TOWN OF ATHERTON

Sacred Heart Schools
Academic Arts Building

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

August 2017

Prepared for:

Town of Atherton

91 Ashfield Road
Atherton, CA 94027

Prepared by:

Michael Baker INTERNATIONAL

500 Ygnacio Valley Road
Suite 300
Walnut Creek, CA 94596

TOWN OF ATHERTON
SACRED HEART SCHOOLS ACADEMIC ARTS BUILDING
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

TOWN OF ATHERTON
91 ASHFIELD ROAD
ATHERTON, CA 94027

Prepared by:

Michael Baker INTERNATIONAL

500 YGNACIO VALLEY ROAD, SUITE 300
WALNUT CREEK, CA 94596

AUGUST 2017

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1.0 INTRODUCTION

1.1. PURPOSE OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The project would update the existing Sacred Heart Schools Master Plan, demolish the existing Sigall Hall and construct a 79,055 square foot Academic Arts Building. The proposed project would also include site improvements for the new building, including pathways/walkways, site lighting, and landscaping. Pathway and walkway improvements would extend to the parking area near the Main Building. The site improvements would include formal and informal outdoor gathering areas, outdoor classrooms and gathering spaces, spaces to support the creative and performing arts, study zones and maker spaces.

The proposed project would require the issuance of discretionary permits and may have the potential to impact the environment, and is therefore subject to the requirements of the California Environmental Quality Act (CEQA).

As the lead agency under CEQA, the Town must evaluate the potential environmental impacts of a project when considering whether to approve a project. This Draft Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the Town in order to evaluate the potential environmental effects of the proposed Sacred Heart Schools Academic Building Project (project).

This Draft IS/MND provides the environmental review for the project's proposed actions, which includes demolishing the existing Sigall Hall building and constructing a new Academic Building on the project site. No zone changes or General Plan amendments are sought.

The Draft IS/MND provides information to the public and permitting agencies on the potential environmental effects of the project. This document has been prepared in accordance with CEQA, Public Resources Code Section §21000 et seq., and the State CEQA Guidelines, California Code of Regulations (CCR), Title 14, Section §15000 et seq.

1.2. DECISION TO PREPARE A MITIGATED NEGATIVE DECLARATION

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines §15063(a)). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines the impacts are, or can be reduced to, less than significant, a Negative Declaration or Mitigated Negative Declaration may be prepared instead of an EIR (CEQA Guidelines §15070(b)). A Mitigated Negative Declaration for this project is consistent with CEQA Guidelines §15070 which indicate that a Mitigated Negative Declaration is appropriate when:

"The project's Initial Study identifies potentially significant effects, but:

a. Revisions to the project plan were made that would avoid or reduce the effects to a point where clearly no significant effects would occur, and

b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment."

This Initial Study identifies potentially significant impacts on certain environmental resources. The Mitigated Negative Declaration proposes a range of mitigation measures to reduce all such effects to less than significant levels. The Town has prepared this IS/MND for the project because all impacts resulting from the project would be reduced to less than significant levels by adoption and implementation of mitigation measures that are incorporated into the project. This IS/MND conforms to the content requirements of a Negative Declaration under CEQA Guidelines §15071.

1.3. LEAD AGENCY

The lead agency for the proposed project is the Town of Atherton, California, located at 91 Ashfield Road, Atherton, CA 94027. The Town of Atherton as the CEQA Lead Agency has prepared this IS/MND to provide agencies and the public with information about the proposed project's potential impacts on the local and regional environment. This document has been prepared in compliance with CEQA as amended and the State CEQA Guidelines, California Administrative Code, Title 14, Division 6, Chapter 3.

1.4. PUBLIC REVIEW PROCESS

This Draft IS/MND will be circulated to local agencies, interested organizations, and individuals who may wish to review and provide comments on the project description, the proposed mitigation measures, or other aspects of the report. The publication will commence the 20-day public review period per CEQA Guidelines §15105(b) beginning August 1, 2017.

Written comments regarding the correctness, completeness, or adequacy of the Draft IS/MND should be submitted to the name and address indicated below. Such comments should be based on specific environmental concerns and must be received on or before the close of the public review period of August 21, 2017.

Written comments may be provided to:

Neal Martin, Planning Consultant
Town of Atherton
91 Ashfield Road
Atherton, CA 94027

Or to Lisa Costa Sanders, Town Planner
lcostasanders@ci.atherton.ca.us

The Draft IS/MND is available for review at:

Town of Atherton
91 Ashfield Road
Atherton, CA 94027

The Draft IS/MND is also posted on the Town of Atherton's website: http://www.ci.atherton.ca.us.

1.5. INITIAL STUDY/MITIGATED NEGATIVE DECLARATION ORGANIZATION

This Initial Study/Mitigated Negative Declaration is organized into the following chapters:

- **Chapter 1 – Introduction:** Discusses the overall document purpose, provides a brief project background, and summarizes the organization of the document.

- **Chapter 2 – Project Description:** Provides background on the proposed project, a description of the project site, and project components and characteristics.

- **Chapter 3 Study Checklist.** This chapter summarizes the findings of the Initial Study.

- **Section 4 – Environmental Checklist and Responses.** This chapter contains the Initial Study Checklist that describes existing setting, potential impacts, identifies the significance of potential environmental impacts, and details proposed mitigations to reduce significant impacts to non-significance. This chapter also contains the Mandatory Findings of Significance.

- **Section 5 – Report Preparation/References.** This chapter identifies the preparers of this document and the references and sources used in the preparation of this IS/MND.

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2.0 PROJECT DESCRIPTION

2.1. REGIONAL AND LOCAL SETTING

The SHS campus is located in the Town of Atherton in San Mateo County, approximately 30 miles south of San Francisco and 20 miles north of downtown San Jose, on the San Francisco peninsula. The SHS Campus is located 2 miles west of U.S. 101 and 2 miles east of Interstate-280 (I-280) and is bounded by Valparaiso Avenue to the south, Emilie Avenue to the east, Park Lane to the north, and Elena Avenue to the west. Local access is currently provided from Valparaiso, Emilie, and Elena Avenues, as well Park Lane. Regional access is provided from U.S. 101 and I-280. Figure 2-1 illustrates the project site regional location.

2.1.1. Surrounding Land Uses

The SHS campus is located in a predominately suburban residential area. The property is bounded by Valparaiso Avenue and the Church of Latter Day Saints to the south, single-family residential properties to the east and west, and the Menlo Circus Club (a country club and equestrian facility) and single-family residential properties to the north.

2.2. PROJECT SITE

2.2.1. Sacred Heart Schools Campus

The project would be located on a portion of the SHS campus. The SHS campus is comprised of approximately 64 acres. The SHS campus includes two divisions; the P-8 Campus, and the Sacred Heart Preparatory, consisting of the High School. The entire campus is developed with school buildings, parking lots, interior roadways, pedestrian and bicycle facilities, a pool, athletic fields, and landscaping. Oakwood, a home for retired nuns, occupies residential buildings located near the middle of the site.

Instructional buildings for the P-8, Pre-School/Kindergarten, Lower, and Middle School (grades P through 8) are located primarily in the eastern part of the campus. The high school division, Sacred Heart Preparatory, is located in the central part of the campus. Instructional facilities are surrounded by landscaping and trees, a Performing Arts Center, and various athletic fields. Physical education facilities are located on the campus and include athletic fields, an Olympic-size swimming pool, an all-weather track, a tennis complex, two gymnasiums and one gymnasium on the P-8 campus.

The SHS campus is designated as Public Facilities and Schools in the Town General Plan and zoned as Public Facilities and Schools (PFS).

The proposed Academic Arts Building would be located in the area currently occupied by Sigall Hall, on the southwestern corner of the campus in the vicinity of the intersection of Valparaiso and Elena Avenues, and surrounded by existing parking areas and site landscaping. Figure 2-2 shows the proposed project site location.

Figure 2-1

Regional Location and Vicinity

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Figure 2-2
Project Site

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2.3. PROJECT CHARACTERISTICS

The project would update the existing Sacred Heart Schools Master Plan, demolish the existing Sigall Hall, construct a 79,055 square foot Academic Arts Building, and construct other site improvements. Figure 2-3 shows the proposed Sacred Heart Schools Master Plan.

The 2-story Academic Arts Building would be approximately 34 feet in height, and would include a basement level. Other project components include associated site improvements (walkways, bioretention/retention basins, and site lighting), emergency vehicle access, and parking changes. The entire project site would be 4.05 acres in size.

During construction, up to 20 portable classrooms would be installed on the Morey Practice Field. The portable classrooms would be single-story and of modular construction. Security lighting would be installed around the portable classrooms. Figure 2-4 shows the proposed project site plan.

No changes to enrollment or staffing are proposed as part of the project. Further, no additional activities or events are proposed beyond what currently occurs on the Sacred Heart Schools site. Table 2-1 shows proposed project components.

Table 2-1
Academic Arts Building Project Components

Component	Relevant Information
Demolition	
Sigall Hall	21,000 Square Feet
Tree Removal	33 trees, including 1 heritage tree (Coast live oak)
Construction	
Academic Building	79,055 Square Feet
Site Improvements	Landscaping, planting/replacement of 48 trees, pathway reconstruction, associated site lighting
Installation of Temporary Portable Classrooms	20 Portable Classrooms

Source: Sacred Heart Schools, 2017.

2.3.1. Project Design

The façade of the Academic Arts Building would be constructed of thin brick, a glazed aluminum curtain wall, metal panels, metal trim, steel columns and beams and painted metal coping. Level 1 would house band and choral areas, art studios, creative inquiry areas, a dance studio, galleries, administrative offices, a computer room, flex space, IT rooms, electrical rooms, storage, stairways, restrooms and outdoor patios for rough inquiry and metal smithing, and ceramics. Level 2 would include voice rooms, a common area, classrooms, flex space, IT rooms, electrical rooms, stairways and restrooms. The basement would include storage, a digital media room, flex studios, a photo room, a dark room, a creative inquiry room, a television studio, a teacher design room, offices, classrooms, student success/testing studio, a mechanical room, a plumbing room, IT rooms, electrical rooms, stairways and restrooms.

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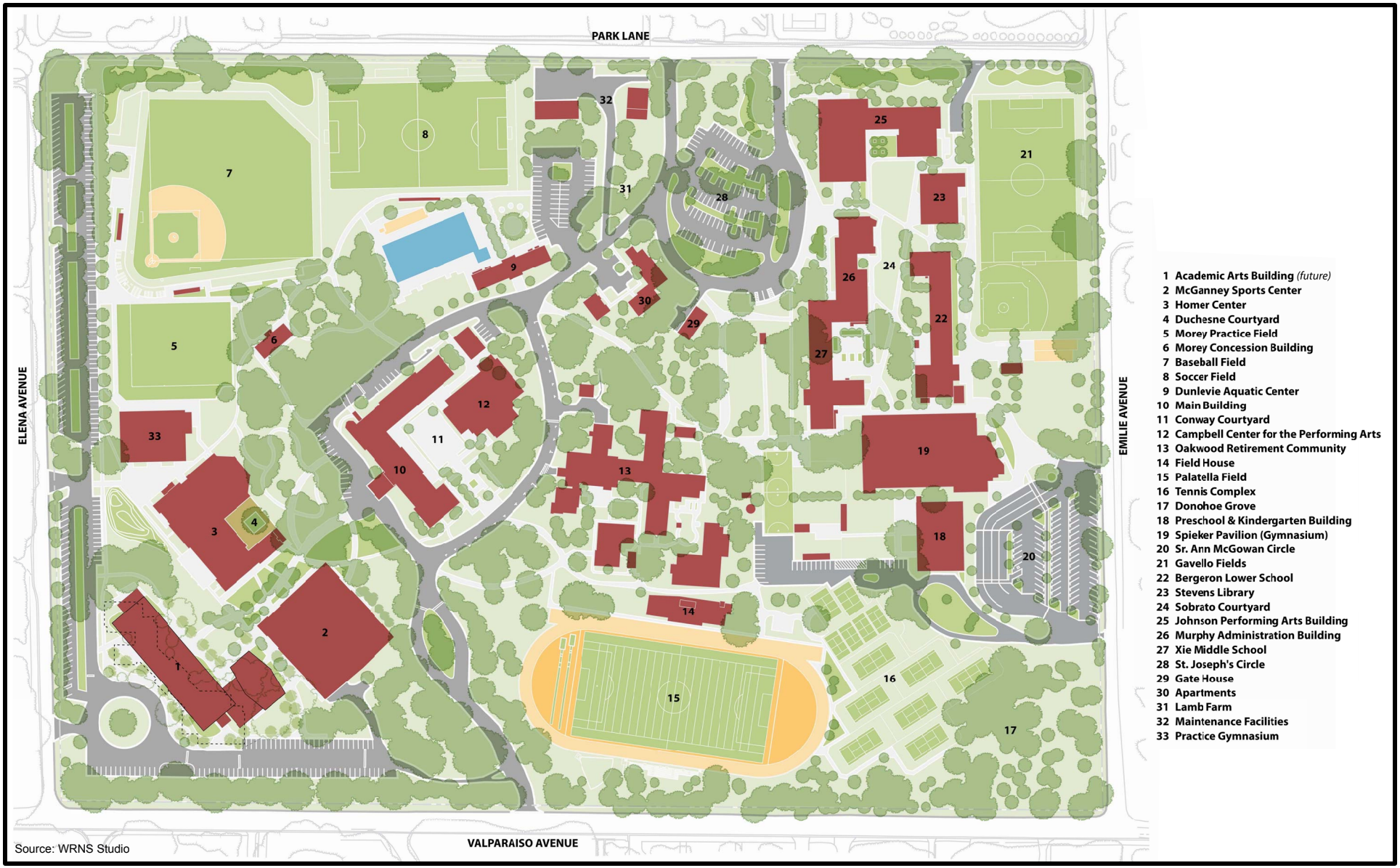

Source: WRNS Studio

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FIGURE 2-3
Proposed Sacred Heart Schools Master Plan

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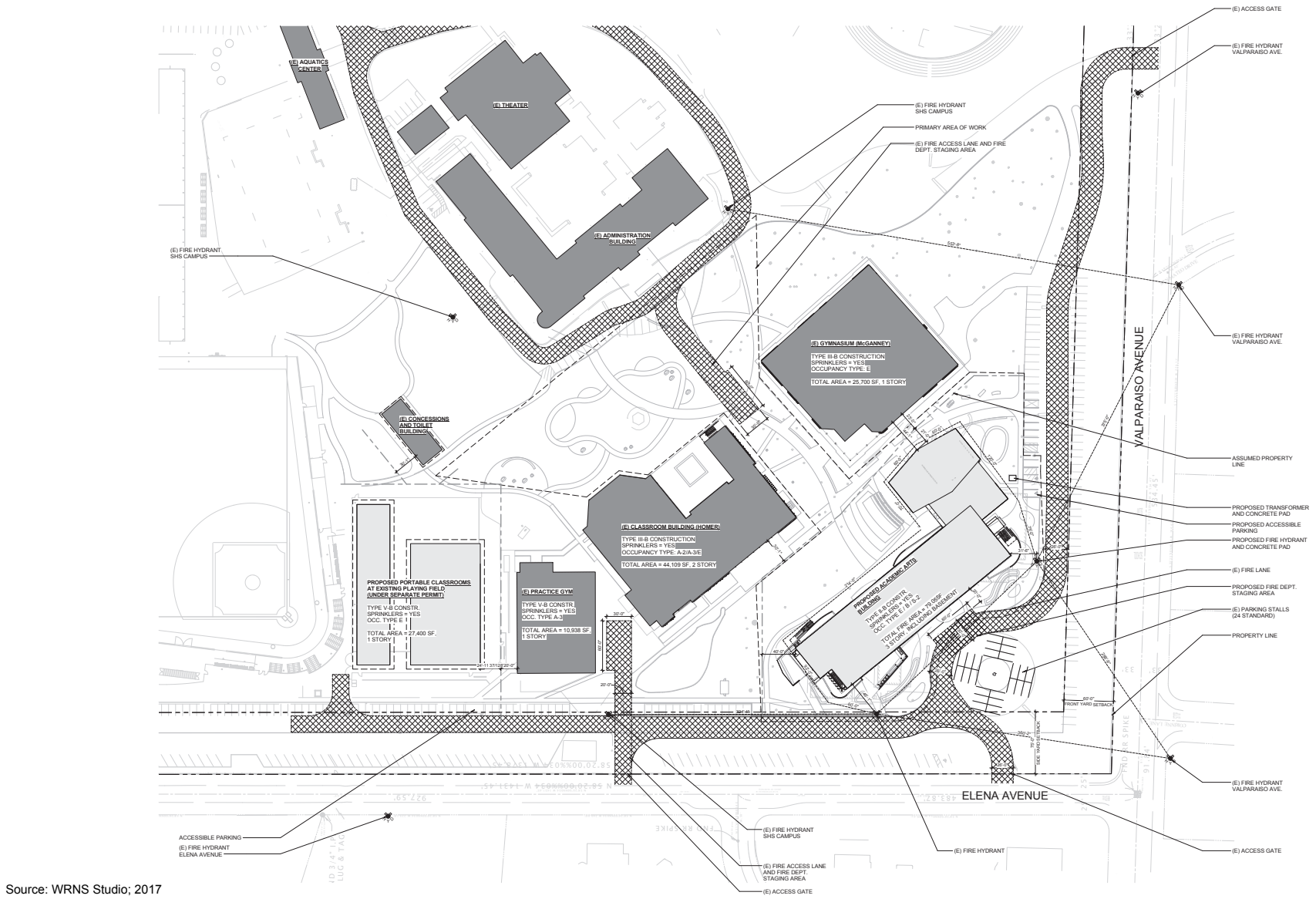

Source: WRNS Studio; 2017

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FIGURE 2-4
Project Site Plan

Michael Baker INTERNATIONAL

The Academic Arts Building would be resource efficient with building and site systems designed to work passively, using natural lighting and cooling as much as possible. Additionally, the Academic Building would employ energy and water conservation features, radiant slab heating, and photovoltaic panels. The project is pursuing Net-Positive energy performance.[1] Figure 2-5 shows renderings of the proposed Academic Arts Building.

2.3.2. Portable Structures

During construction, portable structures would be used to provide classroom, art studio, music, support, and administrative space. Up to twenty (20) portable buildings would be installed on Morey Field in the area between the Practice Gym and the baseball field. No paving would be required as the portables would be installed on top of the Morey Field artificial turf. The artificial turf may be replaced after the portables are removed and Morey Field would return to its original use as a practice field.

2.3.3. Parking

The project would not change the number of existing parking spaces on campus.

2.3.4. Site Improvements

The proposed project would include site improvements around the new building, including pathways/walkways, site lighting, and landscaping. Pathway and walkway improvements would extend past McGanney Gym, connecting to the parking area near the Main Building. The site improvements would include formal and informal outdoor gathering areas, outdoor classrooms and gathering spaces, spaces to support the creative and performing arts, study zones, maker spaces, and fitness areas.

Landscape materials would be selected for their ease of maintenance, including low water use plants adapted to local conditions and plants selected to compliment the character of the existing surrounding campus. The irrigation system for the project would be compatible with existing campus control systems and be designed to utilize highly efficient, low water use equipment. Irrigation control and scheduling would consider plant type, soil conditions, microclimate, and time of year. Plants and irrigation equipment would be selected and designed to be easily maintained over time. A rendering of landscaping plan for the proposed project site is shown in Figure 2-6.

The project would require the removal of 33 trees, including 1 heritage tree (one Coast live oak). This heritage tree would be replaced at a ratio of 2:1 on the project site. The project would include the planting of 46 replacement trees, plus 2 mitigation trees, for a total of 48 trees. Tree removal is shown in Figure 2-7.

[1] *Buildings that over a year are energy neutral, meaning that they deliver as much energy to the supply grids as they use from the grids.*

Aerial view from southwest

Aerial view from northwest

North Facade

Aerial view from north

Source: ProjectFOCUS Management; 2017

FIGURE 2-5
Project Building Elevations

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Source: WRNS Studio & rhaa; 2017

Not To Scale

FIGURE 2-6
Landscaping Plan

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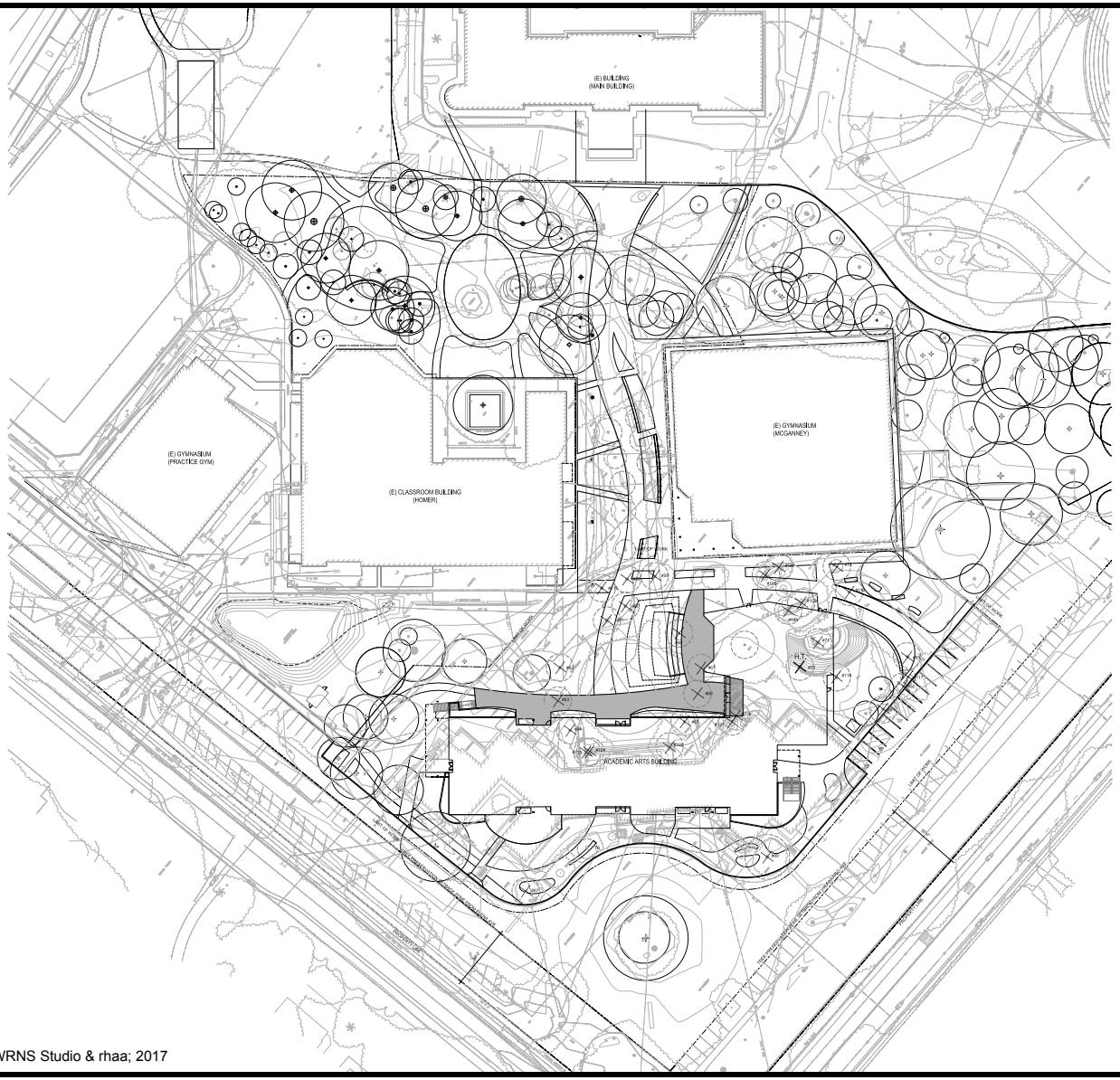

Source: WRNS Studio & rhaa; 2017

TREE REMOVAL SUMMARY

	HERITAGE	NON-HERITAGE	TOTAL
NUMBER OF TREES WITHIN BOUNDARY BEFORE PROJECT	-	-	74
NUMBER OF TREES TO BE REMOVED	1	32	33
NUMBER OF MITIGATION TREES (SEE TREE REMOVAL LEGEND FOR SPECIES AND SIZE)	-	-	2
NUMBER OF OTHER TREES TO BE PLANTED EXCLUDING MITIGATION TREES (SEE PLANTING PLANS FOR SIZES, SPECIES AND LOCATIONS)	-	-	46

TREE REMOVAL LEGEND

TREE NUMBER	SPECIES	SIZE (DBH)	HERITAGE
28	Sequoia sempervirens	25.9"	N
58	Pyrus calleryana 'Bradford'	15.5"	N
59	Pyrus calleryana 'Bradford'	15.7"	N
60	Pyrus calleryana 'Bradford'	15.9"	N
61	Pyrus calleryana 'Bradford'	16.5"	N
62	Pyrus calleryana 'Bradford'	15.3"	N
63	Pyrus calleryana 'Bradford'	16.3"	N
64	Pyrus calleryana 'Bradford'	15.5"	N
65	Pyrus calleryana 'Bradford'	17.1"	N
66	Pyrus calleryana 'Bradford'	16.6"	N
67	Pyrus calleryana 'Bradford'	14.9"	N
68	Pyrus calleryana 'Bradford'	14.3"	N
71	Pittosporum undulatum	9.5" - 11.1" Multi	N
70	Quercus agrifolia	16.9"	Y
73	Olea	15.3", 11.7"	N
87	Ginkgo biloba	10.6"	N
89	Magnolia grandiflora	15.9"	N
91	Sequoia sempervirens	22"	N
92	Pyrus calleryana 'Bradford'	14.3"	N
93	Sequoiadendron giganteum	20.3"	N
115	Liriodendron tulipifera	16.8"	N
117	Quercus agrifolia	9.6"	N
119	Olea	4.8"	N
120	Xylosma	10.8"	N
121	Xylosma	11.6"	N
122	Xylosma	16"	N
123	Xylosma	8.8"	N
124	Xylosma	14.6"	N
126	Lagerstroemia	12.4"	N
127	Lagerstroemia	11.5"	N
128	Lagerstroemia	11.3"	N
129	Lagerstroemia	8"	N
130	Olea	4.9"	N

PLAN LEGEND

- TREE TO BE REMOVED
- H.T. HERITAGE TREE TO BE REMOVED
- #XX TREE I.D. NUMBER. REFER TO ARBORIST REPORT DATED 7/7/16

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FIGURE 2-7
Tree Removal

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The campus landscape surrounding the Academic Arts Building would include formal and informal outdoor gathering areas, outdoor classrooms and gathering spaces, spaces to support the creative and performing arts, study zones, maker spaces, fitness areas. The project would include dark-sky campus lighting, sustainable material selection, low-water use plant selection, and reduced landscape maintenance requirements.

As shown in Figure 2-8, the project would include stormwater retention features. The project would include various stormwater retention features including bioretention areas, self-retaining basins, and pervious paving over some areas of the site. Existing and proposed impervious and pervious surfaces are shown in the Table 2-2.

Table 2-2
Existing and Proposed Impervious and Pervious Surfaces

	Existing (square feet)	Proposed (square feet)	Change (square feet)
Impervious	62,143	66,062	3,919
Pervious	39,560	35,641	-3,919

Source: Sacred Heart Schools, 2017.

2.3.5. Grading and Utility Installation

The proposed project would require site preparation and grading. The proposed project would include installation of electrical, gas, and telecommunications. No water supply improvements other than changes to site irrigation are proposed.

Project construction would require earthmoving activities. The project would require the excavation of 30,000 cubic yards (CY) of soil. The soils would be transported using trucks with an approximately 20 CY capacity (generally filled to 18 CY). Excavation would require approximately 52 days of off-haul.[2] The haul route would be from Elena Ave to Valparaiso Avenue.

[2] *8 trucks x 4 loads/day = 32 loads/day for a total of approximately 1,666 haul truckloads of off-haul (total = 52 days).*

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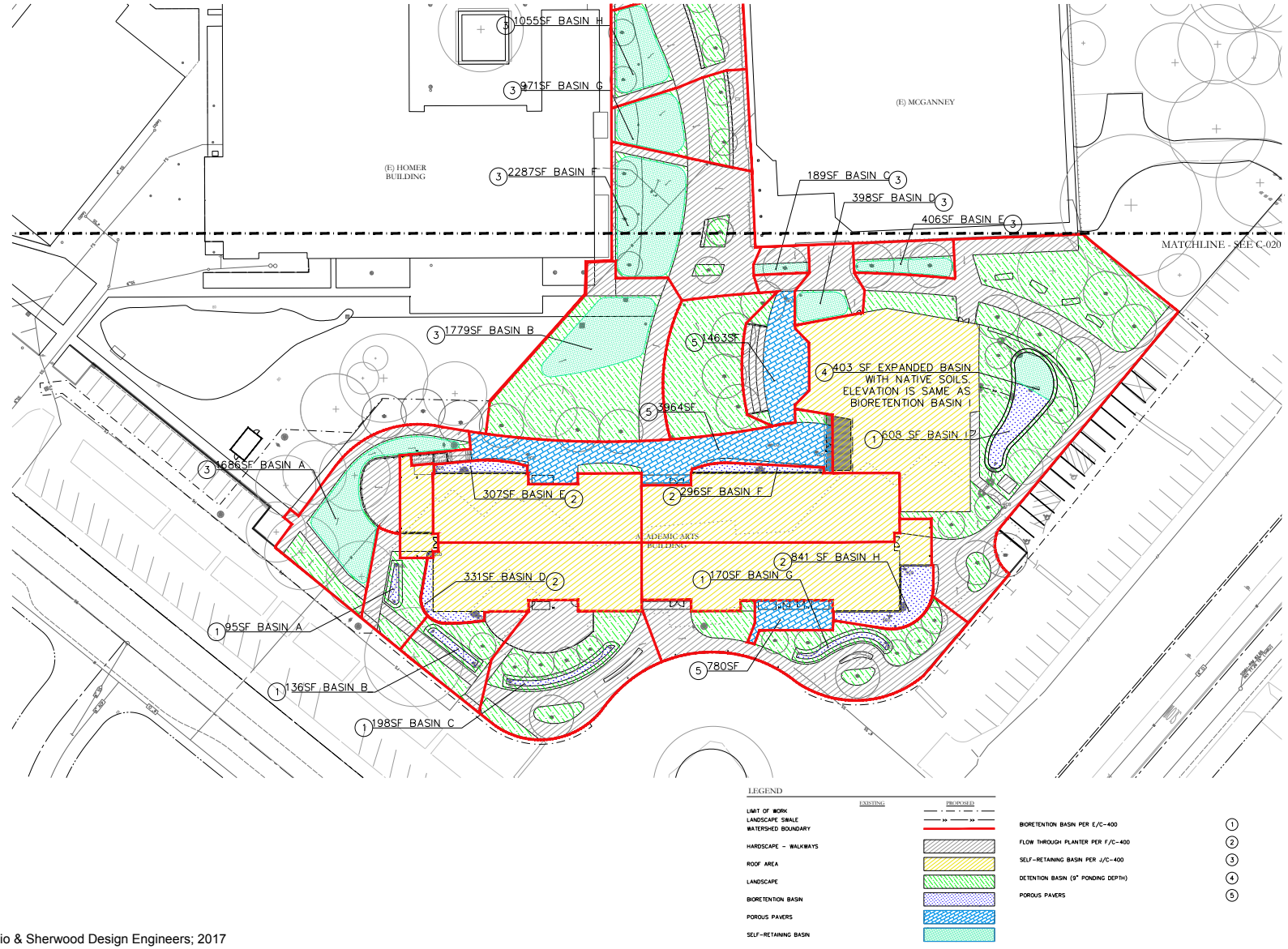

Source: WRNS Studio & Sherwood Design Engineers; 2017

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FIGURE 2-8
Stormwater Plan

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2.3.6. Construction

Project construction would begin in May to June 2018, with completion in approximately 13 months. Staging areas for construction materials and equipment would be located on various portions of the project site and in the Elena Parking Lot. Construction activities would occur Monday through Friday from 8:00 a.m. to 5:00 p.m.

Building demolition would result in approximately 22,000 CY of demolition debris. Demolition would roughly require 38 days of off-haul.[3] All construction truck traffic would be routed along Valparaiso Avenue, then to Elena Avenue and onto campus.

The number of construction workers on-site would vary from 20 to 60 workers a day, depending on the phase and activity. Construction workers would park on-site or in parking provided by SHS. Alternate construction parking would be provided at the Mormon Church on Valparaiso across from the campus. Project construction activity and estimated duration are shown in Table 2-3.

Table 2-3
Construction Activities and Estimated Duration

Construction Activity	Duration* (months)
Site Preparation, Foundations, Underground Utility Work	4
Structural and Framing	3
Finishes and Landscaping	6
Total	**13**

Source: Sacred Heart Schools, 2017.

**Assumes construction activities are sequential and not concurrent.*

2.4. PLANNING BACKGROUND

Private schools are requested to submit Campus Master Plans to the Town for public informational purposes.[4] These Campus Master Plans are not a Town regulatory land use plan, but are Master Plans to guide construction and maintenance of campus and educational facilities to meet educational goals. Therefore, the Campus Master Plans are not a part of the Town's General Plan or land use planning policy, but are used by the Town in the review and approval process for Conditional Use Permits. The Atherton Planning Commission annually reviews Campus Master Plans and provides the opportunity for the school to add new or revise projects included in master plans. Environmental documentation is not required for the annual review unless other discretionary permits are required.

[3] *8 trucks x 4 loads/day = 32 loads/day for a total of approximately 1,222 haul truckloads of debris (total = 38 days).*

[4] *Town of Atherton General Plan, 1.550 Schools, p.LU-6, 2002, and Town of Atherton Municipal Code, 17.36.030. 2009.*

The Academic Arts Building is included as an update to the 2017 Sacred Heart Schools Master Plan. New square footage from construction of the Academic Arts Building would total 79,055 SF. Netting out the square footage of the demolished Sigall Hall (21,000 SF), the proposed project would increase square footage on the site to 396,533 square feet. Table 2-4 shows the existing and proposed building square footages on the Sacred Heart Schools site.

Table 2-4
Sacred Heart Schools Existing and Proposed Buildout Square Footage

Building	Existing (Square feet)	Proposed (Square feet)
Main	68,008	68,008
Gym – McGanney	26,270	26,270
Academic Arts Building	—	79,055
Practice Gym	12,000	12,000
Sigall Hall	21,000	—
Gate House	3,500	3,500
Maintenance	1,000	1,000
Barn–Grounds Shop	2,400	2,400
Montessori	7,480	7,480
Speiker Pavilion	31,465	31,465
Campbell Center	28,000	28,000
Aquatic Center	2,000	2,000
Field House	7,700	7,700
Science & Student Life	44,100	44,100
Lower School	21,424	21,424
Middle School	30,853	30,853
Library	6,363	6,363
Lower School Assembly Hall/Performing Arts	21,915	21,915
Concession/Restrooms	3,000	3,000
Total	**338,478**	**396,533**

2.5. DISCRETIONARY ACTIONS

As defined by CEQA, a Lead Agency is the public agency with the principal responsibility for carrying out or approving a project. The Town is the Lead Agency for approval of the proposed project. Conditional Use Permits are required for new construction, relocated buildings, facility changes, and improvements on the SHS campus.

This IS/MND analyzes the impacts of the 2017 Master Plan, including the proposed project. Upon completion of the environmental review process, the Town will adopt the IS/MND to serve as the environmental document for the proposed project.

A list of the required discretionary permits and approvals that may be required is shown in Table 2-5.

Table 2-5
Project Approvals

Agency/Provider	Permit/Approval
Town of Atherton	• Adoption of the IS/MND • Approval of Conditional Use Permits • Approval of grading and building plans, handicap accessibility, fire, and life safety
Menlo Park Fire Protection District	• Approval of fire suppression systems
Regional Water Quality Control Board	• Approval of National Pollutant Discharge Elimination System (NPDES) General Permit

Source: Town of Atherton, 2017.

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3.0 INITIAL STUDY AND DETERMINATION

Project Title:	**Sacred Heart Schools Academic Arts Building Project**
Lead Agency's Name and Address:	Town of Atherton 91 Ashfield Road Atherton, CA 94027
Lead Agency Contact:	Neal Martin, Planning Consultant or Lisa Costa Sanders, Town Planner (650) 752-0544
Project Location:	Sacred Heart Schools 150 Valparaiso Ave Atherton, CA 94027
Land Use Designation	Public Facilities and Schools
Zoning	Public Facilities and Schools
Description:	Demolition of Sigall Hall and construction of an Academic Arts Building and associated site improvements, Conditional Use Permit, and Tree Removal Permit
Surrounding Land Uses: Single Family Residential Very Low Density and Low Density, Parks and Open Space, Public Facilities and Schools.	

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this 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	☒ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☒ Transportation/Traffic	☐ Tribal Cultural Resources	☐ Utilities /Service Systems
☐ 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 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 Environmental Impact Report (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.

Signature Neal J. Martin for Lisa Costa Sanders — Date July 28, 2017

Signature — Date

4.0 ENVIRONMENTAL CHECKLIST

4.1. AESTHETICS

This section evaluates the potential aesthetic impacts of the proposed project.

4.1.1. EXISTING CONDITIONS

The proposed project site is currently occupied by Sigall Hall, Morey Practice Field, and associated walkways and landscaping. The project site is located adjacent to Homer Science Building and surrounded by existing parking areas and site landscaping. The area is currently developed with buildings, pavement, artificial turf, and landscaping and is only minimally visible from Valparaiso and Elena Avenues due to foreground trees, shrubs, and parking areas. The existing buildings and surrounding area are lit at night. The Morey Practice Field is unlit at night.

4.1.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following aesthetics criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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. Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✓	

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

The project site is not located within any scenic views and does not contain any scenic resources identified in the Town General Plan. [5] Therefore, the proposed project would not be located within any scenic vista and the proposed project would not result in any significant impacts related to scenic vistas.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State or locally designated scenic highway?

[5] *Town of Atherton, Town of Atherton General Plan, 2002.*

The proposed project site would not be visible from designated State Scenic Highway Interstate 280.[6] However, the Town General Plan Circulation Policy 2.421 requires that "All streets and highways in the Town of Atherton shall be preserved as scenic routes."

The proposed Academic Arts Building and associated site improvements would not remove any trees, rock outcroppings, or historic buildings within any street or highway in the Town. Therefore, the proposed project would not result in any significant impacts related to scenic resources within a locally designated scenic highway.

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

The SHS campus has existed since 1898 and is part of the visual character of the neighborhood. The proposed building's design and site improvements would be consistent with the existing school and would not substantially degrade the existing visual character or quality of the site and its surroundings.

The Academic Arts Building would be constructed of materials that match the existing buildings on the campus and would include thin brick, a glazed aluminum curtain wall, metal panels, metal trim, steel columns and beams and painted metal coping in a neutral palette (see Figure 2-5). The proposed Academic Arts Building and associated site improvements would be minimally visible from Elena Avenue, and would be screened from the roadways by internal campus and roadside shrubbery and trees.

Views of the new building would be consistent with the existing views from Valparaiso and Elena Avenues. Landscaping installed around the building would be similar to existing campus landscaping. Twenty portable classroom buildings, totaling 27,400 square feet, would be located on Morey Practice Field. Public views of Morey Practice Field from Elena Avenue are limited and the portable classrooms would be minimally visible from Elena Avenue. Additionally, these portable classrooms would be in place only during project construction. Morey Practice Field would be restored to its previous condition once construction is complete.

The project would require the removal of 33 trees, including 1 heritage tree (Coast live oak). As explained in the Project Description, these trees would be replaced at a ratio of 2 to 1 and the project would include the planting of 48 trees on the project site. Over time, these trees would mature and blend with the existing trees on the site.

Additionally, new landscaped areas would be landscaped with plantings similar in type to the plantings on campus. Trees along the SHS Campus boundary on Elena Avenue would remain and views of the site would not substantially change. The proposed Academic Arts Building's design and site improvements would be consistent with the existing school and would not substantially degrade the existing visual character or

[6] *California Department of Transportation (Caltrans). 2007. California Scenic Highway Mapping System: San Mateo County. Available online at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm. Accessed April 26, 2017.*

quality of the site and its surroundings. Therefore, the proposed project would not result in any significant impacts related to existing visual character or quality.

d. Would the project create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?

The Academic Arts Building would be constructed of materials that match the existing buildings on the campus and would include thin brick, a glazed aluminum curtain wall, metal panels, metal trim, steel columns and beams and painted metal coping in a neutral palette. These materials are not highly reflective and would not generate any glare.

As shown on Figure 2-4, the proposed project would also include site lighting around the new building and pathways, and temporary security lighting around the portable classrooms. The project would include dark-sky campus lighting to reduce lighting impacts. The project would change the existing outdoor lighting to accommodate the new building, temporary portable classrooms, and pedestrian pathways. All new lighting would match existing lighting on the campus in style, size and color.

The Academic Arts Building would include glass and windows that could potentially emit light from interior lighting. However, the building would be separated from any residences across Elena Avenue by trees and landscaping on the campus and on either side of Elena Avenue. Additionally, the closest residences would be over 200 feet away. Any temporary lighting installed around the portable classrooms on Morey Practice Field would be removed when the portable structures are removed. Therefore, the proposed project would not result in any significant impacts related to light and glare.

4.2. AGRICULTURE AND FORESTRY RESOURCES

This section evaluates the potential agriculture and forestry resource impacts of the proposed project.

4.2.1. EXISTING CONDITIONS

The proposed site is designated as Public Facilities and Schools in the Town of Atherton General Plan and zoned as Public Facilities and Schools (PFS).[7] The site is not zoned for agricultural use nor is it subject to a Williamson Act Contract. Additionally, the site is not zoned as forestland (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)).

4.2.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following agricultural and forestry criteria.

[7] *Town of Atherton, Town of Atherton Zoning Code and Town of Atherton Zoning Map December 28, 2011.*

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on 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, forestland (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 forestland or conversion of forestland 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?				✓

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

The proposed project would not result in any impacts on farmland as the project site is designated by the Farmland Mapping and Monitoring Program (FMMP) as urban or built-up land.[8] The project would not result in any significant impacts related to conversion of agriculture and farmland.

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

The proposed project would be located within the existing campus boundaries and is not zoned for agricultural use nor is the site subject to a Williamson Act Contract.[9] Therefore, the proposed project would not result in any significant impacts related to conflict with existing zoning for agricultural use or Williamson Act contracts.

c. Would the project conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code

[8] *California Department of Conservation Division of Land Resource Protection, San Mateo County Important Farmland 2012. Website: http://maps.conservation.ca.gov/ciff/ciff.html. Accessed: April 28, 2017.*

[9] *California Department of Conservation Division of Land Resource Protection, San Mateo County Williamson Act Lands 2006/2007. Website: ftp://ftp.consrv.ca.gov/pub/dlrp/wa/sanmateo_06_07_WA.pdf. Accessed: April 28, 2017.*

section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The proposed project would be located within the existing campus boundaries and is not zoned as forestland (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)).[10] Therefore, the proposed project would not result in any significant impacts related to conflict with existing zoning for forestland.

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

The proposed project would not convert any forestland (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)) to a non-agricultural use. Therefore, the proposed project would not result in any significant impacts related to loss of or conversion of forestland.

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?

As stated above, the proposed project would not convert any Prime Farmland, Unique Farmland or Farmland of Statewide Importance or any 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)) to a non-agricultural or non-forest use. Moreover, the site is surrounded by developed land also designated as urban or built-up land. Therefore, the proposed project would not result in any impacts on agricultural, forest, or timberland resources as related to conversion of farmland to non-agricultural use.

4.3. AIR QUALITY

This section evaluates the potential air quality impacts of the proposed project.

4.3.1. EXISTING CONDITIONS

Ambient air quality in Atherton can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. Existing levels of ambient air quality and historical trends and projections in the vicinity of Atherton are documented by measurements made by the BAAQMD, the air pollution regulatory agency in the San Francisco Bay Area Air Basin that maintains air quality monitoring stations which process ambient air quality measurements.

O_3, PM_{10}, and $PM_{2.5}$ are the pollutants most intensely affecting the SFBAAB. The Redwood City air quality monitoring station (897 Barron Avenue in Redwood City) is the closest station to the project site, approximately 2.4 miles to the northwest. This station monitors ambient concentrations of O_3, PM_{10}, and $PM_{2.5}$. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered generally representative of ambient concentrations in Atherton. The

[10] *Town of Atherton, Town of Atherton Zoning Code and Town of Atherton Zoning Map December 28, 2011.*

concentrations of pollutants monitored at the Redwood City station are representative of Atherton because it is the closest monitoring station to the city and is located in the same climatological subregion.

Table 4.3-1 summarizes the published data since 2012 from the Redwood City air quality monitoring station for each year that monitoring data is provided. The monitoring station is not equipped to monitor PM_{10}. The closest monitoring station that records PM_{10} emissions is the San Jose-Jackson Street station over 25 miles from the project site.

Table 4.3-1
Summary of Ambient Air Quality Data

Pollutant Standards	2013	2014	2015
Ozone			
Max 1-hour concentration (ppm)	0.083	0.086	0.086
Max 8-hour concentration (ppm) (state/federal)	0.076 / 0.075	0.066 / 0.065	0.071/0.071
Number of days above state 1-hour standard	0	0	0
Number of days above state/federal 8-hour standard	1/ 0	0 / 0	1/0
Respirable Particulate Matter (PM_{10})			
Max 24-hour concentration ($\mu g/m^3$) (state/federal)	— / —	— / —	— / —
Number of days above state/federal standard	— / —	— / —	— / —
Fine Particulate Matter ($PM_{2.5}$)			
Max 24-hour concentration ($\mu g/m^3$) (state/federal)	39.0 / 39.0	35.0 / 35.0	16.2* / 16.2*
Estimated number of days above 24-hour standard	3.2	0.0	0.0

Source: CARB 2016
Notes: µg/m3 = micrograms per cubic meter; ppm = parts per million
— = No data is currently available from CARB to determine the value.
** Only the months of September through December are recorded for 2015.*

4.3.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following air quality criteria.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		✓		

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			✓	
d. Expose sensitive receptors to substantial pollutant concentrations?		✓		
e. Create objectionable odors affecting a substantial number of people?			✓	

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

Conformity with Air Quality Planning (2017 Bay Area Plan)

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. Similarly, under state law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The BAAQMD prepared the Bay Area 2017 Clean Air Plan as a multipollutant plan to address the air basin's nonattainment status related to the national 1-hour ozone standard and the California ambient air quality standards (CAAQS), as well as particulate matter, air toxics, and greenhouse gases. The Clean Air Plan establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The Clean Air Plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, updated emission inventory methodologies for various source categories, and the latest population growth projections and vehicle miles traveled (VMT) projections for the region.

Criteria for determining consistency with the Clean Air Plan are defined by the following indicators:

- Consistency Criterion No. 1: The project supports the primary goals of the Clean Air Plan.
- Consistency Criterion No. 2: The project conforms to applicable control measures from the Clean Air Plan and does not disrupt or hinder the implementation of any Clean Air Plan control measures.

The violations to which Consistency Criterion No. 1 refer are the California ambient air quality standards (CAAQS) and the national ambient air quality standards (NAAQS). As evaluated below in Issue b), the

project would not exceed operational standards and therefore would not violate air quality standards. Thus, the project would be consistent with the first criterion.

Concerning Consistency Criterion No. 2, the 2017 Clean Air Plan contains air pollutant reduction strategies and demonstrates that the applicable ambient air quality standards can be achieved within the time frames required under federal law. Growth projections from local general plans adopted by cities in the air district are used to develop regional growth forecasts. The regional growth forecasts are used to develop future air quality forecasts for the 2017 Clean Air Plan. Development in Atherton consistent with the growth projections in the Atherton General Plan is considered to be consistent with the 2017 Clean Air Plan. The proposed project is consistent with the land use designations and development density presented in the General Plan and therefore would not exceed the population or job growth projections used to inform the air quality forecasts of the 2017 Clean Air Plan.

The project is consistent with both criteria and would therefore have a less than significant impact.

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction-Generated Emissions

The project would generate short-term emissions from construction activities such as demolition, site preparation, site grading, building construction, and architectural coatings (e.g., painting). Common construction emissions include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_X emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions.

Predicted maximum daily construction-generated emissions for the project are summarized in Table 4.3-2.

Table 4.3-2
Construction-Related Criteria Pollutant and Precursor Emissions
(Maximum Pounds Per Day)

Construction Activities (maximum daily emissions)	ROG	NO_X	Exhaust PM_{10}	Exhaust $PM_{2.5}$	Fugitive Dust PM_{10}	Fugitive Dust $PM_{2.5}$
Year 2018	4.78	53.79	2.60	2.39	18.51	10.05
Year 2019	8.29	24.86	1.32	1.24	0.80	0.22
Maximum Daily Emissions of All Years of Construction	*8.29*	*53.79*	*2.60*	*2.39*	*18.51*	*10.05*
BAAQMD Potentially Significant Impact Threshold	54	54	82	54	Basic Construction Mitigation Measures	Basic Construction Mitigation Measures
Exceed BAAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.1. See Appendix B for emission model outputs.

As shown in Table 4.3-2, all criteria pollutant emissions would remain below their respective thresholds.

The BAAQMD does not have a numerical threshold for construction-generated fugitive dust PM_{10} and fugitive dust $PM_{2.5}$. Instead, the BAAQMD recommends Basic Construction Mitigation Measures during construction in order to achieve less than significant impacts related to fugitive dust emissions during construction activities (fugitive dust PM_{10} and $PM_{2.5}$). **Mitigation Measure AQ-1** requires BAAQMD Basic Construction Mitigation Measures. Therefore, with the implementation of **Mitigation Measure AQ-1**, fugitive dust PM_{10} and fugitive dust $PM_{2.5}$ generated as a result of the proposed project would be less than significant.

Mitigation Measure AQ-1: Construction-related activities associated with the project would comply with all applicable BAAQMD regulations, including Basic Construction Mitigation Measures from Table 8-1 of the BAAQMD CEQA Air Quality Guidelines. These basic construction mitigation measures include the following:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

3. 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.

4. All vehicle speeds on unpaved roads shall be limited to 15 mph.

5. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

6. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

7. 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 within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Operational Emissions

No changes to enrollment or staffing are proposed as part of the Academic Arts Building Project. Further, no additional activities or events are proposed beyond what currently occurs on the campus site. The project would not represent a new type of land use on the site or a wholly new land use or air emissions generation source, as the project is the modernization of an existing facility as opposed to the construction of a wholly new facility. The purpose and objective of this project is to provide for greater educational opportunities to accommodate an existing school. When complete, the project would not increase existing traffic; thus, it would not increase existing traffic-generated air pollutants. Project- generated increases in emissions would be associated with energy sources and area sources such as the use of landscape maintenance equipment.

Long-term operational emissions associated with full implementation of the proposed project are summarized in Table 4.3-3. The projected emissions associated with proposed operations are compared to the existing baseline, which includes Sigall Hall (21,000 square feet), which is currently in operation yet would be demolished with implementation of the proposed project.

As shown in Table 4.3-3, the increase in operational emissions at full implementation of the project would not surpass any BAAQMD thresholds. Therefore, the proposed project would not result in significant impacts related to air quality during operation.

Table 4.3-3
Long-Term Operational Emissions

Source	Emissions					
	ROG	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer Emissions (Pounds per Day)						
Proposed Project	2.00	0.35	0.30	0	0.03	0.03
Existing Baseline	0.52	0.09	0.08	0	0.01	0.01
Difference	**+1.48**	**+0.26**	**+0.22**	**0**	**+0.02**	**+0.02**
BAAQMD Potentially Significant Impact Threshold (Daily Emissions)	54 pounds/day	54 pounds/day	None	None	82 pounds/day	54 pounds/day
Exceed BAAQMD Daily Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions (Pounds per Day)						
Proposed Project	2.00	0.35	0.30	0	0.03	0.03
Existing Baseline	0.52	0.09	0.08	0	0.01	0.01
Difference	**+1.48**	**+0.26**	**+0.22**	**0**	**+0.02**	**+0.02**
BAAQMD Potentially Significant Impact Threshold (Daily Emissions)	54 pounds/day	54 pounds/day	None	None	82 pounds/day	54 pounds/day
Exceed BAAQMD Daily Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Annual Emissions (Tons per Year)						
Proposed Project	0.37	0.06	0.05	0	0	0
Existing Baseline	0.09	0.02	0.01	0	0	0
Difference	**+0.28**	**+0.04**	**+0.04**	**0**	**0**	**0**
BAAQMD Potentially Significant Impact Threshold (Annual Emissions)	10 tons/year	10 tons/year	None	None	15 tons/year	10 tons/year
Exceed BAAQMD Annual Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.1. See Appendix B for emission model outputs.
Notes: Emissions projections account for an increase of 58,055 square feet of building space [79,055 square feet (proposed) – 21,000 (existing)] and no increase in daily trips over existing conditions.

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The San Francisco Bay Area Air Basin is currently designated as nonattainment for the state and federal ambient air quality standards for ground-level O_3 and $PM_{2.5}$ as well as for the state standards for PM_{10}. The air basin's nonattainment status is attributed to the region's development history. Past, present, and future

development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. According to the BAAQMD, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. According to the air district, if a project exceeds its identified significance thresholds, the project would be cumulatively considerable. As previously demonstrated, the proposed project would not exceed BAAQMD thresholds for air pollutant emissions during construction or operations (see Tables 4.3-2 and 4.3-3). Therefore, since the project does not exceed BAAQMD significance thresholds, it would result in less than significant cumulative impacts.

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive land uses are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65 years old, children under the age of 14, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Air Toxics (TACs) Generated During Project Construction

Sources of construction-related TACs potentially affecting sensitive receptors include off-road diesel-powered equipment. Construction would result in the generation of diesel PM emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

Though the proposed project construction could create a hazard to the student population, these impacts are anticipated to be temporary and short term. Furthermore, as cited in the Project Description, demolition, which is the most hazardous construction phase in terms of air toxics due to the potential release of toxic substances contained in building materials, would begin in June 2018 and would predominantly occur outside of the school session, so students would not be present throughout the majority of the most hazardous phase of construction.

There are residences to the north, south, and east of the project site approximately 60 feet from the SHS property fence line at the nearest. However, the use of diesel-powered construction equipment would be temporary and episodic and would occur over several locations isolated from one another. Additionally, it is generally considered that construction projects contained on a site of this small size represent less than significant health risk impacts due to: (1) limitations on the off-road diesel equipment able to operate and thus a reduced amount of generated diesel PM; (2) the reduced amount of dust-generating ground

disturbance possible compared to larger construction sites; and (3) the reduced duration of construction activities compared to the development of larger sites. Diesel PM and fugitive dust emissions would be further reduced considering that campus modernization would require the use of fewer construction materials and less intense usage of construction equipment compared with conventional school construction, built from the ground up on a vacant site. Additionally, future development would be subject to and would comply with California regulations limiting idling to no more than 5 minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable diesel PM emissions. Construction-related activities associated with the project would comply with all applicable BAAQMD regulations, including Basic Construction Mitigation Measures listed above in **Mitigation Measure AQ 1.**

Sensitive receptors in the project vicinity would not be exposed to substantial diesel exhaust particulate matter. With the implementation of MM AQ-1, fugitive dust particulate matter emissions and temporary impacts from construction-generated air toxics would be insubstantial. The impact is less than significant with mitigation incorporated.

Air Toxics (TACs) Generated During Project Operations

As stated above, the proposed project is considered a sensitive land use. There is a potential that students and employees of the school could be exposed to TAC emissions from stationary and/or mobile sources with the proposed project. Per BAAQMD guidance, all TAC sources within 1,000 feet of a proposed sensitive receptor need to be identified and analyzed. However, the project would not generate any new sources of TAC emissions. Additionally, since there are no new sensitive receptors as a result of the project, TAC emissions and exposure would not change. For this reason, analysis of TACs is not required.

Carbon Monoxide Hot Spots

The primary mobile-source criteria pollutant of local concern is CO. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours.[11]

[11] *Level of service (LOS) is a measure used by traffic engineers to determine the effectiveness of transportation infrastructure. Level of service is most commonly used to analyze intersections by categorizing traffic flow with corresponding safe driving conditions. LOS A is considered the most efficient level of service and LOS F the least efficient.*

Based on BAAQMD guidance, projects meeting all of the following screening criteria would be considered to have a less than significant impact on localized carbon monoxide concentrations:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plans, and local congestion management agency plans.

2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below- grade roadway).

As previously described, no changes to enrollment or staffing are proposed as part of the Academic Arts Building Project. Further, no additional activities or events are proposed beyond what currently occurs on the campus site. The project would not represent a new type of land use on the site or a wholly new land use or air emissions generation source, as the project is the modernization of an existing facility as opposed to the construction of a wholly new facility. The purpose and objective of this project is to provide for greater educational opportunities to accommodate an existing school. Therefore, the current number of trips to the project site is not expected to change. The project would not increase traffic volumes to more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing of pollutants and atmosphere is substantially limited (e.g., in an enclosed parking structure). The impact is less than significant.

e. Would the project create objectionable odors affecting a substantial number of people?

The BAAQMD does not have a recommended odor threshold for construction activities. For purposes of this analysis, it is recognized that heavy-duty construction equipment would emit odors. However, construction activities would be short term and finite in nature. Furthermore, equipment exhaust odors would dissipate quickly and are common in an urban environment. For these reasons, the project is not anticipated to create objectionable odors affecting a substantial number of people.

With respect to operational impacts, the BAAQMD recommends screening criteria based on the distance between the receptor and the types of sources known to generate odor. The land uses identified by the BAAQMD as sources of odors include wastewater treatment plants, wastewater pumping facilities, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing and fiberglass manufacturing facilities, painting/coating operations, rendering plants, coffee roasters, food processing facilities, confined animal facilities, feedlots, dairies, green waste and recycling operations, and metal smelting plants. If a source of odors is proposed to be located near existing or planned sensitive receptors, this could have the potential to cause operational-related odor impacts. The project would not include any of the land uses that have been identified by the BAAQMD as odor sources. Therefore, odors generated as a result of the proposed project would be less than significant.

4.4. BIOLOGICAL R ESOURCES

This section evaluates the potential biological resource impacts of the proposed project.

4.4.1. EXISTING CONDITIONS

Vegetation communities and wildlife habitats on the project site are composed of an entirely landscaped campus with several native and non-native tree species. There are no sensitive vegetation communities, and no habitat to support special status plant and/or animal species on or around the campus.

The new building would be located in the area currently occupied by Sigall Hall, and surrounded by existing parking areas and surrounding vegetation including turf, trees, and shrubs.

An Arborist Report was prepared for the proposed project area (Appendix A).[12] Tree species in the project vicinity include linden, several different types of oaks, cedars, and palms; Trident maple; Cryptomeria; Bay and English laurel; Coast redwood; Giant sequoia; Beech; Bradford pear; Douglas fir; Olive; Silver dollar eucalyptus; Southern magnolia; Maidenhair tree; Xylosma; Spruce; Camphor; and Tulip tree.

4.4.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following biological resources criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (USFWS)?			✓	
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓

[12] *Arborist Report, McClenahan Consulting, April 14, 2017.*

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

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 Wildlife or U.S. Fish and Wildlife Service?

The project site does not support any special status plant or animal species due to the level of existing site development.[13] Therefore, the proposed project would not directly affect any known occurrences of special-status plant or animal species on or in the project vicinity.

The project would require the removal of 33 trees, including one heritage tree. Bird nests could be located in those trees, and removal could result in impacts on nesting birds. According to California Fish and Game Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*). Therefore, preconstruction surveys would be necessary during the nesting season (March through August) to confirm presence or absence of any nests.

Implementation of **Mitigation Measure BIO-1**, outlined below, would be required to reduce impacts related to bird species to less than significant.

Mitigation Measure BIO-1: In order to reduce impacts to nesting birds, the following measures shall be implemented:

- Any active raptor or other nests in the vicinity of proposed construction shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own. Avoidance may be accomplished either by scheduling grading and tree removal during the non-nesting period (September through February), or if this is not feasible, by conducting a pre-construction survey

[13] *Town of Atherton, Sacred Heart Schools Master Plan Environmental Impact Report, 2010, SCH #2009112052.*

for raptor nests. Provisions of the pre-construction survey and nest avoidance, if necessary, shall include the following:

a. If grading is scheduled during the active nesting period (March through August), a qualified wildlife biologist shall conduct a pre-construction nesting survey no more than 14 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity.

b. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the California Department of Fish and Wildlife (CDFW) and implemented to prevent nest abandonment. At a minimum, grading in the vicinity of the nest shall be deferred until the young birds have fledged. A nest-setback zone of at least 300 feet shall be established for raptors and 100 feet for other birds within which all construction-related disturbances shall be prohibited. The perimeter of the nest-setback zone shall be fenced or adequately demarcated (e.g. high visibility fencing, staking or flagging), and construction personnel restricted from the area.

c. If permanent avoidance of the nest is not feasible, impacts shall be minimized by prohibiting disturbance within the nest-setback zone until a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from the nest are foraging independently and capable of independent survival at an earlier date. A survey report by the qualified biologist verifying that the young have fledged shall be submitted to the Town of Atherton and CDFW prior to initiation of grading in the nest-setback zone.

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, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (USFWS)?

Proposed grading and development would not result in impacts to riparian habitat or other sensitive natural community types. There is no riparian habitat or other sensitive natural communities present on the project site.[14] Individual native oak trees are present within the proposed project site. The project would remove one Coast live oak, which would be replaced with two replacement trees. This would not represent a significant impact to sensitive natural communities and this impact would be less than significant.

c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

[14] *Ibid.*

No federally protected wetlands, as defined by Section 404 of the Clean Water Act (CWA), are present on the project site.[15] Therefore, the proposed project would not result in any significant impacts related to jurisdictional wetlands and waters.

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 not located within a known movement corridor for wildlife species and does not support habitat considered to be suitable for a native wildlife nursery site.[16] Therefore, the proposed project would not result in any significant impacts related to wildlife movement.

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

The project would involve construction in an area with trees. Additionally, the project would remove one heritage tree (Quercus agrifolia [Coast live oak]) which is protected under the Town of Atherton Heritage Tree Ordinance (Chapter 8.10). The removal of one Heritage tree would constitute a potentially significant impact.

Implementation of **Mitigation Measure BIO-2** would reduce impacts to less than significant.

Mitigation Measure BIO-2: In conformance with Chapter 8.10 of the Atherton Municipal Code, the Heritage tree would be replaced at a ratio of 2:1. While the removal of 32 other trees would not be a significant impact, in order to avoid damage and preserve the remaining trees on the site, measures as outlined in the April 14, 2017 Arborist Report and the Town of Atherton Tree Preservation Guidelines shall be followed.

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?

The project site is not located within an area covered by a Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the proposed project would not result in any significant impacts related to conflicts with a habitat conservation plan.

[15] *Ibid.*

[16] *Ibid.*

4.5. CULTURAL RESOURCES

This section evaluates the potential cultural resource impacts of the proposed project.

4.5.1. EXISTING CONDITIONS

The project site has been a private school since 1898. A private cemetery used to intern nuns is located in the project vicinity; however, the cemetery is located in the middle of the SHS campus and is not located near the project site. There are no known archaeological, paleontological, or human remains on the project site.

4.5.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following cultural resources criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				✓
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5?		✓		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓
d. Disturb any human remains, including those interred outside of formal cemeteries?		✓		

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

Although the proposed project would demolish Sigall Hall, Sigall Hall is not listed on the National Register of Historic Places, California Register, or any local registers.[17] Additionally, the building is typical of school buildings and do not contain any distinctive characteristics that would qualify them for listing on any registers. Therefore, the proposed project would not result in any significant impacts related to historic resources as defined in Section 15064.5.

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

[17] *Town of Atherton, Sacred Heart Schools Master Plan Environmental Impact Report, 2010, SCH #2009112052.*

The project site has previously been subject to site preparation and grading; therefore, there is minimal risk of discovering an archaeological resource. However, as with any project that requires earthmoving or grading activities, there is the possibility that buried archaeological deposits could be present and accidental discovery could occur. The project would implement **Mitigation Measure CUL-1** to reduce any potential impacts related to archaeological resources to a less than significant level.

Mitigation Measure CUL-1: In order to reduce impacts on archaeological resources, the following measure shall be implemented:

> In the event that subsurface archaeological resources are encountered during the course of grading and/or excavation, all development shall temporarily cease within 25 feet of the find until the Town's Planning Department is contacted and a qualified archaeologist assesses the resources and makes recommendations for their disposition. Construction activities could continue in areas more than 25 feet away. If any findings are determined to be significant by the archeologist, they shall be subject to scientific analysis; duration/disposition of archaeological specimens as agreed to by the Native American community, land owner, and the Town. This report would be filed with the Northwest Information Center.

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

SHS Campus is located on level land that has been developed as a school campus. The project site would be located within the existing campus boundaries and there are no known paleontological or geologic resources on the site. Therefore, the proposed project would not result in any significant impacts related to paleontological or geologic resources.

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

All known human remains in the project vicinity were buried within the confines of a private cemetery. Since the proposed project would be located outside of this cemetery, there would be no impacts on human remains. However, as with any project that requires earthmoving or grading activities, there is the possibility that buried human remains could be present and accidental discovery could occur. In the event that human remains are uncovered, the proposed project would implement **Mitigation Measure CUL-2**. Therefore, the proposed project would have a less than significant impact related to disturbance of human remains.

Mitigation Measure CUL-2: In order to reduce impacts on human remains, the following measure shall be implemented:

> If human remains are encountered, excavation or disturbance of the location shall be halted in the vicinity of the remains, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission. The Native American Heritage Commission shall identify the person or persons believed to be most likely

descended from the deceased Native American. The most likely descendent shall make recommendations regarding the treatment of the remains with appropriate dignity.

4.6. GEOLOGY AND SOILS

This section evaluates the potential geology impacts of the proposed project.

4.6.1. EXISTING CONDITIONS

The proposed project site is relatively flat. According to the Town of Atherton General Plan, the campus is not located within an Alquist-Priolo Earthquake Fault Zone.[18] The campus is located 2.5 miles west of the San Andreas Fault. However, there are no known active or potentially active faults within the Town.

4.6.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following geology and soils criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to 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 Pub. 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 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?		✓		
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		✓		

[18] *Ibid.*

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓

ai. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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?

According to the Town General Plan, the SHS campus is not located within an Alquist-Priolo[19] Earthquake Fault Zone, but is located 2.5 miles west of the San Andreas Fault. There are no known active or potentially active faults within the Town.[20] Therefore, the proposed project would not result in any significant impacts related to the rupture of a known earthquake fault.

aii. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The campus is subject to periodic, strong seismic ground shaking from multiple faults in the region, but especially from the San Andreas Fault, which is 2.5 miles away. This would be a significant impact.

Implementation of **Mitigation Measure GEO-1** would reduce impacts to less than significant.

Mitigation Measure GEO-1: The Geotechnical Report prepared for the project shall include detailed information on geologic site conditions and recommendations for design measures. These recommendations and measures shall be incorporated by SHS into building plans and confirmed by the Town.

aiii. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction refers to the sudden, temporary loss of soil strength during strong ground shaking. The SHS campus is not located in a liquefaction zone as identified in the California Geotechnical Survey Hazard

[19] *California Department of Conservation, Division of Mines and Geology, State of California Special Studies Zones: Palo Alto Quadrangle, 1974 and Association of Bay Area Governments (ABAG) Resilience Program. Website: http://gis.abag.ca.gov/website/Hazards/?hlyr=apZones. Accessed April 28, 2017.*

[20] *Association of Bay Area Governments (ABAG) Resilience Program. Website: http://gis.abag.ca.gov/website/Hazards/?hlyr=apZones. Accessed April 28, 2017.*

Zone Report No. 111 (2006).[21] However, based on historic groundwater elevation and data, there is some potential for liquefaction on campus.[22]

The Geotechnical Report to be prepared for the proposed project site would include design recommendations that would reduce potential impacts from liquefaction to a less than significant level. Implementation of **Mitigation Measure GEO-1** would reduce impacts to less than significant.

aiv. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Landslides on the project site are not considered a hazard because the surface topography of the entire campus, including the proposed project site, is relatively flat. Therefore, the proposed project would not result in any impacts related to landslides.

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

The project site is relatively flat. As a result, the potential for soil erosion is low. The project would involve grading, soil removal, and soil export.

All grading activities on the project site would be conducted in accordance with the requirements outlined in the project's Geotechnical Report. Additionally, topsoil removed during construction would be either paved or replaced and planted with turf and other vegetation. With implementation of these measures, significant impacts related to substantial soil erosion or the loss of topsoil would not result. Therefore, the proposed project would have a less than significant impact related to erosion or the loss of topsoil.

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?

As stated above, there is minimal risk of landslides due to the flat topography of the campus. The Geotechnical Report to be prepared for the proposed project would include design recommendations to reduce potential impacts from lateral spreading, subsidence, liquefaction or collapse to a less than significant level. Implementation of **Mitigation Measure GEO-1** would reduce impacts to less than significant.

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

Soils on campus have a moderate to high expansion potential when subject to fluctuations in moisture content, so soils on the proposed project site may be at risk for expansion.[23] The Geotechnical Report to be prepared for the project would include design recommendations to reduce potential impacts from expansive

[21] *Ibid.*

[22] *Town of Atherton, Sacred Heart Schools Master Plan Environmental Impact Report, 2010, SCH #2009112052.*

[23] *Ibid.*

soil to a less than significant level. Implementation of **Mitigation Measure GEO-1** would reduce impacts to less than significant.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The project does not propose a septic system. The project would be connected to existing wastewater treatment facilities. Therefore, the proposed project would not result in any significant impacts related to septic tanks or alternative wastewater disposal systems.

4.7. GREENHOUSE GAS EMISSIONS

This section evaluates the potential greenhouse gas emissions impacts of the proposed project.

4.7.1. EXISTING CONDITIONS

The BAAQMD has estimated 2007 GHG emissions for San Mateo County, based on standards for criteria pollutant inventories. The estimated GHG emissions are presented in carbon dioxide equivalents, which weight each GHG by its global warming potential. In San Mateo County, transportation emissions were highest, at 4.8 million tons CO_2e per year, followed by industrial/commercial, electricity/co-generation, residential fuel and off-road equipment emissions. Campus-related emissions are due mostly to transportation, followed by electrical use, natural gas use, and water consumption.

4.7.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The assessment of GHG emissions provided below is based on guidance from the BAAQMD. The BAAQMD CEQA Guidelines include guidance on assessing GHG and climate change impacts as required under CEQA Section 15183.5(b) and establish thresholds of significance for impacts related to GHG emissions. Even though the BAAQMD is not currently recommending the use of these guidelines, the guidelines are based on substantial evidence to "attribute an appropriate share of greenhouse gas emission reductions necessary to reach AB 32 goals to new land use development projects in the BAAQMD's jurisdiction that are evaluated pursuant to CEQA" (BAAQMD 2011). Therefore, the BAAQMD CEQA Guidelines will be used to determine the level of impact from the project's contribution of GHG emissions.

The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions; however, the air district recommends the quantification and disclosure of construction- generated GHG emissions.

The BAAQMD project-level threshold of significance for GHG emissions is the project generation of 1,100 metric tons of CO_2e per year during operations; **or** the project generation of 4.6 metric tons of CO_2e per service population (residents + employees) per year during operations; **or** compliance with a Qualified GHG Reduction Strategy. For the purposes of this assessment, the project is evaluated for compliance with the generation of 1,100 metric tons of CO_2e per year during operations. The project is also evaluated for compliance with the City's Climate Action Plan.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emission, 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 emission of greenhouse gases?			✓	

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

The project's GHG emissions would be generated over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term operational emissions associated with indirect source emissions, such as electricity usage for lighting.

Construction GHG Emissions

The approximate quantity of annual GHG emissions generated by construction equipment is shown in Table 4.7-1.

Table 4.7-1
Construction-Related Greenhouse Gas Emissions
(Metric Tons Per Year)

Construction Activities	CO2e
2018	397
2019	171
Total	**568**
BAAQMD Potentially Significant Impact Threshold	***None***
Exceed BAAQMD Threshold?	**N/A**

Source: CalEEMod version 2016.3.1. See Appendix B for emission model outputs.
Note: Project construction is assumed to occur over a 13-month period.

As shown, construction would generate approximately 568 metric tons of CO_2e. Once construction is complete, generation of GHG emissions would cease. As previously stated, the BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions.

Operational GHG Emissions

Projected GHG emissions associated with proposed operations are quantified and compared to the existing baseline, which includes Sigall Hall spanning approximately 21,000 square feet. No changes to enrollment

or staffing are proposed as part of the Academic Arts Building project. Further, no additional activities or events are proposed beyond what currently occurs on the campus site. The project would not represent a new type of land use on the site or a wholly new land use or air emissions generation source, as the project is the modernization of an existing facility as opposed to the construction of a wholly new facility. The purpose and objective of this project is to provide for greater educational opportunities to accommodate an existing school. When complete, the project would not increase existing traffic; thus, it would not increase existing traffic-generated air pollutants.

The project's long-term operational emissions are summarized in Table 4.7-2.

Table 4.7-2
Greenhouse Gas Emissions – Project Operations (Metric Tons Per Year)

Emissions Source	CO_2e
Proposed Project *79,055 s.f. Academic Building*	
Area Source (landscaping)	0
Energy	175
Mobile	0
Waste	52
Water	15
Total	**242**
Existing Baseline *21,000 s.f. Sigall Hall*	
Area Source (landscaping)	0
Energy	47
Mobile	0
Waste	14
Water	4
Total	**65**
Difference	
Area Source (landscaping)	0
Energy	+128
Mobile	0
Waste	+38
Water	+11
Total	**+177**
BAAQMD Potentially Significant Impact Threshold	***1,100***
Exceed BAAQMD Threshold?	**No**

Source: CalEEMod version 2016.3.1. See Appendix B for emission model outputs.

As shown in Table 4.7-2, the increase in operational GHG emissions over the existing baseline would not surpass the BAAQMD threshold. BAAQMD thresholds were developed based on substantial evidence that such thresholds represent quantitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the State's ability to meet its goals of reduced statewide GHG emissions under AB 32.

As demonstrated, the project complies with the BAAQMD's greenhouse gas emissions thresholds for annual CO2e. Therefore, the project would have a less than significant impact.

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

The City of Atherton adopted its Climate Action Plan on October 19, 2016. Compliance with the City's CAP is intended to meet the statewide goals of SB 32. The following goals listed in the City's CAP that are intended to reduce GHG emissions:

- Increase residential and commercial energy efficiency and reduce water consumption;
- Allow for changes in the traditional transportation system to reduce vehicle miles traveled and the modes of transportation types to meet AB 32 emission reduction target;
- Reduce the total amount of community waste generated and sent to landfills to meet AB 32 emission reduction target.

The project would use landscape materials selected for their ease of maintenance, including low water use plants adapted to local conditions. The irrigation system for the project would be designed to utilize highly efficient, low water use equipment. Irrigation control and scheduling would consider plant type, soil conditions, microclimate, and time of year. Plants and irrigation equipment would be selected and designed to be easily maintained over time. Additionally, the project would include dark-sky campus lighting, which uses less energy than other light fixtures, and use sustainable materials. Overall, the project has been developed with the objective of environmental sustainability. Since the project aims to reduce water consumption and increase energy efficiency, it is in compliance with the City's CAP. Therefore, the impact is less than significant.

4.8. HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential hazards and hazardous materials impacts of the proposed project.

4.8.1. EXISTING CONDITIONS

There are no known hazardous materials sites with a quarter mile of the project site, and it is not located on a list of hazardous materials sites.[24] The Association of Bay Area Governments (ABAG) has mapped a

[24] *Department of Toxic Substances Control, EnviroStor, Selection for "150 Valparaiso, Atherton, CA 94027."*

large area of the Town as an area of Wildland Urban Interface Fire Threat.[25] No hazardous materials other than cleaning and maintenance chemicals are handled on site.

4.8.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following hazards and hazardous materials criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 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 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f. For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	

Accessed at: http://www.envirostor.dtsc.ca.gov/public/, accessed April 28, 2017.

[25] *ABAG Resilience Program, San Francisco Bay Area Hazards. Accessed at: http://gis.abag.ca.gov/arcgis/rest/directories/arcgisoutput/Utilities/PrintingTools_GPServer/_ags_de8c4381edf4485b9d42ccd96fae0d67.pdf, accessed April 28, 2017.*

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			✓	

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

Project operation would involve the use of cleaning agents and small amounts of chemicals for use in the photography room, dark room, and mechanical room. Cleaning agents and small amounts of chemicals would be stored and handled properly.

During construction, hazardous materials such as oil, diesel fuel, and gasoline may be transported and used. Construction contractors would be required to handle these substances in accordance with the California State Department of Toxic Substances Control (DTSC) and transportation regulations, which regulate proper hazardous waste handling, storage, disposal, and transport methods. Therefore, the proposed project would not result in any significant impacts related to the routine transport, use or disposal of 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?

There are no known hazardous materials sites on the project site, based on soils testing conducted where demolition and construction would occur.[26] Additionally, demolition activities on the site require that SHS file a Demolition Plan with the Town that outlines measures to safely demolish and handle potentially hazardous building materials. During construction, the potential exists for accidental spills and leaks of lubricants and other fluids from vehicles and equipment. Construction workers are required by law to follow established best practices in order to mitigate this risk.

Project operation would not require routine use or transportation of hazardous materials. There would be no hazards to the public or the environment through reasonably foreseeable upsets and accident conditions involving the release of hazardous materials into the environment. Therefore, the proposed project would not result in any significant impacts related to releasing 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?

[26] *Town of Atherton, Sacred Heart Schools Master Plan Environmental Impact Report, 2010, SCH #2009112052.*

The proposed project would be located within an existing private school. The project would not require the use of hazardous materials on the site or emit hazardous emissions. Therefore, the proposed project would not result in any significant impacts related to emitting hazardous emissions.

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 create a significant hazard to the public or the environment?

The SHS Campus is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[27] According to a records search of the State of California *Geotracker,* there are no hazardous sites on the project site or within a quarter mile. Therefore, the project would have no significant impacts.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The nearest public airport to the project site is the San Carlos Airport, located approximately 6 miles northeast of the project site. Therefore, the project would not result in a safety hazard for people residing or working in the project area.

f. For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The project site is not located within the vicinity of a private airstrip. Therefore, the proposed project would not result in safety hazards for people residing or working on campus.

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

The proposed project does not propose any increase in enrollment and would not generate any additional traffic during the AM, Mid Afternoon, or PM peak hours. Therefore, the project would not affect circulation on any streets. In addition, project construction would occur within the project site and would not block or close roads that would impair an emergency response or evacuation plan. Therefore, the proposed project would result in less than significant impacts on existing emergency response plans.

h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The campus is located in an urbanized area. As stated above, ABAG has mapped a large area of the Town as an area of Wildland Urban Interface Fire Threat. The SHS Campus is not at an increased risk of wildland fires than other parts of the Town surrounding it. The project would be constructed in compliance with the Title 24, California Fire Code, and eight fire hydrants are located surrounding the project site. The project includes three 30-foot wide fire access lanes that would provide direct access to the project site from the

[27] *State Water Resources Control Board (SWRCB), Geotracker, Accessed April 28, 2017.*

north, west, and northwest sides. Therefore, the project would have a less than significant impact related to wildland fires.

4.9. HYDROLOGY AND WATER QUALITY

This section evaluates the potential hydrology and water quality impacts of the proposed project.

4.9.1. EXISTING CONDITIONS

The entire project area, including areas of minor site improvements, is 4.05 acres in size. The proposed project site is currently occupied by Sigall Hall, Morey Practice Field, and surrounding walkways and landscaped areas. These areas are surrounded by other existing buildings, parking areas, walkways, and site landscaping. This area is currently composed of approximately 62,143 square feet of impervious surfaces and 39,560 square feet of pervious surfaces.

4.9.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following hydrology criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?			✓	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			✓	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?			✓	
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?			✓	
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			✓	

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Otherwise substantially degrade water quality?			✓	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?			✓	
j. Inundation by seiche, tsunami, or mudflow?				✓

a. Would the project violate any water quality standards or waste discharge requirements?

The project would not construct a facility that would create or discharge large amounts of polluted water that would violate any water or waste quality standards. Additionally, the project would include bioretention devices that would filter and infiltrate runoff from the project site.

Although the project would generate wastewater, this wastewater would flow to the Silicon Valley Clean Water Treatment Facility, which currently serves the site. The project does not propose any industrial uses, nor would it create or discharge large quantities of polluted water. Therefore, the proposed project would not result in impacts on water quality standards or waste discharge requirements.

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?

The project does not propose the use of any wells or groundwater supplies, since the campus is connected to the municipal water system. However, the project would include a net increase in impervious surfaces on the site, which could limit groundwater recharge in the area. To mitigate this increase in impervious surfaces, the project would include 18 bioretention basins, including 5 self-retaining basins, surrounding the Academic Arts Building to detain all runoff from the project site and reduce runoff to pre-development levels, allowing for groundwater recharge. The project would also include a stormwater retention basin to the northwest of the proposed building. The stormwater management plan, including the bioretention basins, self-retaining basins, and stormwater detention basin, are shown in Figure 2-8.

The project would create an increase in pervious surfaces in the project area, due to the larger building square footage. However, the project would retain runoff on site in the bioretention basins. Over time, treated stormwater would travel into the ground water table, contributing to ground water recharge.

Therefore, the proposed project would not result in significant impacts on aquifer volumes or local groundwater table levels.

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, in a manner which would result in substantial erosion or siltation on or off-site?

There are no streams or rivers on the project site, but construction activities could lead to erosion or surface runoff.

SHS would be required to submit and the Town would oversee implementation of a Storm Water Pollution Prevention Plan (SWPPP) for the project, in accordance with the NPDES General Permit for Discharges of Storm Water Associated with Construction Activity. Therefore, these activities would adhere to Regional Water Quality Control Board (RWQCB) construction requirements and implement the construction-phase and post-construction best management practices (BMPs) to prevent on- or off-site erosion and the proposed project would not result in impacts on erosion or siltation on or off-site.

d. 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?

As stated above, there are no streams or rivers on the project site, but construction could increase surface runoff that could result in flooding on or off-site. The project would reduce flooding impacts by implementing a SWPPP that controls stormwater during construction. Stormwater treatment and detention would meet the requirements of the Town of Atherton's[28] and RWQCB design criteria.

The project would be required to comply with the San Mateo County Drainage Manual (SMCDM) and the San Mateo Countywide Water Pollution Prevention Program C.3 Stormwater Technical Guidance (C.3). Compliance with the SMCDM and C.3 regulations would include installing drainage features to capture and treat surface runoff from the project. The project would be designed in conformance with SMCDM and C.3 requirements, including sizing the retention basin to accommodate in the increase in impervious surface. Therefore, the proposed project would not change existing drainage patterns in a manner that would result in significant flooding impacts.

e. Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

As stated above, the project would be required to comply with the SMCDM and the San Mateo Countywide Water Pollution Prevention Program C.3 Stormwater Technical Guidance (C.3). Compliance with the SMCDM and C.3 regulations would include installing drainage features that would capture and eliminate surface runoff from the project. Therefore, all stormwater drainage features would be sufficiently sized to

[28] *Atherton's drainage criteria refer to the San Mateo County Drainage Manual (SMCDM).*

accommodate additional runoff. Therefore, the proposed project would not result in significant impacts on stormwater drainage system capacity.

f. Would the project otherwise substantially degrade water quality?

The project would use bioretention BMPs to treat stormwater runoff. The bioretention basins and pervious landscaping would be designed to treat runoff by filtering the untreated stormwater through the vegetation in the channel, filtering through the subsoil matrix, and/or infiltration into the underlying soils. Similarly, the proposed project would include a stormwater retention basin located adjacent to the proposed building, on the northwest side that would also treat runoff. Therefore, the proposed project would not result in significant water quality degradation impacts.

g. Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The project site is not located within a 100-year flood hazard area.[29] Additionally, the proposed project does not include any housing. Therefore, the proposed project would not place housing within a 100-year flood hazard area.

h. Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The proposed project would be located within the existing campus boundaries, which are in the Flood Zone X and not located within a 100-year flood hazard area, thus the proposed project would not result in flood hazard impacts. [30]

i. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam?

The Bear Gulch Reservoir is approximately 2 miles from the project site. Due to the many structures within a 2 mile distance between the reservoir and the project site, any flooding from the reservoir overtopping or the dam failing would be unlikely to impact the project site. Additionally, the project site is not located in a flood hazard area, as stated above. Therefore, the proposed project would not result in significant levee or dam failure impacts.

j. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of a tsunami or seiche?

The project is not located in the vicinity of a body of water other than the San Francisco Bay/Pacific Ocean. The project site is located approximately 3 miles southwest of the San Francisco Bay shore and would therefore not be at risk for seiches or tsunamis.[31] Additionally, there is no risk of mudflow because the campus is located on level ground. Because the project is not located in close proximity to a body of water

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[29] *Town of Atherton, Sacred Heart Schools Master Plan Environmental Impact Report, 2010, SCH #2009112052.*

[30] *ABAG Resilience Program, San Francisco Bay Area Hazards. Accessed at: http://gis.abag.ca.gov/website/Hazards/?hlyr=femaZones accessed April 28, 2017.*

[31] *Ibid.*

and the project site is on level ground, the proposed project would not result in significant impacts related to tsunami or seiche impacts.

4.10. LAND USE AND PLANNING

This section evaluates the potential land use and planning impacts of the proposed project.

4.10.1. EXISTING CONDITIONS

The proposed project site is located on the SHS Campus, which is governed by the SHS 2017 Master Plan as well as the Town of Atherton General Plan. The site is designated as Public Facilities and Schools in the General Plan and the site is zoned Public Facilities and Schools (PFS). The surrounding neighborhood parcels are designated as Low Density Single Family Residential (zoned R-1A) and Parks and Open Space (zoned POS). The project site is in use as a school building which is consistent with the General Plan land use designation and zoning for the site.

4.10.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following land use and planning criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				✓
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.				✓
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓

a. Would the project physically divide an established community?

The project would be located within existing campus boundaries and would not physically divide an established community. The project would have no impact.

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project would update the 2017 Master Plan and would be consistent with General Plan policies, as indicated in Table 4.10-1, below. Therefore, the proposed project would not result in conflicts with any applicable land use plan.

Table 4.10-1
Town of Atherton General Plan Land Use Policy Consistency

Applicable Goal / Policy	Consistency Issue(s)
Land Use Element	
Land Use Goal 1.210. To preserve the Town's character as a scenic, rural, thickly wooded residential area with abundant open space.	**Consistent.** Although the proposed project would require the removal of 33 trees to accommodate construction of the Academic Arts Building, 48 trees would be replanted. The Campus contains a significant number of trees and the addition of 14 extra trees would contribute to the rural, wooded character of the site and would be consistent with the residential areas surrounding SHS campus.
Land Use Objective 1.223. To retain the high quality of maintenance and living environment existing in the Town's residential neighborhoods.	**Consistent.** The proposed project would be located on a site already developed with existing buildings. As discussed in Section 4.1 Aesthetics, the Academic Arts Building would be designed to be consistent with the existing buildings on campus. Therefore, the project would avoid any potential intrusion of institutional uses on residential uses, including changes to visual quality and noise. These project design features would maintain the high quality living environment of the Town's residential neighborhoods.
Open Space Land Use Policy 1.421. The Town shall continue to preserve the open space characteristics of existing schools, churches and park facilities.	**Consistent.** See response to Land Use Goal 1.210 and Land Use Objective 1.223.
Public and Quasi-Public Land Use Policy 1.584. The Town supports recycling as a means of reducing the amount of waste material requiring disposal in the landfill. The Town's objective is to reduce the amount of waste material by continuing to participate in the South Bayside Waste Management Authority's recycling and clean waste programs. The Town shall encourage recycling and waste reduction efforts for residents, schools and in public and private development projects.	**Consistent.** The proposed project would comply with the Town's requirement to prepare a plan addressing the recycling and reuse of all demolition and waste construction materials. Additionally, the project would participate in all recycling and clean waste programs as administered by the South Bayside Waste Management Authority.
Circulation Element	
Circulation Objective 2.221. To preserve the streets of Atherton as scenic routes.	**Consistent.** See response to Land Use Goal 1.210 and Land Use Objective 1.223.
Circulation Policy 2.421. All streets and highways in the Town of Atherton shall be preserved as scenic routes.	**Consistent.** See response to Land Use Goal 1.210 and Land Use Objective 1.223.
Circulation Policy 2.425. On-street and visible off-street parking of vehicles and other means of transportation shall be carefully controlled.	**Consistent.** The project would not alter the on-street and off-street vehicle parking or any other means of transportation.
Open Space and Conservation Element	
Open Space and Conservation Goal 4.210. To protect both publicly and privately held lands from deterioration of their rural charm, scenic value and environmental equilibrium.	**Consistent.** See response to Land Use Goal 1.210 and Land Use Objective 1.223.
Open Space and Conservation Policy 4.232. The Town shall endeavor to protect scenic resources, significant stands of natural vegetation, wildlife habitat, public	**Consistent.** See response to Land Use Goal 1.210 and Land Use Objective 1.223. Additionally, measures would be incorporated into the proposed project, including pre-

Table 4.10-1
Town of Atherton General Plan Land Use Policy Consistency

Applicable Goal / Policy	Consistency Issue(s)
safety and significant archaeological resources, both publicly and privately held.	construction surveys and soil sampling, and demolition plans that would protect resources and public safety.
Open Space and Conservation Policy 4.233. The Town seeks to preserve the open space characteristics of existing public and private schools, churches, the Circus Club, the California Water Service property and the public parks.	**Consistent.** See response to Land Use Goal 1.210, Land Use Objective 1.223, and Open Space and Conservation Goal 4.210.
Open Space and Conservation Action Program 4.310. Trees shall be preserved wherever possible. This policy shall be explicitly considered during the subdivision process.	**Consistent.** See response to Land Use Goal 1.210, Land Use Objective 1.223, and Open Space and Conservation Goal 4.210.
Open Space and Conservation Action Program 4.320. Minimum lot sizes, setback restrictions, height limitations and sign regulations shall be employed to accomplish open space and conservation objectives.	**Consistent.** The proposed project would comply with all setback restrictions, height limitations, and sign regulations.
Safety Element	
Safety Policy 6.310. The Town recognizes the potential danger to public safety that may result from natural or man-made causes and seeks to minimize the public risks in such hazards.	**Consistent.** The Academic Arts Building design would comply with all California Building Code requirements for schools and institutional facilities. Additionally, measures would be incorporated into the proposed project to protect public safety, including soil sampling and the preparation of demolition plans that would minimize public risks.
Safety Policy 6.320. The emergency evacuation routes established in this General Plan Element are El Camino Real, Middlefield Road, Marsh Road, Alameda de las Pulgas, and Valparaiso Avenue.	**Consistent.** The proposed project would not change Valparaiso Avenue and would not interfere with any emergency evacuation routes established in this General Plan Element. In addition, project construction would occur on the site and would not block or close any roads.
Safety Policy 6.330. Minimum road widths and clearances around structures shall be in accordance with generally recognized minimums consistent with fire protection.	**Consistent.** The proposed project would comply with all setback restrictions. Additionally, the Academic Arts Building plans would be reviewed by the Town Engineer and Fire Department for compliance with established code requirements consistent with the fire protection and the ability to be served for fire protection.
Safety Policy 6.360. Public education, research and information dissemination on seismic hazards and emergency response shall be encouraged.	**Consistent.** SHS implements an Emergency Response Plan that addresses seismic hazards and emergency response actions.

c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

There are no applicable habitat conservation plans or natural community conservation plan in the project area. Therefore, the project would not conflict with a habitat conservation or natural community conservation plan.

4.11. MINERAL RESOURCES

This section evaluates the potential mineral resource impacts of the proposed project.

4.11.1. EXISTING CONDITIONS

The proposed project would be located on a developed site on the existing SHS campus, surrounded by a single-family residential neighborhood. The site is in the Town of Atherton, which is developed primarily with residential neighborhoods and schools. The Town does not contain any major industrial land uses or mineral quarries. There are known mineral deposits in other parts of San Mateo County but not within the Town.[32]

4.11.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following mineral resources criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

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 project site is not designated by the State or the Town of Atherton General Plan as an area of mineral resource.[33] According to the San Mateo County General Plan, the County does contain oil fields and stone quarries that are considered "significant mineral resources," but these deposits are not located on or near the project site.[34] Therefore, the proposed project site is not designated as a known area of mineral resource, and would not result in the loss of availability of 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?

[32] *San Mateo County, San Mateo County General Plan, Chapter 3: Mineral Resources, 1986.*

[33] *Town of Atherton, Town of Atherton General Plan, November 20, 2002.*

[34] *San Mateo County, San Mateo County General Plan, Chapter 3: Mineral Resources, 1986.*

As stated above, the project site is not designated by the State or the Town of Atherton General Plan as an area of mineral resource.[35] Therefore, the proposed project would not result in to the loss of availability of locally-important mineral resources.

4.12. NOISE

This section evaluates the potential noise impacts of the proposed project.

4.12.1. EXISTING CONDITIONS

Noise-sensitive land uses are those that may be subject to stress and/or interference from excessive noise. The Sacred Heart School campus is located in a predominantly suburban residential area. The property is bounded by Valparaiso Avenue and the Church of Jesus Christ of Latter-day Saints to the south, single-family residential properties to the east and west, the Menlo Circus Club (a country club and equestrian facility), and single-family residential properties to the north. The nearest off-site noise-sensitive receptors to the project site include residences 100 feet distant. In addition, existing classrooms on the school campus are located within 50 feet of the project site.

4.12.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following noise criteria.

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				✓
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
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 expose people residing or working in the project area to excessive noise levels?				✓

[35] *Town of Atherton, Town of Atherton General Plan, November 20, 2002.*

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f. For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction of the project would generate noise. Per the Atherton Municipal Code, noise sources associated with construction are exempt from City noise standards provided said activities only occur between the hours of 8:00 a.m. and 5:00 on weekdays. Since the project would comply with the Municipal Code, the impact related to construction noise standards would be less than significant. In terms of operational noise, since no changes to enrollment or staffing are proposed as part of the Academic Arts Building project, there would not be an increase in traffic and thus traffic-generated noise. Further, no additional activities or events are proposed beyond what currently occurs on the campus. Therefore, the proposed project would not result in any impacts related to operational noise level standards beyond existing conditions.

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Sources of earthborne vibration include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, earthborne vibration may be described by amplitude and frequency. Increases in groundborne vibration levels attributable to the proposed project would be primarily associated with short-term construction-related activities.

Construction activities are expected to use equipment such as backhoes, bulldozers, draglines, front loaders, and earthmoving and compacting equipment, which includes compactors, scrapers, and graders. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. This evaluation uses Caltrans's (2004) recommended standard of 0.2 inches per second peak particle velocity with respect to the prevention of structural damage for older residential buildings. This is also the level at which vibrations may begin to annoy people in buildings. Table 4.12-1 displays vibration levels for typical construction equipment.

Table 4.12-1
Representative Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity at 25 Feet (in/sec)
Large Bulldozer	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer/Tractor	0.003

Source: FTA 2006, Caltrans 2004

Once construction is completed, all construction-generated groundborne vibration would cease. The nearest residential structure to the project site is approximately 100 feet of the project site. There are also classrooms on the Sacred Heart School campus within 50 feet of the construction area. Based on the vibration levels presented in Table 4.12-1, ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.2 inches per second peak particle velocity at 25 feet. Therefore, predicted vibration levels at the nearest off-site structures would not exceed recommended criteria. Once operational, the project would not be a source of groundborne vibration. For these reasons, the impact would be less than significant.

c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The major noise sources associated with the daily operation of the school include vehicular traffic, voices of the students outdoors, and stationary noise sources such as HVAC equipment.

The proposed Academic Arts Building project would result in the modernization of a school campus with the demolition of Sigall Hall and the construction of an academic building. The project's purpose and objective is to provide greater educational opportunities to accommodate an existing school. The new buildings will serve the same function as the current structures. There would be no increase in student attendance or staffing as a result of this project. Furthermore, no additional activities or events are proposed beyond what currently occurs on the campus site. Since there would be no additional activities and since no changes to enrollment or staffing are proposed as a result of this project, the project would not increase existing traffic; thus, it would not increase existing traffic-generated noise. For these reasons, the on-site operational noise sources would remain the same as current conditions. No impact would occur.

d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction of the proposed Academic Arts Building project would occur over 13 months and would include demolition, site preparation, grading, construction, and the application of architectural coatings. Construction-related noise impacts would typically occur during the initial earthwork phases. These phases of construction have the potential to create the highest levels of noise. Typical noise levels generated by construction equipment are shown in Table 4.12-2. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at

lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

Table 4.12-2
Typical Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA Lmax) 50 Feet from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Vibrator	76
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jackhammer	88
Loader	85
Truck	88
Paver	89
Pneumatic Tool	85
Roller	74
Saw	76

Source: FTA 2006

As depicted in Table 4.12-2, noise levels associated with individual construction equipment used for typical construction projects can reach levels of up to approximately 90 dBA Lmax (FTA 2006). During project construction, exterior noise levels could affect the residential neighborhoods in the vicinity of the construction site as well as nearby occupied classrooms.

Per the Atherton Municipal Code, noise sources associated with construction are exempt from City noise standards provided said activities only occur between the hours of 8:00 a.m. and 5:00 on weekdays. Compliance with the Municipal Code would minimize disturbance of sensitive receptors in the project vicinity. Therefore, the proposed project would be less than significant.

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 expose people residing or working in the project area to excessive noise levels?

The closest public airport to the SHS campus is the San Carlos Airport, over 2 miles away. Since the proposed project would be located within the existing campus boundaries, the proposed project would not result in noise hazards for people residing or working on campus beyond existing conditions. No impact would occur.

f. For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The campus is not located within the vicinity of a private airstrip. Since the proposed project would be located within the existing campus boundaries, the proposed project would not result in noise hazards for people residing or working on campus beyond existing conditions. No impact would occur.

4.13. POPULATION AND HOUSING

This section evaluates the potential population and housing impacts of the proposed project.

4.13.1. EXISTING CONDITIONS

The proposed project would be within the existing Sacred Heart Schools campus. The campus is a day school and no students live on campus. There is some housing on campus for retired nuns, but this housing is not located near the proposed project site. The school is located in a single-family neighborhood in the Town of Atherton, which had a population of approximately 7,000 in 2010. The Town is characterized primarily by single-family neighborhoods and schools, and does not contain any major commercial or industrial land use.

4.13.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following population and housing criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?				✓

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

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

The Academic Arts Building would provide updated facilities for existing programs on the SHS Campus and no increase in enrollment is proposed. Therefore, the project would not result in any increase in students or hiring of additional staff. Construction workers would not relocate for the project. Therefore, the proposed project would not result in any impacts related to population growth.

b. Would the project displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?

The project would not displace housing during or after construction, since, with the exception of the nuns, no housing is located on the site. Likewise, the project would be within the SHS campus and would not displace existing housing. Therefore, the proposed project would not result in any impacts related to displacement of existing housing.

c. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

As stated previously, the project would not displace existing housing and would not require the replacement of housing elsewhere. Therefore, the proposed project would not result in any impacts related to displacement of a substantial number of people.

4.14. PUBLIC SERVICES

This section evaluates the potential public services impacts of the proposed project.

4.14.1. EXISTING CONDITIONS

The project site is served by the Menlo Park Fire District, the Town of Atherton Police Department and SHS campus security. The Town of Atherton includes eight public schools and three private schools (including the Sacred Heart Schools). The Town also contains the Atherton branch of the San Mateo County Library and two public parks.[36]

[36] *Town of Atherton, Town of Atherton Zoning Map, December 28, 2011.*

4.14.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following public services criteria.

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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 following public services:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Fire Protection?			✓	
Police Protection?			✓	
Schools?				✓
Parks?				✓
Other public facilities?				✓

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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 public services?

The project would not increase enrollment, and therefore would not significantly impact service ratios, response times, or other performance objectives for public services. The project is the demolition of an existing building and construction of a new Academic Arts Building and would not require increased fire or police services. The Academic Arts Building would be designed and inspected by the Menlo Park Fire Protection District for compliance with California Building Code requirements for public school facilities regarding fire suppression. Building and site plans would also be reviewed by the Atherton Police Department for compliance with emergency procedures and minimization of safety hazards. The project would not result in an increase in people in the area that would generate the need for expanded school, library or park facilities. Therefore, the proposed project would not result in any significant impacts related to public services.

4.15. RECREATION

This section evaluates the potential recreation impacts of the proposed project.

4.15.1. EXISTING CONDITIONS

The project site is located on a school campus with multiple recreational facilities, including the Morey Practice Field, McGanney Sports Center, Dunlevie Aquatic Center, tennis courts, a field house, baseball field, soccer field, football field, all-weather track and additional practice fields. Since the Sacred Heart Schools campus is privately owned, campus recreational facilities are not available to the public. Holbrook-Palmer Park is a public park located in the Town.

4.15.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following recreation criteria.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities 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?				✓

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

As stated above, the project would not increase enrollment on the SHS campus and, therefore, would not increase the use or maintenance of public recreational facilities.

The project would not result in an increased number of campus visitors that would potentially use or impact Town parks. Therefore, the proposed project would not result in any significant impacts related to existing neighborhood and regional parks.

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?

The project would not increase SHS enrollment and, therefore, would not result in the construction or expansion of recreation facilities. The project would temporarily prohibit the use of Morey Practice Field while the portable classrooms are located on the field. However, the portable classrooms would be used only during the construction of the Academic Arts Building, and any damage to the field would be repaired after the portables are removed. Therefore, the proposed project would not require the construction or expansion of recreational facilities and the project would have no impact.

4.16. TRANSPORTATION/TRAFFIC

This section evaluates the potential transportation impacts of the proposed project.

4.16.1. EXISTING CONDITIONS

The new building would be located approximately in the area currently occupied by Sigall Hall, located on the southeastern corner of the campus near the intersection of Valparaiso and Elena Avenues, and surrounded by existing parking areas and site landscaping.

Existing school parking areas are located along Valparaiso and Elena Avenues, and accessed from an entrance on Elena Avenue. Elena Avenue is a two-lane north-south street extending between Valparaiso Avenue and Atherton Avenue. The posted speed limit is 25 miles per hour. Elena Avenue is classified as a "local street" in the Town of Atherton.

4.16.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following transportation criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			✓	
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			✓	
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				✓
e. Result in inadequate emergency access?		✓		
f. Result in inadequate parking capacity?				✓
g. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			✓	

a. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system?

b. Would the project conflict with an applicable congestion management program?

The proposed project would not increase or change student enrollment and no additional activities are proposed that would result in an increase in vehicle trips to campus. Therefore, there would be no changes or impacts on local traffic, including roadways subject to level of service standards set by the San Mateo City/County Association of Governments Congestion Management and Environmental Quality Committee, during project operation and impacts would be less than significant.

c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The nearest public airport is located approximately 6 miles northeast of campus, and the campus is not in the vicinity of any private airstrips. Therefore, the proposed project would not result in any significant impacts related to air traffic patterns.

d. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would not include any changes to driveway access to the campus. Therefore, the proposed project would not result in any significant impacts related to hazards due to a design feature or incompatible uses.

e. Would the project result in inadequate emergency access?

The proposed project would replace an existing building and would not change existing Campus access, which is adequate. The proposed site plans would be inspected by the Menlo Park Fire Protection District for compliance with California Building Code requirements for school facilities regarding emergency access. Building and site plans would also be reviewed by the Atherton Police Department for compliance with emergency procedures and minimization of safety hazards. Therefore, the proposed project would not result in any significant impacts related to inadequate emergency access on the Campus.

Construction staging would occur on the SHS campus and would not cause delays on Elena Avenue. However, during project construction, there would be some added traffic due to construction truck haul trips. Building demolition would result in approximately 22,000 CY of demolition debris. Demolition would roughly require 38 days of off-haul. The project would require the excavation of 30,000 cubic yards (CY) of soil. The soils would be transported using trucks with an approximately 20 CY capacity (generally filled to 18 CY). Excavation would require approximately 52 days of off-haul. All construction truck traffic would be routed along Valparaiso Avenue, then to Elena Avenue and onto campus.

The added truck traffic during construction could result in a significant impact to traffic congestion. Implementation of **Mitigation Measure TRAF-1** would reduce the traffic-related project impacts to a less than significant level.

Mitigation Measure TRAF-1: In order to reduce traffic-related impacts, the following measure shall be implemented:

SHS shall develop and get approval from the Town of Atherton Public Works Department for a construction/demolition traffic management plan before inception of any work. Project truck traffic or oversize vehicle activity shall be limited to the hours between 8:30 a.m. and 3:00 p.m. The Town of Atherton Public Works Department and the school shall document pavement conditions on Park Lane and Elena Avenue before and after the project. SHS shall be responsible for repair of any pavement degradation due to project truck activity.

f. Would the project result in inadequate parking capacity?

The project would not alter on-street or off-street parking. The project would not result in additional student enrollment or a change in existing activities that would increase visitors to the project site. Therefore, the project would not require an increase in parking spaces and would have no impact related to parking.

Some on-campus parking could be inaccessible during construction activities. However, SHS currently has a reciprocal parking agreement to provide additional parking at a lot located at the Church of Jesus Christ of Latter-day Saints across Valparaiso Avenue and with the Menlo Circus Club across Park Lane. If needed, temporary replacement parking would be provided during this time at those lots. Therefore, the proposed project would not result in any significant impacts related to inadequate parking capacity.

g. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The project site is located on the SHS campus and would not result in changes to transit stops or bicycle facilities on streets in the area. Therefore, there would be no impact on public transit either through increased rider demand or changes to any transit stops. The proposed project would improve pedestrian walkways on the project site. The proposed project would not result in any significant impacts related to transit, bicycle or pedestrian plans or programs.

4.17. TRIBAL CULTURAL RESOURCES

This section evaluates the potential tribal cultural resource impacts of the proposed project.

4.17.1. EXISTING CONDITIONS

The project site has been developed as a private school campus since 1898. A private cemetery used to intern nuns is located on the SHS Campus; however, the cemetery is located in the middle of the campus and is not located near the project site. No tribal cultural resources are known to exist on site.

4.17.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following cultural resources criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, features, 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				✓

ai. Would the project cause a substantial adverse change to a 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)?

The Town has not received correspondence from any Native American Tribe requesting notification and consultation for projects in the Town. Although the proposed project would demolish Sigall Hall, Sigall Hall is not considered a tribal cultural resource with cultural value to a California Native American tribe, nor is it listed on the National Register of Historic Places, California Register, or any local registers.[37] Additionally, the building is of a common type typical of school buildings and do not contain any distinctive characteristics that would qualify it for listing on any registers. Therefore, the proposed project would not result in any significant impacts related to historic resources as defined in Public Resources Code Section 5020.1(k).

aii. Would the project cause a substantial adverse change to 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?

As stated above, Sigall Hall is not considered a tribal cultural resource with cultural value to a California Native American tribe, nor is it listed on the National Register of Historic Places, California Register, or

[37] *Town of Atherton, Sacred Heart Schools Master Plan Environmental Impact Report, 2010, SCH #2009112052.*

any local registers.[38] Therefore, the proposed project would not result in any significant impacts related to historic resources as defined in Public Resources Code Section 5020.1(k).

4.18. UTILITIES/SERVICE SYSTEMS

This section evaluates the potential utility/service systems impacts of the proposed project.

4.18.1. EXISTING CONDITIONS

The project site is currently served with water supply by California Water Service Company (CalWater), with wastewater treatment by Silicon Valley Clean Water Treatment Facility, and solid waste services by Recology. There are existing detention basins and features in the area, facilitating on-site stormwater infiltration from surrounding impervious surfaces.

4.18.2. SIGNIFICANCE CRITERIA AND IMPACT ASSESSMENT

The environmental significance of the proposed project was evaluated based on the following utilities and service system criteria.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	

[38] *Ibid.*

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				✓
e. 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?				✓
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g. Comply with federal, state, and local statutes and regulations related to solid waste?			✓	

a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The project would be connected to the existing wastewater treatment system served by the Silicon Valley Clean Water Treatment facility, which is subject to State wastewater treatment requirements. Therefore, the proposed project would not result in any significant impacts related to wastewater treatment requirements.

b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The project would replace existing classrooms and would not result in an increase in the number of students or visitors to the project site. Therefore, no new water or wastewater treatment facilities would be required and the proposed project would not result in any significant impacts related to wastewater treatment requirements.

c. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As shown in Figure 2-8, stormwater drainage features would include 18 bioretention basins, including 5 self-retaining basins, dispersed throughout the project site, surrounding the proposed Academic Arts Building. The project would also include three other stormwater retention basins adjacent to the Academic Arts Building on the north side.

As stated in Section 4.9 Hydrology, the project would be required to comply with the SMCDM and C.3 regulations. The bioretention basins would be sufficiently sized to accommodate the additional project

runoff, which would not exceed the capacity of the current stormwater infrastructure. Therefore, the proposed project would not result in impacts on storm water drainage system capacity.

d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The proposed project would replace an existing building and would not result in an increase in the number of students. Therefore, the project would not increase water demand on the site and there would be no impacts related to water demand or entitlements.

e. 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?

The proposed project would replace an existing building and would not increase student enrollment. Therefore, the project would not increase the generation of wastewater and there would be no impacts related to wastewater capacity.

f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Per Town of Atherton Ordinance 15.52, the project would separate construction and demolition waste and deliver it certified recyclers for recycling. The project would be served by the Ox Mountain Landfill, which would have sufficient capacity to accommodate the Master Plan.

As a result, the proposed project would not impact the Ox Mountain Landfill capacity during construction. Moreover, the project would not result in an increase in the number of students; therefore, the project would not increase solid waste generated during operation and there would be no impact related to solid waste.

g. Would the project comply with federal, State, and local statutes and regulations related to solid waste?

As stated above, the project complies with the Town of Atherton Ordinance 15.52. Therefore, the proposed project would comply with applicable regulations during construction.

Similarly, the proposed project would recycle all construction waste and would implement the school-wide recycling program for paper, aluminum, and plastics. Solid waste generated on site would be disposed of in accordance with all applicable federal and State solid waste regulations. Therefore, the proposed project would not result in any significant impacts related to solid waste.

4.19. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to 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 wildlife community, reduce the number or restrict the range of an endangered, rare or threatened plant or wildlife, 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 that would cause substantial adverse effects on human beings, either directly or indirectly?		✓		

a. Does the project have the potential to 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 wildlife community, reduce the number or restrict the range of an endangered, rare or threatened plant or wildlife, or eliminate important examples of the major periods of California history or prehistory?

As described in this IS/MND, implementation of the proposed project would not have the potential to adversely impact biological resources due to the developed nature of the site and surroundings. However, in order to reduce potential impacts to nesting birds, **Mitigation Measure BIO-1** would be implemented prior to and during tree removal. There are no known cultural resources present on the proposed project site, but in the event that cultural resources are uncovered during construction, **Mitigation Measures CUL-1 and CUL-2** would be implemented. Therefore, the proposed project would not damage biological resources 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)?

The impacts of the proposed project are individually limited and not cumulatively considerable. All environmental impacts that could occur as a result of short-term construction of the proposed project would be reduced to a less than significant level through implementation of the mitigation measures recommended in this IS/MND, and when viewed in conjunction with other closely related past, present or reasonably

foreseeable future projects, would not be significant. Long-term operation of the proposed project would not result in any significant impacts.

c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?

As described in this Initial Study/Mitigated Negative Declaration, implementation of the proposed project could result in air quality, biological resources, cultural resources, geology and soils, and transportation impacts. Implementation of the mitigation measures recommended in this IS/MND would ensure that the proposed project would result in no environmental effects that would cause substantial direct or indirect adverse effects on human beings.

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5.0 REPORT PREPARATION

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Appendix A
Arborist Report

ARBORIST REPORT

Submitted To:

Sacred Heart Schools
Mr. Michael Dwyer
150 Valparaiso Avenue
Atherton, CA 94027

Project Location:
Sacred Heart Schools
150 Valparaiso Avenue
Atherton, CA

Submitted By:
McCLENAHAN CONSULTING, LLC
John H. McClenahan
ISA Board Certified Master Arborist, WE-1476B
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January 11, 2016
Rev. July 7, 2016
April 14, 2017

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January 11, 2016
Rev. July 7, 2016
Rev. April 14, 2017

Sacred Heart Schools
Attention: **Mr. Michael Dwyer**
150 Valparaiso Avenue
Atherton, CA 94027

Assignment

As requested, I performed a visual inspection of 116 trees to determine size and condition and provide Tree Preservation Guidelines for proposed site improvements. Updated to 131 trees on July 7, 2016 and updated to 191 trees April 14, 2017.

Summary

General recommendations for planning purposes are to minimize any grading or excavation within defined Tree Protection Zones (TPZ). It is usually feasible to utilize the footprints of existing structures. Trees have been located on a topographic survey by Kier and Wright Civil Engineers and Surveyors. There are 51 non-heritage trees included in the report. Most of the non-heritage size trees are pears, a couple of oaks, privets, bays, palms and spruce. Tree 73, an olive, fell during Christmas break.

Methodology

No root crown exploration, climbing or plant tissue analysis was performed as part of this survey. For purposes of identification, trees have been numbered with aluminum tags.

In determining Tree Condition several factors have been considered which include:

Rate of growth over several seasons;
Structural decays or weaknesses;
Presence of disease or insects; and
Life expectancy.

Tree Description/Observation

1 Canary Island date palm *(Phoenix canariensis)*
Diameter: 31.5"
Height: 20' **Spread:** 26'
Condition: Fair
Location: Grove at McGanney
Observation: Fronds typical. Recently pruned. The TPZ is 17-feet.

2 Linden *(Tilia americana)*
Diameter: 19.3"
Height: 22' **Spread:** 28'
Condition: Poor to Fair
Location: Grove at McGanney
Observation: History of limb failures. Cavities on low stem. The TPZ is 10-feet.

3 Silk oak *(Grevillea robusta)*
Diameter: 32.2"
Height: 60' **Spread:** 44'
Condition: Poor to Fair
Location: Grove at McGanney
Observation: Crown topped many years ago. Heavy accumulation of interior deadwood. Poor structure. History of limb failures. The TPZ is 17-feet.

4 Coast live oak *(Quercus agrifolia)*
Diameter: 28" Low Branching
Height: 30' **Spread:** 44'
Condition: Fair
Location: Grove at McGanney
Observation: Grows to a lean over drive. Secondary leader weakly attached. The TPZ is 14-feet.

5 Coast live oak
Diameter: 34.3"
Height: 50' **Spread:** 46'
Condition: Poor
Location: Grove at McGanney
Observation: Crown exhibits dieback and lacks vigor. Decay visible at root crown. Recommend removal.

6 Cryptomeria *(Cryptomeria spp.)*
Diameter: 15.1"
Height: 40' **Spread:** 36'
Condition: Poor to Fair
Location: Grove at McGanney
Observation: Crown exhibits a heavy accumulation of interior deadwood. History of branch failure. The TPZ is 8-feet.

7 Deodar cedar *(Cedrus deodara)*
Diameter: 31.7"
Height: 90' **Spread:** 48'
Condition: Poor to Fair
Location: Grove at McGanney
Observation: Crown somewhat one sided with a heavy accumulation of deadwood. Grows to a lean toward Valparaiso. The TPZ is 17-feet.

8 Coast live oak
Diameter: 14.7"
Height: 30' **Spread:** 20'
Condition: Poor to Fair
Location: Grove at McGanney
Observation: Crown exhibits interior deadwood. Competes with larger trees for light. The TPZ is 8-feet.

9 Coast live oak
Diameter: 16"
Height: 45' **Spread:** 22'
Condition: Poor to Fair
Location: Grove at McGanney
Observation: Crown exhibits interior deadwood. Competes with larger trees for light. The TPZ is 8-feet.

10 Coast live oak
Diameter: 18.3" Low Branching
Height: 35' **Spread:** 30'
Condition: Poor to Fair
Location: Grove at McGanney
Observation: Crown exhibits interior deadwood. Competes with larger trees for light. Low branching growth habit creates an inherent structural defect. The TPZ is 10-feet.

11 Coast live oak
Diameter: 36.5"
Height: 60' **Spread:** 55'
Condition: Fair
Location: Grove at McGanney
Observation: Crown exhibits significant interior deadwood. Grows to a lean. Recommend root collar inspection to determine presence and extent of root rot organisms. The TPZ is 19-feet.

12 Coast live oak
Diameter: 40.5" Low Branching
Height: 60' **Spread:** 55'
Condition: Poor to Fair
Location: Grove at McGanney
Observation: Crown exhibits large interior dead limbs. Bleeding observed on low trunk, borers or cankers. Requires more analysis and a more detailed inspection. The TPZ is 21-feet.

13 Coast live oak
Diameter: 26.5"
Height: 65' **Spread:** 50'
Condition: Fair
Location: Grove at McGanney
Observation: Crown exhibits a moderate accumulation of dead limbs. Codominant leaders at 15-feet. The TPZ is 13-feet.

14 Coast live oak
Diameter: 15.8"
Height: 45' **Spread:** 28'
Condition: Fair
Location: Grove at McGanney
Observation: Crown exhibits a moderate accumulation of dead limbs. Codominant leaders at 12-feet. The TPZ is 8-feet.

15 Coast live oak
Diameter: 18.7"
Height: 55' **Spread:** 40'
Condition: Fair
Location: Grove at McGanney
Observation: Crown exhibits a moderate accumulation of dead limbs. Grows to a lean. The TPZ is 10-feet.

16 Valley oak *(Quercus lobata)*
Diameter: 22.4"
Height: 40' **Spread:** 45'
Condition: Fair
Location: Grove at McGanney
Observation: Dormant at time of inspection. Grows to a lean into the grove. The TPZ is 12-feet.

17 Bay laurel *(Umbellularia californica)*
Diameter: 31.1"
Height: 65' **Spread:** 40'
Condition: Fair
Location: Grove at McGanney
Observation: Crown exhibits a moderate accumulation of deadwood. The TPZ is 16-feet.

18 Coast redwood *(Sequoia sempervirens)*
Diameter: 47.5" Multi Trunk
Height: 70' **Spread:** 26'
Condition: Fair
Location: Grove at McGanney
Observation: Moderate accumulation of deadwood. Three stems divide just above grade. The TPZ is 24-feet.

19 Valley oak
Diameter: 15.3"
Height: 40' **Spread:** 30'
Condition: Fair
Location: Grove at McGanney
Observation: Dormant at time of inspection. Grows to a lean into the grove. The TPZ is 8-feet.

20 Bay laurel
Diameter: 44" Multi Trunk
Height: 45' **Spread:** 60'
Condition: Fair
Location: Grove at McGanney
Observation: Crown exhibits a moderate accumulation of deadwood. Multi trunk growth habit. The TPZ is 24-feet.

21 Beech *(Fagus sylvatica)*
Diameter: 34.2"
Height: 70' **Spread:** 50'
Condition: Fair to Good
Location: Grove at McGanney
Observation: Scaffold limbs exhibits narrow attachments. The TPZ is 18-feet.

22 Coast live oak
Diameter: 25.3"
Height: 60' **Spread:** 45'
Condition: Fair
Location: Grove at McGanney
Observation: Crown exhibits a moderate accumulation of large dead limbs. Leans toward tree #23. The TPZ is 13-feet.

23 Blue atlas cedar *(Cedrus atlantica 'Glauca')*
Diameter: 33.6"
Height: 80' **Spread:** 55'
Condition: Fair
Location: Grove at McGanney
Observation: Deadwood observed. Recommend crown reduction pruning. History of limb failure. The TPZ is 17-feet.

24 Coast live oak
Diameter: 24.2"
Height: 35' **Spread:** 45'
Condition: Fair to Good
Location: Grove at McGanney
Observation: Moderate accumulation of deadwood. Grows to a lean toward existing path and branches to the ground. The TPZ is 13-feet.

25 Trident maple *(Acer buergerianum)*
Diameter: 19" Low Branching
Height: 25' **Spread:** 25'
Condition: Fair
Location: Grove at McGanney
Observation: Dormant at time of inspection. Secondary limb has a narrow attachment. The TPZ is 10-feet.

26 Coast live oak
Diameter: 22.2"
Height: 50' **Spread:** 40'
Condition: Fair
Location: Grove at McGanney
Observation: Crown one sided. Grows to a lean toward McGanney. The TPZ is 12-feet.

27 Valley oak
Diameter: 18.3"
Height: 40' **Spread:** 40'
Condition: Fair to Good
Location: Grove at McGanney
Observation: Leans toward McGanney hangs over first floor roof. The TPZ is 10-feet.

28 Coast redwood
Diameter: 25.9"
Height: 90' **Spread:** 30'
Condition: Fair
Location: Grove at McGanney
Observation: Top appears water stressed. The TPZ is 13-feet.

29 Trident maple
Diameter: 20.7"
Height: 50' **Spread:** 40'
Condition: Fair
Location: Grove at McGanney
Observation: Dormant at time of inspection. The TPZ is 10-feet.

30 Bay laurel
Diameter: 22.5" Low Branching
Height: 45' **Spread:** 40'
Condition: Fair
Location: Grove at McGanney
Observation: Irregular burls at root flare. Moderate accumulation of interior deadwood. Slight lean. The TPZ is 12-feet.

31 Coast live oak
Diameter: 21.7"
Height: 55' **Spread:** 50'
Condition: Fair
Location: Grove at McGanney & drive
Observation: Leans toward McGanney, hangs over first floor roof. Existing asphalt within 6-inches of root flare. The TPZ is 11-feet.

32 Bay laurel
Diameter: 31.5"
Height: 75' **Spread:** 45'
Condition: Poor to Fair
Location: Grove at McGanney & drive
Observation: Leans toward main drive. Crown lacks vigor and exhibits interior deadwood. Recommend root collar inspection to determine presence/extent of root rot organisms. The TPZ is 16-feet.

33 Coast live oak
Diameter: 21.8"
Height: 45' **Spread:** 40'
Condition: Poor to Fair
Location: Grove at McGanney & drive
Observation: Leans toward McGanney. Codominant leaders at 12-feet. The TPZ is 11-feet.

34 Coast live oak
Diameter: 25.7"
Height: 45' **Spread:** 40'
Condition: Fair
Location: Grove at McGanney & drive
Observation: Leans over McGanney in close proximity to roof. The TPZ is 13-feet.

35 Coast live oak
Diameter: 15.9"
Height: 22' **Spread:** 25'
Condition: Poor to Fair
Location: Grove at McGanney & drive
Observation: Grows to an exaggerated lean over McGanney roof. The TPZ is 8-feet.

36 Coast live oak
Diameter: 25.2"
Height: 50' **Spread:** 45'
Condition: Fair
Location: Grove at McGanney & drive
Observation: Leans toward McGanney. Scaffold limbs exhibit narrow attachments. The TPZ is 13-feet.

37 Coast live oak
Diameter: 19.5"
Height: 45' **Spread:** 40'
Condition: Fair
Location: Grove at McGanney & drive
Observation: Cluster of three oaks close together. Narrow scaffold limbs. Slight lean. Leans toward McGanney. The TPZ is 10-feet.

38 Coast live oak
Diameter: 14.2"
Height: 50' **Spread:** 24'
Condition: Fair
Location: Grove at McGanney & drive
Observation: Cluster of three oaks close together. Narrow scaffold limbs. Slight lean. Leans directly on tree 37. The TPZ is 8-feet.

39 Coast live oak
Diameter: 20.5"
Height: 55' **Spread:** 40'
Condition: Fair
Location: Grove at McGanney & drive
Observation: Cluster of three oaks close together. Narrow scaffold limbs. Slight lean. The TPZ is 11-feet.

40 Coast live oak
Diameter: 22.5"
Height: 50' **Spread:** 45'
Condition: Fair
Location: Grove at McGanney & drive
Observation: Crown overlaps with adjacent oak canopies. The TPZ is 12-feet.

41 Canary Island date palm
Diameter: 25.1"
Height: 18' **Spread:** 24'
Condition: Fair to Good
Location: Grove at McGanney & drive
Observation: Growing under larger oak canopies. The TPZ is 13-feet.

42 Spruce *(Picea spp.)*
Diameter: 38.9"
Height: 70' **Spread:** 38'
Condition: Poor to Fair
Location: Grove at McGanney & drive
Observation: Crown exhibits dieback and lacks vigor. Scaffold limbs exhibit weak attachments. The TPZ is 20-feet.

43 Valley oak
Diameter: 23.4"
Height: 36' **Spread:** 48'
Condition: Fair
Location: Grove McGanney and Main
Observation: Dormant at time of inspection. Crown hangs over first floor of McGanney. The TPZ is 12-feet.

44 Coast redwood
Diameter: 17.2"
Height: 45' **Spread:** 24'
Condition: Fair to Good
Location: Grove McGanney and Main
Observation: Appears water stressed. The TPZ is 9-feet.

45 Coast redwood
Diameter: 22.9"
Height: 55' **Spread:** 30'
Condition: Fair to Good
Location: Grove McGanney and Main
Observation: Appears water stressed. The TPZ is 12-feet.

46 Coast redwood
Diameter: 25"
Height: 55' **Spread:** 28'
Condition: Fair
Location: Grove McGanney and Main
Observation: Appears water stressed. The TPZ is 13-feet.

47 Coast redwood
Diameter: 19.9"
Height: 55' **Spread:** 26'
Condition: Fair to Good
Location: Grove McGanney and Main
Observation: Appears water stressed. The TPZ is 10-feet.

48 Coast live oak
Diameter: 31.7"
Height: 40' **Spread:** 40'
Condition: Poor to Fair
Location: Grove McGanney and Main
Observation: Leans over path to Homer and McGanney. Numerous bleedfing cankers on main stem. Regular treatment in progress to preserve tree. The TPZ is 16-feet.

49 Coast redwood
Diameter: 19.7"
Height: 50' **Spread:** 24'
Condition: Fair
Location: Grove McGanney and Main
Observation: Appears water stressed. The TPZ is 10-feet.

50 Bradford pear *(Pyrus calleryana 'Bradford')*
Diameter: 12.4"
Height: 15' **Spread:** 15'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 7-feet.

51 Bradford pear
Diameter: 14.3"
Height: 16' **Spread:** 20'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

52 Bradford pear
Diameter: 15"
Height: 15' **Spread:** 18'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

53 Bradford pear
Diameter: 12.9"
Height: 15' **Spread:** 18'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 7-feet.

54 Bradford pear
Diameter: 13"
Height: 15' **Spread:** 18'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 7-feet.

55 Bradford pear
Diameter: 14.4"
Height: 16' **Spread:** 20'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

56 Bradford pear
Diameter: 14.5"
Height: 16' **Spread:** 20'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

57 Bradford pear
Diameter: 14.9"
Height: 12' **Spread:** 16'
Condition: Very poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

58 Bradford pear
Diameter: 15.5"
Height: 16' **Spread:** 20'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

59 Bradford pear
Diameter: 15.7"
Height: 15' **Spread:** 22'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

60 Bradford pear
Diameter: 15.9"
Height: 16' **Spread:** 22'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

61 Bradford pear
Diameter: 16.5"
Height: 18' **Spread:** 22'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

62 Bradford pear
Diameter: 15.3"
Height: 15' **Spread:** 18'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

63 Bradford pear
Diameter: 16.3"
Height: 15' **Spread:** 24'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

64 Bradford pear
Diameter: 15.5"
Height: 15' **Spread:** 24'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

65 Bradford pear
Diameter: 17.1"
Height: 15' **Spread:** 20'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

66 Bradford pear
Diameter: 16.6"
Height: 16' **Spread:** 22'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 8-feet.

67 Bradford pear
Diameter: 14.9"
Height: 15' **Spread:** 22'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 7-feet.

68 Bradford pear
Diameter: 14.3"
Height: 14' **Spread:** 24'
Condition: Poor
Location: Between McGanney and Homer
Observation: Crown reduced to mitigate severe fireblight damage. Weak limb attachments. The TPZ is 7-feet.

69 Douglas fir *(Pseudotsuga menziesii)*
Diameter: 43.6"
Height: 75' **Spread:** 60'
Condition: Poor
Location: Between McGanney and Sigall
Observation: Crown lacks vigor. Numerous old burls on low stem. The TPZ is 22-feet.

70 Coast live oak
Diameter: 16.9"
Height: 30' **Spread:** 27'
Condition: Poor to Fair
Location: Between McGanney and Sigall
Observation: Crown lacks vigor. Leans toward path in front of Sigall. Decay visible on low stem/root flare. Remove due to failure potential.

71 *Pittosporum undulatum*
Diameter: 9.5,9.5, 9.2, 11.1, 11.1" Multi Trunk
Height: 20' **Spread:** 32'
Condition: Poor to Fair
Location: Between McGanney and Sigall
Observation: Crown lacks vigor. Poor structure. Proposed for removal.

72 Coast live oak
Diameter: 27.2"
Height: 40' **Spread:** 48'
Condition: Poor to Fair
Location: Between McGanney and Sigall
Observation: Crown exhibits a moderate accumulation of water sprouts. Western sycamore borer infestation observed at root flare. Recommend root collar inspection. The TPZ is 14-feet.

73 Olive *(Olea europaea)*
Diameter: 15.3, 11.7'' Multi Trunk
Height: 18' **Spread:** 24'
Condition: Fair
Location: Between McGanney and Sigall
Observation: Limited root environment. Tree fell/split apart before completion of report.

74 Coast redwood
Diameter: 34.7''
Height: 60' **Spread:** 25'
Condition: Fair to Good
Location: Between Sigall and bioswale
Observation: Foliage good. The TPZ is 18-feet.

75 Southern magnolia *(Magnolia grandiflora)*
Diameter: 25.9''
Height: 38' **Spread:** 36'
Condition: Poor to Fair
Location: Between Sigall and bioswale
Observation: Appears water stressed. Narrow scaffold limb attachments. The TPZ is 15-feet.

76 Coast redwood
Diameter: 19.5''
Height: 25' **Spread:** 14'
Condition: Fair
Location: Between Sigall and bioswale
Observation: Appears to be a sucker from large redwood. The TPZ is 10-feet.

77 Coast redwood
Diameter: 79.5''
Height: 95' **Spread:** 50'
Condition: Fair
Location: Between Sigall and bioswale
Observation: Codominant leaders create an inherent structural weakness. The TPZ is 40-feet.

78 Silver dollar *(Eucalyptus polyanthemos)*
Diameter: 20.1''
Height: 65' **Spread:** 40'
Condition: Poor to Fair
Location: Between Sigall and bioswale
Observation: Crown lacks normal vigor. Poor structure. Canker/old crack on low stem. The TPZ is 11-feet.

79 Southern magnolia
Diameter: 16.3''
Height: 38' **Spread:** 40'
Condition: Fair
Location: Between Sigall and bioswale
Observation: Slightly sparse crown. Leans toward Sigall. Surface rooting. The TPZ is 9-feet.

80 Coast live oak
Diameter: 17.5"
Height: 30' **Spread:** 35'
Condition: Fair
Location: Between Sigall and bioswale
Observation: Slight lean. Narrow scaffold limb attachments. The TPZ is 9-feet.

81 Coast redwood
Diameter: 40.1" Multi Trunk
Height: 65' **Spread:** 34'
Condition: Poor to Fair
Location: Between Sigall and bioswale
Observation: Drought stressed. The TPZ is 21-feet.

82 Camphor *(Cinnamomum camphora)*
Diameter: 19" Low Branching
Height: 36' **Spread:** 34'
Condition: Poor
Location: Between Sigall and parking
Observation: Crown exhibits dieback. Surface rooting observed. The TPZ is 10-feet.

83 Camphor
Diameter: 22" Low Branching
Height: 38' **Spread:** 42'
Condition: Poor
Location: Between Sigall and parking
Observation: Crown exhibits dieback. Surface rooting observed. The TPZ is 11-feet.

84 Camphor
Diameter: 18.5"
Height: 36' **Spread:** 38'
Condition: Poor to Fair
Location: Between Sigall and parking
Observation: Crown exhibits dieback. Surface rooting observed. The TPZ is 10-feet.

85 Coast live oak
Diameter: 22"
Height: 36' **Spread:** 40'
Condition: Fair
Location: Between Sigall and parking
Observation: Leans over Sigall roof. Concrete footing 10-inches from root flare. The TPZ is 11-feet.

86 Coast live oak
Diameter: 25.5"
Height: 40' **Spread:** 55'
Condition: Fair
Location: Between Sigall and parking
Observation: Narrow scaffold limb attachments. Surface rooting observed. Asphalt drive adjacent to root flare. The TPZ is 13-feet.

87 Maidenhair tree *(Ginkgo biloba)*
Diameter: 10.6"
Height: 25' **Spread:** 24'
Condition: Fair to Good
Location: Between Sigall and parking
Observation: Dormant at time of inspection. The TPZ is 6-feet.

88 Deodar cedar
Diameter: 41.2"
Height: 80' **Spread:** 68'
Condition: Fair
Location: Island corner of Sigall
Observation: Moderate accumulation of interior deadwood. History of small limb failures. The TPZ is 20-feet.

89 Southern magnolia
Diameter: 15.9"
Height: 28' **Spread:** 36'
Condition: Fair to Good
Location: Corner of Sigall
Observation: Surface rooting, minor. The TPZ is 7-feet.

90 Coast redwood
Diameter: 18.6"
Height: 45' **Spread:** 16'
Condition: Fair
Location: Sigall parking lot
Observation: Appears water stressed. Poor root environment. The TPZ is 10-feet.

91 Coast redwood
Diameter: 22"
Height: 45' **Spread:** 18'
Condition: Fair to Good
Location: Sigall parking lot
Observation: Appears water stressed. Poor root environment. The TPZ is 11-feet.

92 Bradford pear
Diameter: 14.3"
Height: 35' **Spread:** 26'
Condition: Poor to Fair
Location: Sigall parking lot
Observation: Fireblight damage. The TPZ is 8-feet.

93 Giant sequoia *(Sequoiadendron giganteum)*
Diameter: 20.3"
Height: 35' **Spread:** 14'
Condition: Fair to Good
Location: Sigall parking lot
Observation: Slight lean. The TPZ is 11-feet.

94 Spruce
Diameter: 18.3"
Height: 35' **Spread:** 24'
Condition: Fair
Location: Between McGanney and parking
Observation: Irregular curvature of stem. The TPZ is 10-feet.

95 Valley oak
Diameter: 47.5"
Height: 50' **Spread:** 80'
Condition: Fair
Location: Between McGanney and parking
Observation: Grows to a slight lean. Large scaffold limbs exhibit narrow attachments. Bleeding canker observed on low trunk. The TPZ is 24-feet.

96 Deodar cedar
Diameter: 29.5"
Height: 70' **Spread:** 50'
Condition: Fair
Location: Between McGanney and parking
Observation: Slight lean. Limited root environment. The TPZ is 15-feet.

97 Coast live oak
Diameter: 24"
Height: 36' **Spread:** 34'
Condition: Fair
Location: Island in Valparaiso drive
Observation: Crown slightly sparse. Grows to a lean. The TPZ is 12-feet.

98 Coast live oak
Diameter: 16.2"
Height: 30' **Spread:** 24'
Condition: Poor to Fair
Location: Island in Valparaiso drive
Observation: Crown slightly sparse. Grows to a lean. The TPZ is 9-feet.

99 Valley oak
Diameter: 61"
Height: 65' **Spread:** 50'
Condition: Poor
Location: Main drive edge
Observation: Exhibits extensive sapwood decay. Leans toward grove and large cedar. The TPZ is 31-feet.

100 Canary Island date palm
Diameter: 36"
Height: 34' **Spread:** 18'
Condition: Poor to Fair
Location: Main drive
Observation: Fronds slightly sparse. Fronds typical of the species. Old stubs exhibit decay and may fall. The TPZ is 18-feet.

101 Canary Island date palm
Diameter: 36.7"
Height: 34' **Spread:** 22'
Condition: Fair
Location: Main drive
Observation: Competes with oaks for light and space. The TPZ is 19-feet.

102 Fan palm *(Washingtonia filifera)*
Diameter: 14.8"
Height: 14' **Spread:** 8'
Condition: Fair to Good
Location: Main drive
Observation: Fronds typical of the species. The TPZ is 8-feet.

103 Canary Island date palm
Diameter: 33.2"
Height: 36' **Spread:** 22'
Condition: Fair
Location: Main drive
Observation: Fronds typical of the species. Old stubs exhibit decay and may fall. The TPZ is 12-feet.

104 Fan palm
Diameter: 15"
Height: 13' **Spread:** 8'
Condition: Fair
Location: Main drive
Observation: Fronds typical of the species.The TPZ is 7-feet.

105 Fan palm
Diameter: 15.3"
Height: 13' **Spread:** 8'
Condition: Fair
Location: Main drive
Observation: Fronds typical of the species. The TPZ is 7-feet.

106 Canary Island date palm
Diameter: 31.2"
Height: 42' **Spread:** 22'
Condition: Fair
Location: Main drive
Observation: Fronds typical of the species. Old stubs exhibit decay and may fall. The TPZ is 16-feet.

107 Canary Island date palm
Diameter: 33.9"
Height: 36' **Spread:** 20'
Condition: Fair
Location: Main drive
Observation: Fronds typical of the species. Old stubs exhibit decay and may fall. The TPZ is 17-feet.

108 Fan palm,
Diameter: 15.4"
Height: 14' **Spread:** 12'
Condition: Fair
Location: Main drive
Observation: Fronds typical of the species. The TPZ is 8-feet.

109 Canary Island date palm
Diameter: 35"
Height: 35' **Spread:** 20'
Condition: Fair
Location: Main drive
Observation: Fronds typical of the species. Old stubs exhibit decay and may fall. The TPZ is 18-feet.

110 Fan palm
Diameter: 16.2"
Height: 14' **Spread:** 12'
Condition: Fair to good
Location: Main drive
Observation: Fronds typical of the species. The TPZ is 9-feet.

111 Canary Island date palm
Diameter: 35.7"
Height: 36' **Spread:** 20'
Condition: Fair
Location: Main drive
Observation: Fronds typical of the species. Old stubs exhibit decay and may fall. The TPZ is 18-feet.

112 Fan palm
Diameter: 16.3"
Height: 16' **Spread:** 14'
Condition: Fair to good
Location: Main drive
Observation: Fronds typical of the species. The TPZ is 9-feet.

113 Linden
Diameter: 18.7" Low Branching
Height: 28' **Spread:** 24'
Condition: Fair
Location: Main drive
Observation: Low branching growth habit creates an inherent structural defect. The TPZ is 10-feet.

114 Linden
Diameter: 26.1"
Height: 40' **Spread:** 36'
Condition: Fair
Location: Main drive island
Observation: Codominant leaders at 7-feet create an inherent strucutral weakness. Slight lean. Dormant at time of inspection. The TPZ is 14-feet.

115 Tulip tree
Diameter: 16.8"
Height: 30' **Spread:** 30'
Condition: Fair
Location: Near pears at Homer
Observation: Dormant at time of inspection. The TPZ is 9-feet.

116 Coast redwood
Diameter: 15.3"
Height: 30' **Spread:** 18'
Condition: Fair
Location: Near bioswale
Observation: Appears to be a sucker from larger redwood. The TPZ is 8-feet.

117 Coast live oak
Diameter: 9.6"
Height: 12' **Spread:** 16'
Condition: Fair to Good
Location: Between McGanney and parking
Observation: Young establishing tree under existing pear. Proposed for removal.

118 Coast live oak
Diameter: 7.0" Low Branching
Height: 12' **Spread:** 16'
Condition: Fair to Good
Location: Between McGanney and Sigall
Observation: Young establishing tree under existing pear. Proposed for removal.

119 Olive
Diameter: 4.8" Low Branching
Height: 14' **Spread:** 14'
Condition: Poor to Fair
Location: Between McGanney and Sigall
Observation: Young establishing tree. Proposed for removal.

120 Xylosma *(Xylosma congestum)*
Diameter: 10.8"
Height: 10' **Spread:** 14'
Condition: Poor to Fair
Location: Raised planter at Sigall
Observation: Overmature shrub. Proposed for removal.

121 Xylosma
Diameter: 11.6" Low Branching
Height: 13' **Spread:** 14'
Condition: Poor to Fair
Location: Raised planter at Sigall
Observation: Overmature shrub. Proposed for removal.

122 Xylosma
Diameter: 16" Low Branching
Height: 15' **Spread:** 24'
Condition: Poor to Fair
Location: Raised planter at Sigall
Observation: Overmature shrub. Proposed for removal.

123 Xylosma
Diameter: 8.8"
Height: 14' **Spread:** 18'
Condition: Poor to Fair
Location: Raised planter at Sigall
Observation: Overmature shrub. Grows to a lean. Proposed for removal.

124 Xylosma
Diameter: 14.6" Low Branching
Height: 18' **Spread:** 22'
Condition: Poor to Fair
Location: Raised planter at Sigall
Observation: Overmature shrub. Proposed for removal.

125 Coast live oak
Diameter: 32.3"
Height: 45' **Spread:** 45'
Condition: Poor
Location: Stairway at Homer
Observation: Narrow scaffold limb attachments. Bleeding cankers and borers visible on low trunk, tension side of lean. Recommend root collar inspection.

126 Crape myrtle *(Lagerstroemia indica)*
Diameter: 12.4" Low Branching
Height: 15' **Spread:** 14'
Condition: Fair to Good
Location: Between McGanney and Sigall
Observation: Located in raised planter. Previously topped. Proposed for removal.

127 Crape myrtle
Diameter: 11.5" Low Branching
Height: 15' **Spread:** 12'
Condition: Fair to Good
Location: Between McGanney and Sigall
Observation: Located in raised planter. Previously topped. Proposed for removal.

128 Crape myrtle
Diameter: 11.3" Low Branching
Height: 18' **Spread:** 12'
Condition: Fair to Good
Location: Between McGanney and Sigall
Observation: Located in raised planter. Previously topped. Proposed for removal.

129 Crape myrtle
Diameter: 8" Low Branching
Height: 12' **Spread:** 8'
Condition: Poor to Fair
Location: Between McGanney and Sigall
Observation: Located in raised planter. Previously topped. Proposed for removal.

130 Olive
Diameter: 4.9" Low Branching
Height: 12' **Spread:** 10'
Condition: Poor to Fair
Location: Between McGanney and Sigall
Observation: Young establishing tree. Proposed for removal.

131 Coast live oak
Diameter: 6.8"
Height: 16' **Spread:** 16'
Condition: Fair to Good
Location: Between Sigall and parking
Observation: Young establishing tree. Proposed for removal.

132 Bay laurel
Diameter: 13.3"
Height: 36' **Spread:** 28'
Condition: Fair
Location: Path to McGanney
Observation: Leans into adjacent bay. The TPZ is 8-feet.

133 Bay laurel
Diameter: 10, 7.4" Low Branching
Height: 25' **Spread:** 20'
Condition: Fair
Location: Path to McGanney
Observation: Leans into adjacent bay. The TPZ is 8-feet.

134 Bay laurel
Diameter: 15.4"
Height: 55' **Spread:** 40'
Condition: Fair
Location: Path to McGanney
Observation: Leans over path. Moderate accumulation of deadwood. The TPZ is 8-feet.

135 Bay laurel
Diameter: 29.1" Low Branching
Height: 50' **Spread:** 45'
Condition: Poor to Fair
Location: Path to McGanney
Observation: Crown exhibits a heavy accumulation of interior deadwood. The TPZ is 15-feet.

136 Coast live oak
Diameter: 6.2"
Height: 20' **Spread:** 12'
Condition: Fair to Good
Location: Between main building and Homer
Observation: Grove of young oak and privet volunteers. The TPZ is 6-feet.

137 Coast live oak
Diameter: 6.0"
Height: 20' **Spread:** 9'
Condition: Fair
Location: Between main building and Homer
Observation: Grove of young oak and privet volunteers. The TPZ is 6-feet.

138 Coast live oak
Diameter: 12.0"
Height: 20' **Spread:** 30'
Condition: Fair
Location: Between main building and Homer
Observation: Crown exhibits a moderate accumulation of deadwood. Leans. The TPZ is 6-feet.

139 Coast live oak
Diameter: 13.0"
Height: 38' **Spread:** 16'
Condition: Fair
Location: Between main building and Homer
Observation: Narrow spreading crown. The TPZ is 7-feet.

140 Coast live oak
Diameter: 6.1"
Height: 20' **Spread:** 20'
Condition: Fair
Location: Between main building and Homer
Observation: Grove of young oak and privet volunteers. The TPZ is 6-feet.

141 Privet
Diameter: 6.8"
Height: 22' **Spread:** 9'
Condition: Fair
Location: Between main building and Homer
Observation: Grove of young oak and privet volunteers. The TPZ is 6-feet.

142 Privet
Diameter: 7.3" Low Branching
Height: 18' **Spread:** 18'
Condition: Poor to Fair
Location: Between main building and Homer
Observation: Grove of young oak and privet volunteers. The TPZ is 6-feet.

143 Privet
Diameter: 8.6" Low Branching
Height: 22' **Spread:** 16'
Condition: Poor to Fair
Location: Between main building and Homer
Observation: Grove of young oak and privet volunteers. The TPZ is 6-feet.

144 Coast live oak
Diameter: 11.0"
Height: 22' **Spread:** 15'
Condition: Fair
Location: Between main building and Homer
Observation: Grove of young oak and privet volunteers. The TPZ is 6-feet.

145 Windmill fan Pam
Diameter: 10.2"
Height: 12' **Spread:** 8'
Condition: Fair
Location: Between main building and Homer
Observation: Fronds slightly chlorotic. The TPZ is 6-feet.

146 Fan palm
Diameter: 14.4"
Height: 18' **Spread:** 12'
Condition: Fair to Good
Location: Between main building and Homer
Observation: Fronds slightly chlorotic. The TPZ is 8-feet.

147 Canary Island date palm
Diameter: 46.2"
Height: 60' **Spread:** 28'
Condition: Fair
Location: Between main building and Homer
Observation: Fronds slightly chlorotic. The TPZ is 24-feet.

148 Maidenhair tree *(Ginkgo biloba)*
Diameter: 30.6" Low Branching
Height: 25' **Spread:** 40'
Condition: Fair
Location: Between main building and Homer
Observation: Accumulation of deadwood in crown. The TPZ is 16-feet.

149 Fan palm
Diameter: 15.9"
Height: 20' **Spread:** 15'
Condition: Poor to Fair
Location: Between main building and Homer
Observation: Fronds slightly chlorotic. The TPZ is 8-feet.

150 Bay laurel
Diameter: 28.9"
Height: 50' **Spread:** 40'
Condition: Poor
Location: Between main building and Homer
Observation: Crown is sparse with below average vigor and a heavy accumulation of deadwood. The TPZ is 15-feet.

151 Canary Island date palm
Diameter: 35.8"
Height: 35' **Spread:** 22'
Condition: Fair
Location: Between main building and Homer
Observation: Fronds slightly sparse. Fronds typical of the species. Old stubs exhibit decay and may fall. The TPZ is 18-feet.

152 Fan palm
Diameter: 16.1"
Height: 18' **Spread:** 14'
Condition: Fair to Good
Location: Between main building and Homer
Observation: Fronds slightly chlorotic. The TPZ is 8-feet.

153 English laurel
Diameter: 6, 7, 8, 8.2" Multi trunk
Height: 16' **Spread:** 28'
Condition: Poor
Location: Between main building and Homer
Observation: Large old shrub with decayed old branches. The TPZ is 8-feet.

154 English laurel
Diameter: 8.1, 7.4, 7.6, 7.8" Multi trunk
Height: 12' **Spread:** 20'
Condition: Poor
Location: Between main building and Homer
Observation: Large old shrub with decayed old branches. The TPZ is 8-feet.

155 Coast redwood
Diameter: 47.8"
Height: 100 **Spread:** 36'
Condition: Fair to Good
Location: Grove between Homer and Concession
Observation: Crown exhibits minor accumulation of deadwood and water sprouts. The TPZ is 24-feet.

156 Bay laurel
Diameter: 20" Low Branching
Height: 20' **Spread:** 22'
Condition: Poor to Fair
Location: Grove between Homer and Concession
Observation: Poor structure. Deadwood observed. The TPZ is 10-feet.

157 Bay laurel
Diameter: 11.0"
Height: 20' **Spread:** 16'
Condition: Fair
Location: Grove between Homer and Concession
Observation: 2-feet from live oak. The TPZ is 6-feet.

158 Coast live oak
Diameter: 27.4"
Height: 38' **Spread:** 40'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Scaffold limbs exhibit narrow attachments. Leans toward practice field. The TPZ is 13-feet.

159 Coast live oak
Diameter: 9.0"
Height: 25' **Spread:** 12'
Condition: Poor to Fair
Location: Grove between Homer and Concession
Observation: Cankers observed on low stem. The TPZ is 6-feet.

160 Coast live oak
Diameter: 12.9"
Height: 25' **Spread:** 25'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to a slight lean away from larger bay. The TPZ is 7-feet.

161 Coast live oak
Diameter: 12.2"
Height: 26' **Spread:** 28'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to a slight lean away from larger bay. The TPZ is 7-feet.

162 Coast live oak
Diameter: 9.8"
Height: 26' **Spread:** 28'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to a slight lean away from larger bay. The TPZ is 6-feet.

163 Coast live oak
Diameter: 20"
Height: 30' **Spread:** 30'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Codominant leaders create an inherent structural weakness. Grows to a lean. The TPZ is 10-feet.

164 Coast live oak
Diameter: 24.3"
Height: 40' **Spread:** 36'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Codominant leaders create an inherent structural weakness. Grows to a lean. The TPZ is 13-feet.

165 Bay laurel
Diameter: 10"
Height: 22' **Spread:** 18'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to a slight lean away from larger bay. The TPZ is 6-feet.

166 Bay laurel
Diameter: 50.7"
Height: 65' **Spread:** 45'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Minor deadwood and tip dieback observed. Scaffold limbs exhibit narrow attachments. The TPZ is 26-feet.

167 Coast redwood
Diameter: 89.7" Multi Trunk
Height: 110' **Spread:** 50'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Multi trunk growth habit creates an inherent structural defect. Deadwood observed in crown. The TPZ is 45-feet.

168 Coast redwood
Diameter: 19.4"
Height: 55' **Spread:** 22'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Crown is one sided with a moderate accumulation of deadwood. The TPZ is 10-feet.

169 Coast redwood
Diameter: 33.4"
Height: 80' **Spread:** 30'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Crown is one sided with a moderate accumulation of deadwood. The TPZ is 18-feet.

170 Bay laurel
Diameter: 15.4"
Height: 40' **Spread:** 24'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to a lean. Moderate accumulation of deadwood. The TPZ is 8-feet.

171 Bay laurel
Diameter: 12.4"
Height: 36' **Spread:** 40'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to a lean. Moderate accumulation of deadwood. The TPZ is 7-feet.

172 Coast live oak
Diameter: 10.5"
Height: 10' **Spread:** 22'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to an exaggerated lean. The TPZ is 6-feet.

173 Bay laurel
Diameter: 11.2"
Height: 28' **Spread:** 20'
Condition: Poor to Fair
Location: Grove between Homer and Concession
Observation: Crown exhibits a moderate accumulation of deadwood. Grows to a lean. The TPZ is 6-feet.

174 Coast live oak
Diameter: 29.5"
Height: 60' **Spread:** 45'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Scaffold limbs exhibits narrow attachments. Recommend removal of 2 adjacent bays. The TPZ is 15-feet.

175 Coast live oak
Diameter: 12.3"
Height: 28' **Spread:** 35'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to a lean. Understory tree. The TPZ is 7-feet.

176 Bay laurel
Diameter: 6.6"
Height: 25' **Spread:** 24'
Condition: Poor to Fair
Location: Grove between Homer and Concession
Observation: Leaves with dead tips. Recommend removal.

177 Coast live oak
Diameter: 17.6"
Height: 38' **Spread:** 36'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Crown overlaps with adjacent trees. Scaffold limbs exhibit narrow attachments. Leans. The TPZ is 9-feet.

178 Coast live oak
Diameter: 13.6"
Height: 30' **Spread:** 32'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Crown overlaps with adjacent trees. Scaffold limbs exhibit narrow attachments. Leans. The TPZ is 7-feet.

179 Silk oak *(Grevillea robusta)*
Diameter: 27.6"
Height: 60' **Spread:** 49'
Condition: Poor
Location: Grove between Homer and Concession
Observation: Ivy on lower 30' of trunk. Below average vigor. The TPZ is 14-feet.

180 Coast live oak
Diameter: 20.2"
Height: 45' **Spread:** 40'
Condition: Poor
Location: Grove between Homer and Concession
Observation: Cankers on low stem. Leans. The TPZ is 10-feet.

181 Coast live oak
Diameter: 26.7"
Height: 50' **Spread:** 50'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Crown exhibits interior deadwood and heavy limbs. Scaffold limbs exhibit narrow attachments. The TPZ is 14-feet.

182 Coast live oak
Diameter: 8.2"
Height: 35' **Spread:** 16'
Condition: Poor to Fair
Location: Grove between Homer and Concession
Observation: Understory tree. Leans toward building. The TPZ is 6-feet.

183 Coast live oak
Diameter: 6.5"
Height: 28' **Spread:** 30'
Condition: Poor to Fair
Location: Grove between Homer and Concession
Observation: Understory tree. Leans toward building. The TPZ is 6-feet.

184 Bay laurel
Diameter: 6.2"
Height: 18' **Spread:** 12'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Understory tree. Leans toward building. The TPZ is 6-feet.

185 Bay laurel
Diameter: 22.7"
Height: 55' **Spread:** 45'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Grows to a lean. Codominant leaders at 8-feet. The TPZ is 12-feet.

186 Coast live oak
Diameter: 26.1"
Height: 50' **Spread:** 50'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Dense, heavy crown interior deadwood. The TPZ is 13-feet.

187 Valley oak *(Quercus lobata)*
Diameter: 12.6"
Height: 22' **Spread:** 24'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Understory tree. Grows to a lean. The TPZ is 7-feet.

188 Coast live oak
Diameter: 8.1"
Height: 15' **Spread:** 14'
Condition: Fair to Good
Location: Grove between Homer and Concession
Observation: Young establishing tree. Leans slightly. The TPZ is 6-feet.

189 Coast live oak
Diameter: 8.1"
Height: 20' **Spread:** 14'
Condition: Fair
Location: Grove between Homer and Concession
Observation: Young establishing tree. Leans slightly. The TPZ is 6-feet.

190 Coast live oak
Diameter: 7.0"
Height: 16' **Spread:** 18'
Condition: Good
Location: Grove between Homer and Concession
Observation: Young establishing tree. Leans slightly. The TPZ is 6-feet.

191 Coast live oak
Diameter: 34.0"
Height: 40' **Spread:** 50'
Condition: Fair to Good
Location: Homer deck
Observation: Crown exhibits normal vigor. Leans toward building. The TPZ is 18-feet.

TREE PRESERVATION GUIDELINES

Tree Preservation and Protection Plan
In providing recommendations for tree preservation, we recognize that injury to trees as a result of construction include mechanical injuries to trunks, roots and branches, and injury as a result of changes that occur in the growing environment.

To minimize these injuries, we recommend grading operations encroach no closer than six times the trunk diameter, (i.e. 30" diameter tree x 6=180" distance). At this distance, buttress/anchoring roots would be preserved and minimal injury to the functional root area would be anticipated. Should encroachment within the area become necessary, hand digging is ***mandatory.***

Barricades
Prior to initiation of construction activity, temporary barricades should be installed around all trees in the construction area. Six-foot high, chain link fences are to be mounted on steel posts, driven 2 feet into the ground, at no more than 10-foot spacing. The fences shall enclose the entire area under the drip line of the trees or as close to the drip line area as practical. These barricades will be placed around individual trees and/or groups of trees as the existing environment dictates.

The temporary barricades will serve to protect trunks, roots and branches from mechanical injuries, will inhibit stockpiling of construction materials or debris within the sensitive 'drip line' areas and will prevent soil compaction from increased vehicular/pedestrian traffic. No storage of material, topsoil, vehicles or equipment shall be permitted within the tree enclosure area. The ground around the tree canopy shall not be altered. These barricades should remain in place until final inspection of the building permit, except for work specifically required in the approved

plans to be done under the trees to be protected. Designated areas beyond the drip lines of any trees should be provided for construction materials and onsite parking.

Root Pruning (if necessary)
During and upon completion of any trenching/grading operation within a tree's drip line, should any roots greater than one inch (1") in diameter be damaged, broken or severed, root pruning to include flush cutting and sealing of exposed roots should be accomplished under the supervision of a qualified Arborist to minimize root deterioration beyond the soil line ***within twenty-four (24) hours.***

Pruning
Pruning of the foliar canopies to include removal of deadwood is recommended and should be initiated prior to construction operations. Such pruning will provide any necessary construction clearance, will lessen the likelihood or potential for limb breakage, reduce 'windsail' effect and provide an environment suitable for healthy and vigorous growth.

Irrigation
A supplemental irrigation program is recommended for the trees on site and should be accomplished at regular three to four week intervals during the period of October 31st through May 1st. Irrigation is to be applied at or about the 'drip line' in an amount sufficient to supply approximately fifteen (15) gallons of water for each inch in trunk diameter.

Irrigation can be provided by means of a soil needle, 'soaker' or permeable hose. When using 'soaker' or permeable hoses, water is to be run at low pressure, avoiding runoff/puddling, allowing the needed moisture to penetrate the soil to feeder root depths.

Fertilization
A program of fertilization by means of deep root soil injection is recommended with applications in spring and summer for those trees to be impacted by construction.

Such fertilization will serve to stimulate feeder root development, offset shock/stress as related to construction and/or environmental factors, encourage vigor, alleviate soil compaction and compensate for any encroachment of natural feeding root areas.

Inception of this fertilizing program is recommended prior to the initiation of construction activity.

Mulch
Mulching with wood chips (maximum depth 3") within tree environments (outer foliar perimeter) will lessen moisture evaporation from soil, protect and encourage adventitious roots and minimize possible soil compaction.

Inspection
Periodic inspections by the ***Site Arborist*** are recommended during construction activities, particularly as trees are impacted by trenching/grading operations.

Inspections at approximate four (4) week intervals would be sufficient to assess and monitor the effectiveness of the Tree Preservation Plan and to provide recommendations for any additional care or treatment.

We thank you for this opportunity to be of assistance in your tree preservation concerns.

Should you have any questions, or if we may be of further assistance in these concerns, kindly contact our office at any time.

Very truly yours,

McCLENAHAN CONSULTING, LLC

By: **John H. McClenahan**
ISA Board Certified Master Arborist, WE-1476B
member, American Society of Consulting Arborists

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ARBORIST DISCLOSURE STATEMENT

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like a medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures.

Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risks is to eliminate all trees.

Arborist: John H. McClenahan

Date: January 11, 2016
Rev. July 7, 2016
Rev. April 14, 2017

Appendix B
Air Quality and Greenhouse Gas Emissions Assessment

Sacred Heart Schools Academic Arts Building- Existing

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	21.00	1000sqft	0.48	21,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No Construction in this model.

Vehicle Trips - No trips.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0930	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.8000e-004	3.8000e-004	0.0000	0.0000	4.0000e-004
Energy	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	46.2821	46.2821	1.6100e-003	6.0000e-004	46.5010
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	5.5417	0.0000	5.5417	0.3275	0.0000	13.7292
Water						0.0000	0.0000		0.0000	0.0000	0.2212	2.9233	3.1445	0.0229	5.6000e-004	3.8839
Total	**0.0949**	**0.0170**	**0.0145**	**1.0000e-004**	**0.0000**	**1.2900e-003**	**1.2900e-003**	**0.0000**	**1.2900e-003**	**1.2900e-003**	**5.7629**	**49.2058**	**54.9686**	**0.3520**	**1.1600e-003**	**64.1145**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0930	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.8000e-004	3.8000e-004	0.0000	0.0000	4.0000e-004
Energy	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	46.2821	46.2821	1.6100e-003	6.0000e-004	46.5010
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	5.5417	0.0000	5.5417	0.3275	0.0000	13.7292
Water						0.0000	0.0000		0.0000	0.0000	0.2212	2.9233	3.1445	0.0229	5.6000e-004	3.8839
Total	**0.0949**	**0.0170**	**0.0145**	**1.0000e-004**	**0.0000**	**1.2900e-003**	**1.2900e-003**	**0.0000**	**1.2900e-003**	**1.2900e-003**	**5.7629**	**49.2058**	**54.9686**	**0.3520**	**1.1600e-003**	**64.1145**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/26/2017	5/25/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 31,500; Non-Residential Outdoor: 10,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	27.7355	27.7355	1.2500e-003	2.6000e-004	27.8442
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	27.7355	27.7355	1.2500e-003	2.6000e-004	27.8442
NaturalGas Mitigated	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.5466	18.5466	3.6000e-004	3.4000e-004	18.6568
NaturalGas Unmitigated	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.5466	18.5466	3.6000e-004	3.4000e-004	18.6568

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High School	347550	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.5466	18.5466	3.6000e-004	3.4000e-004	18.6568
Total		**1.8700e-003**	**0.0170**	**0.0143**	**1.0000e-004**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**18.5466**	**18.5466**	**3.6000e-004**	**3.4000e-004**	**18.6568**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High School	347550	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.5466	18.5466	3.6000e-004	3.4000e-004	18.6568
Total		**1.8700e-003**	**0.0170**	**0.0143**	**1.0000e-004**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**18.5466**	**18.5466**	**3.6000e-004**	**3.4000e-004**	**18.6568**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High School	95340	27.7355	1.2500e-003	2.6000e-004	27.8442
Total		**27.7355**	**1.2500e-003**	**2.6000e-004**	**27.8442**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High School	95340	27.7355	1.2500e-003	2.6000e-004	27.8442
Total		**27.7355**	**1.2500e-003**	**2.6000e-004**	**27.8442**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0930	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.8000e-004	3.8000e-004	0.0000	0.0000	4.0000e-004
Unmitigated	0.0930	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.8000e-004	3.8000e-004	0.0000	0.0000	4.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0820					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.8000e-004	3.8000e-004	0.0000	0.0000	4.0000e-004
Total	**0.0930**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.8000e-004**	**3.8000e-004**	**0.0000**	**0.0000**	**4.0000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0820					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.8000e-004	3.8000e-004	0.0000	0.0000	4.0000e-004
Total	**0.0930**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.8000e-004**	**3.8000e-004**	**0.0000**	**0.0000**	**4.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.1445	0.0229	5.6000e-004	3.8839
Unmitigated	3.1445	0.0229	5.6000e-004	3.8839

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High School	0.697297 / 1.79305	3.1445	0.0229	5.6000e-004	3.8839
Total		**3.1445**	**0.0229**	**5.6000e-004**	**3.8839**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High School	0.697297 / 1.79305	3.1445	0.0229	5.6000e-004	3.8839
Total		**3.1445**	**0.0229**	**5.6000e-004**	**3.8839**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.5417	0.3275	0.0000	13.7292
Unmitigated	5.5417	0.3275	0.0000	13.7292

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High School	27.3	5.5417	0.3275	0.0000	13.7292
Total		**5.5417**	**0.3275**	**0.0000**	**13.7292**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High School	27.3	5.5417	0.3275	0.0000	13.7292
Total		**5.5417**	**0.3275**	**0.0000**	**13.7292**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sacred Heart Schools Academic Arts Building- Existing

San Mateo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	21.00	1000sqft	0.48	21,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No Construction in this model.

Vehicle Trips - No trips.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.1734	0.0000	0.0000	0.1734	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1734**	**0.0000**	**0.0000**	**0.1734**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.1734	0.0000	0.0000	0.1734	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1734**	**0.0000**	**0.0000**	**0.1734**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Sacred Heart Schools Academic Arts Building- Existing - San Mateo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5096	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Energy	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.5199**	**0.0934**	**0.0806**	**5.6000e-004**	**0.0000**	**7.1000e-003**	**7.1000e-003**	**0.0000**	**7.1000e-003**	**7.1000e-003**		**112.0272**	**112.0272**	**2.1600e-003**	**2.0500e-003**	**112.6932**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5096	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Energy	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.5199**	**0.0934**	**0.0806**	**5.6000e-004**	**0.0000**	**7.1000e-003**	**7.1000e-003**	**0.0000**	**7.1000e-003**	**7.1000e-003**		**112.0272**	**112.0272**	**2.1600e-003**	**2.0500e-003**	**112.6932**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/26/2017	5/25/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 31,500; Non-Residential Outdoor: 10,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
NaturalGas Unmitigated	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High School	952.192	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
Total		**0.0103**	**0.0934**	**0.0784**	**5.6000e-004**		**7.0900e-003**	**7.0900e-003**		**7.0900e-003**	**7.0900e-003**		**112.0226**	**112.0226**	**2.1500e-003**	**2.0500e-003**	**112.6883**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High School	0.952192	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
Total		**0.0103**	**0.0934**	**0.0784**	**5.6000e-004**		**7.0900e-003**	**7.0900e-003**		**7.0900e-003**	**7.0900e-003**		**112.0226**	**112.0226**	**2.1500e-003**	**2.0500e-003**	**112.6883**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5096	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Unmitigated	0.5096	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1000e-004	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Total	**0.5096**	**2.0000e-005**	**2.1700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.6000e-003**	**4.6000e-003**	**1.0000e-005**		**4.9100e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1000e-004	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Total	**0.5096**	**2.0000e-005**	**2.1700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.6000e-003**	**4.6000e-003**	**1.0000e-005**		**4.9100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sacred Heart Schools Academic Arts Building- Existing

San Mateo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	21.00	1000sqft	0.48	21,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No Construction in this model.

Vehicle Trips - No trips.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.1734	0.0000	0.0000	0.1734	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1734**	**0.0000**	**0.0000**	**0.1734**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.1734	0.0000	0.0000	0.1734	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1734**	**0.0000**	**0.0000**	**0.1734**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Sacred Heart Schools Academic Arts Building- Existing - San Mateo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5096	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Energy	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.5199**	**0.0934**	**0.0806**	**5.6000e-004**	**0.0000**	**7.1000e-003**	**7.1000e-003**	**0.0000**	**7.1000e-003**	**7.1000e-003**		**112.0272**	**112.0272**	**2.1600e-003**	**2.0500e-003**	**112.6932**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5096	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Energy	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.5199**	**0.0934**	**0.0806**	**5.6000e-004**	**0.0000**	**7.1000e-003**	**7.1000e-003**	**0.0000**	**7.1000e-003**	**7.1000e-003**		**112.0272**	**112.0272**	**2.1600e-003**	**2.0500e-003**	**112.6932**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/26/2017	5/25/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 31,500; Non-Residential Outdoor: 10,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
NaturalGas Unmitigated	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High School	952.192	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
Total		**0.0103**	**0.0934**	**0.0784**	**5.6000e-004**		**7.0900e-003**	**7.0900e-003**		**7.0900e-003**	**7.0900e-003**		**112.0226**	**112.0226**	**2.1500e-003**	**2.0500e-003**	**112.6883**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High School	0.952192	0.0103	0.0934	0.0784	5.6000e-004		7.0900e-003	7.0900e-003		7.0900e-003	7.0900e-003		112.0226	112.0226	2.1500e-003	2.0500e-003	112.6883
Total		**0.0103**	**0.0934**	**0.0784**	**5.6000e-004**		**7.0900e-003**	**7.0900e-003**		**7.0900e-003**	**7.0900e-003**		**112.0226**	**112.0226**	**2.1500e-003**	**2.0500e-003**	**112.6883**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5096	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Unmitigated	0.5096	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1000e-004	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Total	**0.5096**	**2.0000e-005**	**2.1700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.6000e-003**	**4.6000e-003**	**1.0000e-005**		**4.9100e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1000e-004	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6000e-003	4.6000e-003	1.0000e-005		4.9100e-003
Total	**0.5096**	**2.0000e-005**	**2.1700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.6000e-003**	**4.6000e-003**	**1.0000e-005**		**4.9100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sacred Heart Schools Academic Arts Building- Proposed

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	79.06	1000sqft	1.81	79,055.00	0
Other Non-Asphalt Surfaces	2.24	Acre	2.24	97,574.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Adjusted per Project Applicant.

Trips and VMT - Adjusted per Project Applicant.

Demolition -

Grading -

Vehicle Trips - No new trips.

Sacred Heart Schools Academic Arts Building- Proposed - San Mateo County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	130.00
tblConstructionPhase	NumDays	230.00	66.00
tblConstructionPhase	NumDays	20.00	34.00
tblConstructionPhase	NumDays	8.00	14.00
tblConstructionPhase	NumDays	18.00	130.00
tblConstructionPhase	NumDays	5.00	54.00
tblConstructionPhase	PhaseEndDate	12/26/2019	7/23/2019
tblConstructionPhase	PhaseEndDate	12/31/2018	1/22/2019
tblConstructionPhase	PhaseEndDate	7/6/2018	7/18/2018
tblConstructionPhase	PhaseEndDate	9/28/2018	10/22/2018
tblConstructionPhase	PhaseEndDate	6/28/2019	7/23/2019
tblConstructionPhase	PhaseEndDate	8/21/2018	10/2/2018
tblConstructionPhase	PhaseStartDate	6/29/2019	1/23/2019
tblConstructionPhase	PhaseStartDate	9/29/2018	10/23/2018
tblConstructionPhase	PhaseStartDate	8/22/2018	10/3/2018
tblConstructionPhase	PhaseStartDate	1/1/2019	1/23/2019
tblConstructionPhase	PhaseStartDate	7/7/2018	7/19/2018
tblGrading	AcresOfGrading	7.00	4.00
tblGrading	MaterialExported	0.00	15,000.00
tblGrading	MaterialExported	0.00	15,000.00
tblLandUse	BuildingSpaceSquareFeet	79,060.00	79,055.00
tblLandUse	LandUseSquareFeet	79,060.00	79,055.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	96.00	1,222.00
tblTripsAndVMT	HaulingTripNumber	1,875.00	833.00
tblTripsAndVMT	HaulingTripNumber	1,875.00	833.00

tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.3009	3.3902	1.8367	4.1900e-003	0.5942	0.1540	0.7482	0.3070	0.1429	0.4499	0.0000	394.5337	394.5337	0.0831	0.0000	396.6109
2019	0.5608	1.1530	1.1302	1.9200e-003	0.0241	0.0658	0.0899	6.4400e-003	0.0615	0.0680	0.0000	169.7161	169.7161	0.0404	0.0000	170.7258
Maximum	**0.5608**	**3.3902**	**1.8367**	**4.1900e-003**	**0.5942**	**0.1540**	**0.7482**	**0.3070**	**0.1429**	**0.4499**	**0.0000**	**394.5337**	**394.5337**	**0.0831**	**0.0000**	**396.6109**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.3009	3.3902	1.8367	4.1900e-003	0.5942	0.1540	0.7482	0.3070	0.1429	0.4499	0.0000	394.5334	394.5334	0.0831	0.0000	396.6107
2019	0.5608	1.1530	1.1302	1.9200e-003	0.0241	0.0658	0.0899	6.4400e-003	0.0615	0.0680	0.0000	169.7160	169.7160	0.0404	0.0000	170.7256
Maximum	**0.5608**	**3.3902**	**1.8367**	**4.1900e-003**	**0.5942**	**0.1540**	**0.7482**	**0.3070**	**0.1429**	**0.4499**	**0.0000**	**394.5334**	**394.5334**	**0.0831**	**0.0000**	**396.6107**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2018	8-31-2018	1.8709	1.8709
2	9-1-2018	11-30-2018	1.4983	1.4983
3	12-1-2018	2-28-2019	0.8605	0.8605
4	3-1-2019	5-31-2019	0.7545	0.7545
5	6-1-2019	8-31-2019	0.4345	0.4345
		Highest	1.8709	1.8709

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3584	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4500e-003	1.4500e-003	0.0000	0.0000	1.5500e-003
Energy	7.0500e-003	0.0641	0.0539	3.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003	0.0000	174.2300	174.2300	6.0600e-003	2.2600e-003	175.0541
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	20.8634	0.0000	20.8634	1.2330	0.0000	51.6882
Water						0.0000	0.0000		0.0000	0.0000	0.8328	11.0055	11.8384	0.0860	2.1200e-003	14.6219
Total	**0.3654**	**0.0642**	**0.0546**	**3.8000e-004**	**0.0000**	**4.8700e-003**	**4.8700e-003**	**0.0000**	**4.8700e-003**	**4.8700e-003**	**21.6963**	**185.2370**	**206.9333**	**1.3251**	**4.3800e-003**	**241.3657**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3584	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4500e-003	1.4500e-003	0.0000	0.0000	1.5500e-003
Energy	7.0500e-003	0.0641	0.0539	3.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003	0.0000	174.2300	174.2300	6.0600e-003	2.2600e-003	175.0541
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	20.8634	0.0000	20.8634	1.2330	0.0000	51.6882
Water						0.0000	0.0000		0.0000	0.0000	0.8328	11.0055	11.8384	0.0860	2.1200e-003	14.6219
Total	**0.3654**	**0.0642**	**0.0546**	**3.8000e-004**	**0.0000**	**4.8700e-003**	**4.8700e-003**	**0.0000**	**4.8700e-003**	**4.8700e-003**	**21.6963**	**185.2370**	**206.9333**	**1.3251**	**4.3800e-003**	**241.3657**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Sacred Heart Schools Academic Arts Building- Proposed - San Mateo County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2018	7/18/2018	5	34	
2	Site Preparation	Site Preparation	7/19/2018	10/2/2018	5	54	
3	Grading	Grading	10/3/2018	10/22/2018	5	14	
4	Building Construction	Building Construction	10/23/2018	1/22/2019	5	66	
5	Paving	Paving	1/23/2019	7/23/2019	5	130	
6	Architectural Coating	Architectural Coating	1/23/2019	7/23/2019	5	130	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.24

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,583; Non-Residential Outdoor: 39,528; Striped Parking Area: 5,854 (Architectural Coating – sqft)

OffRoad Equipment

Sacred Heart Schools Academic Arts Building- Proposed - San Mateo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,222.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	833.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	833.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	74.00	29.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0103	0.0000	0.0103	1.5600e-003	0.0000	1.5600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0632	0.6515	0.3792	6.6000e-004		0.0330	0.0330		0.0307	0.0307	0.0000	59.7109	59.7109	0.0165	0.0000	60.1222
Total	**0.0632**	**0.6515**	**0.3792**	**6.6000e-004**	**0.0103**	**0.0330**	**0.0433**	**1.5600e-003**	**0.0307**	**0.0322**	**0.0000**	**59.7109**	**59.7109**	**0.0165**	**0.0000**	**60.1222**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5100e-003	0.2255	0.0816	5.2000e-004	0.0102	9.3000e-004	0.0112	2.8100e-003	8.9000e-004	3.7000e-003	0.0000	52.5179	52.5179	6.2500e-003	0.0000	52.6741
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.5000e-004	0.0000	1.7819	1.7819	4.0000e-005	0.0000	1.7830
Total	**7.3400e-003**	**0.2261**	**0.0877**	**5.4000e-004**	**0.0122**	**9.4000e-004**	**0.0132**	**3.3400e-003**	**9.0000e-004**	**4.2500e-003**	**0.0000**	**54.2998**	**54.2998**	**6.2900e-003**	**0.0000**	**54.4571**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0103	0.0000	0.0103	1.5600e-003	0.0000	1.5600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0632	0.6515	0.3792	6.6000e-004		0.0330	0.0330		0.0307	0.0307	0.0000	59.7109	59.7109	0.0165	0.0000	60.1221
Total	**0.0632**	**0.6515**	**0.3792**	**6.6000e-004**	**0.0103**	**0.0330**	**0.0433**	**1.5600e-003**	**0.0307**	**0.0322**	**0.0000**	**59.7109**	**59.7109**	**0.0165**	**0.0000**	**60.1221**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5100e-003	0.2255	0.0816	5.2000e-004	0.0102	9.3000e-004	0.0112	2.8100e-003	8.9000e-004	3.7000e-003	0.0000	52.5179	52.5179	6.2500e-003	0.0000	52.6741
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	6.0000e-004	6.1200e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.5000e-004	0.0000	1.7819	1.7819	4.0000e-005	0.0000	1.7830
Total	**7.3400e-003**	**0.2261**	**0.0877**	**5.4000e-004**	**0.0122**	**9.4000e-004**	**0.0132**	**3.3400e-003**	**9.0000e-004**	**4.2500e-003**	**0.0000**	**54.2998**	**54.2998**	**6.2900e-003**	**0.0000**	**54.4571**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4886	0.0000	0.4886	0.2683	0.0000	0.2683	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1232	1.3014	0.6069	1.0300e-003		0.0696	0.0696		0.0640	0.0640	0.0000	93.8518	93.8518	0.0292	0.0000	94.5822
Total	**0.1232**	**1.3014**	**0.6069**	**1.0300e-003**	**0.4886**	**0.0696**	**0.5582**	**0.2683**	**0.0640**	**0.3323**	**0.0000**	**93.8518**	**93.8518**	**0.0292**	**0.0000**	**94.5822**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4300e-003	0.1537	0.0556	3.5000e-004	6.9700e-003	6.3000e-004	7.6000e-003	1.9100e-003	6.1000e-004	2.5200e-003	0.0000	35.7999	35.7999	4.2600e-003	0.0000	35.9063
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.1500e-003	0.0117	4.0000e-005	3.8300e-003	2.0000e-005	3.8500e-003	1.0200e-003	2.0000e-005	1.0400e-003	0.0000	3.3961	3.3961	8.0000e-005	0.0000	3.3981
Total	**6.0200e-003**	**0.1549**	**0.0673**	**3.9000e-004**	**0.0108**	**6.5000e-004**	**0.0115**	**2.9300e-003**	**6.3000e-004**	**3.5600e-003**	**0.0000**	**39.1960**	**39.1960**	**4.3400e-003**	**0.0000**	**39.3044**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4886	0.0000	0.4886	0.2683	0.0000	0.2683	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1232	1.3014	0.6069	1.0300e-003		0.0696	0.0696		0.0640	0.0640	0.0000	93.8516	93.8516	0.0292	0.0000	94.5821
Total	**0.1232**	**1.3014**	**0.6069**	**1.0300e-003**	**0.4886**	**0.0696**	**0.5582**	**0.2683**	**0.0640**	**0.3323**	**0.0000**	**93.8516**	**93.8516**	**0.0292**	**0.0000**	**94.5821**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4300e-003	0.1537	0.0556	3.5000e-004	6.9700e-003	6.3000e-004	7.6000e-003	1.9100e-003	6.1000e-004	2.5200e-003	0.0000	35.7999	35.7999	4.2600e-003	0.0000	35.9063
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.1500e-003	0.0117	4.0000e-005	3.8300e-003	2.0000e-005	3.8500e-003	1.0200e-003	2.0000e-005	1.0400e-003	0.0000	3.3961	3.3961	8.0000e-005	0.0000	3.3981
Total	**6.0200e-003**	**0.1549**	**0.0673**	**3.9000e-004**	**0.0108**	**6.5000e-004**	**0.0115**	**2.9300e-003**	**6.3000e-004**	**3.5600e-003**	**0.0000**	**39.1960**	**39.1960**	**4.3400e-003**	**0.0000**	**39.3044**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0451	0.0000	0.0451	0.0235	0.0000	0.0235	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2147	0.1160	2.1000e-004		0.0109	0.0109		9.9900e-003	9.9900e-003	0.0000	18.9748	18.9748	5.9100e-003	0.0000	19.1225
Total	**0.0194**	**0.2147**	**0.1160**	**2.1000e-004**	**0.0451**	**0.0109**	**0.0560**	**0.0235**	**9.9900e-003**	**0.0335**	**0.0000**	**18.9748**	**18.9748**	**5.9100e-003**	**0.0000**	**19.1225**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4300e-003	0.1537	0.0556	3.5000e-004	6.9700e-003	6.3000e-004	7.6000e-003	1.9100e-003	6.1000e-004	2.5200e-003	0.0000	35.7999	35.7999	4.2600e-003	0.0000	35.9063
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.5000e-004	2.5200e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.7337	0.7337	2.0000e-005	0.0000	0.7342
Total	**4.7700e-003**	**0.1540**	**0.0581**	**3.6000e-004**	**7.8000e-003**	**6.4000e-004**	**8.4300e-003**	**2.1300e-003**	**6.1000e-004**	**2.7400e-003**	**0.0000**	**36.5336**	**36.5336**	**4.2800e-003**	**0.0000**	**36.6405**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0451	0.0000	0.0451	0.0235	0.0000	0.0235	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2147	0.1160	2.1000e-004		0.0109	0.0109		9.9900e-003	9.9900e-003	0.0000	18.9748	18.9748	5.9100e-003	0.0000	19.1225
Total	**0.0194**	**0.2147**	**0.1160**	**2.1000e-004**	**0.0451**	**0.0109**	**0.0560**	**0.0235**	**9.9900e-003**	**0.0335**	**0.0000**	**18.9748**	**18.9748**	**5.9100e-003**	**0.0000**	**19.1225**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4300e-003	0.1537	0.0556	3.5000e-004	6.9700e-003	6.3000e-004	7.6000e-003	1.9100e-003	6.1000e-004	2.5200e-003	0.0000	35.7999	35.7999	4.2600e-003	0.0000	35.9063
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.5000e-004	2.5200e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.7337	0.7337	2.0000e-005	0.0000	0.7342
Total	**4.7700e-003**	**0.1540**	**0.0581**	**3.6000e-004**	**7.8000e-003**	**6.4000e-004**	**8.4300e-003**	**2.1300e-003**	**6.1000e-004**	**2.7400e-003**	**0.0000**	**36.5336**	**36.5336**	**4.2800e-003**	**0.0000**	**36.6405**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0670	0.5848	0.4395	6.7000e-004		0.0375	0.0375		0.0353	0.0353	0.0000	59.4418	59.4418	0.0146	0.0000	59.8059
Total	**0.0670**	**0.5848**	**0.4395**	**6.7000e-004**		**0.0375**	**0.0375**		**0.0353**	**0.0353**	**0.0000**	**59.4418**	**59.4418**	**0.0146**	**0.0000**	**59.8059**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8600e-003	0.0985	0.0376	2.0000e-004	4.7300e-003	7.6000e-004	5.4800e-003	1.3700e-003	7.2000e-004	2.0900e-003	0.0000	19.5974	19.5974	1.7400e-003	0.0000	19.6410
Worker	6.0400e-003	4.3900e-003	0.0444	1.4000e-004	0.0146	9.0000e-005	0.0147	3.8800e-003	9.0000e-005	3.9600e-003	0.0000	12.9276	12.9276	3.0000e-004	0.0000	12.9352
Total	**9.9000e-003**	**0.1029**	**0.0820**	**3.4000e-004**	**0.0193**	**8.5000e-004**	**0.0201**	**5.2500e-003**	**8.1000e-004**	**6.0500e-003**	**0.0000**	**32.5250**	**32.5250**	**2.0400e-003**	**0.0000**	**32.5762**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0670	0.5848	0.4395	6.7000e-004		0.0375	0.0375		0.0353	0.0353	0.0000	59.4417	59.4417	0.0146	0.0000	59.8058
Total	**0.0670**	**0.5848**	**0.4395**	**6.7000e-004**		**0.0375**	**0.0375**		**0.0353**	**0.0353**	**0.0000**	**59.4417**	**59.4417**	**0.0146**	**0.0000**	**59.8058**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8600e-003	0.0985	0.0376	2.0000e-004	4.7300e-003	7.6000e-004	5.4800e-003	1.3700e-003	7.2000e-004	2.0900e-003	0.0000	19.5974	19.5974	1.7400e-003	0.0000	19.6410
Worker	6.0400e-003	4.3900e-003	0.0444	1.4000e-004	0.0146	9.0000e-005	0.0147	3.8800e-003	9.0000e-005	3.9600e-003	0.0000	12.9276	12.9276	3.0000e-004	0.0000	12.9352
Total	**9.9000e-003**	**0.1029**	**0.0820**	**3.4000e-004**	**0.0193**	**8.5000e-004**	**0.0201**	**5.2500e-003**	**8.1000e-004**	**6.0500e-003**	**0.0000**	**32.5250**	**32.5250**	**2.0400e-003**	**0.0000**	**32.5762**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0189	0.1686	0.1373	2.2000e-004		0.0103	0.0103		9.7000e-003	9.7000e-003	0.0000	18.8083	18.8083	4.5800e-003	0.0000	18.9229
Total	**0.0189**	**0.1686**	**0.1373**	**2.2000e-004**		**0.0103**	**0.0103**		**9.7000e-003**	**9.7000e-003**	**0.0000**	**18.8083**	**18.8083**	**4.5800e-003**	**0.0000**	**18.9229**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-003	0.0296	0.0114	6.0000e-005	1.5100e-003	2.0000e-004	1.7200e-003	4.4000e-004	2.0000e-004	6.3000e-004	0.0000	6.2061	6.2061	5.5000e-004	0.0000	6.2198
Worker	1.7500e-003	1.2300e-003	0.0127	4.0000e-005	4.6600e-003	3.0000e-005	4.6900e-003	1.2400e-003	3.0000e-005	1.2700e-003	0.0000	4.0080	4.0080	9.0000e-005	0.0000	4.0102
Total	**2.8500e-003**	**0.0309**	**0.0241**	**1.0000e-004**	**6.1700e-003**	**2.3000e-004**	**6.4100e-003**	**1.6800e-003**	**2.3000e-004**	**1.9000e-003**	**0.0000**	**10.2141**	**10.2141**	**6.4000e-004**	**0.0000**	**10.2300**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0189	0.1686	0.1373	2.2000e-004		0.0103	0.0103		9.7000e-003	9.7000e-003	0.0000	18.8083	18.8083	4.5800e-003	0.0000	18.9229
Total	**0.0189**	**0.1686**	**0.1373**	**2.2000e-004**		**0.0103**	**0.0103**		**9.7000e-003**	**9.7000e-003**	**0.0000**	**18.8083**	**18.8083**	**4.5800e-003**	**0.0000**	**18.9229**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-003	0.0296	0.0114	6.0000e-005	1.5100e-003	2.0000e-004	1.7200e-003	4.4000e-004	2.0000e-004	6.3000e-004	0.0000	6.2061	6.2061	5.5000e-004	0.0000	6.2198
Worker	1.7500e-003	1.2300e-003	0.0127	4.0000e-005	4.6600e-003	3.0000e-005	4.6900e-003	1.2400e-003	3.0000e-005	1.2700e-003	0.0000	4.0080	4.0080	9.0000e-005	0.0000	4.0102
Total	**2.8500e-003**	**0.0309**	**0.0241**	**1.0000e-004**	**6.1700e-003**	**2.3000e-004**	**6.4100e-003**	**1.6800e-003**	**2.3000e-004**	**1.9000e-003**	**0.0000**	**10.2141**	**10.2141**	**6.4000e-004**	**0.0000**	**10.2300**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0824	0.8294	0.8004	1.2300e-003		0.0468	0.0468		0.0431	0.0431	0.0000	108.6950	108.6950	0.0334	0.0000	109.5310
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0824**	**0.8294**	**0.8004**	**1.2300e-003**		**0.0468**	**0.0468**		**0.0431**	**0.0431**	**0.0000**	**108.6950**	**108.6950**	**0.0334**	**0.0000**	**109.5310**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8500e-003	2.7100e-003	0.0279	1.0000e-004	0.0102	7.0000e-005	0.0103	2.7200e-003	6.0000e-005	2.7800e-003	0.0000	8.8014	8.8014	1.9000e-004	0.0000	8.8061
Total	**3.8500e-003**	**2.7100e-003**	**0.0279**	**1.0000e-004**	**0.0102**	**7.0000e-005**	**0.0103**	**2.7200e-003**	**6.0000e-005**	**2.7800e-003**	**0.0000**	**8.8014**	**8.8014**	**1.9000e-004**	**0.0000**	**8.8061**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0824	0.8294	0.8003	1.2300e-003		0.0468	0.0468		0.0431	0.0431	0.0000	108.6949	108.6949	0.0334	0.0000	109.5309
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0824**	**0.8294**	**0.8003**	**1.2300e-003**		**0.0468**	**0.0468**		**0.0431**	**0.0431**	**0.0000**	**108.6949**	**108.6949**	**0.0334**	**0.0000**	**109.5309**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8500e-003	2.7100e-003	0.0279	1.0000e-004	0.0102	7.0000e-005	0.0103	2.7200e-003	6.0000e-005	2.7800e-003	0.0000	8.8014	8.8014	1.9000e-004	0.0000	8.8061
Total	**3.8500e-003**	**2.7100e-003**	**0.0279**	**1.0000e-004**	**0.0102**	**7.0000e-005**	**0.0103**	**2.7200e-003**	**6.0000e-005**	**2.7800e-003**	**0.0000**	**8.8014**	**8.8014**	**1.9000e-004**	**0.0000**	**8.8061**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4326					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1193	0.1197	1.9000e-004		8.3700e-003	8.3700e-003		8.3700e-003	8.3700e-003	0.0000	16.5962	16.5962	1.4000e-003	0.0000	16.6312
Total	**0.4499**	**0.1193**	**0.1197**	**1.9000e-004**		**8.3700e-003**	**8.3700e-003**		**8.3700e-003**	**8.3700e-003**	**0.0000**	**16.5962**	**16.5962**	**1.4000e-003**	**0.0000**	**16.6312**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8800e-003	2.0300e-003	0.0209	7.0000e-005	7.6800e-003	5.0000e-005	7.7200e-003	2.0400e-003	5.0000e-005	2.0900e-003	0.0000	6.6011	6.6011	1.4000e-004	0.0000	6.6046
Total	**2.8800e-003**	**2.0300e-003**	**0.0209**	**7.0000e-005**	**7.6800e-003**	**5.0000e-005**	**7.7200e-003**	**2.0400e-003**	**5.0000e-005**	**2.0900e-003**	**0.0000**	**6.6011**	**6.6011**	**1.4000e-004**	**0.0000**	**6.6046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4326					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1193	0.1197	1.9000e-004		8.3700e-003	8.3700e-003		8.3700e-003	8.3700e-003	0.0000	16.5961	16.5961	1.4000e-003	0.0000	16.6312
Total	**0.4499**	**0.1193**	**0.1197**	**1.9000e-004**		**8.3700e-003**	**8.3700e-003**		**8.3700e-003**	**8.3700e-003**	**0.0000**	**16.5961**	**16.5961**	**1.4000e-003**	**0.0000**	**16.6312**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8800e-003	2.0300e-003	0.0209	7.0000e-005	7.6800e-003	5.0000e-005	7.7200e-003	2.0400e-003	5.0000e-005	2.0900e-003	0.0000	6.6011	6.6011	1.4000e-004	0.0000	6.6046
Total	**2.8800e-003**	**2.0300e-003**	**0.0209**	**7.0000e-005**	**7.6800e-003**	**5.0000e-005**	**7.7200e-003**	**2.0400e-003**	**5.0000e-005**	**2.0900e-003**	**0.0000**	**6.6011**	**6.6011**	**1.4000e-004**	**0.0000**	**6.6046**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722
Other Non-Asphalt Surfaces	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	104.4110	104.4110	4.7200e-003	9.8000e-004	104.8201
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	104.4110	104.4110	4.7200e-003	9.8000e-004	104.8201
NaturalGas Mitigated	7.0500e-003	0.0641	0.0539	3.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003	0.0000	69.8191	69.8191	1.3400e-003	1.2800e-003	70.2340
NaturalGas Unmitigated	7.0500e-003	0.0641	0.0539	3.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003	0.0000	69.8191	69.8191	1.3400e-003	1.2800e-003	70.2340

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High School	1.30836e+006	7.0500e-003	0.0641	0.0539	3.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003	0.0000	69.8191	69.8191	1.3400e-003	1.2800e-003	70.2340
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.0500e-003**	**0.0641**	**0.0539**	**3.8000e-004**		**4.8700e-003**	**4.8700e-003**		**4.8700e-003**	**4.8700e-003**	**0.0000**	**69.8191**	**69.8191**	**1.3400e-003**	**1.2800e-003**	**70.2340**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High School	1.30836e+006	7.0500e-003	0.0641	0.0539	3.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003	0.0000	69.8191	69.8191	1.3400e-003	1.2800e-003	70.2340
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.0500e-003**	**0.0641**	**0.0539**	**3.8000e-004**		**4.8700e-003**	**4.8700e-003**		**4.8700e-003**	**4.8700e-003**	**0.0000**	**69.8191**	**69.8191**	**1.3400e-003**	**1.2800e-003**	**70.2340**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High School	358910	104.4110	4.7200e-003	9.8000e-004	104.8201
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**104.4110**	**4.7200e-003**	**9.8000e-004**	**104.8201**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High School	358910	104.4110	4.7200e-003	9.8000e-004	104.8201
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**104.4110**	**4.7200e-003**	**9.8000e-004**	**104.8201**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3584	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4500e-003	1.4500e-003	0.0000	0.0000	1.5500e-003
Unmitigated	0.3584	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4500e-003	1.4500e-003	0.0000	0.0000	1.5500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3151					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4500e-003	1.4500e-003	0.0000	0.0000	1.5500e-003
Total	**0.3584**	**1.0000e-005**	**7.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4500e-003**	**1.4500e-003**	**0.0000**	**0.0000**	**1.5500e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3151					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4500e-003	1.4500e-003	0.0000	0.0000	1.5500e-003
Total	**0.3584**	**1.0000e-005**	**7.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4500e-003**	**1.4500e-003**	**0.0000**	**0.0000**	**1.5500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.8384	0.0860	2.1200e-003	14.6219
Unmitigated	11.8384	0.0860	2.1200e-003	14.6219

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High School	2.62516 / 6.75041	11.8384	0.0860	2.1200e-003	14.6219
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**11.8384**	**0.0860**	**2.1200e-003**	**14.6219**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High School	2.62516 / 6.75041	11.8384	0.0860	2.1200e-003	14.6219
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**11.8384**	**0.0860**	**2.1200e-003**	**14.6219**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	20.8634	1.2330	0.0000	51.6882
Unmitigated	20.8634	1.2330	0.0000	51.6882

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High School	102.78	20.8634	1.2330	0.0000	51.6882
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**20.8634**	**1.2330**	**0.0000**	**51.6882**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High School	102.78	20.8634	1.2330	0.0000	51.6882
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**20.8634**	**1.2330**	**0.0000**	**51.6882**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sacred Heart Schools Academic Arts Building- Proposed

San Mateo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	79.06	1000sqft	1.81	79,055.00	0
Other Non-Asphalt Surfaces	2.24	Acre	2.24	97,574.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Adjusted per Project Applicant.

Trips and VMT - Adjusted per Project Applicant.

Demolition -

Grading -

Vehicle Trips - No new trips.

Sacred Heart Schools Academic Arts Building- Proposed - San Mateo County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	130.00
tblConstructionPhase	NumDays	230.00	66.00
tblConstructionPhase	NumDays	20.00	34.00
tblConstructionPhase	NumDays	8.00	14.00
tblConstructionPhase	NumDays	18.00	130.00
tblConstructionPhase	NumDays	5.00	54.00
tblConstructionPhase	PhaseEndDate	12/26/2019	7/23/2019
tblConstructionPhase	PhaseEndDate	12/31/2018	1/22/2019
tblConstructionPhase	PhaseEndDate	7/6/2018	7/18/2018
tblConstructionPhase	PhaseEndDate	9/28/2018	10/22/2018
tblConstructionPhase	PhaseEndDate	6/28/2019	7/23/2019
tblConstructionPhase	PhaseEndDate	8/21/2018	10/2/2018
tblConstructionPhase	PhaseStartDate	6/29/2019	1/23/2019
tblConstructionPhase	PhaseStartDate	9/29/2018	10/23/2018
tblConstructionPhase	PhaseStartDate	8/22/2018	10/3/2018
tblConstructionPhase	PhaseStartDate	1/1/2019	1/23/2019
tblConstructionPhase	PhaseStartDate	7/7/2018	7/19/2018
tblGrading	AcresOfGrading	7.00	4.00
tblGrading	MaterialExported	0.00	15,000.00
tblGrading	MaterialExported	0.00	15,000.00
tblLandUse	BuildingSpaceSquareFeet	79,060.00	79,055.00
tblLandUse	LandUseSquareFeet	79,060.00	79,055.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	96.00	1,222.00
tblTripsAndVMT	HaulingTripNumber	1,875.00	833.00
tblTripsAndVMT	HaulingTripNumber	1,875.00	833.00

tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.7844	53.7905	27.4165	0.0814	18.5133	2.6010	21.1143	10.0479	2.3938	12.4417	0.0000	8,772.5988	8,772.5988	1.6003	0.0000	8,812.6072
2019	8.2938	24.8575	20.2073	0.0407	0.8036	1.3189	2.1226	0.2176	1.2404	1.4580	0.0000	4,039.2369	4,039.2369	0.7183	0.0000	4,057.1951
Maximum	**8.2938**	**53.7905**	**27.4165**	**0.0814**	**18.5133**	**2.6010**	**21.1143**	**10.0479**	**2.3938**	**12.4417**	**0.0000**	**8,772.5988**	**8,772.5988**	**1.6003**	**0.0000**	**8,812.6072**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.7844	53.7905	27.4165	0.0814	18.5133	2.6010	21.1143	10.0479	2.3938	12.4417	0.0000	8,772.5988	8,772.5988	1.6003	0.0000	8,812.6072
2019	8.2938	24.8575	20.2073	0.0407	0.8036	1.3189	2.1226	0.2176	1.2404	1.4580	0.0000	4,039.2369	4,039.2369	0.7183	0.0000	4,057.1951
Maximum	**8.2938**	**53.7905**	**27.4165**	**0.0814**	**18.5133**	**2.6010**	**21.1143**	**10.0479**	**2.3938**	**12.4417**	**0.0000**	**8,772.5988**	**8,772.5988**	**1.6003**	**0.0000**	**8,812.6072**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9642	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Energy	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.0028**	**0.3515**	**0.3036**	**2.1100e-003**	**0.0000**	**0.0267**	**0.0267**	**0.0000**	**0.0267**	**0.0267**		**421.7294**	**421.7294**	**8.1300e-003**	**7.7300e-003**	**424.2366**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9642	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Energy	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.0028**	**0.3515**	**0.3036**	**2.1100e-003**	**0.0000**	**0.0267**	**0.0267**	**0.0000**	**0.0267**	**0.0267**		**421.7294**	**421.7294**	**8.1300e-003**	**7.7300e-003**	**424.2366**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2018	7/18/2018	5	34	
2	Site Preparation	Site Preparation	7/19/2018	10/2/2018	5	54	
3	Grading	Grading	10/3/2018	10/22/2018	5	14	
4	Building Construction	Building Construction	10/23/2018	1/22/2019	5	66	
5	Paving	Paving	1/23/2019	7/23/2019	5	130	
6	Architectural Coating	Architectural Coating	1/23/2019	7/23/2019	5	130	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.24

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,583; Non-Residential Outdoor: 39,528; Striped Parking Area: 5,854 (Architectural Coating – sqft)

OffRoad Equipment

Sacred Heart Schools Academic Arts Building- Proposed - San Mateo County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,222.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	833.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	833.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	74.00	29.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6080	0.0000	0.6080	0.0921	0.0000	0.0921			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.6080**	**1.9386**	**2.5465**	**0.0921**	**1.8048**	**1.8969**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3784	12.9406	4.7325	0.0305	0.6239	0.0540	0.6780	0.1707	0.0517	0.2224		3,420.0954	3,420.0954	0.4031		3,430.1723
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0314	0.3800	1.2300e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		122.6680	122.6680	2.8500e-003		122.7391
Total	**0.4278**	**12.9719**	**5.1125**	**0.0318**	**0.7472**	**0.0548**	**0.8019**	**0.2034**	**0.0524**	**0.2558**		**3,542.7634**	**3,542.7634**	**0.4059**		**3,552.9114**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6080	0.0000	0.6080	0.0921	0.0000	0.0921			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.6080**	**1.9386**	**2.5465**	**0.0921**	**1.8048**	**1.8969**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3784	12.9406	4.7325	0.0305	0.6239	0.0540	0.6780	0.1707	0.0517	0.2224		3,420.0954	3,420.0954	0.4031		3,430.1723
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0314	0.3800	1.2300e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		122.6680	122.6680	2.8500e-003		122.7391
Total	**0.4278**	**12.9719**	**5.1125**	**0.0318**	**0.7472**	**0.0548**	**0.8019**	**0.2034**	**0.0524**	**0.2558**		**3,542.7634**	**3,542.7634**	**0.4059**		**3,552.9114**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0977	0.0000	18.0977	9.9354	0.0000	9.9354			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0977**	**2.5769**	**20.6746**	**9.9354**	**2.3708**	**12.3062**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1624	5.5541	2.0312	0.0131	0.2678	0.0232	0.2910	0.0733	0.0222	0.0955		1,467.9024	1,467.9024	0.1730		1,472.2274
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0376	0.4560	1.4800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		147.2016	147.2016	3.4100e-003		147.2869
Total	**0.2217**	**5.5917**	**2.4872**	**0.0146**	**0.4157**	**0.0241**	**0.4398**	**0.1125**	**0.0230**	**0.1355**		**1,615.1039**	**1,615.1039**	**0.1764**		**1,619.5143**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0977	0.0000	18.0977	9.9354	0.0000	9.9354			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0977**	**2.5769**	**20.6746**	**9.9354**	**2.3708**	**12.3062**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1624	5.5541	2.0312	0.0131	0.2678	0.0232	0.2910	0.0733	0.0222	0.0955		1,467.9024	1,467.9024	0.1730		1,472.2274
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0376	0.4560	1.4800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		147.2016	147.2016	3.4100e-003		147.2869
Total	**0.2217**	**5.5917**	**2.4872**	**0.0146**	**0.4157**	**0.0241**	**0.4398**	**0.1125**	**0.0230**	**0.1355**		**1,615.1039**	**1,615.1039**	**0.1764**		**1,619.5143**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4463	0.0000	6.4463	3.3613	0.0000	3.3613			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272		2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.4463**	**1.5513**	**7.9976**	**3.3613**	**1.4272**	**4.7885**		**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6265	21.4229	7.8346	0.0505	1.0329	0.0894	1.1223	0.2826	0.0855	0.3682		5,661.9092	5,661.9092	0.6673		5,678.5912
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0314	0.3800	1.2300e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		122.6680	122.6680	2.8500e-003		122.7391
Total	**0.6759**	**21.4542**	**8.2146**	**0.0518**	**1.1561**	**0.0902**	**1.2463**	**0.3153**	**0.0862**	**0.4016**		**5,784.5772**	**5,784.5772**	**0.6701**		**5,801.3303**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4463	0.0000	6.4463	3.3613	0.0000	3.3613			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272	0.0000	2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.4463**	**1.5513**	**7.9976**	**3.3613**	**1.4272**	**4.7885**	**0.0000**	**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6265	21.4229	7.8346	0.0505	1.0329	0.0894	1.1223	0.2826	0.0855	0.3682		5,661.9092	5,661.9092	0.6673		5,678.5912
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0314	0.3800	1.2300e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		122.6680	122.6680	2.8500e-003		122.7391
Total	**0.6759**	**21.4542**	**8.2146**	**0.0518**	**1.1561**	**0.0902**	**1.2463**	**0.3153**	**0.0862**	**0.4016**		**5,784.5772**	**5,784.5772**	**0.6701**		**5,801.3303**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1515	3.8729	1.4360	7.9700e-003	0.1957	0.0300	0.2257	0.0563	0.0287	0.0850		870.3209	870.3209	0.0759		872.2173
Worker	0.2439	0.1547	1.8745	6.0700e-003	0.6079	3.7600e-003	0.6117	0.1612	3.4600e-003	0.1647		605.1620	605.1620	0.0140		605.5129
Total	**0.3953**	**4.0276**	**3.3105**	**0.0140**	**0.8036**	**0.0338**	**0.8374**	**0.2176**	**0.0322**	**0.2497**		**1,475.4828**	**1,475.4828**	**0.0899**		**1,477.7302**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1515	3.8729	1.4360	7.9700e-003	0.1957	0.0300	0.2257	0.0563	0.0287	0.0850		870.3209	870.3209	0.0759		872.2173
Worker	0.2439	0.1547	1.8745	6.0700e-003	0.6079	3.7600e-003	0.6117	0.1612	3.4600e-003	0.1647		605.1620	605.1620	0.0140		605.5129
Total	**0.3953**	**4.0276**	**3.3105**	**0.0140**	**0.8036**	**0.0338**	**0.8374**	**0.2176**	**0.0322**	**0.2497**		**1,475.4828**	**1,475.4828**	**0.0899**		**1,477.7302**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1351	3.6429	1.3610	7.8700e-003	0.1957	0.0253	0.2211	0.0563	0.0242	0.0806		861.3413	861.3413	0.0746		863.2061
Worker	0.2209	0.1358	1.6825	5.8800e-003	0.6079	3.7400e-003	0.6116	0.1612	3.4400e-003	0.1647		586.3154	586.3154	0.0124		586.6256
Total	**0.3559**	**3.7787**	**3.0435**	**0.0138**	**0.8036**	**0.0291**	**0.8327**	**0.2176**	**0.0277**	**0.2452**		**1,447.6567**	**1,447.6567**	**0.0870**		**1,449.8316**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1351	3.6429	1.3610	7.8700e-003	0.1957	0.0253	0.2211	0.0563	0.0242	0.0806		861.3413	861.3413	0.0746		863.2061
Worker	0.2209	0.1358	1.6825	5.8800e-003	0.6079	3.7400e-003	0.6116	0.1612	3.4400e-003	0.1647		586.3154	586.3154	0.0124		586.6256
Total	**0.3559**	**3.7787**	**3.0435**	**0.0138**	**0.8036**	**0.0291**	**0.8327**	**0.2176**	**0.0277**	**0.2452**		**1,447.6567**	**1,447.6567**	**0.0870**		**1,449.8316**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637		1,843.3191	1,843.3191	0.5671		1,857.4966
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2679**	**12.7604**	**12.3130**	**0.0189**		**0.7196**	**0.7196**		**0.6637**	**0.6637**		**1,843.3191**	**1,843.3191**	**0.5671**		**1,857.4966**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0597	0.0367	0.4547	1.5900e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		158.4636	158.4636	3.3500e-003		158.5475
Total	**0.0597**	**0.0367**	**0.4547**	**1.5900e-003**	**0.1643**	**1.0100e-003**	**0.1653**	**0.0436**	**9.3000e-004**	**0.0445**		**158.4636**	**158.4636**	**3.3500e-003**		**158.5475**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637	0.0000	1,843.3191	1,843.3191	0.5671		1,857.4966
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2679**	**12.7604**	**12.3130**	**0.0189**		**0.7196**	**0.7196**		**0.6637**	**0.6637**	**0.0000**	**1,843.3191**	**1,843.3191**	**0.5671**		**1,857.4966**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0597	0.0367	0.4547	1.5900e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		158.4636	158.4636	3.3500e-003		158.5475
Total	**0.0597**	**0.0367**	**0.4547**	**1.5900e-003**	**0.1643**	**1.0100e-003**	**0.1653**	**0.0436**	**9.3000e-004**	**0.0445**		**158.4636**	**158.4636**	**3.3500e-003**		**158.5475**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**6.9214**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0448	0.0275	0.3411	1.1900e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		118.8477	118.8477	2.5100e-003		118.9106
Total	**0.0448**	**0.0275**	**0.3411**	**1.1900e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**118.8477**	**118.8477**	**2.5100e-003**		**118.9106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**6.9214**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0448	0.0275	0.3411	1.1900e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		118.8477	118.8477	2.5100e-003		118.9106
Total	**0.0448**	**0.0275**	**0.3411**	**1.1900e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**118.8477**	**118.8477**	**2.5100e-003**		**118.9106**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722
Other Non-Asphalt Surfaces	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
NaturalGas Unmitigated	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High School	3584.55	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0387**	**0.3514**	**0.2952**	**2.1100e-003**		**0.0267**	**0.0267**		**0.0267**	**0.0267**		**421.7116**	**421.7116**	**8.0800e-003**	**7.7300e-003**	**424.2176**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High School	3.58455	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0387**	**0.3514**	**0.2952**	**2.1100e-003**		**0.0267**	**0.0267**		**0.0267**	**0.0267**		**421.7116**	**421.7116**	**8.0800e-003**	**7.7300e-003**	**424.2176**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9642	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Unmitigated	1.9642	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2370					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.9000e-004	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Total	**1.9642**	**8.0000e-005**	**8.3800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0178**	**0.0178**	**5.0000e-005**		**0.0190**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2370					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.9000e-004	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Total	**1.9642**	**8.0000e-005**	**8.3800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0178**	**0.0178**	**5.0000e-005**		**0.0190**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sacred Heart Schools Academic Arts Building- Proposed

San Mateo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	79.06	1000sqft	1.81	79,055.00	0
Other Non-Asphalt Surfaces	2.24	Acre	2.24	97,574.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Adjusted per Project Applicant.

Trips and VMT - Adjusted per Project Applicant.

Demolition -

Grading -

Vehicle Trips - No new trips.

Sacred Heart Schools Academic Arts Building- Proposed - San Mateo County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	130.00
tblConstructionPhase	NumDays	230.00	66.00
tblConstructionPhase	NumDays	20.00	34.00
tblConstructionPhase	NumDays	8.00	14.00
tblConstructionPhase	NumDays	18.00	130.00
tblConstructionPhase	NumDays	5.00	54.00
tblConstructionPhase	PhaseEndDate	12/26/2019	7/23/2019
tblConstructionPhase	PhaseEndDate	12/31/2018	1/22/2019
tblConstructionPhase	PhaseEndDate	7/6/2018	7/18/2018
tblConstructionPhase	PhaseEndDate	9/28/2018	10/22/2018
tblConstructionPhase	PhaseEndDate	6/28/2019	7/23/2019
tblConstructionPhase	PhaseEndDate	8/21/2018	10/2/2018
tblConstructionPhase	PhaseStartDate	6/29/2019	1/23/2019
tblConstructionPhase	PhaseStartDate	9/29/2018	10/23/2018
tblConstructionPhase	PhaseStartDate	8/22/2018	10/3/2018
tblConstructionPhase	PhaseStartDate	1/1/2019	1/23/2019
tblConstructionPhase	PhaseStartDate	7/7/2018	7/19/2018
tblGrading	AcresOfGrading	7.00	4.00
tblGrading	MaterialExported	0.00	15,000.00
tblGrading	MaterialExported	0.00	15,000.00
tblLandUse	BuildingSpaceSquareFeet	79,060.00	79,055.00
tblLandUse	LandUseSquareFeet	79,060.00	79,055.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	96.00	1,222.00
tblTripsAndVMT	HaulingTripNumber	1,875.00	833.00
tblTripsAndVMT	HaulingTripNumber	1,875.00	833.00

tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.7954	53.9762	27.5813	0.0808	18.5133	2.6016	21.1149	10.0479	2.3944	12.4423	0.0000	8,706.9508	8,706.9508	1.6078	0.0000	8,747.1465
2019	8.3053	24.9534	20.2900	0.0402	0.8036	1.3195	2.1231	0.2176	1.2409	1.4585	0.0000	3,988.3227	3,988.3227	0.7198	0.0000	4,006.3184
Maximum	**8.3053**	**53.9762**	**27.5813**	**0.0808**	**18.5133**	**2.6016**	**21.1149**	**10.0479**	**2.3944**	**12.4423**	**0.0000**	**8,706.9508**	**8,706.9508**	**1.6078**	**0.0000**	**8,747.1465**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.7954	53.9762	27.5813	0.0808	18.5133	2.6016	21.1149	10.0479	2.3944	12.4423	0.0000	8,706.9508	8,706.9508	1.6078	0.0000	8,747.1465
2019	8.3053	24.9534	20.2900	0.0402	0.8036	1.3195	2.1231	0.2176	1.2409	1.4585	0.0000	3,988.3227	3,988.3227	0.7198	0.0000	4,006.3184
Maximum	**8.3053**	**53.9762**	**27.5813**	**0.0808**	**18.5133**	**2.6016**	**21.1149**	**10.0479**	**2.3944**	**12.4423**	**0.0000**	**8,706.9508**	**8,706.9508**	**1.6078**	**0.0000**	**8,747.1465**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9642	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Energy	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.0028**	**0.3515**	**0.3036**	**2.1100e-003**	**0.0000**	**0.0267**	**0.0267**	**0.0000**	**0.0267**	**0.0267**		**421.7294**	**421.7294**	**8.1300e-003**	**7.7300e-003**	**424.2366**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.9642	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Energy	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**2.0028**	**0.3515**	**0.3036**	**2.1100e-003**	**0.0000**	**0.0267**	**0.0267**	**0.0000**	**0.0267**	**0.0267**		**421.7294**	**421.7294**	**8.1300e-003**	**7.7300e-003**	**424.2366**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2018	7/18/2018	5	34	
2	Site Preparation	Site Preparation	7/19/2018	10/2/2018	5	54	
3	Grading	Grading	10/3/2018	10/22/2018	5	14	
4	Building Construction	Building Construction	10/23/2018	1/22/2019	5	66	
5	Paving	Paving	1/23/2019	7/23/2019	5	130	
6	Architectural Coating	Architectural Coating	1/23/2019	7/23/2019	5	130	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.24

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,583; Non-Residential Outdoor: 39,528; Striped Parking Area: 5,854 (Architectural Coating – sqft)

OffRoad Equipment

Sacred Heart Schools Academic Arts Building- Proposed - San Mateo County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,222.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	833.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	833.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	74.00	29.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6080	0.0000	0.6080	0.0921	0.0000	0.0921			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.6080**	**1.9386**	**2.5465**	**0.0921**	**1.8048**	**1.8969**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3888	13.3529	4.9052	0.0302	0.6239	0.0554	0.6794	0.1707	0.0530	0.2238		3,385.0095	3,385.0095	0.4077		3,395.2010
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0387	0.3721	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		115.1042	115.1042	2.7400e-003		115.1727
Total	**0.4436**	**13.3916**	**5.2773**	**0.0314**	**0.7472**	**0.0562**	**0.8033**	**0.2034**	**0.0537**	**0.2571**		**3,500.1137**	**3,500.1137**	**0.4104**		**3,510.3737**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6080	0.0000	0.6080	0.0921	0.0000	0.0921			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.6080**	**1.9386**	**2.5465**	**0.0921**	**1.8048**	**1.8969**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3888	13.3529	4.9052	0.0302	0.6239	0.0554	0.6794	0.1707	0.0530	0.2238		3,385.0095	3,385.0095	0.4077		3,395.2010
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0387	0.3721	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		115.1042	115.1042	2.7400e-003		115.1727
Total	**0.4436**	**13.3916**	**5.2773**	**0.0314**	**0.7472**	**0.0562**	**0.8033**	**0.2034**	**0.0537**	**0.2571**		**3,500.1137**	**3,500.1137**	**0.4104**		**3,510.3737**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0977	0.0000	18.0977	9.9354	0.0000	9.9354			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0977**	**2.5769**	**20.6746**	**9.9354**	**2.3708**	**12.3062**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1669	5.7310	2.1053	0.0130	0.2678	0.0238	0.2916	0.0733	0.0228	0.0960		1,452.8435	1,452.8435	0.1750		1,457.2177
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0658	0.0464	0.4466	1.3900e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		138.1250	138.1250	3.2900e-003		138.2073
Total	**0.2326**	**5.7775**	**2.5518**	**0.0144**	**0.4157**	**0.0247**	**0.4404**	**0.1125**	**0.0236**	**0.1361**		**1,590.9686**	**1,590.9686**	**0.1783**		**1,595.4250**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0977	0.0000	18.0977	9.9354	0.0000	9.9354			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0977**	**2.5769**	**20.6746**	**9.9354**	**2.3708**	**12.3062**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1669	5.7310	2.1053	0.0130	0.2678	0.0238	0.2916	0.0733	0.0228	0.0960		1,452.8435	1,452.8435	0.1750		1,457.2177
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0658	0.0464	0.4466	1.3900e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		138.1250	138.1250	3.2900e-003		138.2073
Total	**0.2326**	**5.7775**	**2.5518**	**0.0144**	**0.4157**	**0.0247**	**0.4404**	**0.1125**	**0.0236**	**0.1361**		**1,590.9686**	**1,590.9686**	**0.1783**		**1,595.4250**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4463	0.0000	6.4463	3.3613	0.0000	3.3613			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272		2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.4463**	**1.5513**	**7.9976**	**3.3613**	**1.4272**	**4.7885**		**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6436	22.1054	8.1204	0.0500	1.0329	0.0918	1.1247	0.2826	0.0878	0.3704		5,603.8250	5,603.8250	0.6749		5,620.6968
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0387	0.3721	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		115.1042	115.1042	2.7400e-003		115.1727
Total	**0.6984**	**22.1441**	**8.4925**	**0.0512**	**1.1561**	**0.0925**	**1.2487**	**0.3153**	**0.0885**	**0.4038**		**5,718.9292**	**5,718.9292**	**0.6776**		**5,735.8696**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4463	0.0000	6.4463	3.3613	0.0000	3.3613			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272	0.0000	2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.4463**	**1.5513**	**7.9976**	**3.3613**	**1.4272**	**4.7885**	**0.0000**	**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6436	22.1054	8.1204	0.0500	1.0329	0.0918	1.1247	0.2826	0.0878	0.3704		5,603.8250	5,603.8250	0.6749		5,620.6968
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0387	0.3721	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		115.1042	115.1042	2.7400e-003		115.1727
Total	**0.6984**	**22.1441**	**8.4925**	**0.0512**	**1.1561**	**0.0925**	**1.2487**	**0.3153**	**0.0885**	**0.4038**		**5,718.9292**	**5,718.9292**	**0.6776**		**5,735.8696**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1589	3.9449	1.5767	7.8400e-003	0.1957	0.0306	0.2263	0.0563	0.0293	0.0856		855.5176	855.5176	0.0782		857.4715
Worker	0.2705	0.1909	1.8358	5.7000e-003	0.6079	3.7600e-003	0.6117	0.1612	3.4600e-003	0.1647		567.8474	567.8474	0.0135		568.1855
Total	**0.4293**	**4.1358**	**3.4125**	**0.0135**	**0.8036**	**0.0344**	**0.8380**	**0.2176**	**0.0328**	**0.2503**		**1,423.3649**	**1,423.3649**	**0.0917**		**1,425.6570**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1589	3.9449	1.5767	7.8400e-003	0.1957	0.0306	0.2263	0.0563	0.0293	0.0856		855.5176	855.5176	0.0782		857.4715
Worker	0.2705	0.1909	1.8358	5.7000e-003	0.6079	3.7600e-003	0.6117	0.1612	3.4600e-003	0.1647		567.8474	567.8474	0.0135		568.1855
Total	**0.4293**	**4.1358**	**3.4125**	**0.0135**	**0.8036**	**0.0344**	**0.8380**	**0.2176**	**0.0328**	**0.2503**		**1,423.3649**	**1,423.3649**	**0.0917**		**1,425.6570**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1414	3.7069	1.4887	7.7400e-003	0.1957	0.0259	0.2216	0.0563	0.0248	0.0811		846.5727	846.5727	0.0766		848.4876
Worker	0.2452	0.1677	1.6375	5.5200e-003	0.6079	3.7400e-003	0.6116	0.1612	3.4400e-003	0.1647		550.1699	550.1699	0.0119		550.4674
Total	**0.3866**	**3.8746**	**3.1262**	**0.0133**	**0.8036**	**0.0296**	**0.8333**	**0.2176**	**0.0282**	**0.2458**		**1,396.7425**	**1,396.7425**	**0.0885**		**1,398.9549**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1414	3.7069	1.4887	7.7400e-003	0.1957	0.0259	0.2216	0.0563	0.0248	0.0811		846.5727	846.5727	0.0766		848.4876
Worker	0.2452	0.1677	1.6375	5.5200e-003	0.6079	3.7400e-003	0.6116	0.1612	3.4400e-003	0.1647		550.1699	550.1699	0.0119		550.4674
Total	**0.3866**	**3.8746**	**3.1262**	**0.0133**	**0.8036**	**0.0296**	**0.8333**	**0.2176**	**0.0282**	**0.2458**		**1,396.7425**	**1,396.7425**	**0.0885**		**1,398.9549**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637		1,843.3191	1,843.3191	0.5671		1,857.4966
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2679**	**12.7604**	**12.3130**	**0.0189**		**0.7196**	**0.7196**		**0.6637**	**0.6637**		**1,843.3191**	**1,843.3191**	**0.5671**		**1,857.4966**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0663	0.0453	0.4426	1.4900e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		148.6946	148.6946	3.2200e-003		148.7750
Total	**0.0663**	**0.0453**	**0.4426**	**1.4900e-003**	**0.1643**	**1.0100e-003**	**0.1653**	**0.0436**	**9.3000e-004**	**0.0445**		**148.6946**	**148.6946**	**3.2200e-003**		**148.7750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637	0.0000	1,843.3191	1,843.3191	0.5671		1,857.4966
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2679**	**12.7604**	**12.3130**	**0.0189**		**0.7196**	**0.7196**		**0.6637**	**0.6637**	**0.0000**	**1,843.3191**	**1,843.3191**	**0.5671**		**1,857.4966**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0663	0.0453	0.4426	1.4900e-003	0.1643	1.0100e-003	0.1653	0.0436	9.3000e-004	0.0445		148.6946	148.6946	3.2200e-003		148.7750
Total	**0.0663**	**0.0453**	**0.4426**	**1.4900e-003**	**0.1643**	**1.0100e-003**	**0.1653**	**0.0436**	**9.3000e-004**	**0.0445**		**148.6946**	**148.6946**	**3.2200e-003**		**148.7750**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**6.9214**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0497	0.0340	0.3319	1.1200e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		111.5209	111.5209	2.4100e-003		111.5812
Total	**0.0497**	**0.0340**	**0.3319**	**1.1200e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**111.5209**	**111.5209**	**2.4100e-003**		**111.5812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**6.9214**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0497	0.0340	0.3319	1.1200e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		111.5209	111.5209	2.4100e-003		111.5812
Total	**0.0497**	**0.0340**	**0.3319**	**1.1200e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**111.5209**	**111.5209**	**2.4100e-003**		**111.5812**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722
Other Non-Asphalt Surfaces	0.498968	0.049513	0.248277	0.134909	0.018184	0.006326	0.020670	0.006254	0.003828	0.003354	0.008577	0.000418	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
NaturalGas Unmitigated	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High School	3584.55	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0387**	**0.3514**	**0.2952**	**2.1100e-003**		**0.0267**	**0.0267**		**0.0267**	**0.0267**		**421.7116**	**421.7116**	**8.0800e-003**	**7.7300e-003**	**424.2176**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High School	3.58455	0.0387	0.3514	0.2952	2.1100e-003		0.0267	0.0267		0.0267	0.0267		421.7116	421.7116	8.0800e-003	7.7300e-003	424.2176
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0387**	**0.3514**	**0.2952**	**2.1100e-003**		**0.0267**	**0.0267**		**0.0267**	**0.0267**		**421.7116**	**421.7116**	**8.0800e-003**	**7.7300e-003**	**424.2176**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9642	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Unmitigated	1.9642	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2370					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.9000e-004	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Total	**1.9642**	**8.0000e-005**	**8.3800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0178**	**0.0178**	**5.0000e-005**		**0.0190**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2370					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.9000e-004	8.0000e-005	8.3800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0178	0.0178	5.0000e-005		0.0190
Total	**1.9642**	**8.0000e-005**	**8.3800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0178**	**0.0178**	**5.0000e-005**		**0.0190**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation