onto the Project site in the future.

Nests of most bird species are protected under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code when in active use. No nesting or roosting locations have been identified by the CNDDB for the Project site or immediate vicinity or were observed during the field surveys. However, trees on and in the vicinity of the Project site contain suitable nesting substrate for some bird species recognized as Species of Special Concern (SSC) by the CDFW, as well as more common species, and new nests could be established in the future. Tree removal and other construction activities during the breeding season could result in the incidental loss of fertile eggs or nestlings or nest abandonment. This would be considered a potentially significant impact if active nests are established before construction proceeds.



Source: California Natural Diversity Database accessed on May 6th, 2020;
USGS base map by ESRI and NGS. Map produced by www.digitalmappingsolutions.com on 5/6/2020.

Figure 4
Special-Status Plant Species and
Sensitive Natural Communities



Source: California Natural Diversity Database accessed on May 6th, 2020;
US Critical Habitat downloaded in April 2020 (March 27th, 2020 version).
USGS base map by ESRI and NGS. Map produced by www.digitalmappingsolutions.com on 5/6/2020.

Figure 5
Special-Status Animal Species and Critical Habitat

A standard method to address the potential for nesting birds is either to initiate vegetation grubbing and construction during the non-nesting season or to conduct a nesting survey within 14 days prior to initial tree removal, building demolition, and construction to determine whether any active nests are present that must be protected until any young have fledged and are no longer dependent on the nest. In Alameda County the bird nesting season typically ranges from February through August, with the non-nesting season from September through January. Protection of the active nests, if present, would require that construction setbacks be provided during the nesting and fledging period, with the setback depending on the type of bird species, degree to which the individuals have already acclimated to other ongoing disturbance, and other factors. Without these controls, tree removal and construction activities could have a potentially significant impact on nesting birds. With implementation of **Mitigation Measure BIO-1**, potentially significant impacts on nesting birds and special-status species would be fully mitigated.

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

Sensitive natural communities are community types recognized by CDFW and other agencies because of their rarity. In the Oakland vicinity, sensitive natural community types include coastal salt marsh, brackish water, freshwater marshlands, and native grasslands. However, sensitive natural community types are absent from the Project site and vicinity of proposed construction, and no adverse impacts are anticipated. No significant impacts are anticipated and no mitigation is required.

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

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions.

The CDFW, U.S. Army Corps of Engineers (Corps), and California Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to wetlands and other "waters of the United States." Jurisdiction of the Corps is established through provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material without a permit. The RWQCB jurisdiction is established through Section 401 of the Clean Water Act, which requires certification or waiver to control discharges in water quality, and the State Porter-Cologne Act. Jurisdictional authority of the CDFW over wetland areas is established under Sections 1600-1607 of the State Fish and Game Code, which pertain to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream.

A preliminary wetland assessment was conducted during the field surveys. No indications of any jurisdictional waters were observed on the Project site. **Mitigation Measures HYDRO-1 and**

HYDRO-2 included in **Section 10 Hydrology and Water Quality** would prevent any sedimentation or erosion during construction, preventing any potential for water quality degradation to downgradient waters. No direct or indirect impacts on the jurisdictional waters are anticipated and no mitigation is required.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Project site is intensively developed with existing structures and ornamental landscaping and provides only limited wildlife habitat values. The proposed Project would not have any significant adverse impacts on wildlife movement opportunities or adversely affect native wildlife nurseries. To protect ornamental plantings, the existing Horticulture Complex is already fenced to exclude deer and other large mammals. Grading and construction would temporarily disrupt wildlife use of the immediate vicinity, but this would be a relatively short-term effect on common wildlife species which could continue to use the surrounding areas for foraging and other activities. No substantial disruption of movement corridors or access to native wildlife nurseries is anticipated, potential impacts would be less than significant, and no mitigation is required.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The District is exempt from City of Oakland planning and code requirements. However, presented below is a summary of applicable City planning and code requirements that demonstrate the proposed Project is not in conflict with applicable City planning and code requirements.

City of Oakland General Plan. The proposed Project would not conflict with relevant policies in the *Open Space, Conservation, and Recreation (OSCAR) Element of the Oakland General Plan* (City of Oakland, 1996). These pertain to the protection of native plant communities (*Policy CO-7.1),* encouraging native plant restoration (Policy CO-7.2), discouraging the removal of large trees on developed sites (Policy CO-7.4), protecting habitat for special-status species (Policy CO-9.1), and protecting and enhancing wildlife movement corridors (Policy CO-11.2). The Project site does not contain sensitive biological resources addressed under the OSCAR Element. No significant conflicts with the City's OSCAR Element are anticipated and no mitigation is necessary.

Tree Protection Ordinance. Title 12, Chapter 12.36 of the City of Oakland Municipal Code identifies protected trees that require a permit for removal. According to the ordinance, a tree removal permit must be obtained to remove a "protected tree." A protected tree consists of any coast live oak measuring four inches in diameter at breast height (DBH) or any other tree species measuring nine inches DBH or larger, except non-native eucalyptus (*Eucalyptus* spp.) and Monterey pine (*Pinus radiata*). Replacement tree plantings are typically required where a protected tree is to be removed. Native protected trees proposed for removal must be replaced at a ratio of 1:1 if the replacement tree is a 24-inch box size and 3:1 if the replacement trees are 15-gallon size trees. Protected trees located within 30 feet of construction must be

identified. Adequate protection must also be provided during the construction period for any trees that are to remain in the vicinity of proposed development.

The Current Landscape Horticulture Complex Site Plan (refer to **Figure 2**) shows the location of existing trees proposed for removal or to be protected during construction. Based on an inspection of trees during the field surveys, only four of the trees mapped for removal would qualify as a protected tree under the City's ordinance based on species or DBH. These consist of a 10-inch canoe birch (*Betula papyrifera*), a 12-inch river birch (*B. nigra "Heritage"*), a 14-inch flowering cherry (*Prunus* sp.), and a 10-inch Japanese maple (*Acer palmatum*). All the other trees are too small to qualify as a protected tree under the ordinance, and no native trees of any kind are proposed for removal.

Detailed landscape plans have not yet been prepared for the Project but would include new plantings of trees, shrubs, and groundcover species. Appropriate controls would be implemented to ensure that trees on the Project site in the vicinity of construction are adequately protected. The replacement landscaping for the Project would replace any trees removed at a 1:1 ratio. Replacement trees will be 24-inch boxes or larger. The proposed Project will be consistent with the OSCAR Element.

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

This criterion is not applicable to the Project because there are no adopted habitat conservation plans or natural community conservation plans that encompass the Project site or vicinity. The closest Habitat Conservation Plan is the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), located more than 15 miles east of the Project site. Therefore, there would be no impact related to a conflict with an adopted conservation plan.

Recommended Mitigation Measure

BIO-1 Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act and State Fish and Game Code when in active use. This shall be accomplished by taking the following steps:

- If construction is proposed during the nesting season (February through August), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 14 days prior to the onset of tree removal or construction, in order to identify any active nests on the project sites and in the vicinity of proposed construction.
- If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September through February), construction may proceed with no restrictions.
- If bird nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall

be based on input received from the California Department of Fish and Wildlife (CDFW), and may vary depending on species and sensitivity to disturbance. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated on the remainder of the construction area.

- A report of findings shall be prepared by the qualified biologist and submitted to the Peralta Community College District for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season (February through August). The report either shall confirm absence of any active nests or shall confirm that any young within a designated no-disturbance zone have fledged and construction can proceed.

References

City of Oakland. Title 12, Chapter 12.36 of the City of Oakland Municipal Code.

City of Oakland, 1996, *Open Space, Conservation, and Recreation (OSCAR) Element of the City of Oakland General Plan*, Adopted by Oakland City Council, June.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Impact Discussion

The proposed Project would not disturb archaeological resources during construction activities. A discussion of each environmental issue included under Section 5 is presented below.

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Merritt College was constructed between 1968 and 1978 and has undergone extensive campus improvements since then including the modernization of existing buildings, construction of new buildings, sports facilities and parking lots. The Merritt College campus is not a designated landmark, nor is the campus located in a local historic district (City of Oakland 2019).

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

There are no archaeological resources known to be present on the Merritt College campus, including the Project site. The Horticulture Complex site overlies up to 25 feet of fill placed during construction of the campus (refer to **Section 7 Geology and Soils**).

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

There are no human remains known to be present on the Merritt College campus, including the Project site.

Mitigation Measures

None required.

References

City of Oakland. 2019. *List of Designated Landmarks*: www.2.oaklandnet.com/government/o/PBN/OurServices/DOWD009012. Viewed on April 11, 2019.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Impact Discussion

The proposed Horticulture Complex buildings would incorporate sustainable measures to efficiently manage energy consumption at the Project site. A discussion of each environmental issue included under Section 6 is presented below.

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

The Horticulture Complex Project will incorporate energy conservation measures such as solar orientation of buildings, natural daylighting, sharp cut-off exterior lighting and solar-ready roofs. The Project will be designed in compliance with the *California Green Building Standards Code* (State of California 2016) and, as applicable, the *Peralta Community College District Sustainability and Resiliency Goals and Policies* (PCCD 2017). Energy consumption is anticipated to be similar to or less than with existing conditions and is considered a less than significant impact.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

As discussed under subsection 6a above, the proposed Project will be designed to meet applicable State Green Building Code requirements.

Mitigation Measures

None required.

References

State of California. 2016. California Green Building Standards Code (CCR, Title 24, Part 11 – CAL Green). Available at: https://www.dgs.ca.gov/BSC.

PCCD. 2017. *Peralta Sustainability and Resiliency Master Plan, Report Progress and Next Steps Webinar.* Available at: https://www.peraltasustainabilityplan.org.

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

Impact Discussion

Strong ground shaking will likely occur at the Project site during the useful economic life of the Horticulture Complex buildings. With implementation of **Mitigation Measures GE0-1** and **GEO-2**, potentially significant impacts would be less than significant. A discussion of each environmental issue included under Section 7 is presented below.

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault; ii) strong seismic ground shaking; iii) seismic-related ground failure including liquefaction; and iv) landslides?

i. The Merritt College campus is not located within an Alquist-Priolo Earthquake Special Studies Zone. The nearest such zone is located about 0.67 mile southeast of the Project site and is associated with the Hayward Fault. Ground rupture is unlikely (Terraphase Engineering, Inc. 2020).

ii. Strong ground shaking will likely occur at the Project site during the useful economic life of the proposed Horticulture Complex buildings (Terraphase Engineering, Inc. 2020).

iii. The Project site is underlain by bedrock and engineered fill which is not subject to liquefaction or seismic shakedown (Terraphase Engineering, Inc. 2020).

iv. The Project site is located on the relatively flat areas of the Horticulture Complex and is not within a Seismic Hazard Zone. The slopes north, south and east of the Complex are stable under the design earthquake acceleration (Terraphase Engineering, Inc., 2020).

With implementation of **Mitigation Measures GEO-1** and **GEO-2**, potential adverse impacts associated with seismic events would be less than significant.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Earthmoving across the Project site would expose site soils to erosion from heavy winds, rainfall, or runoff. **Mitigation Measures HYDRO-1** and **HYDRO-2**, included in **Section 10 Hydrology and Water Quality**, will mitigate soil erosion impacts due to Project construction activities.

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

The Project is underlain by up to 25 feet of engineered fill placed during the initial development of the campus in the late 1960s. The engineered fill overlies bedrock of the Franciscan Complex, shales to the north and rhyolite (hard igneous rock) to the south. Neither the fill nor the bedrock is susceptible to liquefaction. The loop roadway located east of the existing Horticulture Complex is partially supported by a retaining wall which is in poor condition. The Project plans will include replacement of the retaining wall with a new wall designed to withstand the expected seismic loads on it (Terraphase Engineering, Inc., 2020).

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

Laboratory results on soil samples collected from the Project site do not indicate that the soils are expansive (Terraphase Engineering, Inc. 2020).

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

The Horticulture Complex buildings will be connected to the City of Oakland sanitary sewer system.

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

The entire Merritt College campus, including the Project site, underwent extensive site disturbance during construction of the college between 1968 and 1978. Consequently, it is unlikely that paleontological resources are present on the Project site. The area proposed for the Horticulture Complex overlies up to 25 feet of fill placed during development of the campus. (Terraphase Engineering, Inc. 2020).

Recommended Mitigation Measures

GEO-1 The design recommendations included in the Draft Geotechnical Design and Geological Hazards Report Horticultural Center Merritt College 12500 Campus Drive Oakland, California shall be incorporated into the Merritt College Complex building design developed by the project architect.

GEO-2 The retaining wall supporting the fire lane on the eastern side of the Horticulture Complex shall be replaced with a new structure designed to withstand the expected seismic forces.

References

Terraphase Engineering, Inc. *Draft Geotechnical Design and Geological Hazards Evaluation Report Horticultural Center Merritt College 12500 Campus Drive, Oakland, California*. July 2020.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
8. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Setting

Greenhouse gases (GHGs) are atmospheric gases that capture and retain a portion of the heat radiated from the earth after it has been heated by the sun. The primary GHGs are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor. While GHGs are natural components of the atmosphere, CO_2, CH_4 and N_2O are also emitted from human activities and their accumulation in the atmosphere over the past 200 years has substantially increased their concentrations. This accumulation of GHGs has been implicated as the driving force behind global climate change.

Human emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with organic decay processes in agriculture, landfills, etc. Other GHGs, including hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, are generated by certain industrial

processes. The global warming potential of GHGs are typically reported in comparison to that of CO_2, the most common and influential GHG, in units of "carbon dioxide-equivalents" (CO_2e).[3]

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, increased forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity (OPR 2018).

The California Air Resources Board (CARB) estimated that in 2011 California produced 448 million gross metric tons of CO_2e, or about 535 million U.S. tons. CARB found that transportation is the source of 37.6 percent of the state's GHG emissions, followed by industrial sources at 20.8 percent and electricity generation (both in-state and out-of-state) at 19.3 percent. Commercial and residential fuel use (primarily for heating) accounted for 10.1 percent of GHG emissions (CARB 2018).

In the San Francisco Bay Area, fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) and the industrial and commercial sectors are the two largest sources of GHG emissions, each accounting for approximately 36 percent of the San Francisco Bay Area's 95.8 million metric tons of CO_2e emitted in 2007. Electricity generation accounts for approximately 16 percent of the San Francisco Bay Area's GHG emissions followed by residential fuel usage at seven percent, off-road equipment at three percent and agriculture at one percent (BAAQMD 2010).

Regulatory Setting

Assembly Bill 32 (AB 32), the *California Global Warming Solutions Act*, requires the CARB to lower State GHG emissions to 1990 levels by 2020 - a 25 percent reduction statewide with mandatory caps for significant GHG emission sources. AB 32 directed CARB to develop discrete early actions to reduce GHG while preparing the Climate Change Scoping Plan to identify how best to reach the 2020 goal. Statewide strategies to reduce GHG emissions to attain the 2020 goal include the Low Carbon Fuel Standard (LCFS), the California Appliance Energy Efficiency regulations, the California Renewable Energy Portfolio standard, changes in the motor vehicle corporate average fuel economy (CAFE) standards, and other early action measures that would ensure the state is on target to achieve the GHG emissions reduction goals of AB 32 (CARB AB 32 overview).

In an effort to make further progress in attaining the longer-range GHG emissions reductions required by AB 32, an additional goal was set by the Governor's Office in 2015 to reduce California's GHG emissions to 40 percent below 1990 levels by 2030 by implementing additional climate change strategies:

- Reduce present petroleum use in cars and trucks by up to 50 percent;
- Increase from one-third to 50 percent the share of California's electricity derived from renewable sources;

[3] Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

- Double the energy efficiency savings achieved at existing buildings and make heating fuels cleaner;
- Reducing the release of methane, black carbon, and other short-lived GHGs;
- Manage farm and rangelands, forests and wetlands to more efficiently store carbon; and
- Periodically update the State's climate adaptation strategy.

The California Green Building Standards Code (CALGreen) provides minimum standards that buildings need to meet to be certified for occupancy, but does not prevent a local jurisdiction from adopting more stringent requirements. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) reduce energy and water consumption.

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for air quality regulation in the nine-county San Francisco Bay Area Air Basin. As part of that role, the BAAQMD has prepared *CEQA Air Quality Guidelines* (BAAQMD 2017) that provide CEQA thresholds of significance for operational GHG emissions from land use projects: 1,100 metric tons of CO_2e per year. This threshold is also considered the definition of a cumulatively considerable contribution to the global GHG burden and, therefore, of a significant cumulative impact. The BAAQMD has not defined thresholds for project construction GHG emissions. The *CEQA Air Quality Guidelines* methodology and thresholds of significance have been used in this Initial Study's analysis of potential GHG impacts associated with the proposed Project.

Impact Discussion

The proposed Horticulture Complex would incorporate sustainable measures to efficiently manage energy consumption at the Project site. Consequently, the Project would achieve a maximum feasible reduction of GHG emissions and would not exceed the CEQA significance threshold. A discussion of each environmental issue included under Section 8 is presented below.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The CalEEMod (California Emissions Estimator Model, Version 2016.3.2) model was used to quantify long-term net new GHG operational emissions produced by Project energy use, water use, and solid waste generation. CalEEMod incorporates GHG emission factors for motor vehicles, electricity generation, water use and solid waste generation.

The Project's estimated operational GHG emissions are presented in **Table 6**. Project GHG emissions would not exceed the BAAQMD threshold of 1,100 metric tons and operational GHG impacts would be less than significant.

The 108-metric-ton net new increment from Project stationary GHG sources (i.e., the sum of net new emissions from area, energy, solid waste and water use GHG sources) as calculated by CalEEMod is a worst-case estimate and is below the significance threshold.

TABLE 6: PROJECT OPERATIONAL GREENHOUSE GAS EMISSIONS (METRIC TONS PER YEAR)

Project GHG Source	CO_2	CH_4	N_2O	CO_{2e}
Area	< 0.01	0	0	< 0.01
Energy Use	91.17*	< 0.01*	< 0.01*	91.59*
Motor Vehicles	----**	----**	----**	----**
Solid Waste Disposal	5.01	0.30	0	12.42
Water Use	3.25	0.03	< 0.01	4.23
Annual Total	**99.43**	**0.33**	**< 0.01**	**108.25**
Significance Thresholds				**1100**
Significant Impact?				**No**

* The new Horticultural Complex buildings will include energy conserving design features such as solar orientation of greenhouses/buildings, natural daylighting, light-colored roofing/paving materials, sharp-cutoff exterior lighting, and solar-ready roofs that will reduce energy-use emissions further from the numbers shown.

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

The proposed Horticultural Complex would be below the threshold for GHG emissions and would not conflict with the GHG reduction strategies of AB 32.

Mitigation Measures

None required.

References

Bay Area Air Quality Management District (BAAQMD). 2017. *California Environmental Quality Act (CEQA) Air Quality Guidelines.* http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

BAAQMD. 2010. Source Inventory of Bay Area Greenhouse Gas Emissions. https://mtc.ca.gov/sites/default/files/Bay_Area_Greenhouse_Gas_Emissions_2-10.pdf

BAAQMD. 2017. *Spare the Air Cool the Climate A Blueprint for Clean Air and Climate Protection in the Bay Area.* http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en

California Governor's Office of Planning and Research (OPR). 2018. *California's Changing Climate 2018, A Summary of Key Findings from California's Fourth Climate Change Assessment.* http://climateassessment.ca.gov/state/docs/20180827-SummaryBrochure.pdf

CAPCOA (California Air Pollution Control Officers Association). 2013. California Emissions Estimator Model [CalEEMod], Version 2016.3.2 User's Guide and Appendix D - Default Data Tables. http://www.caleemod.com/

California Air Resources Board (CARB). 2018. *California Greenhouse Gas Emissions for 2000 to 2016 – Trends of Emissions and Other Indicators*. https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf

CARB. Assembly Bill 32 Overview. https://www.arb.ca.gov/cc/ab32/ab32.htm

Peralta Community College District (PCCD). 2017. *Peralta Sustainability and Resiliency Master Plan, Report Progress and Next Steps Webinar*. https://www.peraltasustainabilityplan.org

State of California. 2016. *California Green Building Standards Code (CCR, Title 24, Part 11 – CAL Green)*. https://www.dgs.ca.gov/BSC

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

Impact Discussion

The Horticulture Complex has been operational for more than 40 years. There is the possibility that hazardous materials may be present at the Project site. With implementation of **Mitigation Measure HAZ-1**, potentially significant impacts associated with presence of hazardous materials would be less than significant. Merritt College is located in a High Fire Severity Zone, consequently the Project could increase the risk of wildfire during both construction and operation. This is considered a

potentially significant impact. But with implementation of **Mitigation Measures HAZ-2** and **HAZ-3**, potential impacts associated with wildfire risk would be less than significant. A discussion of each environmental issue included under Section 9 is presented below.

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

A Phase I Environmental Assessment was prepared for the Project site and concluded a Phase II Environmental Assessment was necessary to assess the potential for presence of hazardous materials. This is considered a potentially significant impact, but with implementation of **Mitigation Measure HAZ-1**, potentially significant impacts associated with presence of hazardous materials at the Project site and their disposal would be less than significant.

The proposed Horticulture Complex Project operations would not use, dispose of or transport hazardous materials.

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

The Horticulture Complex focuses on sustainable practices for nurseries. Project operations would not result in the release of any hazardous materials into the environment.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Horticulture Complex Project would not emit hazardous emissions or store hazardous materials within the complex of buildings or greenhouses. The nearest schools beyond the Merritt College campus are Skyline High School, located about 0.35-mile northeast of the Project site; Carl B. Munck Elementary School located about 0.36 mile west of the site; and Oakland Hebrew Day School located about 0.3-mile northwest of the site.

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

The Project site is not included on the Department of Toxic Substance Control's site cleanup list as per Government Code Section 65962.5 (California Department of Toxic Substance Control 2020).

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

The Merritt College campus is located about five miles northeast of the Oakland International Airport and thus, is not located within the *Oakland International Airport Comprehensive Land Use Plan* (Alameda

County Community Development Agency). The Project would not result in a safety hazard or expose students and staff to excessive noise generated by Oakland International Airport.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Figure 7.5 of the *Safety Element* of the *City of Oakland General Plan* (City of Oakland) shows the emergency evacuation routes in the vicinity of the Merritt College campus include Redwood Road, Skyline Boulevard and Mountain Boulevard. The *Merritt College Emergency Operations Plan* (Peralta Community College District 2012) does not indicate specific evacuation routes and indicates it is expected that most major streets would be open and as such, evacuation should be easily facilitated. The proposed Project would not alter roadways in the vicinity of the Merritt College campus or be located on a designated emergency evacuation route. Therefore, the proposed Project would have a less-than-significant impact related to impairing or interfering with emergency response or evacuation.

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

The Merritt College campus is located in a High Fire Severity Zone as mapped by California Department of Forestry and Fire Protection (CAL FIRE). Construction of the Project would entail use of construction equipment that could generate sparks (e.g., vehicles, saws, mowers, acetylene torches and welding equipment) and would involve storage and use of flammable materials (e.g., fuel and compressed gasses) that would temporarily increase fire risks. Project operation would involve the use of vegetation management equipment that could generate sparks and increase fire risks. If vegetation on the Project site is not appropriately managed, the Project could increase the risk of fire occurring on the Project site and spreading from the Project site to surrounding areas.

The proposed Project could increase the risk of wildfire during both construction and operation. This is considered a potentially significant impact. However, with implementation of **Mitigation Measures HAZ-2** and **HAZ-3**, potential impacts associated with wildfire risk would be less than significant.

Recommended Mitigation Measure

HAZ-1 A Phase II Environmental Assessment shall be prepared to assess the presence of hazardous materials at the project site. The recommendations included in the Phase II EA shall be implemented.

HAZ-2 Construction contractors shall ensure the following measures are implemented to minimize the potential for accidental ignition of construction materials and vegetation:

- Flammable/combustible materials shall be stored away from vegetated areas;
- Spark arrestors shall be fitted on all construction vehicles and equipment;
- Work that generates sparks such as metal cutting, torching and welding shall only be performed in areas where vegetation has been sufficiently cleared and the ground surface has been wetted; and

- An adequate water source and fire extinguishers shall be available at all times for fire suppression.

HAZ-3 The Peralta Community College District shall develop a Vegetation Management and Fire Prevention Plan prior to the start of construction and shall implement the plan during construction and operation of the project. The Vegetation Management and Fire Prevention Plan shall include, at a minimum, the following measures:

- Using spark arrestors on all vehicles and equipment used for vegetation management;
- Using fire-resistant plants when planting areas for erosion control;
- Pruning the lower branches of tall trees;
- Clearing out ground-level brush and debris; and
- Storing combustible materials away from vegetated areas.

References

Alameda County Community Development Agency. *Oakland International Airport Land Use Compatibility Plan*. acgov.org/cda/planning/generalplans/airportlandplans.htm. Alameda Co

Basics Environmental. 2020. *Phase I Environmental Assessment Merritt College Horticulture Project 12500 Campus Drive, Oakland, CA 94606*. May 7, 2020.

CAL FIRE. *Fire Hazard Severity Zone Map*. https://www.fire.ca.gov/fire_prevention/fhsz_maps_alameda.

City of Oakland. *Safety Element, Oakland General Plan*. oaklandca.gov/resources/safety-element.

Peralta Community College District. 2012. *Merritt College Emergency Operations Plan*. Merritt.edu/up/technologycommittee/wp-content/uploads/sites/3/2014/11/MC-Emergency-Operations-Plan.pdf.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;	☐	☒	☐	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐

10. HYDROLOGY AND WATER QUALITY (cont.)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Impact Discussion

The proposed Project would result in ground disturbance during construction activities which could cause potentially significant soil erosion and sedimentation during precipitation events. However, with implementation of **Mitigation Measures HYDRO-1** and **HYDRO-2**, potential impacts would be less than significant. With the proposed Project, impervious surface area would increase by about four percent, however, surface runoff would now be treated on-site, which was not the case with existing site drainage conditions. A discussion of each environmental issue included under Section 10 is presented below.

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The Horticulture Complex contains approximately five acres. The Project site comprises about 2.5 acres currently developed with planting areas, buildings, greenhouses, parking areas, and circulation loop. Currently, there are no stormwater treatment measures in place on the Project site. The remaining 2.5 acres, which are not part of the proposed Project, comprise steep slopes with program-planted zones, lawn area and an overlook structure.

Project Construction

Project construction would involve demolition, earthwork and trenching associated with construction of the Horticulture Complex project. These activities could expose site soils to erosion during precipitation events. Because the Project area is greater than one acre (approximately 2.5 acres), the proposed Project is subject to the National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP) for Discharges of Storm Water Associated with Construction Activity The CGP requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) (San Francisco Bay Regional Water Control Board 2015). Project-related construction activities could result in potential water quality impacts associated with sediment, oil and grease, petroleum hydrocarbons and metals. This is considered a potentially significant impact. However, with

implementation of **Mitigation Measures HYDRO-1** and **HYDRO-2** potential water quality degradation would be less than significant.

Project Operation

Stormwater discharges in Oakland are permitted under San Francisco Bay Regional Water Quality Control Board (RWQCB) NPDES Permit (MRP) Section C.3 of the MRP (New Development and Redevelopment) which requires that local agencies use their planning authorities to include appropriate source control, site design and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects. This goal is to be accomplished primarily through the implementation of low impact development (LID) techniques (San Francisco Bay Regional Water Control Board 2015). The Project drainage plan identifies LID measures to treat stormwater runoff before it enters the municipal storm drain system in compliance with Section C.3 of the MRP (Sherwood Design Engineers 2020). Stormwater runoff will be treated prior to discharge, which was not previously the case and is therefore considered a less than significant impact.

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

The proposed Project would not substantially decrease groundwater supplies or interfere with groundwater recharge. The Project would increase impervious surface at the site by about four percent which is considered a modest increase that would not substantially decrease groundwater supplies or interfere with groundwater recharge.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii)create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?

i) During Project construction activities there is the potential for site erosion. **Mitigation Measures HYDRO-1 and HYDRO-2** would reduce potential erosion and siltation impacts to less than significant.

ii) The proposed Project would increase impervious surface area by about four percent. This represents a modest increase and would not result in a substantial increase in the rate or amount of surface runoff from the Project site and is considered a less than significant impact.

iii) There is the potential for a modest increase in stormwater runoff, but this is not anticipated to adversely affect off-site storm drains and is considered a less than significant impact.

iv) The Project site is not located within a flood hazard zone; consequently, it would not impede or redirect flood flows.

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

The Merritt College campus, including the Project site, is not located in a flood, tsunami or seiche zone (City of Oakland).

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The proposed Project would be in compliance with Section C.3 of the MRP. With implementation of **Mitigation Measures HYDRO-1** and **HYDRO 2**, the proposed Project would be in compliance with the San Francisco Bay Regional Water Quality Control Board planning policies and requirements.

Recommended Mitigation Measures

HYDRO-1 Prior to Project construction, a Storm Water Pollution Prevention Plan (SWPPP) shall be prepared. The SWPPP shall include the following:

- Site map which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the Project site.
- Best Management Practices (BMPs) to protect storm water runoff and placement of those BMPs
- A visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body.

HYDRO-2 Peralta Community College District and their contractor shall implement Best Management Practices (BMPs) to control erosion and sedimentation and prevent pollutants from entering the stormwater runoff during construction. BMPs may include, but are not limited to:

- Conduct grading during dry months (April – September).
- Cover disturbed areas with soil stabilizers, mulch, fiber roles, or temporary vegetation.
- Locate construction-related equipment or processes that contain or generate pollutants in secure areas, away from storm drains and gutters.
- Prevent or contain potential leakage or spilling from sanitary facilities by surrounding them with a berm and do not allow a direct connection to the storm drainage system.
- Park, fuel and clean all vehicles and equipment in one designated and contained area.
- Designate concrete washout areas.

- Provide inlet protection, such as filters.
- Monitor the site during rainy season to replace or adjust BMPs as needed.

References

City of Oakland. *Oakland General Plan, Chapter 6 Safety Element*. https://www.oaklandca.gov/topics/city-of-oakland-general-plan.

San Francisco Bay Regional Water Quality Control Board. 2015. Municipal Regional Stormwater Permit (MRP) No. R2-2015-0049. Adopted November 18, 2015. https://www.waterboards.ca.gov.

Sherwood Design Engineers. *Project Drainage Plan*. May 15, 2020.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. LAND USE PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Impact Discussion

The proposed Project would not conflict with adjacent and nearby land uses. A discussion of each environmental issue included under Section 11 is presented below.

a) Would the project physically divide an established community?

The Horticulture Complex Project would construct new classrooms/labs, greenhouses and support facilities within 2.5 acres of the existing five-acre Horticulture Complex. The Project would not adversely affect surrounding park and open space lands or residential neighborhoods.

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

The proposed Project would not conflict with the *Oakland General Plan* (City of Oakland 2019) or the *Oakland Planning Code* (City of Oakland 2019). The Merritt College Campus is designated Institutional under the *Oakland General Plan*, which allows development of college facilities. The Merritt College campus is zoned RH4 for large-lot (6,500 square feet to 8,000 square feet residences. The proposed Project would not conflict with the *Oakland General Plan* and *Planning Code*. It is noted the District is legally exempt from local planning and land use regulations.

Mitigation Measures

None required.

References

City of Oakland. *General Plan Land Use Map*. cao-94612.s3.amazonaws.com/documents/General-Plan-Designations-20150519.pdf.

City of Oakland 1997, *Oakland Planning Code*. cao-94612.s3amazonaws.com/documents/Planning-Code-after-6-5-19_Emergency-Housing-pdf.pdf.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Impact Discussion

The proposed Project will not affect any known mineral resources. A discussion of each environmental issue included under Section 12 is presented below.

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The Horticulture Complex site is located on the Merritt College campus which is designated Institutional by the *Oakland General Plan Land Use Map* (City of Oakland). The *Oakland General Plan Land Use Map* identifies no land area within the City limits as known to have mineral resource deposits. Merritt College is surrounded by parks, open space and residential development. The Project will not affect known mineral resources.

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

Refer to Subsection 12a above.

Mitigation Measures

None required.

References

City of Oakland. *General Plan* Map Land Use Map. cao_94612.s3.amazonaws.com/documents/General-Plan-Designations-20150519.pdf.

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

Existing Conditions

Sound is created when vibrating objects produce pressure variations that move rapidly outward into the surrounding air. The more powerful the pressure variations, the louder the sound perceived by a listener. The decibel (dB) is the standard measure of loudness relative to the human threshold of perception. Noise is a sound or series of sounds that are intrusive, objectionable or disruptive to daily life. Many factors influence how a sound is perceived and whether it is considered disturbing to a listener; these include the physical characteristics of sound (e.g., loudness, pitch, duration, etc.) and other factors relating to the situation of the listener (e.g., the time of day when it occurs, the acuity of a listener's hearing, the activity of the listener during exposure – is s/he sleeping, working, talking? etc.). Environmental noise has many documented undesirable effects on human health and welfare both psychological (e.g., annoyance and speech interference) and physiological (e.g., hearing impairment and sleep disturbance).

The Horticulture Complex site was surveyed on Tuesday, May 12, 2020 to observe influential on-/near-site noise sources and noise-sensitive land uses. The site is several hundred feet northwest of the main campus and is accessed via a gated road. There were no classes in session that day. No stationary on-site noise sources were active (e.g., no machinery noise from the maintenance shops in the site's westernmost building, a gasoline-engine-powered wood-chipper was observed in the Horticulture Complex's northern outdoor planting area, but was not in use). Campus Drive (a few hundred feet south of the Horticulture Complex) provides vehicular access to the campus via Redwood Road (about half a mile northwest of the site at closest approach), which connects with State Highway 13 and the I-580 freeway (both about a mile west/south of the site at closest approach). No motor vehicle noise emanating from local roadways was audible on the site throughout the survey period. A few high-altitude overflights of commercial aircraft were faintly audible during the survey. Existing low-density residential developments are adjacent to the site's north and east boundaries, the closest residential buildings located about 200-300 feet from the Project site.

Regulatory Setting

CEQA noise issues are typically addressed in relation to the policies and standards set in the appropriate city or county General Plan and Noise Ordinance. Merritt College lies within the city limits of Oakland where the *Noise Element City of Oakland General Plan* (City of Oakland 2005) and the *Oakland Municipal Code* (City of Oakland) normally are applicable. Although the District is under no mandate to apply/enforce City policies/standards, they have been applied here as appropriate to assess Project noise impacts. Also, the construction noise modeling methodologies of the Federal Highway Administration (FHWA) (Federal Highway Administration 2006) have been used as appropriate in the Project construction noise analysis.

The *Noise Element* contains the following noise control policy with applicability to the Project:

- **Policy 2:** Protect the noise environment by controlling the generation of noise by both stationary and mobile noise sources.

The Municipal Code (Chapter 8.18.020) prescribes the following restrictions on construction noise:

Failure [of construction activity/machinery] to comply with the following provisions shall constitute a nuisance.

- All construction equipment powered by internal combustion engines shall be properly muffled and maintained.
- Unnecessary idling of internal combustion engines is prohibited.
- All stationery noise-generating construction equipment such as tree grinders and air compressors are to be located as far as is practical from existing residences.
- Quiet construction equipment, particularly air compressors, are to be selected whenever possible.
- Use of pile drivers and jack hammers shall be prohibited on Sundays and holidays, except for emergencies and as approved in advance by the Building Official.

Impact Discussion

Project construction noise and vibration could be disruptive to the nearest residences, but would be reduced to a less-than-significant level with implementation of **Mitigation Measures NOISE-1**. A discussion of each environmental issue included under Section 13 is presented below.

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

Construction equipment/activity is widely recognized as a major noise source and for its potential to cause substantial disturbance when a construction site is located near noise-sensitive receptors (e.g., residential areas, schools, hospitals/nursing homes, public parks, etc.).

Construction of the proposed Horticultural Complex will require several pieces of construction equipment and daily site access by supply-delivery/debris-removal trucks and worker commute vehicles over a period of at least a year. The FHWA's Roadway Construction Noise Model (RCNM) was used to estimate the noise levels at various distances from the locus of work produced by a characteristic working group of construction equipment (i.e., a dump truck, a backhoe and a crane) likely to be used for Project construction, as shown in **Table 7**.

TABLE 7: RCNM MODELED CONSTRUCTION NOISE LEVELS

Distance from Area of Construction Activity (feet)	Average Construction Daytime Noise Level (dB)	Maximum Construction Daytime Noise Level (dB)
50	82	85
100	76	79
200	70	73
400	64	67

Source: Federal Highway Administration, Roadway Construction Noise Model (RCNM).

During Project construction, noise levels in the outdoor areas of the adjacent residences to the north and east facing the construction site (i.e., within about 200-300 feet and with an uninterrupted line-of-sight from source to receptor) could at times (e.g., during demolition of the existing structures, or during foundation preparation after demolition, or when the major structural components are being delivered or erected) be incompatible with outdoor leisure activities. With implementation of **Mitigation Measure NOISE-1**, temporary noise impacts associated with construction activities would be reduced to a less-than-significant level.

After Project construction, the new Horticultural Complex would not increase facilities capacity. Thus, the Project would not generate additional motor vehicle trips on local streets, nor have the permanent traffic noise increments usually associated with them, a less than significant impact.

b) Would the project generate excessive groundborne vibration or groundborne noise levels?

Just as vibrating objects radiate sound through the air, if they are in contact with the ground, they also radiate mechanical energy through the ground. If such an object is massive enough and/or close enough to a person, the ground vibrations can be perceptible and, if the vibrations are strong enough, they can cause annoyance to the person and, if still stronger, damage to buildings. The metric most commonly used to correlate vibration levels with human annoyance and structural damage is the vibration decibel (VdB). There are no policies or standards in the *Noise Element* for avoiding/reducing structural damage or annoyance from construction vibration impacts. However, the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (Federal Transit Administration, 2018) provides methodologies for their evaluation, and standards to avoid impacts (i.e., for the latter, a 94 VdB limit to prevent structural damage to wood frame structures that are characteristic of most residences, and a 80 VdB limit to avoid significant annoyance to building occupants).

The most vibration-intensive piece of construction equipment is a pile driver, but no pile driving would be required for the Project. Other types of construction equipment are far less vibration-intensive. Next in intensity are heavily loaded trucks or large tracked earth-moving equipment, which could pose a damage or annoyance threat if they regularly and often come close to vibration-sensitive receptors during construction.

Existing residential uses (all of wood-frame construction) north and east of the Project site boundary (the closest within about 200-300 feet of the center of the construction area) are potential targets for vibration damage and resident annoyance. Project construction would not require large numbers of heavy equipment operating for long periods. But backhoes and front loaders would likely be required for the demolition and site preparation phases. During subsequent phases, equipment needs would be limited to a crane (which would be not be mobile) and lighter equipment for moving building material (e.g., forklifts). In **Table 8**, FTA vibration screening methodology has been applied to the most vibration-intensive construction equipment (short of pile drivers and similar impact tools) showing that Project vibration levels would be far below the range where there would be any potential for on-going substantial annoyance or structural damage to the closest residences from Project construction activity.

TABLE 8: MODELED CONSTRUCTION EQUIPMENT VIBRATION LEVELS

Construction Equipment Type	Vibration Level at Reference Distance (25 feet) (VdB)	Vibration Level at Greater Distances (VdB)
Bulldozer	87	69 @ 100 feet
Bulldozer	87	60 @ 200 feet
Bulldozer	87	55 @ 300 feet
Loaded Truck	86	68 @ 100 feet
Loaded Truck	86	59 @ 200 feet
Loaded Truck	86	54 @ 300 feet

Source: Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment (2018).

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

Merritt College is about five miles northeast of Oakland International Airport, and is well outside that airport's 65 dB 24-hour-average noise contour, which is widely accepted as the metric of significant aircraft noise impact potential. Thus, there is no significant potential for aircraft noise impacts to users of the Horticultural Complex.

Recommended Mitigation Measure

NOISE-1 The following Best Management Practices shall be incorporated into the construction documents to be implemented by the Project contractor:

- Provide enclosures and noise mufflers for stationary equipment, shrouding or shielding for impact tools, and barriers around particularly noisy activity areas on the site.
- Use quietest type of construction equipment whenever possible, particularly air compressors.
- Provide sound-control devices on equipment no less effective than those provided by the manufacturer.
- Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.
- Prohibit unnecessary idling of internal combustion engines.
- Require applicable construction-related vehicles and equipment to use designated truck routes when entering/leaving the site.
- Designate a noise (and vibration) disturbance coordinator who shall be responsible for responding to complaints about noise (and vibration) during construction. The telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site. Copies of the project purpose, description and construction schedule shall also be distributed to the surrounding residences.
- Limit project construction activity to the hours of 7 am to 9 pm on weekdays as required under the *City of Oakland Municipal Code Chapter 8.18.020*.

References

Federal Transit Administration (FTA). 2006. *Transit Noise and Vibration Impact Assessment Manual.* https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model User's Guide.* https://www.gsweventcenter.com/Draft_SEIR_References/2006_01_Roadway_Construction_Noise_Model_User_Guide_FHWA.pdf

City of Oakland. 2005. *Noise Element City of Oakland General Plan.* http://www2.oaklandnet.com/oakca1/groups/ceda/documents/webcontent/oak035231.pdf

City of Oakland. Municipal Code, Chapter 8.18.020. https://library.municode.com/ca/oakland/codes/code_of_ordinances?nodeId=TIT8HESA_CH8.18NU

Environmental Protection Agency (USEPA). 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. (more commonly cited by the shorter title Protective Noise Levels) http://www.nonoise.org/library/levels74/levels74.htm

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Discussion

The proposed Project will not affect population or housing. A discussion of each environmental issue included under Section 14 is presented below.

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed Project would provide replacement facilities at the existing Horticulture Complex site on the Merritt College campus. The proposed Project would not induce population growth.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The proposed Project is located at the Horticulture Complex on the Merritt College campus and would not displace any housing.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Impact Discussion

The proposed Horticulture Complex Project would not adversely affect public services. A discussion of each environmental issue included under Section 15 is presented below.

a) Oakland Fire Station 21, located at 13150 Skyline Boulevard, is the closest fire station (less than one mile) to the Merritt College campus. The Horticulture Complex buildings would not adversely affect Oakland Fire Department's ability to respond to emergencies at the Horticulture Complex. The Oakland Fire Department will review and approve site access, the number of fire hydrants required and their location and water pressure. The Horticulture Complex buildings will meet all local and State life safety requirements.

b) Peralta Police Services (Alameda County Sheriff's Office) is under contract to provide security for the Merritt College campus. Their office is housed at the District offices located at 333 East 8th Street, in Oakland. Hours of operation are Monday thru Friday 7:00 am to 11:00 pm. ABC Security provides swing shift and weekend security for the campus.

c) The Merritt College Horticulture program is a popular program serving a range of students for credit and non-credit offerings. Replacing the existing buildings with state-of-the-art classroom/laboratory facilities and greenhouse will improve the learning experience for students and the teaching experience for faculty.

d) The Project would not generate an increase in potential student and staff use of nearby parks including Leona Heights Park and Leona Regional Open Space.

e) The Project will not adversely affect other public facilities that may be located in the campus vicinity.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. RECREATION. Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Impact Discussion

The Horticulture Complex Project would not result in an increase in demand for recreation facilities. A discussion of each environmental issue included under Section 16 is presented below.

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

The proposed Project would not generate an increase in the use of nearby parks: Leona Heights Park and Leona Regional Open Space.

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

The Horticulture Complex is located on the Merritt College campus which provides ball fields, track and tennis courts.

Mitigation Measures

None required.

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

Existing Conditions

Roadway Facilities

Campus Drive provides all access to Merritt College. This north-south roadway extends from Redwood Road to the north to Keller Avenue to the south, with primary vehicular access to the Merritt College campus provided via Redwood Road. Between Redwood Road and the college campus, the roadway is four-lanes wide with a median left turn lane provided at intersections. South of the campus, Campus Drive narrows to a two-lane cross section extending through a residential neighborhood (Ridgemont) to Keller Drive.

Redwood Road provides regional access to Merritt College via a connection between Campus Drive and State Route 13 to the west. From State Route 13, campus traffic may access Interstate 580, State Route 24, and other regional connections. Redwood Road is a four-lane divided arterial with a posted speed limit of 35 miles per hour.

Transit Facilities

Transit service to Merritt College is provided by AC Transit's Route 54. Route 54 provides a connection to the Fruitvale BART Station via Redwood Road and 35th Avenue. Service is generally provided from 7:30 AM to 8 PM on 30-minute headways. At Merritt College, the route stops at the main Campus Drive loop at the base of the campus where two shelters are provided for riders.

Bicycle Facilities

While bicycles are not prohibited on any roadways in the vicinity of the project, there are currently no designated bicycle facilities (Class I, II, III or VI) in the area. Bicycle racks are provided at the Campus Drive loop's transit stops at the base of the campus. Bicycle racks are also provided at a number of locations throughout the campus, including at the Horticultural facility.

Pedestrian Facilities

Campus Drive provides City standard sidewalks on both sides of the roadway south of Merritt College connecting to Keller Avenue. North of the Project site, Campus Drive provides a continuous sidewalk along the east side of the roadway connecting to Redwood Road, where a signalized crossing with crosswalks and pedestrian push button actuation have been installed. Sidewalks are provided along the north side of Redwood Road from the campus to State Route 13, although this roadway provides a relatively steep grade as it traverses downhill to the west.

Regulatory Setting

This section includes applicable plans, ordinances, and policies addressing the safety or performance of the circulation system.

State of California Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. The legislature found that with the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the State had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled and thereby contribute to the reduction of greenhouse gas emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill 32). In December 2018, the Governor's Office of Planning and Research (OPR) finalized guidelines on evaluating transportation impacts in CEQA based on the criteria of vehicle miles traveled (VMT).

The implementation of SB 743 eliminated the use of criteria such as auto delay, level of service, and similar measures of vehicle capacity of traffic congestion as the basis for determining significant impacts as part of CEQA compliance. The SB 743 VMT criteria promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

City of Oakland General Plan

The City of Oakland's General Plan is a comprehensive plan for the growth and development of the City. Applicable plans and policies related to Transportation are presented below.

Land Use and Transportation Element (LUTE)

The City of Oakland, through various policy documents, states a strong preference for encouraging use of pedestrian, bicycle, and transit travel modes. The following policies are included in the LUTE:

- **LUTE Policy Framework, Encouraging Alternative Means of Transportation:** "A key challenge for Oakland is to encourage commuters to carpool or use alternative modes of transportation, including bicycling or walking. The Policy Framework proposes that congestion be lessened by promoting alternative means of transportation, such as transit, biking, and walking, providing facilities that support alternative modes, and implementing street improvements. The City will continue to work closely with local and regional transit providers to increase accessibility to transit and improve intermodal transportation connections and facilities. Additionally, policies support the introduction of light rail and trolley buses along appropriate arterials in heavily traveled corridors, and expanded use of ferries in the bay and estuary."

- **Policy T3.5, Including Bikeways and Pedestrian Walks:** The City should include bikeways and pedestrian walks in the planning of new, reconstructed, or realized streets, wherever possible.

- **Policy T3.6, Encouraging Transit:** The City should encourage and promote use of public transit in Oakland by expediting the movement of and access to transit vehicles on designated "transit streets" as shown on the Transportation Plan. (Policies T3.6 and T3.7 are based on the City Council's passage of "Transit First" policy in October 1996.)

- **Policy T3.7, Resolving Transportation Conflicts:** The City, in constructing and maintaining its transportation infrastructure, should resolve any conflicts between public transit and single occupant vehicles in favor of the transportation mode that has the potential to provide the greatest mobility and access for people, rather than vehicles, giving due consideration to the environmental, public safety, economic development, health and social equity impacts.

- **Policy T4.1, Incorporating Design Features for Alternative Travel:** The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage use of alternative modes of transportation such as transit, bicycling, and walking.

Bicycle Master Plan

The Oakland City Council adopted a new Bike Plan in 2019, titled *Let's Bike Oakland*. The plan features increased emphasis on equity in pursuit of its four goals: Access, Health & Safety, Affordability, and Collaboration. Near Merritt College, the plan proposes the installation of Class II buffered bicycle lanes on Campus Drive from the college to Redwood Road and on Redwood Road/35th Avenue from Campus Drive to MacArthur Boulevard.

Pedestrian Master Plan

In June 2017, the City of Oakland adopted the *Oakland Walks!* 2017 Pedestrian Master Plan Update (2017 PMP). The 2017 PMP is an update to the 2002 Pedestrian Master Plan (2002 PMP), which was

adopted by the City Council and incorporated into the adopted General Plan. The PMP identifies policies and implementation measures that promote a walkable City, and was updated in 2017 to reflect four goals:

- **Holistic Community Safety:** Make Oakland's pedestrian environment safe and welcoming.
- **Responsiveness:** Develop and provide tools to ensure that Oakland creates and maintains a vibrant pedestrian environment.
- **Equity:** Recognizing a historical pattern of disinvestment, focus investment and resources to create equitable, accessible walking conditions to meet the needs of Oakland's diverse communities.
- **Vitality:** Ensure that Oakland's pedestrian environment is welcoming, well connected, supports the local economy, and sustains healthy communities.

City of Oakland Public Transit and Alternative Modes Policy

The City of Oakland adopted the Public Transit and Alternative Modes Policy, also known as the "Transit-First Policy," in October 2006.[4] This resolution supports public transit and other alternatives to single occupant vehicles and directs the LUTE to incorporate "various methods of expediting transit services on designated streets and encouraging greater transit use." The resolution also directs the City, in constructing and maintaining its transportation infrastructure, to resolve any conflicts between public transit and single occupant vehicles on City streets in favor of the transportation mode that provides the greatest mobility for people rather than vehicles giving due consideration to the environment, public safety, economic development, health, and social equity impacts.

City of Oakland Complete Street Policy

The City of Oakland adopted the Complete Street Policy to further ensure that Oakland streets provide safe and convenient travel options for all users in January 2013.[5] This resolution, consistent with the California Complete Streets Act of 2008, directs the City of Oakland to plan, design, construct, operate, and maintain the street network in the City to accommodate safe, convenient, comfortable travel for all modes, including pedestrians, bicyclists, transit users, motorists, trucks, and emergency vehicles.

Impact Discussion

A brief discussion of each environmental issue covered under Section 17 is presented below.

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

The proposed Project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities.

[4] Oakland City Council Resolution 73036 C.M.S.
[5] City of Oakland City Council Resolution 84204 C.M.S.

Construction traffic associated with the Horticulture Complex will be required to use State Route 13, Redwood Road and Campus Drive to access the site. From Campus Drive, construction traffic will use the Horticulture Complex's access roadway to travel to and from the site. Project construction would begin in January 2022 and extend until April 2023. To allow for continuing student instruction, construction would occur in two separate phases.

Peak truck traffic would occur during the excavation and earthwork portion of project construction. This phase is forecast to last two to four days, with a peak level of activity consisting of 36 daily off-haul loads. As each truck would make an inbound and outbound trip to execute the off-haul movement, the peak level of truck activity would be 72 daily truck trips. This level of activity would occur for two to four days. The peak number of construction workers on site during Project construction is estimated to be 33. Construction workers are anticipated to drive their own private automobile to the site and park in a designated area on-campus.

It is recommended that a Construction Traffic Control Plan (CTP) be prepared and implemented to manage transportation activities associated with Project construction. The CTP includes the following:

- A prohibition on all construction truck activity during the period 30 minutes prior to the beginning of school (7:30 to 8:30 AM) and 30 minutes after the end of the school day (4:30 to 5:00 PM).
- The provision of flaggers at all on-site locations where construction trucks and construction worker vehicles conflict with school vehicle, bicycle, or pedestrian traffic.
- Preservation of emergency vehicle access.
- Identification of approved truck routes by the College in communication with the City with the prohibition of all truck activity on the residential portion of Campus Drive south of the campus.
- Location of staging areas and the location of construction worker parking.
- Identification of the means and locations of the separation (i.e. fencing) of construction areas and active school property.
- Provision of a point of contact for City of Oakland residents to obtain construction information, have questions answered and convey complaints.
- Identification of the traffic controls and methods proposed during each phase of project construction. Provision of safe and adequate access for vehicles, transit, bicycles, and pedestrians.

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

The proposed Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1). As the proposed Project would not increase facilities capacity, the total amount of traffic traveling to and from the site would not change. Total Vehicle Miles of Travel (VMT) associated with the campus would remain unchanged with Project implementation.

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

The Horticulture Complex would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). The Project proposes no dangerous features or incompatible uses.

e) Result in inadequate emergency access?

The Horticulture Complex would not result in inadequate emergency access. The general path of emergency access/response would remain unchanged as a result of Project implementation. The Project would widen and improve the loop roadway providing access through the Horticultural Complex.

Mitigation Measures

None required.

References

Alameda-Contra Costa Transit District (AC Transit). 2020. *Route Map and Schedule*, Accessed June 12

City of Oakland, *City of Oakland General Plan, Land Use and Transportation Element*, March 1998

City of Oakland, *City of Oakland Bicycle Master Plan, Let's Bike Oakland*, 2019

City of Oakland, *City of Oakland 2017 Pedestrian Plan Update, Oakland Walks!*, 2017

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

Impact Discussion

The Project would not adversely affect tribal cultural resources. A discussion of each environmental issue included under Section 18 is presented below.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Merritt College, including the Project site, is not listed or considered eligible for listing in the California Register of Historical Resources (California Resister of Historical Resources).

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

Refer to Criterion 18a (i) above.

Mitigation Measures

None required.

References

California Register of Historical Resources. www.ohp.parks.ca.gov/ListedResources/?view=name&criteria=Oakland.

City of Oakland. *List of Designated Landmarks*: www.2.oaklandnet.com/government/o/PBN/OurServices/DOWD009012.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
19. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

19. UTILITIES AND SERVICE SYSTEMS (cont.)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Impact Discussion

The proposed Project would not adversely affect utilities and service systems. A discussion of each environmental issue included under Section 19 is presented below.

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

The proposed Horticulture Complex Project would not require the relocation of existing utilities or construction of new or expanded utilities provided by public and private utility service systems.

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

The Merritt College campus is served by East Bay Municipal Utility District (EBMUD). The proposed Project would not result in an increase in water use. The Project would include the following water efficiency components:

- Water efficient restroom fixtures
- Water efficient irrigation systems
- Demonstration graywater system
- Demonstration green roof
- Demonstration rainwater capture

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

EBMUD provides wastewater service to Merritt College. The proposed Horticulture Complex would include water efficient restroom fixtures that would reduce wastewater generation at the Project site and would thus not adversely affect EBMUD's wastewater treatment capacity

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

District policy is to reduce waste, develop a comprehensive recycling plan and compost food for each of the four campuses, which includes Merritt College (Peralta Community College District, 2017). It is not anticipated the proposed Project would generate an increase in solid waste beyond what can be accommodated by existing conservation measures at the Merritt College campus.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Project would comply with federal, state and local waste management and reduction statutes and regulations. Refer to Subsection 19d above.

Recommended Mitigation Measures

None required.

References

Peralta Community College District. 2017. *Peralta Sustainability and Resiliency Master Plan, Report Progress and Next Steps Webinar*. September 4, 2017.

United States Green Building Council (USGBC). https://www.usgbc.org

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

Impact Discussion

Merritt College is located within a High Fire Severity Zone. A discussion of each environmental issue included under Section 20 is presented below.

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The proposed Project includes the construction of a new loop roadway that would improve on-campus access to the Project site for emergency response vehicles. Off-campus access roads to and from the campus currently provide access for emergency vehicles. The Project would not substantially impair any adopted emergency response or evacuation plans.

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

As discussed in **Hazards and Hazardous Materials, Subsection 9g**, the Project could increase the risk of wildfire during construction and operation due to the site being located within a High Fire Severity Zone as mapped by the California Department of Forestry and Fire Protection (CAL FIRE). Recommended **Mitigation Measures HAZ-2** and **HAZ-3** would reduce potentially significant impacts to less than significant.

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

While the Project would be located in a fire hazard area, it would be within a developed college campus and would not require installation or maintenance of infrastructure that would exacerbate fire risk.

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

No significant risks would be created as a result of post-fire stability, runoff, or drainage changes. The 2.5-acre site is relatively level and the Project would improve drainage on the site.

References

CAL FIRE. *Fire Hazard Severity Zones*. https://www.fire.ca.gov/fire_prevention/fhsz_maps_alameda.

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

Impact Discussion

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

The removal of trees located on the Project site and construction activities in general could have a potentially significant impact on nesting birds. However, with implementation of **Mitigation Measure BIO-1**, potentially significant impacts on nesting birds and special-status species would be reduced to a less-than-significant level.

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

The proposed Project would not result in cumulatively considerable impacts.

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

Geology and Soils. The Horticulture Complex Project site may include subsurface expansive soils which represent a potentially significant impact. However, with implementation of **Mitigation Measures GE0-1** and **GEO-2**, potentially significant impacts would be less than significant.

Hazards and Hazardous Materials. There is the possibility that hazardous materials are present at the Horticulture Complex site, but with implementation of **Mitigation Measure HAZ-1**, potentially significant impacts would be less than significant. The Project site is located within a High Fire Severity Zone and could increase the risk of wildfire at the Project site during construction and operation and is considered a potentially significant impact. With implementation of **Mitigation Measures HAZ-2** and **HAZ-3**, potentially significant impacts would be less than significant.

Hydrology and Water Quality. During construction, the Project site would undergo substantial ground disturbance which could result in significant soil erosion and sedimentation during precipitation events. However, with implementation of **Mitigation Measures HYDRO-1** and **HYDRO-2**, potential water quality impacts would be less than significant.

Noise. Temporary Project construction noise could be disruptive to on-campus educational/leisure activities and nearby residences, but with implementation of **Mitigation Measures NOISE-1**, temporary noise increase would be reduced to a less-than-significant level.

REPORT PREPARATION

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APPENDIX A
CNDD SUMMARY TABLE REPORT

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Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Oakland East (3712272) OR Las Trampas Ridge (3712271))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Accipiter cooperii Cooper's hawk	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	260 260	118 S:1	0	0	1	0	0	0	0	1	1	0	0
Ambystoma californiense California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	20 1,111	1231 S:3	0	1	0	0	1	1	2	1	2	0	1
Amsinckia lunaris bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley SB_UCSC-UC Santa Cruz	575 1,611	93 S:12	0	1	1	0	0	10	1	11	12	0	0
Anomobryum julaceum slender silver moss	G5? S2	None None	Rare Plant Rank - 4.2		13 S:1	0	0	0	0	0	1	0	1	1	0	0
Antrozous pallidus pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	210 770	420 S:7	0	0	0	0	0	7	7	0	7	0	0
Aquila chrysaetos golden eagle	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,560 1,560	321 S:1	0	1	0	0	0	0	1	0	1	0	0
Arctostaphylos pallida pallid manzanita	G1 S1	Threatened Endangered	Rare Plant Rank - 1B.1	1,120 1,500	9 S:6	0	0	4	1	1	0	1	5	5	1	0
Astragalus tener var. tener alkali milk-vetch	G2T1 S1	None None	Rare Plant Rank - 1B.2	20 20	65 S:1	0	0	0	0	1	0	1	0	0	1	0
Bombus caliginosus obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	300 1,200	181 S:4	0	0	0	0	0	4	4	0	4	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Bombus occidentalis western bumble bee	G2G3 S1	None Candidate Endangered	USFS_S-Sensitive XERCES_IM-Imperiled	350 1,000	279 S:5	0	0	0	0	0	5	5	0	5	0	0
Calochortus pulchellus Mt. Diablo fairy-lantern	G2 S2	None None	Rare Plant Rank - 1B.2	1,200 1,250	52 S:2	0	0	0	0	0	2	2	0	2	0	0
Chloropyron maritimum ssp. palustre Point Reyes salty bird's-beak	G4?T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		76 S:1	0	0	0	0	1	0	1	0	0	1	0
Chorizanthe robusta var. robusta robust spineflower	G2T1 S1	Endangered None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	30 30	20 S:1	0	0	0	0	1	0	1	0	0	1	0
Clarkia concinna ssp. automixa Santa Clara red ribbons	G5?T3 S3	None None	Rare Plant Rank - 4.3	400 400	20 S:1	0	0	0	0	0	1	1	0	1	0	0
Clarkia franciscana Presidio clarkia	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	1,000 1,000	4 S:1	0	1	0	0	0	0	0	1	1	0	0
Corynorhinus townsendii Townsend's big-eared bat	G3G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	710 710	635 S:1	0	0	0	0	1	0	1	0	0	1	0
Coturnicops noveboracensis yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	20 20	45 S:1	0	0	0	0	0	1	1	0	1	0	0
Dipodomys heermanni berkeleyensis Berkeley kangaroo rat	G3G4T1 S1	None None		580 1,400	8 S:5	0	0	0	0	0	5	4	1	5	0	0
Dirca occidentalis western leatherwood	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	660 1,400	71 S:14	1	5	2	0	0	6	5	9	14	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Efferia antiochi Antioch efferian robberfly	G1G2 S1S2	None None		350 350	4 S:1	0	0	0	0	0	1	1	0	1	0	0
Emys marmorata western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	440 560	1385 S:2	1	0	0	0	0	1	1	1	2	0	0
Eriogonum luteolum var. caninum Tiburon buckwheat	G5T2 S2	None None	Rare Plant Rank - 1B.2	850 950	26 S:3	0	0	1	0	0	2	0	3	3	0	0
Eryngium jepsonii Jepson's coyote-thistle	G2 S2	None None	Rare Plant Rank - 1B.2	675 675	19 S:2	0	0	0	0	0	2	1	1	2	0	0
Eucyclogobius newberryi tidewater goby	G3 S3	Endangered None	AFS_EN-Endangered CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	5 5	127 S:1	0	0	0	0	0	1	1	0	1	0	0
Euphydryas editha bayensis Bay checkerspot butterfly	G5T1 S1	Threatened None	XERCES_CI-Critically Imperiled	500 1,300	30 S:2	0	0	0	0	2	0	2	0	0	0	2
Extriplex joaquinana San Joaquin spearscale	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden		127 S:1	0	0	0	0	1	0	1	0	0	1	0
Falco peregrinus anatum American peregrine falcon	G4T4 S3S4	Delisted Delisted	CDF_S-Sensitive CDFW_FP-Fully Protected USFWS_BCC-Birds of Conservation Concern	0 0	56 S:1	0	1	0	0	0	0	0	1	1	0	0
Fissidens pauperculus minute pocket moss	G3? S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	985 985	22 S:1	0	0	0	0	0	1	1	0	1	0	0
Fritillaria liliacea fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	200 200	82 S:3	0	0	0	0	1	2	3	0	2	1	0
Gilia millefoliata dark-eyed gilia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		54 S:1	0	0	0	0	1	0	1	0	0	0	1
Helianthella castanea Diablo helianthella	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	500 1,800	107 S:21	4	5	2	0	0	10	6	15	21	0	0

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Helminthoglypta nickliniana bridgesi Bridges' coast range shoulderband	G3T1 S1S2	None None	IUCN_DD-Data Deficient	1,400 1,400	6 S:1	0	0	0	0	0	1	1	0	1	0	0
Hoita strobilina Loma Prieta hoita	G2? S2?	None None	Rare Plant Rank - 1B.1		34 S:1	0	0	0	0	0	1	1	0	1	0	0
Horkelia cuneata var. sericea Kellogg's horkelia	G4T1? S1?	None None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz USFS_S-Sensitive	20 20	58 S:1	0	0	0	0	1	0	1	0	0	1	0
Lasionycteris noctivagans silver-haired bat	G5 S3S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	400 400	139 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasiurus cinereus hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	325 660	238 S:2	0	0	0	0	0	2	2	0	2	0	0
Laterallus jamaicensis coturniculus California black rail	G3G4T1 S1	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	1 1	303 S:1	0	0	0	0	1	0	1	0	0	1	0
Masticophis lateralis euryxanthus Alameda whipsnake	G4T2 S2	Threatened Threatened		260 1,600	167 S:34	10	9	5	1	0	9	15	19	34	0	0
Meconella oregana Oregon meconella	G2G3 S2	None None	Rare Plant Rank - 1B.1	1,300 1,550	9 S:2	0	0	0	0	0	2	1	1	2	0	0
Melospiza melodia pusillula Alameda song sparrow	G5T2? S2S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	20 1,300	38 S:3	0	0	0	0	0	3	2	1	3	0	0
Microcina leei Lee's micro-blind harvestman	G1 S1	None None		600 600	2 S:1	0	0	0	0	0	1	1	0	1	0	0
Monolopia gracilens woodland woollythreads	G3 S3	None None	Rare Plant Rank - 1B.2		68 S:1	0	0	0	0	0	1	1	0	1	0	0

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Neotoma fuscipes annectens	G5T2T3	None	CDFW_SSC-Species of Special Concern	667	42	0	1	1	0	0	0	0	2	2	0	0
San Francisco dusky-footed woodrat	S2S3	None		713	S:2											
Northern Maritime Chaparral	G1	None		1,300	17	0	0	0	0	0	1	1	0	1	0	0
Northern Maritime Chaparral	S1.2	None		1,300	S:1											
Plagiobothrys diffusus	G1Q	None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz	920	17	0	0	1	0	0	0	1	0	1	0	0
San Francisco popcornflower	S1	Endangered		920	S:1											
Polygonum marinense	G2Q	None	Rare Plant Rank - 3.1		32	0	0	0	0	0	1	1	0	1	0	0
Marin knotweed	S2	None			S:1											
Rallus obsoletus obsoletus	G5T1	Endangered	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	0	99	0	1	1	1	0	0	0	3	3	0	0
California Ridgway's rail	S1	Endangered		10	S:3											
Rana boylii	G3	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	300	2468	0	1	0	0	5	0	6	0	1	0	5
foothill yellow-legged frog	S3	Candidate Threatened		1,101	S:6											
Rana draytonii	G2G3	Threatened	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	300	1543	2	4	1	0	0	1	5	3	8	0	0
California red-legged frog	S2S3	None		840	S:8											
Sanicula maritima	G2	None	Rare Plant Rank - 1B.1 SB_SBBG-Santa Barbara Botanic Garden USFS_S-Sensitive		17	0	0	0	0	1	0	1	0	0	0	1
adobe sanicle	S2	Rare			S:1											
Scapanus latimanus parvus	G5THQ	None	CDFW_SSC-Species of Special Concern	10	8	0	0	0	0	0	2	2	0	2	0	0
Alameda Island mole	SH	None		20	S:2											
Serpentine Bunchgrass	G2	None		1,120	22	0	0	0	0	0	1	1	0	1	0	0
Serpentine Bunchgrass	S2.2	None		1,120	S:1											
Spirinchus thaleichthys	G5	Candidate		0	46	0	0	0	0	0	2	1	1	2	0	0
longfin smelt	S1	Threatened		0	S:2											

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Streptanthus albidus ssp. peramoenus most beautiful jewelflower	G2T2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley USFS_S-Sensitive	800 900	103 S:5	0	0	1	0	0	4	3	2	5	0	0
Stuckenia filiformis ssp. alpina slender-leaved pondweed	G5T5 S2S3	None None	Rare Plant Rank - 2B.2	1,600 1,600	21 S:1	0	0	0	0	0	1	1	0	1	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	700 1,000	592 S:2	0	0	0	0	0	2	2	0	2	0	0
Trifolium hydrophilum saline clover	G2 S2	None None	Rare Plant Rank - 1B.2		56 S:1	0	0	0	0	1	0	1	0	0	0	1
Tryonia imitator mimic tryonia (=California brackishwater snail)	G2 S2	None None	IUCN_DD-Data Deficient	0 0	39 S:1	0	0	0	0	1	0	1	0	0	0	1
Viburnum ellipticum oval-leaved viburnum	G4G5 S3?	None None	Rare Plant Rank - 2B.3	600 600	39 S:1	0	0	0	0	0	1	0	1	1	0	0