SPECIAL MEETING OF THE CITY OF CONCORD PLANNING COMMISSION

Thursday, December 15, 2016
6:30 p.m. – Council Chamber
1950 Parkside Drive, Concord

Planning Commission Members:
Jason Laub, Vice Chair
Dominic Aliano, Commissioner
LaMar Anderson, Commissioner
Ray Barbour, Commissioner

SPECIAL MEETING
6:30 p.m. – Council Chamber

I. ROLL CALL

II. PLEDGE TO THE FLAG

III. PUBLIC COMMENT PERIOD

IV. REORGANIZATION OF PLANNING COMMISSION

1. Nomination and designation of the Vice Chairperson of the Planning Commission for 2016/17.

V. COMMISSION APPOINTMENTS

1. Nomination and designation of TRANSPAC Liaison and Alternate for 2016/17.

2. Nomination and designation of Bicycle and Pedestrian Advisory Committee Representative and Alternate for 2016/17.

VI. ADDITIONS / CONTINUANCES / WITHDRAWALS

VII. CONSENT CALENDAR – None

VIII. PUBLIC HEARINGS

1. **Argent Concord (PL16333 – UP, DR) –** Application for a new high density residential building with approximately 181 new residential units, and podium and subterranean parking on a 1.57-acre site at 2400 Willow Pass Road. The General Plan designation is Downtown Mixed Use; Zoning classification is DMX (Downtown Mixed Use, 10,000 sq. ft. minimum lot area); APN 126-082-008. An Initial Study (IS) was prepared to assess the project's environmental impacts pursuant to CEQA. The IS was conducted to evaluate consistency between the

proposed project, the General Plan and Downtown Specific Plan as defined under the California Environmental Quality Act (CEQA) Guidelines. The Initial Study was prepared pursuant to CEQA Guidelines, Section 15183 (a), applicable sections of California Environmental Quality Act of 1970, Public Resources Code 21000, et seq., as amended an implementing State CEQA Guidelines, Title 14, Chapter 3 of the California Code of Regulations. The IS determination is that the proposed Project is a Project consistent with a Community Plan or Zoning, that there are no project-specific significant effects which are peculiar to the project or its site, and No Additional Environmental Review is Required. **Project Planner: Afshan Hamid @ (925) 671-3281**

2. **Todos Santos Design Guidelines (PL16048 – DR) –** The City of Concord has prepared a Final Draft of the Todos Santos Design Guidelines for review and recommendation to City Council for review and adoption. The Todos Santos Design Guidelines (TSDG) implements recommendations from the earlier Concord Downtown Specific Plan (2014) to design and prepare downtown design guidelines. The area covered is the Inner and Outer Core of the downtown as defined within the TSDG. The TSDG are intended provide design guidance on architecture, façade improvement and renovations, landscaping and signage for private development within the downtown. The TSDG provide a comprehensive vision to strengthen the urban fabric, and enhance placemaking, walkability, and architecture. The TSDG would provide guidance to developers and architects, and serve as a tool for design and development. Pursuant to the provisions of the California Environmental Quality Act (CEQA) of 1970, as amended, the project is classified as Categorically Exempt pursuant to 15301(c) Class 1, and 15304(h), Class 4, and no further environmental review is required. **Project Planner: Afshan Hamid @ (925) 671-3281**

IX. COMMISSION CONSIDERATIONS

X. STAFF REPORTS / ANNOUNCEMENTS

XI. COMMISSION REPORTS / ANNOUNCEMENTS

XII. FUTURE PUBLIC HEARING ITEMS

XIII. ADJOURNMENT

NOTICE TO PUBLIC

ADA ACCOMMODATION

In accordance with the Americans With Disabilities Act and California Law, it is the policy of the City of Concord to offer its public programs, services and meetings in a manner that is readily accessible to everyone, including those with disabilities. If you are disabled and require a copy of a public hearing notice, or an agenda and/or agenda packet in an appropriate alternative format; or if you require other accommodation, please contact the ADA Coordinator at (925) 671-3021, at least five (5) days in advance of the hearing. Advance notification within this guideline will enable the City to make reasonable arrangements to ensure accessibility.

APPEALS

Decisions of the Planning Commission on use permits, variances, major subdivisions, appeals taken from decisions of the Zoning Administrator or staff interpretations of the Zoning Code may be appealed to the City Council. Appeals and the required filing fee must be filed with the City Clerk within ten (10) days of the decision.

If you challenge any of the foregoing described actions in court, an appeal first of said actions to the Zoning Administrator, Planning Commission, and/or City Council (as applicable) in the manner and within the time period established in Development Code Chapter 18.510 (Appeals and Calls for Review) is required, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Zoning Administrator and/or Planning Commission (as applicable) at, or prior to, said public hearing.

APPLICANT'S SUBMITTAL OF INFORMATION

Submittal of information by a project applicant subsequent to the distribution of the agenda packet but prior to the public hearing may result in a continuance of the subject agenda item to the next regularly scheduled Planning Commission meeting, if the Commission determines that such late submittal compromises its ability to fully consider and evaluate the project at the time of the public hearing.

CONSENT CALENDAR

Adoption of the Consent Calendar may be made by one motion of the Planning Commission, provided that any Commissioner, individual, or organization may request removal of an item from the Consent Calendar for separate consideration. If a request for removal of an item from the Consent Calendar has been received, the Chair may defer action on the particular item and place the same on the regular agenda for consideration in any order s/he deems appropriate.

CORRESPONDENCE

Correspondence and writings received within 72 hours of the scheduled Planning Commission meeting that constitute a public record under the Public Records Act concerning any matter on the agenda is available for inspection during normal business hours at the Permit Center located at 1950 Parkside Drive, Concord. For additional information contact the Planning Division at (925) 671-3152.

HEARINGS

Persons who wish to speak on hearings listed on the agenda will be heard when the hearing is opened, except on hearing items previously heard and closed to public comment. Each public speaker should limit their comments to three (3) minutes or less. The Chair may grant additional time. The project applicant normally shall be the first person to make a presentation when a hearing is opened for public comment. The project applicant's presentation should not exceed ten (10) minutes unless the Chair grants permission for a longer presentation. After the public has commented, the item is closed to further public comment and brought to the Planning Commission level for discussion and action. Further comment from the audience will not be received unless requested by the Commission. No public hearing or hearing shall commence after 11:00 p.m. unless this rule is waived by majority vote of the Commission.

MEETING RECORDS

Planning Commission meetings are available for viewing on the City's website, www.cityofconcord.org and at the Concord Public Library. Copies of DVDs of the Planning Commission Meeting are available for purchase. Contact the Planning Division at (925) 671-3152 for further information.

NOTICE TO THE HEARING IMPAIRED

The Council Chamber is equipped with Easy Listener Sound Amplifier units for use by the hearing impaired. The units operate in conjunction with the Chamber's sound system. You may request the Easy Listener Phonic Ear Personal Sound Amplifier from the staff for personal use during Commission meetings.

ROUTINE AGENDA ITEMS AND CONTINUED ITEMS

All routine and continued items will be considered by the Planning Commission at the beginning of the meeting. There will not be separate discussions of these items unless a request is made prior to the time the Planning Commission considers the motions.

SPEAKER'S CARD

Members of the audience who wish to address the Planning Commission should complete a speaker's card available in the lobby or at the front bench. Submit the completed card to staff before the item is called, preferably before the meeting begins.

TELEVISED MEETINGS

All Planning Commission meetings are broadcast live on Astound Broadband channel 29 and Comcast channel 28. The meeting is replayed on the Thursday following the meeting at 8:00 a.m., 2:00 p.m. and 8:00 p.m. Replays are also broadcast on Fridays and Saturdays. Please check the City website, http://www.cityofconcord.org/about/citynews/tvlistings.pdf or check the channels for broadcast times.

NEXT PLANNING COMMISSION MEETINGS:

December 21, 2016: ***CANCELLED***
January 4, 2017: 6:30 pm – Council Chamber

Concord

REPORT TO PLANNING COMMISSION

DATE: December 15, 2016

SUBJECT: **Argent Concord (PL16333 – UP, MP, DR)**

Recommendation: **Adopt Resolution # 16-33 PC, determining that no further environmental review is required pursuant to Section 15183 of the California Environmental Quality Act, and approving the Argent Concord Use Permit, Minor Use Permit, and Design Review (PL16333 – UP, MP, DR).**

I. Introduction

A. Application Request

Application for a Use Permit, Minor Use Permit, and Design Review for a 181-unit apartment seven-story multi-family rental residential project with one below grade and two levels of podium style parking on a 1.53 acre site.

Pursuant to the Initial Study prepared for purposes of California Environmental Quality Act (CEQA) (included as Attachment G), the proposed project is consistent with a community plan, general plan or zoning and there are no project-specific significant effects which are peculiar to the project or its site; accordingly, no further environmental review is required under CEQA Guideline Section 15183.

A Use Permit is required pursuant to the Development Code, Table 18.45.020, for a multi-family project in the DMX zoning district.

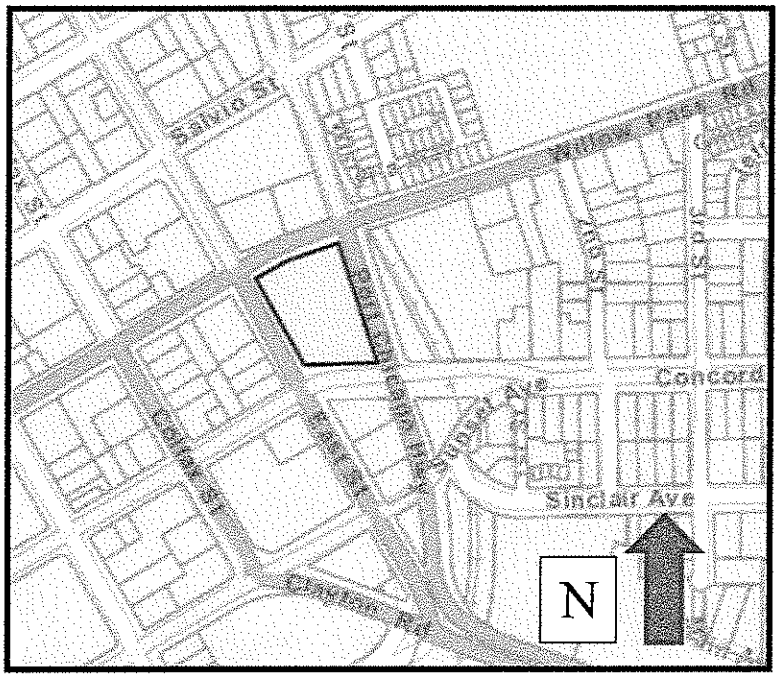
A Use Permit is required pursuant to the Development Code, 18.160.050 (G) for adjustments to parking, where a 25% reduction in parking is requested.

A Minor Use Permit is required pursuant to 18.105.040, Development Standards, to approve an increase in density.

A Design and Site review is required pursuant to 18.415, to approve a design and site review.

B. Location

The project is located at 2400 Willow Pass Road, APN: 126-082-008.



C. Applicant & Owner
David Jones
Argent Concord, LLC
121 7th Avenue
Santa Cruz, CA 95062
(650)318-8411

II. Background

On March 30, 2016, the applicant, David Jones, and the project architect, KTGY appeared at a joint meeting of the Early California Architectural Review Committee (ECAR) & Design Review Board (DRB) for preliminary review of the 2400 Willow Pass Road new multi-family residential development. In general there was support for the modern design, and ECAR and DRB recommended further developing the four-sided architecture.

On May 12, 2016, the DRB conducted a Conceptual Design Review of the preliminary application. The applicant further developed the design based on comments from the March 30th joint ECAR and DRB meeting. The DRB provided the applicant with comments regarding the site design, architecture, and landscaping. Overall the DRB was supportive and requested more details be developed for key elevations.

On August 12, 2016, the applicant filed a formal application for a Use Permit, Minor Use Permit and Design Review. The application was reviewed by the Development Advisory Committee (DAC) on August 23, 2016 and deemed incomplete by staff on September 9, 2016.

On September 22, 2016, the applicant, and project architect, appeared before the DRB for a preliminary review of the formal application. The DRB acknowledged continued support for the project and requested further refinement of some areas on the project.

On September 27, 2016, a neighborhood meeting was conducted. Postcards were mailed to surrounding properties within 300 feet of the subject property. No public was in attendance.

On October 5, 2016, the Planning Commission (PC) conducted a study session on the project and provided direction to staff and the applicant to address the inconsistencies between the proposal and the Development Code requirements. The PC made recommendations regarding setbacks, number of parking spaces, parking space standards, the loading and unloading area, incorporating new decorative light standards required by the Downtown Corridors Plan, and incorporating short-term and long-term bicycle parking standards required by the Bicycle, Pedestrian & Safe Routes to Transit Plan (Bike & Ped Plan).

On November 10, 2016, the applicant submitted revised drawings for DAC review. The DAC met on November 15, 2016, and on November 29, 2016 staff deemed the project complete.

On December 8, 2016, the applicant appeared before the DRB for final design review approval. Staff will provide an update to the Planning Commission regarding the outcome of the meeting.

III. General Information

A. General Plan

The General Plan designation is Downtown Mixed-Use.

B. Zoning

The site is zoned DMX (Downtown Mixed Use)

C. Environmental Review

Pursuant to Section 15183 of the CEQA Guidelines, projects which are consistent with the development density established by the existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was previously certified shall not require additional environmental review, except where there are project-specific effects which are peculiar to the project or its site.

In this instance, the City had previously approved the Concord 2030 Urban Area General Plan and the Downtown Specific Plan, which in turn provided the goals and policies that convey the City's long-term vision and guide for development in the downtown area, where the Argent project is located. In approving these plans, the City had previously certified the General Plan Environmental Impact Report (EIR) in 2007, the Supplemental EIR (SEIR), which was prepared in 2012 in order to assess the impacts of the City's new Development Code and Zoning Map, and in 2014, the City certified an Addendum to the 2012 SEIR to

update the SEIR in connection with the implementation of the City's Downtown Specific Plan.

To assist the City in its analysis as to whether further environmental review was necessary for the Argent project pursuant to Section 15183, the City (as the lead agency) requested that an Initial Study (IS) be prepared by Analytical Environmental Services (AES), a copy of which is included as Attachment G. The IS evaluated Section 15183 of the CEQA Guidelines impacts as a checklist (Appendix M to the CEQA guidelines) to determine the peculiar impacts of the project which were not analyzed or discussed in previous EIRs on the following resource areas: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and circulation, utilities and service systems, and mandatory findings of significance.

After an analysis of the General Plan EIR, SEIR and Addendum to the SEIR, the Initial Study determined that the proposed project is consistent with the existing zoning, Specific Plan and General Plan policies and determined that no additional environmental review is required as the impacts of the proposed project, as any environmental effects:

1. Are not peculiar to the project or the parcel on which the project would be located;
2. Were analyzed as significant effects in a prior EIR on the zoning action, general plan, and specific plan, with which the project is consistent where applicable;
3. Are not potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan and specific plan; and,
4. Are not previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

Moreover, the Initial Study also determined that the impacts of the proposed project would be further reduced by the imposition of uniformly applied development policies or standards. Accordingly, the implementation of the proposed project complies with Section 15183 of the CEQA Guidelines and no further environmental review for this project is required.

D. Site Description

The 1.53 acre site is one parcel with four street frontages; Willow Pass Road, East Street, Port Chicago Highway and Concord Boulevard. The property is relatively flat and slopes down toward the northwest. Currently on the site is a single story 18,080 sq. ft. former Blockbuster video building and associated parking on north, west and south sides of the building. Vegetation is limited to street trees and some onsite landscaping.

The project site is located at 2400 Willow Pass Road, approximately two blocks from Todos Santos Plaza, and a quarter mile from the Concord BART station. Approximately 160 feet to the east of the project site, BART's Pittsburg/Bay Point line runs northeast to southwest.

E. Surrounding Land Use

The following table outlines the existing land use, General Plan Designation, and zoning district for the adjacent parcels:

	Existing Land Use	General Plan Designation	Zoning
North	Vacant Parcel	Downtown Mixed-Use	DMX
South	Concord Tire Center	Downtown Mixed-Use	DMX
East	Safeway Grocery Store	Commercial Mixed-Use	CMX
West	Best Little Donut House In Town and Bay Area Carbide	Downtown Mixed-Use	DMX

IV. Detailed Project Description

A. Site Planning/Circulation/Parking

The seven-story, 181-unit rental residential building is proposed with a zero lot line, where the project occupies the entire site with moderate setbacks on all four sides for sidewalks, landscaping, and bio-retention areas. The building is oriented towards East Street and maintains continuity towards the Concord BART station to the south through the East Street elevation. One below grade and two levels of podium style parking are proposed. Access to the parking garage is off Port Chicago Highway. A night gate is proposed at the entry ramp. A loading / unloading area for trash and resident move-in is proposed off Concord Boulevard. Two resident entries are proposed, one off Willow Pass Road and the second off Concord Blvd. A leasing office is located on the corner of Willow Pass Road and East Street. Six townhome units are proposed along East Street, each with their own individual entrance.

Port Chicago Highway serves as a one-way street north bound. The parking garage ingress and egress is off Port Chicago Highway with a left-in/left-out. The entry is designed for two-way circulation with a 24 ft. driveway and a four ft. center median. Guest parking and secure bicycle parking is located on the first level parking with a secured night gate access. The garage will be gated at night and accessible by residents via call box. Guests will have to be "buzzed in" by residents after hours. Willow Pass Road is a two way street, and no driveways or entrances are proposed. Concord Blvd. is a one-way street west bound with a 14 ft. wide by 55 ft. long loading / unloading area for trash pick-up and move-in. The loading / unloading area is located within the City right-of-way, parallel and adjacent to Concord Blvd.

A total of 263 parking spaces are proposed comprised of 202 resident parking spaces and 61 guest parking spaces. The applicant proposes 234 standard sized stalls with 9' x 19' dimensions, 29 compact sized stalls with 8' x 16', and 8 ADA compliant stalls. A total of 155

bicycle parking stalls are proposed on the first floor in a bike / work room. A total of 8 motorcycle stalls are proposed on parking level 1. The 263 parking spaces represent a 25% reduction of the total number of required parking spaces. The applicant requested the maximum reduction allowable within the Transit-Oriented Development zoning district, as supported by a parking demand study, prepared by Omni-Means, Ltd. included as Attachment F.

The project plan indicates two buildings; Building A is an L-shaped plan located on the corner of Willow Pass Road and Port Chicago Highway, Building B is a trapezoid shaped plan located primarily on Concord Blvd. The two buildings are connected by an open courtyard at the third level and pedestrian bridges above the third level. The two buildings are a double loaded corridor, with units facing either the streets or the internal courtyard. Each building has an elevator and access stairs for vertical circulation to the first floor lobby, parking, bike room / work area, mail boxes, storage and pet area.

B. Architecture

The proposed seven story multi-family residential project is designed as contemporary architecture with a reflection of Early California style. The overall architecture is a unified approach with two buildings on the site, connected with a similar design language. The main elevation is on East Street with six townhome units carrying a brick façade and creating a pedestrian connection at the base. A four sided architecture is proposed for Building A and B. Building A has projecting balconies, articulated bays, balanced proportions, defined comer element, wide overhangs at the roof and art elements at the base. Building B is a similar language to A, with a 90 degree roof parapet and articulated vertical residential bays. An open courtyard on the third floor opens toward Todos Santos Plaza. Residential amenities include a bike / work area, to store and repair bikes, and a pet area, to wash and groom pets, on the first floor, an open courtyard, outdoor pool, and unspecified two-story amenity space on the third floor.

The 181-units are studios, one bedrooms, two bedrooms, and town home-style units with a two and three bedroom plan. The square footages range from 646 square feet for a one bedroom unit, to 1,750 sq. ft. for a three bedroom townhome. The unit layouts vary with a total of seven options for all the units. Each unit offers a minimum 60 sq. ft. balcony. Detailed floor plans, square footages and unit counts are provided below:

Plan Number	Sq. Ft.	Total Units
Studio	646	20
1 Bedroom	717	104
2 Bedroom	1,053	51
2 Bedroom Townhome	1,535	5
3 Bedroom Townhome plus Den	1,750	1
Total	159,732	181

C. Landscaping

Streetscape Design

The site plan is a zero lot line building. The street level plan, as shown on Sheet L1.0, is designed with street trees, landscape buffers, and foundation landscaping on all four streets. The street and perimeter trees plantings are spaced in a consistent manner along the street and building edges. The plantings at the foundation and along the building edge are drought tolerant and native to Northern California. The plantings have been designed for sun and shade conditions. The planting design includes grasses and ground cover and will provide year round interest. The irrigation system for the plants is designed pursuant to the California Water Efficient Landscape Ordinance ("WELO"). The plants are designed in hydrozone groupings. Trees will have separate bubblers for irrigation. On Willow Pass Road, a raised platform adjacent to the main lobby and leasing area is proposed. The platform has raised planters with decorative drought tolerant plants. The platform is designed with movable tables and chairs. The platform at the ground level is designed with skateboard deterrent seat walls. The loading / unloading area along Concord Blvd. is screened from view with street trees and ten foot width foundation plantings. On East Street each townhome unit patio area is designed with foundation plantings. The plants at the street level are chosen to withstand street conditions including high traffic and debris collection. Along East Street three types of plants will be used in the stormwater planter. Along Willow Pass Road and Concord Blvd. at the ground level two different kinds of permeable paver pattern is designed to break up the long sidewalk areas. Staff recommends the East Street sidewalk area incorporate a paver pattern to replicate what is proposed on Willow Pass Road and Concord Blvd.

Podium Level Design

The podium level plan, opens towards Todos Santos Plaza. As shown on Sheet L2.0, the plan has a pool, seating areas, bocce ball, shade structures, cooking areas with grills and sinks, movable chairs and tables. The podium level plan is broken into passive and active areas to allow various activity levels for residents. The various areas have sun areas as well as shade areas with trellises and umbrellas. Raised concrete planters with a variety of trees and drought tolerant plantings are proposed. The plant palette incorporated fragrance and year round color and interest through flowering trees, shrubs, succulents, grasses and perennials. The podium flooring is designed with wood decking, porcelain tile and concrete pavers to distinguish various activity areas. Residents will also be able to access the amenity space off the third level.

D. Signs

The proposed signage is preliminary in nature and is intended as a placeholder. The applicant will be conditionally required to submit a final sign package, subject to review and approval, which complies with Development Code, Chapter 18.180.

E. Development Regulations

The project meets standards for lot area, lot coverage, setbacks, and building area of DMX zoning (unless otherwise noted), and all applicable requirements under the Development Code, Article IV, Development Standards.

Standards	Required/Allowed	Proposed
Density (du/net acre) minimum/maximum	33 – 100 du/net acre 52 – 157 units	118.3[1] 181 units
Floor Area Ratio (FAR) minimum	1.00	>1.00
Floor Area Ratio (FAR) maximum	6.0	4.5
Lot Area (square feet) minimum	10,000	66,646.8
Lot Width (feet) minimum		
Interior Lot	100	-
Corner Lot	110	188'-9"
Lot Depth (feet) minimum	100	246'-1"
Building Height (feet)		
Minimum	30	>30
Maximum	200	78'-9"
Building Height – First floor minimum (feet, floor to floor height)	15	11[2]
Setbacks (feet) required minimum		
Front	10	2-10[2]
Interior Side	0	-
Corner Side	10	-
Rear	0	4-11
Open Space/Unit (square feet) minimum	175	213
Parking Spaces		
Vehicle	350	263[3]
Motorcycle	7	8
Bicycle		
Short Term	14	19[4]
Long Term	43	136[4]

V. Discussion and Analysis

A. General Plan Consistency

The General Plan land use designation for the property is Downtown Mixed-Use, which promotes high density and intensity mix of residential, commercial and office

[1] See discussion titled "Density Bonus"
[2] See discussion titled "Development Regulations"
[3] See discussion titled "Adjustments to Parking Requirements"
[4] See discussion titled "Bicycle Parking"

development in Central Concord. It allows for a mix of uses that balances jobs and housing opportunities, including offices, commercial development, hotels, public/quasi-public, and residential uses. The project provides residential uses and is thus consistent with the intent of the Downtown Mixed-Use designation to establish housing opportunities in the Downtown. The project is in substantial compliance with the goals, objectives, and policies of the Concord General Plan, including "supporting higher density and mixed-use development in Downtown and near transit centers and corridors" as outlined in General Plan Principle LU-1.3.3.

The project reinforces and capitalizes on neighborhood strengths and benefits the neighborhood identity and scale by proposing building designs and materials that are consistent with the neighborhood and architecture that mitigates the mass of the building with setbacks, building relief and careful use of landscaping to blend with the surrounding neighborhood as outlined in General Plan Policy LU-1.1.1.

Additionally, the project is consistent with General Plan policies that encourage pedestrian-oriented urban design by incorporating building elements such as ground floor patios, human-scale landscaping at the street level, and outdoor seating and building entries at the street level (Policy LU-4.2.3).

B. Density Bonus

The DMX District generally permits a density between 33 and 100 units per net acre. Therefore, on the subject 1.53 acre parcel, a minimum density of 52 and a maximum density of 157 units is generally permitted. The applicant proposes to construct 181 units on a 1.53 acre parcel.

However, this project is located within one-half mile of the perimeter of the Concord BART station and is located in a Transit Station Overlay District; accordingly, the maximum density may be increased up to a maximum of 25 percent for residential projects in the Transit Station Overlay District (See Development Code Section 18.105.040). The increase in density shall only be granted as a Minor Use Permit if the project includes a minimum of at least three of the elements listed in the Transit Station Overlay District. The applicant has incorporated the following three elements into the project design.

a) *Continuity of building façades along the street with no interruptions in the progression of building and uses except for pedestrian access.*

The building encompasses an entire development block with a continuous façade on all four elevations. Pedestrian entries are incorporated into the façade as well as at the townhome units. Vehicle entry is designed into the project as part of the design language. The building architecture is a cohesive language with no interruptions.

b) *Pedestrian friendly street level building design amenities such as highly articulated façades with a variety of high quality materials and architectural*

detailing, visibility into buildings, awnings, paseos, or arcades, and signage oriented and scaled to the pedestrian, located directly behind the sidewalk.

The contemporary architecture incorporates modern high quality materials on all four sides of the building. The building is oriented toward the East Street where there is the most pedestrian and vehicular exposure. The façade is well articulated with vertical bays, projecting balconies, and articulation of architectural elements. The ground floor townhome units have a pedestrian-oriented scale and proportion. The residential units above the podium level face the interior courtyard and the street. The residential units are articulated with balconies, rhythmically placed window openings, and variation in roof height.

c) *Pedestrian amenities including wide sidewalks, weather protection through building design, landscaping, fountains, public seating or other street furniture, public art, additional lighting or other pedestrian amenities.*

Sidewalks on the property vary between 2 to 10 feet; however, when combined with the public sidewalk area, the combined pedestrian sidewalk width area increases to a maximum of 15 feet.

Landscape buffer along the street edge as well as foundation plantings are introduced along all four street edges. On Willow Pass Road and Port Chicago Highway, art panels are designed into the building walls.

For the reasons stated above, the project includes a minimum of at least three of the elements listed in the Transit Station Overlay District and therefore qualifies for a density bonus of 118.3 units per net acre.

C. Downtown Specific Plan

The City adopted its Downtown Specific Plan ("DTSP") on June 24, 2014. The Specific Plan establishes a long range vision that reflects the aspirations of the community, and outlines steps to achieve this vision. The DTSP provides a vision for how the Downtown will integrate housing, jobs, retail, and transportation linkages including pedestrian, disability access, and vehicular traffic with transit hubs. The purpose of the Specific Plan is to set forth policies focused on what is achievable to implement in the Downtown over the next 20 to 30 years and set forth actions to be undertaken by the City.

The project site is identified as an "area of interest" residential site "M". One of the objectives of the DTSP is to promote high quality infill development that successfully integrates new development with existing development. The project is consistent with this objective as it utilizes an underdeveloped infill site within the Downtown.

The project is consistent with policies that encourage a variety of living opportunities through a range of housing types and prices. The project as proposed includes six unit types at different rental rates as well as nine affordable units at very low. The project

proposes high density development within a 10-minute walk of transit and BART that is consistent with the strategy to increase the amount of residential units in Downtown. The project is consistent with the DTSP.

D. Zoning Consistency

The proposed use is allowed within the applicable zoning district and complies with all other applicable provisions of the Development Code and the Concord Municipal Code (CMC). The proposed use is classified as multi-family, which is a conditionally permitted use in the DMX (Downtown Mixed Use) Zoning District. The project meets the standards for lot area, floor area ratio, setbacks, and building height of DMX zoning, satisfying applicable requirements under Development Code, Division IV, General Development Standards, and complies with all other applicable provisions of the Development Code and Concord Municipal Code as described below.

E. Development Regulations

Setbacks

The Development Code requires minimum setbacks for individual interior and corner lots in the DMX district. The building has four primary streets and is proposed as a full development block on one parcel. The building fronts Concord Boulevard. The majority of the building maintains a 10 foot setback, except at the townhome entrance and patio area. The building at the townhome projects eight feet into the setback. As currently stated in the Development Code a "full block development" where all four sides of a site is not addressed. The lot shape is trapezoidal, with the narrowest portion facing Concord Blvd. This attributes to the unique character of the lot in terms of measuring the appropriate setbacks from the property line.

In the DMX zone, the Development Code calls for 10 foot setbacks for the front and corner sides of parcels and zero foot setbacks for the rear and interior sides. However, (similar to the interpretation provided in the neighboring Concord Village project), because the project is a full block development and an irregularly-shaped lot, the Development Code also provides that the Planning Division shall determine setbacks on a case-by-case basis, (Section 18.150.140 (C)(7). Moreover, the DTSP states that all new development on primary streets should build to zero lot line with exceptions for any usable, publicly-accessible, at grade open space such as small plaza, pocket park, or a pedestrian alley. The applicant proposes a full development block development on an irregular-shaped lot in the downtown area where zero lot lines are encouraged. The applicant is proposing to landscape around the perimeter of the site with street edge plantings and perimeter plantings which will help soften the pedestrian edges. The DTSP also provides guidelines that "encourage porches, patios and stoops in the building setback zone" and that "building setbacks should be landscaped to ensure privacy in case of residential ground floor use." At the October 5th, Study Session, the PC indicated their support of the interpretation.

Given the unique character of the lot, which is surrounded on all sides by roadways and by its unique trapezoidal shape, staff believes the proposed setbacks are appropriate as proposed.

Staff feels the proposed front yard setback meets the intent of the design goals of the DTSP by providing an attractive landscaped buffer between the street and the building façade. On Concord Boulevard, the perceived setback from the face of curb will be a minimum of 17 feet within which are a landscaped strip, sidewalk, and private landscaping adjacent to the building. On the three remaining streets, the setback will measure at least 10 feet or more in depth.

Building Height

The DMX development standards require a minimum first floor height of 15 feet. The intent of the regulation is to account for ground floor retail uses. Tall ceiling heights at the ground floor correlate with proper retail space function and allowing for a usable retail space. The project as proposed is all residential. The townhome units along East Street provide pedestrian connectivity through a ground floor base that comprises the equivalent of two stories with a well-articulated design. Additionally, the applicant proposes a 22 foot tall leasing area on the corner of Willow Pass Road and East Street. The building design meets the intent of creating an activated first floor at this location.

Density

The allowable density for the site is 100 d.u./acre; however, the TOD zoning district allows a 25% increase over the maximum density, if the following three findings are made: 1) the project provides continuity of building façade along the street with no interruptions in the progression of the building and uses except for pedestrian and vehicular access because the building encompasses an entire block with a continuous façade along all four elevations, and pedestrian and vehicular entries are incorporated into the façade of the building; 2) the project provides pedestrian-friendly street level building design amenities including: contemporary architecture and high quality materials on all four sides of the building, well-articulated bays and architectural elements, with pedestrian scale and proportion. The residential units face the street and the courtyards. The ground level units engage at the street level through patios and landscaping; and 3) the project contributes to pedestrian amenities by providing wide sidewalks, landscape buffers along the street, landscape at the building foundation and art panels designed into the building facade.

In this case, 157 units are permitted in the DMX district and the applicant is seeking an increased density of an additional 24 units, which would be an increase of 15%.

In addition to the increased density allowed in the TOD district, the applicant is also requesting a density bonus concession for providing 5% (9) of the units affordable to "Very Low Income" households, available under the City's Density Bonus Program, discussed in greater detail below. The balance of the units will be rented at market rates.

F. Adjustments to Parking Requirements

Without any parking adjustments applied, Table 18.160.040 requires that applicant provide 350 parking spaces for the 181 units. According to Section 18.160.050 (G), required parking

spaces may be reduced by up to 25 percent if the applicant can demonstrate that due to special circumstances, such as the nature of the use, proximity to transit, transportation characteristics of the use, or implementation of a transportation demand management program, there will be a reduced demand for parking at the site. In this case, a reduction of 25 percent would amount to 263 parking spaces.

1. *The parking demand study, as directed by the city, substantiates the need for less parking (e.g., documentation of customer frequency, information on parking standards required for the proposed use by other cities, etc.) than required in Table 18.160.040.*
   The City conducted an independent parking demand study by Omni-MeansLtd., consulting. The City requested similar type of projects, high density residential within close proximity to BART to be included in the parking study. In addition, as recommended by the Planning Commission at the October 5th Study Session, the study also includes a project within Concord in the analysis. The Parking Demand Study surveyed two properties in Oakland (both at Jack London Square) and one in downtown Concord (Park Central). Parking surveys of each property were also conducted. The study also looked at published Institute of Transportation Engineers (ITE) rates and other reference materials from the Planning Center in Oakland.

   As indicated in the parking demand study (Attachment F), the Omni-Means consultant found that the two Oakland locations had surveyed parking rates of 1.08 and 1.22 vehicles/unit, and noted that the Planning Center of Oakland had found parking demand rates of 1.45 and 1.73 at these same locations. The study also found that the Concord location (Park Central) had a surveyed rate of 1.44 vehicles/unit. The study also noted that published rates by the Institute of Transportation Engineers (ITE) for multi-unit apartments and condominiums have average rates of 1.20-1.38 vehicles/unit.

   In summary, the study found a wide range of parking rates (from less than 1 vehicle/unit to almost 2vehicles/unit) associated with multi-family developments. In comparing the proposed project to the surveyed properties, the consultants found that the Concord property was more similar to the Argent property in that it is a similar residential apartment style project close to BART, and found a rate of 1.44 vehicles per unit. Here, the Argent Concord project proposes a rate of 1.45 after the 25% reduction is applied, which substantiates the need for less parking than required in Table 18.160.040.

2. *The applicant has demonstrated that the project could provide additional parking if long-term parking demand requires additional parking; and*
   The Downtown Specific Plan, in the Todos Santos District, identifies the project site as a desired infill opportunity. The DTSP as an urban strategy encourages higher density residential on underutilized and vacant sites that are located in the downtown. The DTSP envisions higher development densities will accommodate more residents in the Downtown Concord, support additional retail and economic activity, sustain and/or increase BART ridership, increase public safety and create an overall more vibrant quality of life. The project site is close to many amenities such as transit, grocery store, post office and parks. The project is designed as a Transit Supportive project with many Transportation Demand Management strategies, such as six dedicated car share spaces,

Uber and Lyft pick up areas, on-site bicycle parking that meets the requirement of the Bike & Ped Plan, and on site management program for monitoring the number of parking spaces allotted to each unit.

3. *Parking demand generated by the project will not exceed the capacity of or have a detrimental impact on the on-street parking in the surrounding area.*
The project is designed with Transportation Demand Management strategies; 6 dedicated car share spaces, Uber and Lyft pick-up areas, on-site bicycle parking that meets the requirement of the Bike & Ped Plan, and on site management program for monitoring the number of parking spaces allotted to each unit.

The project does not propose on street parking. The curb will be conditioned to not allow on-street parking.

G. Design Review

Pursuant to Development Code Chapter 18.415, findings are required for approval of the Design Review application. Staff analysis on how the project meets those findings is provided below with a comprehensive list included in the draft resolution attached as Exhibit A to this report.

1) The project is consistent with the General Plan.

The project is consistent with the General Plan as explained in Section V-A above.

2) The project meets the following criteria in Section 18.415.080.

(a) The building design and landscaping supports public safety and security by allowing for surveillance of the street by people inside buildings and elsewhere on the site.

The residential units face outward toward the public street as will the podium space at the third level. Lobby spaces and townhome units have direct connections to the street creating a level of informal surveillance. The main lobby space is adjacent to a raised platform and provides safety and security. The parking garage will be secured with a night gate. The gate will be open during the day to prevent traffic back up on Port Chicago Highway. After hours entrance for guests and visitors is through keypad/call box system.

(b) The design is compatible with the historical or visual character of any area recognized by the City as having such character.

Downtown properties, especially those areas within walking distance of the Todos Santos Plaza are the heart of the City. A number of historical structures are identified in the downtown. The DTSP objective is to reflect early California architecture in the design of new buildings. The project introduces a high level of care and detail at the base of the building through the brick detailing of the townhomes and the wide

overhanging eave details at the roof. The podium level courtyard opens up and faces east towards Todos Santos Plaza, creating a vertical connection.

Since November 16, 2015, the ECAR Committee initiated Todos Santos Design Guidelines for new construction and renovation projects in the Inner and Outer Core of the downtown. On November 16, 2016, the ECAR Committee recommended approval of the final draft Todos Santos Design Guidelines. At 30%, 60%, and final review, the TSDG have been reviewed and supported by the Design Review Board. The TSDG will be presented to Planning Commission on December 15, 2016 with a recommendation for adoption anticipated before the City Council in early 2017. The project as designed meets the criteria in the Todos Santos Design Guidelines.

In parallel to the development of the Design Guidelines, on March 30, 2016, the ECAR reviewed the project as part of an early review and supported the proposed building design.

(c) *The project design preserves major view and vistas along major streets and open spaces and trails and enhances them by providing project amenities.*

The main project façade is along East Street, and provides pedestrian continuity through the two level brick townhome design. Art panels are incorporated into the building façade along Willow Pass Road and Port Chicago Highway, and provide interest along the major roadways. A third floor podium level courtyard faces west towards Todos Santos Plaza, and provides a visual and vertical connection.

(d) *The proposed lighting and fixtures are designed to complement on-site buildings, are of an appropriate scale for the development, and provide adequate light for safety and security while minimizing glare.*

Exterior lighting will be residential in type and character to minimize glare and improve nighttime visibility and safety for pedestrians and vehicles.

(e) *All mechanical, electrical, and utility equipment is located, screened, or incorporated into the design of the buildings so as not to be visible from off-site, and screening devices are consistent with the exterior colors and materials of the buildings.*

The draft conditions require final details of mechanical, electrical, and utility equipment to be shown on building permit plans to ensure they are located behind roof parapets or screened so as not to be visible from off-site.

(f) *The overall design of the project, including its scale, massing, site plan, exterior design, and landscaping, enhances the appearance and features of the project site and surrounding natural and built environment.*

The overall design is in keeping with the Final draft Todos Santos Design Guidelines recommended for approval on November 16, 2016 by ECAR. The overall design is

articulated on all four façades, has high quality materials, and includes a strong first floor base design. Drought tolerant landscaping is at the building foundation along with street landscape buffer zones.

The DRB reviewed the project on December 8, 2016. Staff will provide the PC an update on the DRB recommendation.

H. Parking Design Standards Concession

As discussed above, because the project qualifies for a density bonus as a project in the TOD district, the density bonus incentive provided under the City's Density Bonus Program would not be applied in this project as these development incentives are separate and not cumulative [Section 18.050(C)]. However, as the applicant will designate 5% or 9 units of the project at a "Very Low Income," under the Density Bonus Program and Government Code Section 65915, the applicant may seek concessions from the City's development standards (Section 18.185.050(F).

In order to qualify for this concession, as a condition of approval, applicant will execute an affordable housing agreement and deed restriction that specifies the 9 units designated as "Very Low Income." The recorded agreements will also specify that these inclusionary units shall be dispersed throughout the residential project, the construction quality of the exterior design shall be comparable to market rate units, and the average number of bedrooms must be equivalent to the average number of market rate units within the same residential project.

As a concession, the applicant seeks relief from the City's Parking Design Standards in order to create the most efficient garage layout. Pursuant to 18.160.090 (C) (1), "Parking Design Standards," a parking space abutting a wall, fence, column or other obstruction shall be increased two feet in width on each obstructed side. The proposed podium style parking is spaced to provide a column span of 30 feet. The current parking design standard would impact the re-design of the podium style parking garage and result in deficient number of spaces.

The applicant indicates that if relief from this standard is not granted, applicant would need to construct more parking further underground in order to provide the necessary parking, which in turn would render the project economically infeasible because of the substantial additional cost involved. As demonstrated by the project's architect at the October 5, 2016 Study Session, staff believes that modification of the parking design standard will not adversely affect the width of the parking spaces. At the meeting, the applicant shared photos of several recently constructed podium style garages and provided diagrams of parking spaces with columns adjacent to the space. The case studies demonstrated that the placement of columns next to parking spaces were reasonable, safe and practical.

The City shall provide a waiver or modification of development or zoning standards that are necessary to make the housing development economically feasible [Section 18.185.050 (F)] or if the established standard(s) would physically preclude the construction of a density bonus project [Section 18.185.050 (I)].

The City may only deny an applicant's request to waive or modify the City's development standards if any of the following circumstances apply:

- The application for density bonus does not conform to the requirements of the City's Density Bonus Program or the Government Code;
- The applicant fails to demonstrate that the City's development standards physically preclude the utilization of a density bonus on a specific site;
- The waiver or reduction would have an adverse impact on any real property that is listed in the California Register of Historical Resources; and
- The waiver or reduction would be contrary to state or federal law.

The applicant is designating 5% or 9 units of the project as affordable units in the "Very Low Income" range and as a condition of approval, an affordable housing agreement and deed restriction will be recorded against the property to ensure that the affordable units are kept at this rate. Accordingly, the project meets the City's Density Bonus Program.

And, if relief from the parking design standards are not met, the applicant has demonstrated that they will not be able to meet the parking demand without making the project economically unfeasible. Moreover, the waiver of the subject parking design standard will not have an adverse impact on any real property that is listed on the California Register of Historical Resources, nor would it be contrary to any state or federal law. Accordingly, staff recommends that relief from the parking design standards be granted to the applicant as a concession under the Density Bonus Program.

I. Loading / Unloading Area

Off-street loading area requirements, loading and service areas shall take place on the site and not within the public rights-of-way. However, the Planning Commission may also waive part or all of these requirements if it is "determined that the requirements are either unattainable or unnecessary." (Section 18.160.150 (A)).

At the October 5th Study Session, the PC directed the applicant to work with staff on a resolution and to evaluate the location with Concord Disposal. Concord Disposal reviewed the dimensions, location, and access and recommended that trucks maintain a certain distance from the building. As currently designed, the loading / unloading area has been widened to 14 ft. by 55 ft. in length and is located within the public right-of-way, adjacent and parallel to Concord Blvd.

Staff supports the proposed location for loading/unloading, given the four-sided street configuration and a full block development. Accordingly, the project will be conditioned to limit the number of days, times, transportation to and from the trash room to the curb, management, and penalties for non-compliance.

J. Downtown Corridors Plan

The Downtown Corridors Plan was adopted September 13, 2016. The Plan provides direction to City staff members charged with improvements to the public right-of-way. While the focus is on the three study corridors located in the downtown, many of the guidelines could readily be applied to other nearby streets.

Decorative Light Standards

The Downtown Corridors Plan was recently adopted by City Council on September 13, 2016. The guidelines express a cohesive vision. They provide direction to City staff members charged with improvements to the public right-of-way. While the focus is on the three study corridors, many of the guidelines could readily be applied to other streets. The guidelines propose new street light standards for pedestrian and street lighting. The new street lights would provide a coherent, cohesive entry to Todos Santos Plaza.
At the October 5, 2016 Planning Commission Study Session, staff discussed new decorative street light standards applicable to new developments as part of improvements within the right-of-way. The Planning Commission was in support of the improvement. Further, the decorative light standard would be an improvement along the major corridors in Concord. The decorative light standard would tie the new development with the Early California theme and provide continuity in the urban fabric. Staff is requesting that as part of improvements to the overall project including those within the right-of-way, decorative light standards be required as a condition of approval. The number and placement of decorative lights would be based on a photometric plan provided by the applicant during permit review.

K. Bicycle Parking

The City adopted the Bicycle, Pedestrian & Safe Routes to Transit Plan (Bike & Ped Plan) on September 27, 2016. The Bike & Ped Plan, updates the recommended requirements for short term and long term bicycle parking. Under Table 5-3, based on the multi-family land use, 0.10 spaces per unit are recommended for short-term bicycle parking and 0.75 spaces per unit are recommended for long-term bicycle parking. The development provides 19 short term bicycle parking and 136 long-term bicycle parking, therefore meeting the standards of the Bike & Ped plan. The current development code requires 18 short-term bicycle parking and 43 long-term bicycle parking. The increase in the number of long-term bicycle parking is part of the TDM strategy.

L. BART

The project is adjacent to a portion of BART's elevated tracks. Staff solicited input from BART regarding the project design from the early review of the project. BART stated that there are no underground facilities at the location, only an aerial structure. No further review is required by BART.

The project provides sound attenuating measures to minimize noise from the adjacent BART tracks. This will include internal sound insulation, wall and window designs

limiting sound transmission. Landscaping and building profiles are designed to reduce sound reflection.

M. Signage

As a Condition of Approval, a full signage package is required to be submitted separately and meet the current regulations of the Development Code. Currently, only conceptual signage is indicated on perspective drawings.

VI. Fiscal Impact

The proposed would have a negligible fiscal impact on the City.

VII. Public Contact

Notification was mailed to all owners and occupants of property within three-hundred (300) feet of the subject parcel, and has been published in the Contra Costa Times, as required by the Concord Municipal Code. This item has also been posted at the Civic Center and at the subject site at least 10 days prior to the public hearing. Notification posters were placed at the site at least 10 days prior to the public hearing.

VIII. Summary and Recommendations

Staff is in support of the Argent Concord multi-family residential apartment project. ECAR, DRB and the Planning Commission provided valuable input on the projects land use, development regulations, resulting in minimizing any potential negative impacts. Furthermore, staff believes that the overall desired effect of the development is supported by the General Plan, the Downtown Specific Plan and the final draft Todos Santos Design Guidelines.

Staff recommends the Planning Commission consider staff's report, allow the applicant to make a presentation and answer any questions from the Planning Commission, take public testimony, and close the public hearing upon completion of public testimony. Following the public testimony, staff recommends that the Planning Commission deliberate regarding the identified policy and/or project issues.

IX. Motion

I, (Comm. _____), hereby move that the Planning Commission adopt Resolution 16-33PC approving Argent Concord, PL16333, subject to the Conditions of Approval set forth in Attachment A to Resolution 16-33 PC. (Seconded by Comm. _____.)

Prepared by:

Afshan Hamid, AICP
Senior Planner

Reviewed by:

Laura Simpson, AICP
Planning Manager

Exhibits:

A - PC Resolution, Conditions of Approval (Attachment A)
B - Applicant's Statement and Project Description dated August 12, 2016
C - Applicant's Request for Parking Reduction dated November 21, 2016
D- Applicant's Request for Affordable Housing Agreement dated November 28, 2016
E - DRB Minutes dated September 22, 2016
F - Parking Study : Prepared by Omni Means, Ltd. dated November 18, 2016
G - CEQA documents, Initial Study prepared by AES dated November 2016
H - Applicant's Plans and Drawings date stamp received November 10, 2016

16srpc.100

EXHIBIT A

BEFORE THE PLANNING COMMISSION
OF THE CITY OF CONCORD,
COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA

A RESOLUTION APPROVING ARGENT CONCORD USE PERMIT, MINOR USE PERMIT & DESIGN REVIEW (PL16333)

Resolution No. 16-33 PC

/

WHEREAS, on August 12, 2016, developer David Jones, representing Argent, LLC., submitted an application for a Use Permit, Minor Use Permit & Design Review, to construct/allow a 181-unit Multi-family residential apartment project at 2400 Willow Pass Road, APN 126-082-008 ("Project"); and

WHEREAS, on November 29, 2016 the application was deemed complete for processing; and

WHEREAS, the City of Concord adopted the 2030 Concord Urban Area General Plan on October 2, 2007; and

WHEREAS, the City of Concord concurrently certified the Final Environmental Impact Report for the 2030 Concord Urban Area General Plan on October 2, 2007; and

WHEREAS, the City of Concord adopted Chapter 122 of the Concord Municipal Code ("Development Code") on July 24, 2012; and

WHEREAS, the City of Concord concurrently certified the Supplemental Environmental Impact Report to the 2030 Concord General Plan EIR for the Concord Development Code Project on July 24, 2012 ("SEIR"); and

WHEREAS, on June 24, 2014, the City adopted the Downtown Concord Specific Plan, which articulated a vison for the downtown area and the policies and goals to implement this vision; and

WHEREAS, on June 25, 2014, the City Council approved the Addendum to the Final Supplemental Environmental Impact Report (SEIR) to the 2030 Concord General Plan EIR for the Concord Development Code Project, and adopted the Downtown Concord Specific Plan General Plan Amendment as Volume IV of the Concord 2030 General Plan; and

WHEREAS, pursuant to the provisions of the California Environmental Quality Act (CEQA) of 1970, as amended, an Initial Study was prepared for the project which concluded that the Project is consistent with the community plan, general plan or zoning for the City for which environmental

review was previously certified, and that there are no project-specific significant effects which are peculiar to the project or its site; accordingly no further environmental review under CEQA Guidelines Section 15183 is required;

WHEREAS, on September 13, 2016, in building on the community's vision as set forth in the Downtown Specific Plan, the City Council adopted the Downtown Corridors Plan, which focuses on revitalizing the City's downtown area by enhancing three critical corridors that connect residents and visitors to transit, retail, and employment opportunities; and

WHEREAS, on December 8, 2016, the Design Review Board (DRB) recommended Planning Commission approval of the use permit, minor use permit and design review application for a new 181-unit multi-family apartment unit, Argent Concord, at 2400 Willow Pass Road, and

WHEREAS, the Planning Commission, after giving all public notices required by state law and the Concord Municipal Code, held a duly noticed public hearing on December 15, 2016 on the subject proposal; and

WHEREAS, the Planning Commission considered testimony and information received at the public hearing and the oral and written reports from City staff dated December 15, 2016, as well as other documents contained in the record of proceedings relating to the proposed project, which are maintained at the offices of the City of Concord Planning Division ("Project Information"); and

WHEREAS, on December 15, 2016 the Planning Commission, after consideration of all pertinent plans, documents and testimony and Project Information, declared their intent to approve the subject proposal subject to the Conditions of Approval contained herein as Attachment A.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS: that the Planning Commission does hereby approve the Argent Concord (PL16333 – UP, MUP, DR) Use Permit, Minor Use Permit and Design Review subject to the Conditions of Approval (Attachment A) and further makes the following findings:

RECITALS

1. The recitals above are true and correct and incorporated herein by reference. The recitals constitute findings in this matter, and together with the Project Information, serve as an

adequate and appropriate evidentiary basis for the findings and actions set forth in this Resolution.

CEQA

1. Pursuant to the provisions of the California Environmental Quality Act (CEQA) of 1970, as amended; the project is consistent with the community plan, general plan or zoning of the City for which environmental review was previously certified and that there are no project-specific significant effects which are peculiar to the project or its site; accordingly no further environmental review under CEQA Guidelines Section 15183 is required;

General Plan

2. *Downtown Mixed Use.* The project's density of 118.3 dwelling units per net acre exceeds the density of 33 – 100 dwelling units per net acre allowed in the Downtown Mixed Use district.

3. *Density Bonus.* As allowed by Concord Development Code Section 18.105.040, the maximum density may be increased up to a maximum of 25 percent for residential projects because the project includes a minimum of at least three of the elements listed in the Transit Station Overlay District as follows:

(a) The project provides continuity of building facades along the street with no interruptions in the progression of the building and uses except for pedestrian and vehicular access because the building encompasses an entire block with a continuous façade along all four elevations, and pedestrian and vehicular entries are incorporated into the façade of the building.

(b) The project provides pedestrian friendly street level building design amenities including: contemporary architecture and high quality materials on all four sides of the building, well-articulated bays and architectural elements, with pedestrian scale and proportion. The residential units face the street and the courtyards. The ground level units engage at the street level through patios and landscaping.

(c) The project contributes to pedestrian amenities by providing wide sidewalks, landscape buffers along the street, landscape at the building foundation and art panels designed into the building facade.

5. The project provides residential uses and is thus consistent with the intent of the Downtown Mixed Use designation to establish housing opportunities in the Downtown.

6. The project is in substantial compliance with the goals, objectives, and policies of the Concord General Plan to encourage infill residential development, including supporting higher density and mixed use development in Downtown and near transit centers and corridors as outlined in General Plan Principle LU-1.3.3.

7. The project as conditioned is consistent with General Plan policies that encourage pedestrian-oriented urban design by incorporating building elements such as ground floor patios, human-scale landscaping at the street level, and outdoor seating and building entries at the street level as outlined in General Plan Policy LU-4.2.3.

8. The project reinforces and capitalizes on neighborhood strengths and benefits the neighborhood identity and scale by proposing building designs and materials that are consistent with the neighborhood and architecture that mitigates the mass of the building with setbacks, building relief and careful use of landscaping to blend with the surrounding neighborhood as outlined in General Plan Policy LU-1.1.1.

Downtown Specific Plan

9. The project is consistent with policies of the Downtown Specific Plan to promote high quality infill development. The project proposes to develop an underdeveloped infill site within the Downtown with a high density multi-family residential development that develops the full block with parking below grade and podium style.

10. The project is consistent with policies of the Downtown Specific Plan to encourage a variety of living opportunities by proposing six-unit types at different rental rates as well as nine affordable units. The project proposes high density development within a 10-minute walk of transit and BART that is consistent with the strategy to increase the amount of residential units in the Downtown.

11. The project will assist in implementing the City's Housing Element Regional Housing Needs Allocation by providing 181 new housing units, including 9 units affordable to Very Low

Income Households, utilizing the City's Density Bonus ordinance.

Development Code

12. The project meets standards for lot area, lot coverage, setbacks, and building height of DMX zoning, and all applicable requirements under Development Code, Article IV, Development Standards.

Adjustments to the Parking Requirements

13. The project meets the required parking space reduction by 25%, by providing a full block development on an infill site, with a high density multi-family apartment project, within close proximity to BART, and implementation of a transportation demand management program that reduces on demand for parking at the site

(a) The parking demand study, as directed by the city, substantiates the need for less parking (e.g., documentation of customer frequency, information on parking standards required for the proposed use by other cities, etc.) than required in Table 18.160.040. The project provides a rate of 1.45 vehicles / unit, comparable to parking standards for similar type projects in other cities and similar to a comparable apartment project in the City of Concord, published ITE rates and surveys through the Planning Center.

(b) The applicant has demonstrated through Transportation Demand Management to meet the additional parking requirements for long term parking via increased bicycle parking, dedicated car share spaces, taxi and other third party transport services pick up areas and on-site management program for monitoring the number of parking spaces allotted to each unit.

(c) The parking demand generated by the project will not exceed the capacity of or have a detrimental impact on the on-street parking in the surrounding area as the project is not proposing on street parking, and will re-stripe the curb on all four streets.

Density Bonus Concession

14. The applicant is providing 5% of the units, or 9 units, as affordable to Very Low Income households. As a result of providing affordable units, the applicant may request a concession from the City of a development standard under Development Code Section 18.185.050(F) and state

law.

(a) Applicant has requested a waiver or modification of the City's parking design standard concerning the layout of parking stalls in relation to the podium parking support columns. Development Code Section 18.160.090(C)(1) states that a parking space abutting a column shall be increased by two feet in width on each obstructed side. If relief from this standard is not granted, the Project would be rendered economically infeasible due to the increased cost in providing the required space for each parking stall affected by a column.

(b) As part of the Conditions of Approval (Attachment A), applicant will execute and record an Affordable Housing Agreement, in conformance with state law and Development Code Section 18.185.070.

(c) In approving applicant's request for a waiver or modification of development standards, the Planning Commission finds:

1. The application for density bonus conforms with the requirements of the City's Density Bonus Program and state law;

2. The applicant has demonstrated that the City's development standards for parking design would physically preclude the utilization of a density bonus on the property site;

3. The waiver of the City's development standards for parking design would not have an impact on any real property that is listed in the California Register of Historical Resources; and

4. The waiver of the City's development standards for parking design would not be contrary to state or federal law.

<u>Loading / Unloading Area</u>

15. The loading / unloading area is designed within the public Right-Of-Way with conditions on the number of days, time restrictions, trash transport, location on the curb, trash management and penalties for non-compliance.

16. The requirement for off-street loading/unloading is waived as it is determined that the

requirement for off-street loading/unloading is unattainable or unnecessary.

Downtown Corridors Plan

17. As part of improvements to the overall development and the public Right-Of-Way, the applicant is proposing the installation of new decorative street light standards consistent with the Downtown Corridors Plan adopted September 13, 2016. The number, location and specifications of the new street light standards are to be resolved during the building permit.

Use Permit and Minor Use Permit

18. The proposed use is allowed within the applicable zoning district and complies with all other applicable provisions of the development code and the Concord Municipal Code.

19. The proposed use is consistent with the general plan and any applicable specific plan.

20. The design, location, size, and operating characteristics of the proposed activity are compatible with the existing and future land uses in the vicinity.

21. The site is physically suitable for the type, density, and intensity of the proposed use, including access, utilities, and the absence of physical constraints.

22. Granting the permit would not be detrimental to the public health, safety, or welfare of the persons residing or working in the subject neighborhood or materially detrimental or injurious to property or improvements in the vicinity and zoning district where the property is located.

Design and Site Development Review

23. The project is consistent with the General Plan and Downtown Specific Plan as addressed in the findings above.

24. The project meets the following criteria in Section 18.415.080 (Design Criteria):

(a) The building design and landscaping supports public safety and security by allowing for surveillance of the street by people inside buildings and elsewhere on the site. The apartment units are double loaded corridor with units facing the street as well as the courtyard. Lobby spaces and the townhome units have direct connections to the street creating a level of informal surveillance. The main lobby space is adjacent to a raised platform and provides safety and security. The parking garage is secured with a night gate. After hours access for residents and guests is through a keypad /

call box system.

(b) The design is compatible with the historical or visual character of any area recognized by the City as having such character. On December 8, 2016, the Design Review Board reviewed and approved the project. The project is compatible with the historical or visual character through providing pedestrian continuity on East Street, providing landscape buffers on all four sides of the project, articulating vertical bays and using earth tone material palette.

(c) The project design preserves major view and vistas along major streets and open spaces and trails and enhances them by providing project amenities. The project provides continuity through the six two-level brick townhome design along East Street. Art panels are integrated in the façade design along two major corridors, Willow Pass Road and Port Chicago Highway. A third floor podium level open courtyard faces west towards Todos Santos Plaza.

(d) The proposed lighting and fixtures are designed to complement on-site buildings, are of an appropriate scale for the development, and provide adequate light for safety and security while minimizing glare. Exterior lighting will be residential in type and character to minimize glare and improve nighttime visibility and safety for pedestrians and vehicles.

(e) All mechanical, electrical, and utility equipment is located, screened, or incorporated into the design of the buildings so as not to be visible from off-site, and screening devices are consistent with the exterior colors and materials of the buildings. The project conditions require final details of mechanical, electrical, and utility equipment to be shown on building permit plans to ensure they are located behind fencing or screened so as not to be visible from off-site.

(f) The overall design of the project, including its scale, massing, site plan, exterior design, and landscaping, enhances the appearance and features of the project site and surrounding natural and built environment. The design was recommended for approval by the Design Review Board on December 8, 2016. The overall design is articulated on all four facades, has high quality materials, and a strong first floor base design. Drought tolerant landscaping is at the building foundation along with street landscape buffer zones.

(g) The project design is appropriate to the function of the project and will provide an

attractive and comfortable environment for occupants, visitors, and the general community. The project includes, among other things, the following design features to enhance the functionality of the apartment units and the attractiveness and comfort of the general community: on-site podium style parking with a secure night time gate; bicycle parking and work room; pet room; open courtyard with swimming pool with active and passive outdoor spaces, sidewalks on all four sides of the project, stormwater facilities to reduce and treat runoff; and site improvements that improve circulation, parking, drainage, and lighting for the area.

(h) The architectural details, colors, materials, and landscaping are internally consistent, fully integrated with one another, and used in a manner that is visually consistent with the proposed architectural design. The project meets the criteria because building materials and colors used are warm tonal ranges, wide over hanging eaves, articulated residential bays, and a unifying landscape palette will be used for the entire project.

(i) The project is compatible with neighboring development in a similar Zoning District by avoiding large differences in building scale and character and provides a harmonious transition between the proposed project and surrounding development. The project meets the criteria and is similar in scale to other multi-family projects in the Downtown, the building creates vertical relief along all four building facades into one cohesive project, and a landscape buffer is provided along the perimeter of the project.

(j) The project creates an attractive and visually interesting built environment with a variety of building styles and designs, well-articulated structures that present varied building facades, rooflines, and building heights within a unifying context. The project meets the criteria and creates an attractive and visually interesting built environment featuring a cohesive architectural style with design elements including varied roof forms, articulated residential bays, interest and detail at the first floor base; decorative elements such as porches at the street level, a rooftop courtyard, and balconies; and a mix of building materials that create interesting textures with rhythmically spaced window arrangement and a quality look to the building design. Similarities in the design elements, materials, and colors between the units create a unifying context for the project.

(k) The landscaping is compatible with and enhances the architectural character of the buildings and site features, and blends with the surrounding landscape. Landscape elements complement the buildings and rooflines through color, texture, density, and form. Landscaping is in scale with on-site and off-site buildings, and plantings have been selected and located to avoid conflicts with views, lighting, infrastructure, utilities, and signage. The DRB has reviewed the landscape plan and determined that it is compatible with the building architecture. The landscape plan is compatible with drought tolerant, native Northern California plant palette that provides year round color, fragrance, texture and interest.

(l) Stormwater treatment areas have been integrated into the landscape design. The project includes bio-retention and self-treating areas integrated into the landscape design adjacent to Concord Blvd.

(m) New construction does not need to match existing surrounding development or buildings; however, the design shall complement or enhance existing development. The project meets the criteria because it will improve and enhance an underutilized site with new apartments designed in a modern, diverse architectural style that complements the neighborhood's design vernacular through the use of high quality material, proportioned elevation, varying rooflines, well designed first floor base.

25. *The project is consistent with all applicable Design Guidelines adopted by the City Council that are in effect at the time of approval.* The project is consistent with the Concord Community Design Guidelines because:

(a) The exterior building colors and materials consist of stucco, cementitious lap siding, brick veneer, metal railings and awnings, and other materials that are compatible with the neighborhood;

(b) Apartment units are sited as a double loaded corridor design with correlation to the site and street, and in compliance with setbacks to provide accessible and usable open spaces;

(c) The project provides emergency access as required by Contra Costa County Fire Protection District;

(d) Building lighting design is compatible with the architecture and will be operated at levels consistent with lighting in the area;

(e) Street lighting will comply with City photometric standards to ensure lighting levels are kept to the minimum necessary for public safety;

(f) Exterior spaces on the property and public right-of-way are landscaped to provide a continuity of the landscape palette and concept along all four sides of the project; and

(h) Required off-street parking is provided for each apartment unit.

26. *The interrelationship between the orientation, location, and elevations of buildings and structures and site improvements are mutually compatible and aesthetically harmonious.* The apartment units provide a consistent pattern oriented towards the street and towards the internal courtyard and are thus aesthetically harmonious with each other and the streetscape. The apartments will be accessed by one driveway leading to a parking garage with adequate parking for residents and guest. As discussed above, the apartment units will be designed with similar design elements, materials, and colors to create a unifying/harmonious context.

27. *The orientation, location, and elevation of the building and site improvements are compatible with and are aesthetically harmonious with adjacent development or the character of the neighborhood.* The project will be harmonious with the pattern of similar multi-family buildings in the Downtown and will use architectural styles that the Design Review Board finds to be aesthetically compatible other similar projects.

28. *Landscaping, irrigation systems, walls and fences, or features to conceal outdoor activities, utility enclosures, and trash facilities meet current requirements or provide a significant upgrade and improvement to the site and the appearance of the neighborhood.* New landscaping is designed to meet current requirements will result in screening the loading / unloading area and mechanical rooms with a significant improvement to existing site conditions and a visual upgrade to the neighborhood in general.

29. *Parking, pedestrian access, and traffic circulation are adequate or improved for all modes of circulation.* The project meets this finding because it will construct improvements that

enhance parking, pedestrian safety, bicycle parking, and improved access to the Downtown for the neighborhood.

This resolution shall become effective immediately upon its passage and adoption.

PASSED AND ADOPTED this 15th day of December, 2016, by the following vote:

AYES: Commissioner -

NOES: Commissioner -

ABSTAIN: Commissioner -

ABSENT: Commissioner -

Laura Simpson, AICP
Secretary to the Planning Commission

Attachments:
A – Draft Conditions of Approval

cc: Robert Ovadia, City Engineer
Robert Woods, Building Division
Captain Robert Marshall, Contra Costa County Fire Protection District

CONDITIONS OF APPROVAL
ARGENT CONCORD
APPLICATION NUMBER: PL16333 – UP, MP, DR
2400 Willow Pass Road
APN: 126-082-008

PERMIT DESCRIPTION

1. These Conditions apply to and constitute the approval of a **Use Permit, Minor Use Permit and Design Review (PL 16333 – UP, MP, DR)** for: **Argent Concord, a 181 unit multi-family residential rental development with one below grade and two levels of podium style parking, and associated landscaping located at 2400 Willow Pass Road.**

   Exterior building materials and colors shall be in substantial conformance with the approved plans as follows:

Approved Materials	Manufacturer (or similar)		Sample Number		Color
Cementitious Panel	James Hardie Panel (or similar)		Sherwin Williams SW-7008		Alabaster (painted to match)
Cementitious Panel	James Hardie Panel (or similar)		Sherwin Williams SW-7017		Dorian Gray (painted to match)
Stucco	Stucco (20/30 Finish)		Sherwin Williams SW-6062		Rugged Brown (painted to match)
Stucco	Stucco (20/30 Finish)		Sherwin Williams SW-7676		Seal Skin (painted to match)
Stucco	Stucco (20/30 Finish)		Sherwin Williams SW-7017		Dorian Gray (painted to match)
Brick Veneer	Belden Brick (or similar)		"Mod. Commodore Full Vel. A"		Red Brick
Soffit Composite Cladding	Prodema Prodex (or similar)				Rustik Color System
Window	VPI Quality Windows (or similar)		Window Vinyl		Adobe color
Metal Awnings, Railing & Balcony Deck	N/A		Sherwin Williams SW-7675		Seal Skin (painted to match)
Composite Railing	Knot Wood (or similar)				Kwila Color
Storefront	Arcadia (or similar)				Standard Medium Bronze

2. The following Exhibits, date stamped received by the City of Concord, on November 10, 2016, are approved and shall be incorporated as Conditions of Approval.

Plan	Date Prepared	Prepared by	Sheet
Cover	11/07/2016	KTGY Group, Inc.	cover
Sheet Index	11/07/2016	KTGY Group, Inc.	A0.1
Project Data	11/07/2016	KTGY Group, Inc.	A0.2
Existing Site Conditions	11/07/2016	KTGY Group, Inc.	A0.3
Conceptual Firewall Diagram	11/07/2016	KTGY Group, Inc.	A0.4
Shadow Study	11/07/2016	KTGY Group, Inc.	A0.5
Shadow Study	11/07/2016	KTGY Group, Inc.	A0.6
Site Plan	11/07/2016	KTGY Group, Inc.	A1.0
Building Elevations	11/07/2016	KTGY Group, Inc.	A2.0
Building Elevations	11/07/2016	KTGY Group, Inc.	A2.1
Conceptual Building Plan Subterranean level	11/07/2016	KTGY Group, Inc.	A3.0
Conceptual Building Plan Level 1	11/07/2016	KTGY Group, Inc.	A3.1
Conceptual Building Plan Level 2	11/07/2016	KTGY Group, Inc.	A3.2
Conceptual Building Plan Level 3	11/07/2016	KTGY Group, Inc.	A3.3
Conceptual Building Plan Level 4	11/07/2016	KTGY Group, Inc.	A3.4
Conceptual Building Plan Levels 5-6	11/07/2016	KTGY Group, Inc.	A3.5
Conceptual Building Plan Level 7	11/07/2016	KTGY Group, Inc.	A3.6
Conceptual Building Plan Roof	11/07/2016	KTGY Group, Inc.	A3.7
Building Sections	11/07/2016	KTGY Group, Inc.	A4.0
Building Sections	11/07/2016	KTGY Group, Inc.	A4.1
Typical Units	11/07/2016	KTGY Group, Inc.	A5.0
Unit Plans – 2 bdrm Townhome	11/07/2016	KTGY Group, Inc.	A5.1
Unit Plans – 3 bdrm Townhome	11/07/2016	KTGY Group, Inc.	A5.2
Conceptual Details	11/07/2016	KTGY Group, Inc.	A6.0
Conceptual Details	11/07/2016	KTGY Group, Inc.	A6.1
Conceptual Details	11/07/2016	KTGY Group, Inc.	A6.2
Conceptual Details	11/07/2016	KTGY Group, Inc.	A6.3
Conceptual Building Lighting	11/07/2016	KTGY Group, Inc.	A6.4
Perspective-Concord Blvd	11/07/2016	KTGY Group, Inc.	A7.0
Perspective-East St.	11/07/2016	KTGY Group, Inc.	A7.1

Perspective-Willow Pass	11/07/2016	KTGY Group, Inc.	A7.2
Perspective-Port Chicago	11/07/2016	KTGY Group, Inc.	A7.3
Perspective-Port Chicago Hwy.	11/07/2016	KTGY Group, Inc.	A7.4
Art Component	11/07/2016	KTGY Group, Inc.	A7.5
Landscaping Street Level	11/07/2016	KTGY Group, Inc.	L1.0
Landscaping Detail	11/07/2016	KTGY Group, Inc.	L1.1
Landscaping Podium Level	11/07/2016	KTGY Group, Inc.	L2.0
Materials & Furnishings	11/07/2016	KTGY Group, Inc.	L3.1
Preliminary Plant Palette	11/07/2016	KTGY Group, Inc.	L3.2
Product Specifications	11/07/2016	KTGY Group, Inc.	L3.3
Civil Cover	11/07/2016	Dk Consulting	C1.00
Civil Notes	11/07/2016	Dk Consulting	C1.01
Civil Sections & Details	11/07/2016	Dk Consulting	C2.00
Topographic Survey	11/07/2016	Dk Consulting	C3.00
Demolition Plan	11/07/2016	Dk Consulting	C4.00
Horizontal Floor Plan	11/07/2016	Dk Consulting	C5.00
Grading and Drainage Plan	11/07/2016	Dk Consulting	C6.00
Stormwater Control Plan	11/07/2016	Dk Consulting	C8.00
Stormwater Control Plan Notes	11/07/2016	Dk Consulting	C8.01
Visibility Triangle Exhibit	11/01/2016	Dk Consulting	N/A

GENERAL CONDITIONS

3. The Conditions are the responsibility of the applicant and all contractors. Compliance shall occur as specified in the Conditions or at one of the following project milestones:

   a) With the submittal of Grading, Improvement, Landscape, or Building Plans.
   b) Prior to issuance of Encroachment, Grading, or Building Permits, whichever comes first.
   c) Prior to construction.
   d) On-going during construction.
   e) Prior to occupancy approval.

   If timing for compliance is not specified, it shall be determined by the Divisions listed after the Condition. ***(PLNG, BLDG, ENGR)***

4. Where a plan or further information is required, it is subject to review and approval by the applicable City Department/Division, as noted at the end of each Condition. The Division listed first shall be the primary contact for implementation of that Condition. ***(PLNG, BLDG, ENGR)***

5. The project shall comply with all applicable Federal and State laws and Concord Municipal Code (CMC) requirements. ***(PLNG, BLDG, ENGR)***

6. Minor modifications that are found to be in substantial conformance with the approved plans such as colors, plant materials, or minor lot line adjustments, may be approved administratively. Major modifications shall be approved by the applicable decision making body. ***(PLNG, ENGR)***

7. The Conditions of Approval shall be listed on a plan sheet that is included in the construction plan set (Grading, Utility, Landscape and Building Plans). ***(PLNG, ENGR)***

8. Two annotated copies of the Conditions of Approval specifying how each applicable condition has been satisfied, shall be submitted as follows:

   a) At the time Grading, Utility, Landscape, and/or Building Plans are submitted for plan check, whichever comes first.
   b) Prior to occupancy approval. ***(PLNG, ENGR)***

9. Submit three signed copies, one notarized, of the City's "Property Maintenance Agreement", to ensure on-going repair, replacement and maintenance of all exterior improvements including buildings, parking areas, private roads, walkways, landscaping, irrigation, signs, fences, walls, and other improvements, prior to issuance of Grading or Building permits, whichever comes first. ***(PLNG)***

10. The project site and area surrounding the site shall be **fenced and** maintained in a weed and litter free condition for the period prior to construction. ***(BLDG, PLNG)***

11. For projects that abut residential uses, the perimeter fence/wall shall be installed within two weeks from completion of site demolition or grading work in the area of the fence/wall. If the fence at an abutting residential property is planned for removal, or if an existing residential property does not have a fence, the replacement perimeter fence/wall shall be completed within two weeks from removal of the original fence, unless otherwise approved by the Planning Division. ***(PLNG, ENGR)***

DENSITY BONUS

12. The maximum density allowed for the property is increased 15% pursuant to Section 18.105.040 "Transit Overly District", to a maximum of 181 units, and includes a minimum of at least three elements listed in the Transit Overlay District as follows.
    a. The project provides a continuity of building façades along the street with no interruptions in the progression of building and uses except for pedestrian access. Pedestrian entries are incorporated into the façade as well as at the townhome units. Vehicle entry is designed into the project as part of the design language.
    b. Pedestrian friendly street level building design amenities with highly articulated façades with a variety of high quality materials and architectural detailing, visibility into buildings. The façade is well articulated with vertical bays, projecting balconies, and articulation of architectural elements. The ground floor townhome units have a pedestrian-oriented scale and proportion.
    c. Pedestrian amenities including wide sidewalks, weather protection through building design, landscaping, or public art, or other pedestrian amenities. Landscape buffer along the street edge as well as foundation plantings are introduced along all four street edges. On Willow Pass Road and Port Chicago Highway, art panels are designed into the building walls.

DEVELOPMENT REGULATION

13. The project is a full block development and shall meet the following development regulations:

Standards	Required/Allowed	Proposed
Density (du/net acre) minimum/maximum	33 – 100 du/net acre 52 – 157 units	118.31 181 units
Floor Area Ratio (FAR) minimum	1.00	>1.00
Floor Area Ratio (FAR) maximum	6.0	4.5
Lot Area (square feet) minimum	10,000	66,646.8
Lot Width (feet) minimum		
Interior Lot	100	-
Corner Lot	110	188'-9"
Lot Depth (feet) minimum	100	246'-1"
Building Height (feet)		
Minimum	30	>30
Maximum	200	78'-9"
Building Height – First floor minimum (feet, floor to floor height)	15	112
Setbacks (feet) required minimum		
Front	10	2-10
Interior Side	0	-
Corner Side	10	-
Rear	0	4-11
Open Space/Unit (square feet) minimum	175	213
Parking Spaces		
Vehicle	350	263
Motorcycle	7	8
Bicycle		
Short Term	14	194
Long Term	43	136

14. Building Height for the first floor shall be a minimum of 11 feet.

PARKING DESIGN STANDARDS CONCESSION

15. As a concession permitted by Section 18.185.050(F) "Development Incentives and Concessions" and Government Code Section 65915, a waiver of the City's Parking Design Standards (Section 18.160.090 (C)(1), as it applies to parking spaces that abut columns located in the podium style parking garage, is granted.

16. In order to qualify for this concession, the project shall provide 5 percent of the 181 rental units (9 units or "inclusionary units") for "very low affordable households", as that term is defined in Section 18.20.030 (a household whose combined annual income does not exceed the qualifying limit of 50 percent of area median income, adjusted for household size or pursuant to Health and Safety Code Section 50105), and as permitted under 18.185.050 (E) (b) "Density Bonus Program" and Government Code Section 65915.

17. Three originals of an Affordable Housing Agreement and deed restriction for 5% or 9 "Very Low Income" units shall also be executed and recorded with the County Recorder's Office (Section 18.185.070). The Affordable Housing Agreement shall include, but is not limited to, the following:

    a) The total number of units approved for the development, including the number of affordable housing units;
    b) The location, unit sizes (in square feet) and number of bedrooms of the affordable housing units;
    c) A description of the household income groups to be accommodated by the project and a calculation of the affordable rent prices;
    d) The party responsible for certifying annual rental rates, and the process that will be used for certification;
    e) A schedule for the completion and occupancy of the affordable housing units;
    f) The duration of affordability (55 years) for the affordable housing units, including provisions for resale and deed restrictions on targeted housing units that are binding on property upon sale or transfer;
    g) Provisions covering the expiration of the agreement, including notice prior to conversion to market-rate units and a right of first refusal for the city and/or the distribution of accrued equity for for-sale units;
    h) A description of the remedies for breach of the agreement by either party;
    i) The rules and procedures for qualifying tenants, establishing affordable rental rates, filling vacancies, and maintaining target units for qualified tenants;
    j) Provisions requiring owners to verify tenant incomes and maintain books and records to demonstrate compliance with the City's Affordable Housing Ordinance;
    k) Provisions requiring owners to submit an annual report to the City, which includes the name, address, and income of each person occupying affordable units, and which identifies the bedroom size and monthly rent of each affordable unit; and
    l) A requirement to apply the same rental terms and conditions to the tenants of affordable units as are applied to other tenants, except as required to comply with the City's Affordable Housing Ordinance or with other applicable government subsidy programs.
    m) A provision which indicates that discrimination against persons receiving housing assistance is also prohibited.
    n) The City shall use Contra Costa county income limits in Title 25, Section 6932 of the California Code of Regulations.

18. Pursuant to 18.185.040 (F) "Design Standards," the inclusionary units constructed shall meet the following:

a) Inclusionary units shall be dispersed throughout the residential project and have access to all on-site amenities available to market rate units.
b) The construction quality and exterior design of inclusionary shall be comparable to the market rate units.
c) The average number of bedrooms for all inclusionary units will be equivalent to the average number of bedrooms for market rate units within the same residential project.
d) All inclusionary units must be constructed and occupied prior to or concurrently with the market rate units within the same residential project.

ARCHITECTURAL

19. The project shall meet the Design Review approval pursuant to Development Code Chapter 18.415.

20. ***The project shall provide the necessary number, location and specifications of decorative street light standards in accordance with the Downtown Corridors Plan adopted on September 13, 2016. (See Condition #104- below).***

21. Rooftop equipment (HVAC, meters, refrigeration equipment, plumbing lines, ductwork and transformers), shall not extend above the building parapet and shall be screened from view on all sides with materials architecturally compatible with the main structure. Screening details shall be shown on the Building Plans and submitted for review and approval by the Planning Division, prior to the issuance of Building Permits and installed prior to occupancy approval. ***(PLNG)***

22. Hardboard siding shall be installed per manufacturer's standards, true and plumb, with no two butt joints lined up one above the other, and butt joints secured in clips designed for this purpose. Any siding that does not meet this requirement shall be replaced. ***(PLNG)***

23. Vents, gutters, downspouts, flashing, electrical conduits, etc., shall be painted to match the color of the adjacent surface, unless otherwise approved by the Planning Division. ***(PLNG)***

LANDSCAPING

24. Submit Final Landscape Plans prepared by a Landscape Architect, registered by the State of California, for review and approval with the Grading, Improvement, or Building Plans, whichever comes first. The Plan shall be drawn on or consistent with the Grading, Improvement, Utility, and Stormwater Plans prepared by the Civil Engineer, with the following information:

a) A legend that lists all plant species (Latin and common name), including size, quantities, spacing, and ultimate height and width.
b) Specifications and details for planting, including staking of trees and planting in bio-retention or other stormwater treatment areas. Plants for bio-retention facilities should be compatible with temporarily flooded conditions.
c) Utility and Grading information on the base map, screened back.
d) Existing Heritage trees to be saved and identification of all replacement trees.
e) Trees (minimum size 24-inch box size) and shrubs (minimum 5-gallon container size; accent or sub-shrubs may be 1-gallon container size).

f) Root control barriers for parking lot trees, street trees, and trees within three feet of any paved area or curb.
g) Six-inch vertical concrete curbs around landscaped areas.
h) A soils and plant laboratory analysis with recommendations for fertilization and mulching to be incorporated into the planting specifications.
i) A Layout/Hardscape Plan showing the location and details of all non-plant improvements, with dimensions and call outs, showing finished grades, hardscape/paving treatment, planter details, arbors, trellises, fences, walls, trash enclosures, and other features.
j) Details for street trees in accordance with City Standard Plan S-38, "Street Tree Planting Detail". ***(PLNG, ENGR)***

25. Irrigation Plans shall be submitted with the Final Landscape Plans in compliance with the requirements of CMC Chapter 18.170 "Water Efficient Landscaping". All Irrigation Plans shall include the following standards:

a) All landscaped areas shall have a fully automatic irrigation system.
b) High water pressure areas shall have pressure regulation devices on the irrigation system.
c) Valves and circuits shall be separated based on water use.
d) Trees shall be watered with drip or bubbler irrigation systems with circuits on their own control valve.
e) Drip and bubbler systems shall not discharge water in excess of 1.5 gallons per minute per device.
f) Sprinkler heads shall have matched precipitation rates within each control valve circuit.
g) Serviceable check valves shall be required where elevation differential may cause low head drainage.
h) Sprinkler head spacing shall be designed for head-to-head coverage or closer due to high wind conditions.
i) Design sprinkler head orientation and throw for minimum runoff and for minimum overspray onto non-irrigated areas.
j) Be equipped with a controller capable of dual or multiple programming. Controllers shall have multiple-cycle start capacity and a flexible calendar program. Water shall be timed between the hours of 3:00 a.m. and 10:00 a.m. unless a "water smart" ET based controller which adjusts controller programs based upon the current evapo-transpiration rate is used.
k) Provide a rain shut off device if the controller is not an ET based controller.
l) Sprinkler heads used on slopes exceeding 15 percent shall have a precipitation rate that does not exceed 0.85 inches per hour.
m) Sprinkler heads used on slopes exceeding 10 percent and located within 10 feet of any hardscape shall have a precipitation rate that does not exceed 0.85 inches per hour. ***(PLNG)***

26. The Landscape Plans shall include a water usage program with the following:

a) Estimated annual water use (in gallons) and the area (in square feet) to be irrigated.
b) Precipitation rate(s) for each valve circuit.
c) Monthly irrigation schedule for each type of irrigation head showing the plant establishment period and the first year thereafter. ***(PLNG) CMC***

27. All landscaping shall be installed prior to occupancy approval. Contact the Planning Division at least two weeks prior to occupancy, to request a site inspection of all exterior improvements including buildings, driveways, parking lots, landscaping, irrigation, signs, lighting, walls, fences, and trash enclosures. ***(PLNG)***

28. Prior to occupancy approval, the licensed Landscape Architect shall:

    a) Conduct a final field observation and an open trench examination of the irrigation system.
    b) Provide written certification that:
        i) The landscaping and irrigation system were installed in conformance with the approved Landscape and Irrigation Plans.
        ii) The landscaping has been installed in accordance with the CCWD Water Conservation Guidelines or the Model Water Efficient Landscape Ordinance.
        iii) An irrigation audit was performed and deficiencies were listed which will be corrected within 30 days.
        iv) There will be a minimum 60-day maintenance period for all landscape improvements.
    c) Provide a signed letter of compliance with the final construction documents stating that the Landscape Architect has met all State and City requirements. ***(PLNG)***

29. Arrange for an irrigation water audit with the Contra Costa Water District during the 60-day maintenance period. The results of the audit shall be used to adjust the irrigation schedule. The schedule shall include a more water intensive plant establishment period during the first 12 months following installation, as well as a long-term irrigation schedule. The Landscape architect shall provide written verification to the Planning division of audit completion, adjustments to the schedule, and the long term schedule following plant establishment. ***(PLNG) CMC***

30. Any vegetation damaged or destroyed by construction activities shall be replaced with like or comparable plant materials, and if damage occurs off-site, the replacement plants shall be approved by the property owner and the Planning Division, prior to occupancy approval. ***(PLNG)***

31. The establishment of plant materials shall be guaranteed for a period of two years after subdivision acceptance or occupancy approval. A cash or equivalent guarantee shall be posted in an amount equal to 10% of the value of the improvements, which will be released upon final inspection and acceptance of landscape improvements by a registered Landscape Architect at the end of the two-year period. ***(PLNG)***

32. Any embankment to be retained that is over 48 inches in height shall be "benched" so that no individual retaining wall exceeds a height of 48 inches tall from finished grade, and each bench has a minimum depth of 24 inches. ***(PLNG)***

33. All retaining walls shall be designed and constructed to visually blend into the adjacent slopes using geo-grid retaining wall systems or similar products. The style, materials, and colors for all

walls shall be approved by the Planning Division prior to the issuance of Grading or Building permits, whichever comes first. ***(PLNG)***

TREE PRESERVATION

34. All existing trees within the project boundaries shall be in compliance with those identified in the Arborist Report prepared by Patrick W. Morgan Certified Arborist #WE-10493A received August 12, 2016, which have been specifically designated for removal on the approved Landscape or Tree Removal plan. ***(PLNG)***

35. Demolition, Grading, Utility, Landscape, and Building plans shall show all Heritage trees to be preserved, with accurate trunk location, drip line, and existing grade. The plans shall show the location and type of protective fencing, and the location of on-site construction materials storage. The protective fencing shall be installed and inspected prior to the issuance of any Demolition, Grading, or Building Permit. ***(PLNG, ENGR, BLDG, PARKS)***

36. The Arborist shall conduct site inspections during grading and construction, and may require additional measures to protect the trees to be preserved, including stopping construction activities, if necessary. ***(PLNG, PARKS)***

37. Comply with the Tree Preservation Guidelines contained in the Arborist Report. One year after occupancy, a Certified Arborist, retained by the applicant at their expense, shall evaluate tree health, vigor and acclamation to the new environment. The Arborist shall identify any tree(s) that is found to be in poor condition due to the impact of construction. The Arborist shall identify measures to restore the tree's health. If the tree can't be restored, replacement trees shall be required at a ratio and size consistent with the value of the damaged tree, but no less than a minimum ratio of three to one 36-inch box trees or as otherwise determined by the City. ***(PARKS, PLNG)***

LIGHTING

38. Show all exterior lighting including: building fixtures, walkway lighting, parking lot lighting, and street lights on the Site, Utility, Landscape, and Building plans, prior to the issuance of any permits. The height and style of fixtures shall be shown. Energy-saving fixtures shall be used and noted on the plans. ***(PLNG, ENGR, BLDG)***

39. All exterior building and parking lot lighting shall provide illumination for safety and shall be installed in a manner that is glare shielded and directed away from adjacent properties and right-of-ways. ***(PLNG)***

40. Submit a Photometric plan for review and approval, showing the location of all light sources, streetlight spacing, intensity of luminance, and uniformity ratio, in accordance with the City's specifications, with the Improvement, Utility, or Building Plans, whichever comes first. The photometric analysis shall be reviewed by Transportation Division for the determination of streetlight spacing and adequacy of lighting level both inside covered and open parking lots. ***(ENGR, TRANS, BLDG, PD)***

SIGNAGE

41. All signage shall comply with CMC Chapter 18.180 "Signs". ***(PLNG) CMC***

42. Signs with exposed raceways shall not be permitted. ***(PLNG)***

43. Signs shall be flush-mounted or near to flush as is practical to the building façade. ***(PLNG)***

44. Internally illuminated signs shall have an opaque background, with only individual letters or logos illuminated. ***(PLNG)***

45. Pennants, banners, streamers, or flags in connection with special promotions and business openings shall be permitted for a period not to exceed 30 days. The same, different, or similar pennants, banners, streamers, and flags shall not be permitted within 150 calendar days after such removal. No pennants, banners, streamers, balloons, inflatable devices, flags, or any other advertising devices shall be mounted on or above any roof or mansard, or otherwise extend above a parapet wall or ridge of a structure. ***(PLNG) CMC***

46. Paper or printed window signs shall be limited to no more than 10 percent of the window area of any street frontage or more than 50 percent of any single window pane. ***(PLNG) CMC***

47. Construction plans showing details for installation, dimensions, font, logos, materials and colors, including a sample of all materials and colors shall submitted for review and approval prior to the issuance of a Sign Permit. ***(PLNG)***

48. One sign denoting the architect, engineer, or contractor associated with the project may be permitted on site. The maximum sign area shall be 12 sq. ft. within single family districts and 40 sq. ft. for other districts, of which 32 sq. ft. may be for the general contractor. These signs shall be removed upon occupancy approval. ***(PLNG) CMC***

PARKING

49. **Pursuant to Section 18.160.050(G), the parking requirement has been reduced by 25%. A total of 263 parking spaces are proposed comprised of 202 resident parking spaces and 61 guest parking spaces. The applicant proposes 234 standard sized stalls with 9' x 19' dimensions, 29 compact sized stalls with 8' x 16', and 8 ADA compliant stalls. A total of 8 motorcycle stalls are proposed on parking level 1.** ***(PLNG, TRANS)***

50. **The provided parking will adhere to the Parking Demand Study prepared by Omni-Means, Ltd. Engineers & Planners on November 18, 2016.** ***(PLNG, TRANS)***

51. **The project shall comply with the Transportation Demand Management program dated November 21, 2016 which provides 6 dedicated car share spaces, taxi or other taxi-related services (such as "Uber" or "Lyft") pick up areas, on-site bicycle parking that meets the requirement of the Bike & Ped Plan, and on site management program for monitoring the number of parking spaces allotted to each unit.** ***(PLNG, TRANS)***

52. **Short Term and Long Term Bicycle Parking is meeting the City adopted Bicycle, Pedestrian & Safe Routes to Transit Plan. Short-term bicycle parking spaces shall be total of 19 spaces. Long term bicycle parking spaces shall be 136 spaces. The location of bicycle parking facilities shall be shown on the Civil Site, Landscape, and Building plans as approved by the Planning and Transportation Divisions, prior to issuance of a Grading or Building permit, whichever comes first.** ***(PLNG, ENGR, TRANS)***

53. **Curbs on all four streets fronting (East St., Concord Blvd., Port Chicago Hwy., and Willow Pass Rd.) the project site shall be painted red to prohibit on-street parking.** ***(PLNG, ENGR)***

54. All parking spaces shall be striped; full-size spaces shall be 9 ft. by 19 ft; compact spaces shall be 8 ft. by 16 ft. Wheel stops shall be provided, except when parking spaces abut a concrete curb for a landscaped planter, then a two foot overhang is allowed. ***(PLNG, ENGR) CMC***

55. Compact stalls shall be clearly identified. ***(PLNG, ENGR) CMC***

56. Parking shall comply with CMC Chapter 18.160.090 "Parking, Loading, and Access", including motorcycle and bicycle parking spaces, drive aisle and parking space dimensions, turning radii, back-out dimensions, driveway clearances, landscape median dimensions, and other relevant information. ***(ENGR, PLNG) CMC***

57. Any vehicle that identifies a business by way of signage that is painted on or applied to the vehicle shall be parked in a delivery or storage area at the rear of the building or in an area screened from view from adjacent public right-of-way. ***(PLNG)***

58. Handicapped parking stalls shall comply with the latest edition of the California Building Code in effect at the time of the permit application. ***(BLDG)***

STREET IMPROVEMENTS

59. **Right of way relinquishment will be required along the project frontage prior to issuance of the site development permits or building permit, whichever comes first.** ***(ENGR)***

60. **Construct improvements along the frontage on Willow Pass Rd., Port Chicago Hwy., Concord Blvd. and East Street including but not limited to: driveway removal; pavement replacement One foot wide measured perpendicular from lip of gutter; pavement widening; concrete valley gutter; wheel chair ramps; construction of concrete curb, gutter and sidewalk; ADA compliant concrete driveway approach; storm drainage system; conforms to existing improvements; and repair/replacement of deficient frontage improvements as determined by the City Engineer / City inspector, prior to occupancy approval or Acceptance of Improvements.** ***(ENGR)***

61. **Install slurry seal on Willow Pass Rd., Port Chicago Hwy., Concord Blvd. and East Street, from lip of gutter beyond trenching and up to the lane line, after completion of utility undergrounding and frontage improvements, prior to the Acceptance of Improvements.** ***(ENGR)***

62. Any trenching for underground utilities shall comply with the modified City Standard Detail S-17 for pavement repair and possible slurry placement. ***(ENGR)***

63. Construct all public facilities in accordance with the current Americans with Disabilities Act (ADA), including driveways and curb ramps. ***(ENGR)***

64. Show construction details for all pedestrian paths and trails on the Improvement Plans and Final Landscape Plans. Trail crossings of streets shall have curb cuts, ramps, signs, and pavement markings as approved by Engineering Services **(and East Bay Regional Park District if required)**. ***(ENGR, PARKS)***

NOISE

65. A site-specific Noise study shall be prepared prior to issuance of a Building Permit to identify measures to meet the following criteria identified in the General Plan Noise Element:

    a) Indoor noise levels not to exceed 45 dBA CNEL.

66. An Acoustical Engineer shall review the Building Plans and develop specific Sound Transmission Class (STC) rating requirements to ensure interior noise levels meet the City standard. The Building Official shall verify that Sound Transmission Class (STC) ratings for residential windows and sound-rated wall construction comply with the interior noise limits, prior to the issuance of Building Permits. ***(PLNG, BLDG)***

67. Site preparation and construction activities shall be limited to the days and hours as set forth below:

    Monday through Friday 7:30 a.m. to 6:00 p.m.

    Construction on Saturdays may be allowed only upon prior approval by the Building, Engineering, and Planning Divisions. No changes to these construction hours shall be allowed without the prior written consent of the City. A contact person shall be available during all construction activities in the evening and on weekends to respond to complaints and take actions necessary to reduce noise. ***(BLDG, ENGR, PLNG)***

CONSTRUCTION ACTIVITIES

68. Contact Engineering Services to arrange for a Pre-Construction Meeting prior to issuance of Grading or Building Permits, whichever comes first. ***(ENGR)***

69. Implement a dust and construction noise control plan. Submit the plan to Engineering Services for review and approval prior to issuance of the Grading Permit. ***(ENGR)***

70. Construction equipment shall not be serviced at the site at any time. During construction no deliveries shall be made to the site and no delivery vehicles (including gasoline tanker trucks) shall enter the site between 6:00 p.m. and 7:30 a.m. on weekdays, and between 5:00 p.m. and

8:00 a.m. on weekends and federal holidays. Delivery vehicles shall have their engines turned off during unloading. ***(BLDG, ENGR, PLNG)***

71. Employ the quietest construction equipment available, to muffle noise from construction equipment and keep all mufflers in good working order in accordance with State law. ***(BLDG, ENGR, PLNG)***

72. Implement the following measures during construction:

    a) Gather all construction debris on a regular basis and place them in a dumpster or other container that is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to storm water pollution.
    b) Remove all dirt, gravel, rubbish, refuse, and green waste from the street pavement, and storm drains adjoining the project site. During wet weather, avoid driving vehicles off paved areas.
    c) Broom sweep the public street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall be scraped from these areas before sweeping.
    d) Install filter materials (e.g., sandbags and filter fabric) at the storm drain inlet nearest the downstream side of the site in order to preclude any debris or dirt from flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and to prevent street flooding. Dispose of filter particles in an approved trash receptacle.
    e) Create a contained and covered area on the site for the storage of bags, cement, paints, flammable, oils, fertilizers, pesticides, or any other materials used on the site that have the potential for being discharged to the storm drain system by being windblown or in the event of a material spill.
    f) Never clean items such as machinery, tools, and brushes or rinse containers in a street, gutter, or storm drain.
    g) Ensure that concrete, gunite, plaster, or similar supply trucks do not discharge wash water into street gutters or drains. ***(ENGR, BLDG)***

73. No equipment shall be started or staging area be established on the streets or the site before or after the specified hours of construction. ***(ENGR, BLDG)***

74. Ensure that no debris or construction scrap material is placed on any adjoining lot, open space area, or street, and that any such material stored on an adjoining site shall be completely removed and the site cleaned, prior to occupancy approval. ***(ENGR, BLDG)***

75. At no time shall campers, trailers, motor homes, or any other vehicle be used as living or sleeping quarters on the construction site unless authorized for site security. ***(ENGR, BLDG)***

76. There shall be no parking of construction equipment or construction worker's vehicles on residential streets or adjacent streets at any time; all vehicles shall be maintained on-site. ***(ENGR, BLDG)***

77. Portable toilets used during construction shall be kept as far as possible from adjacent properties and shall be emptied on a regular basis as necessary to prevent odor. ***(ENGR, BLDG)***

78. Identify truck routes for the import or export of cut/fill material and/or construction debris for review and approval by the City Engineer prior to the issuance of permits. Repair any damage to City streets (private and public) caused by activity associated with this project. ***(ENGR)***

79. In the event of the encounter of subsurface materials suspected to be of an archaeological or paleontological nature, all grading and/or excavation shall cease, the find shall be left untouched, and the City Planning Division shall be immediately notified. The County Coroner and the Native American Heritage Commission shall also be notified and the procedures required in CEQA §15064.5 shall be followed. This requirement shall be noted on the Grading and Building Plans, prior to issuance of permits. ***(PLNG, ENGR, BLDG)***

80. In the above event, retain a qualified professional archaeologist certified by the Register of Professional Archaeologists or paleontologist with a degree(s) in paleontology or geology, to evaluate and make recommendations as to disposition, mitigation and/or salvage. The recommendation shall be implemented before work may proceed. The applicant shall be responsible for all costs associated with the professional investigation and implementation. ***(PLNG, ENGR, BLDG)***

CONSTRUCTION PLAN REVIEW/PRE-PERMIT REQUIREMENTS

81. Submit electronic copy of soils report and Preliminary Title Report, prepared within three months prior to plan submittal. ***(ENGR)***

82. The proposed buildings are within the 100-year Floodplain Zone (**X**). At a minimum, comply with the City of Concord Municipal Code requirements in establishing building finished floor elevations. The Grading Plan shall be referenced to the same elevation datum as the FEMA map, and shall show the finished floor elevations of the proposed buildings, 100-year Base Flood Elevations (BFE), and building setback line per CMC. ***(ENGR) CMC***

83. The Improvement Plans shall show frontage improvements including but not limited to: drainage improvements, curb, gutter and sidewalk per City Standard Detail S-10, and driveway construction per City Standard Detail S-14 and repair/replacement of deficient frontage improvements as determined by the City Engineer. Any unusable existing driveway shall be replaced with standard curb, gutter, and sidewalk per S-10 above. Any trenching for utility installation shall comply with the modified City Standard Detail S-17 for pavement repair and possible slurry placement. ***(ENGR)***

84. The Improvement Plans shall show plan and profile of all proposed street, drainage and sewer improvements and details for curb, gutter, sidewalk, and driveway construction. ***(ENGR)***

85. Design improvements in accordance with the City Standard Plans S-34 and S-36 for sight distance, sidewalk, back up, fencing, geometrics at intersection and corner setback requirements, prior to the Acceptance of Improvements. Plans shall be subject to review and approval by Engineering Services. ***(ENGR)***

86. Obtain an Encroachment Permit from the City prior to performing any work within the public right-of-way or public easements. ***(ENGR) CMC***

SITE DEVELOPMENT PLANS

87. Submit Grading, Erosion Control, Improvement, Stormwater Pollution Prevention Plans (SWPPP), and Stormwater Control Plans prepared by a Registered Civil Engineer to Engineering Services for review and approval prior to issuance of an Encroachment Permit, Grading or Building Permit. ***(ENGR)***

88. If building occupancy occurs in phases, all physical improvements shall be in place prior to occupancy per an approved phasing plan. No individual unit/building shall be occupied until the adjoining area is made safe, accessible, provided with all reasonable services and amenities, and completely separated from any remaining construction-related activity. ***(BLDG, PLNG, ENGR)***

GRADING/EROSION CONTROL/GEOLOGIC

89. Submit a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. A licensed geologist must prepare an evaluation and written report. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet). ***(ENGR)***

90. Submit a Geotechnical Report with the Grading Plans and Building Plans, pursuant to CMC Chapter 16.10 that addresses and provides recommendations for grading, drainage, walls, building foundations, and pavement structural sections. ***(ENGR)***

91. All grading shall require a Grading and Drainage Plan prepared by a registered Civil Engineer, a Soils Report prepared by a registered Geotechnical Engineer and receipt of a Grading Permit approved by the City Engineer. The Grading Plans and Soils Report shall require review by the City's Geotechnical consultant with all costs to be borne by the applicant. ***(ENGR)***

92. Contour grading techniques shall be employed throughout the project to achieve a more natural appearance, even where this will increase the amount of grading. Tops of cuts or toes of fills adjacent to existing public rights-of-way or easements shall be set back two feet minimum from said rights-of-way and easements. All cut-and-fill slopes in excess of five feet in height shall be rounded both horizontally and vertically. ***(ENGR)***

93. Grading on adjacent properties shall require written approval from the affected property owners. ***(ENGR)***

94. On-site finish grading work shall require drainage to be directed away from all building foundations at a minimum slope of 2 percent and a maximum slope of 20 percent toward approved drainage facilities or swales. Non-paved drainage swales shall have a minimum slope of 1 percent. ***(ENGR)***

95. The project Civil Engineer shall inspect the finished grading and certify that it conforms to the compaction and elevations shown on the Grading Plan and Soils Report. ***(ENGR) CMC***

96. At all times seasonally appropriate erosion control measures shall be implemented per plans approved by the City Engineer for all grading work at all times. Wet season measures shall be in place October through April at a minimum and when rain is otherwise predicted. At the time of approval of the Improvement and/or Grading Plans, an approved Erosion Control Plan prepared by a registered Civil Engineer shall be filed with the City Engineer. ***(ENGR)***

97. All graded slopes and stockpiles of loose soil shall be hydromulched/hydroseeded by October of any given year. During grading work between October and April, if rain is forecast, stop all grading work two days before the rain forecast and implement BMPs to insure that the site is protected from erosion. ***(ENGR)***

98. Submit Grading, Erosion Control, Improvement, Waste Discharger Identification (WDID) number, verifying submittal of Stormwater Pollution Prevention Plan (SWPPP), and Stormwater Control Plans to Engineering Services for review and approval prior to the issuance of Grading, Encroachment, and Building Permits. Where applicable, evidence of compliance with the State General Construction Permit shall be provided. ***(ENGR) CMC***

99. Comply with the applicable provisions of the Grading Ordinance and the Storm Water Management and Discharge Control Ordinance. ***(ENGR) CMC***

UTILITIES

100. New electrical transformers shall be placed underground or screened from view. ***(PLNG, ENGR)***

101. No above ground utility facilities/structures shall be located between the face of curb and back of sidewalk in the public right-of-way. ***(ENGR)***

102. **Replace all existing street lights with City approved street light fixtures (minimum 7) along project frontages on East St., Concord Blvd., Port Chicago Hwy., and Willow Pass Rd.** Submit streetlight plans in accordance with the City Standard Specifications showing pole type, luminaries type, conductor and wiring schedule, connection points, lamp wattage and pull box locations, at the time of submittal of improvement plans. Streetlights shall be completely installed and operational prior to occupancy approval. ***(ENGR)***

103. All new utilities shall be constructed underground prior occupancy approval. ***(ENGR)***

104. Undergrounding of all existing overhead utilities along **project frontage is required** including aerial street crossings shall be required pursuant to CMC Section 13.10.130. All new utilities shall be constructed underground prior to issuance of occupancy approval. ***(ENGR)***

105. Comply with the City of Concord sewer design flow criteria and sewer construction requirements of the Central Contra Costa Sanitary District. ***(ENGR)***

106. Submit to Engineering Services sanitary sewer calculations with the Improvement Plans stamped and signed by a Registered Civil Engineer for review. ***(ENGR)***

107. New sewer lateral is required for this project with the sewer clean out at the property line. The sewer line shall be constructed per Central Contra Costa Sanitary District standards and specifications. ***(ENGR)***

108. Submit to Engineering Services a sewer fixture count and square footage of the existing buildings for possible fee credit purposes, prior to demolition. ***(ENGR)***

109. Coordinate all facility adjustments, relocations, or additions to utility services with the appropriate utility companies. ***(ENGR)***

110. Utility areas, electrical and gas meters shall be architecturally screened from view. ***(PLNG)***

111. The location of all outdoor, above-ground and/or at-grade pad mounted transformers, utility equipment, electrical and gas meters, vaults, irrigation control boxes, back flow prevention devices, and the like shall remain outside the sight visibility triangle per City of Concord development code section 18.150.170 and shall be subject to approval by Planning and Engineering Services prior to the issuance of the Grading or Building Permit, whichever comes first. All such equipment shall be screened from view either architecturally or with landscaping and painted forest green or other approved color as approved by the Planning Division. Any changes to the approved Utility Plans, including location or screening details shall be reviewed and approved by the Planning Division. ***(PLNG, ENGR)***

112. Provide cable companies a set of approved site diagrams in electronic format showing the joint trench layout for dry utilities for cable service to be provided to the site. ***(ENGR)***

113. Connect all buildings to the sanitary sewer collection facilities of the City, and pay all current sewer connection and service fees prior to occupancy approval. ***(ENGR) CMC***

114. Submit proof acceptable to Engineering Services that all work within the existing (new) private waterline easement(s) are reviewed and approved by the easement owner of record. ***(ENGR)***

DRAINAGE/STORMWATER C.3 REQUIREMENTS

115. Submit a Stormwater Control Plan (SWCP) prepared in accordance with the current Contra Costa Clean Water Program Stormwater C.3 Guidebook for review and approval by Engineering Services prior to issuance of any permit. The SWCP shall be prepared and certified by a Civil Engineer, registered in the State of California, demonstrating an understanding of the design of treatment measures for water quality and groundwater protection principles applicable to the project site. ***(ENGR)***

116. Prior to issuance of permits for building, site improvements, or landscaping, applicant shall submit a permit application consistent with the applicant's approved Stormwater Control Plan (SWCP), and include drawings and specifications necessary for construction of site design features, measures to limit directly connected impervious area, pervious pavements, self-

retaining areas, treatment BMP's, permanent source control BMP's, and other features that control stormwater flow and potential stormwater pollutants. The Contra Costa Clean Water Program permit application shall include a completed "Construction Plan C.3 Checklist" as described in the Stormwater C.3 Guidebook, and a detailed draft Stormwater BMP Operation and Maintenance Plan consistent with the general O&M plan included in the applicant's approved Stormwater Control Plan. Guidelines for the preparation of Stormwater BMP Operation and Maintenance Plans are in Appendix F of the Stormwater C.3 Guidebook. ***(ENGR)***

117. Construct stormwater treatment measures per the approved SWCP prior to occupancy approval. ***(ENGR)***

118. Submit a final Stormwater BMP Operation and Maintenance Plan (O&M Plan) in accordance with City of Concord Guidelines, for review and approval by Engineering Services, prior to site development permit issuance. This O&M Plan shall incorporate City comments on the draft O&M Plan and any revisions resulting from changes made during construction. The implementation of the O&M Plan shall be the responsibility of the property owner or the HOA where one exists. ***(ENGR)***

119. Execute O&M agreements identified in the SWCP which pertain to the transfer of ownership, right-of-entry for inspection or abatement, and long-term maintenance of stormwater treatment or hydrograph modification BMPs, prior to occupancy approval. ***(ENGR)***

120. Prevent site drainage from draining across sidewalks and driveways in a concentrated manner. ***(ENGR)***

    Collect and convey all stormwater entering and/or originating from the site to an adequate downstream drainage facility. Submit hydrologic and hydraulic calculations for a 10-year storm with the Improvement Plans to Engineering Services for review and approval.

    Install City of Concord "No Dumping, Drains to Creek" curb marker (English and Spanish version) on all catch basins. ***(ENGR)***

121. Submit a Construction Best Management Practice (BMP) Program for review and approval by the Engineering Development Services Department prior to issuance of a Building and/or Grading Permit. The general contractor and all subcontractors and suppliers of materials and equipment shall implement these BMPs. Construction site cleanup and control of construction debris shall also be addressed in this program. Failure to comply with the approved construction BMP may result in the issuance of correction notices, citations, or a project stop work order. ***(ENGR)***

122. Sweep or vacuum the parking lot(s) and adjacent streets a minimum of once a month and prevent the accumulation of litter and debris on the site. Corners and hard to reach areas shall be swept manually. If sidewalks and/or the parking lot are pressure washed, debris must be trapped and collected to prevent entry into the storm drain system. No cleaning agent may be discharged into the storm drain. If any cleaning agent or degreaser is used, wash water shall be collected and discharged to the sanitary sewer, subject to the approval of the Central Contra Costa Sanitary District. ***(ENGR)***

123. Ensure that the area surrounding the project such as the streets stay free and clear of construction debris such as silt, dirt, dust, and tracked mud coming in from or in any way related to project construction. Areas that are exposed for extended periods shall be watered regularly to reduce wind erosion. Paved areas and access roads shall be swept on a regular basis. All trucks shall be covered. ***(ENGR)***

124. Clean all on-site stormdrain facilities a minimum of twice a year, once immediately prior to October 15 and once in January. Additional cleaning may be required if found necessary by the City Engineer/Director of Building Inspection. ***(ENGR, BLDG)***

SOLID WASTE/RECYCLING

125. **The trash pickup/drop off area is designated to the driveway bay adjacent and parallel to Concord Blvd. The trash pickup shall not exceed more than three times a week and shall be performed during off-peak hours, at the approval of the City. At no time shall trash bins be left on the sidewalk. The trash bins shall not be placed or extended into the street (Concord Blvd.) at any time. The trash bins shall be secured and protected from public access and free of litter and pollution. The property management will be responsible for the care and maintenance of the sidewalk, driveway bay and surrounding area. Repair of any damage to the sidewalk or driveway bay caused by moving trash bins or resident/tenant move shall be under the Owner's Duty to Maintain Improvements as specified under the Property Maintenance Agreement.**

126. Comply with CMC Chapter 8.20, Solid Waste, Article III, Construction and Demolition (C&D) Waste Recycling, Sections 8.20.330 through 8.20.450, as applicable. ***(BLDG)***

127. Design and implement City approved Source Reduction/Recycling Plan and demonstrate that interior and exterior refuse enclosures have been sufficiently designed and located for the storage and pick up of recyclable materials in accordance with CMC Section 8.20.260, Source reduction/recycling plans required, prior to issuance of a Building Permit. ***(PW)***

128. Trash bins and refuse shall be stored within approved trash enclosure and the doors shall be closed at all times except when the bins are being emptied. ***(CE)***

129. Comply with the provisions of the CMC, Central Contra Costa Sanitary District and the disposal service regarding enclosure design, access requirements, and the number of required individual refuse receptacles based upon waste pickup schedules. Trash enclosures shall incorporate the following features:

    a) A concrete pad to prevent damage to asphalt paving.
    b) A roof and area drain , designed to prevent rainwater from penetrating the interior of the enclosure and preclude trash from being blown outside of the bins.
    c) The area drain shall connect to a sanitary sewer to prevent contaminated water from entering the storm drain system.

d) If any cleaning agent or degreaser is used, wash water must be collected and discharged to the sanitary sewer, subject to the approval of the Central Contra Costa Sanitary District. ***(CCCSD, ENGR)***

130. Trash enclosures shall incorporate the same architectural treatment, and use the same exterior materials and colors as the main building and shall comply with the Community Design Guidelines, including the following:

a) A roof.
b) Masonry, steel or heavy timber walls.
c) An interior, poured-in-place curb to prevent damage to the screen walls.
d) Doors with external hinges to prevent damage from the receptacle.
e) Doors of solid metal or with a metal frame with self-closing latch.
f) The height of the enclosure walls and door shall be the same height or higher than the bins within the enclosure. ***(PLNG)***

AGREEMENTS, FEES, BONDS

131. All fees noted below are the fees currently in effect as of July 11, 2016 per the Resolution of Fees and Charges. The fees and charges are reviewed annually as part of the budget public hearing process. Fee adjustments are based on a number of factors and vary depending on the type of fee:

Service-based fees are adjusted annually based on the San Francisco-San Jose-Oakland Area Consumer Price Index;

Improvement based fees (also called impact fees) are adjusted annually based on Engineering News Record Construction Cost Index (San Francisco Bay Area); and the

Parkland Fee is adjusted per Section 78-95 of the Concord Municipal Code.

The fees become effective as of the date set forth in Exhibit A of Resolution No. 78-6042, Fees and Charges for Various Municipal Services, as most recently amended and approved by the City Council. Persons interested in how a particular fee is calculated should contact the City Department administering the fee or the Finance Department. ***(ENGR)***

132. Provide a **($15,000 or other)** cash deposit to the Planning Division to cover Condition Compliance and Mitigation Monitoring costs, at the time of submittal of plans and documents to Engineering Services or the Building Division for plan check. Planning staff's time will be charged to this deposit for work performed to implement the Conditions of Approval, from the time of project approval to occupancy approval. Mitigation Monitoring costs will be charged at cost over the life of the project mitigation requirements. The deposit will be placed in a refundable account and any unused funds will be returned upon completion. If the initial deposit is insufficient to cover actual costs, an additional deposit will be required. ***(PLNG)***

133. Pay a Document Imaging fee to reimburse the City for implementation of the Document Imaging and File Retention programs, prior to issuance of Grading or Building Permits. ***(PLNG)***

134. Enter into a Maintenance Agreement acceptable to the City prior to the occupancy permit, agreeing to provide for proper maintenance of the driveway bay, sidewalk and ADA path of travel surrounding the project , storm drain outside of the public right of way, street lights and other privately maintained improvements pursuant to CMC Section 17.35.190 "Streets". ***(ENGR)***

135. All improvement agreements required in connection with said plans shall be submitted to and approved by the City and other agencies having jurisdiction over said project prior to approval or issuance of the Building, Encroachment or Grading Permit, whichever comes first. ***(ENGR)***

136. All required faithful performance bonds and labor materials bonds in a penal amount equal to 100 percent of the approved estimates of construction costs of improvements shall be submitted to and approved by the City and other agencies having jurisdiction prior to approval of the Final Map or issuance of the Building or Grading Permit, whichever comes first. ***(ENGR)***

137. Encroachment Permit Application:

    a) Pay the Filing Fee at the time of submittal of permit application, improvement plans and supporting documents to City Engineering Services for review. The current fee is $_66.00____.
    b) Provide a restoration security before issuance of the Encroachment Permit. The security shall be in an amount sufficient to restore existing public improvements to a serviceable condition should development improvement activity cause damage. The amount of the security shall be determined by, and be in a form acceptable to the City Engineer.
    c) Provide a $10,000 cash deposit to cover Condition Compliance/Mitigation Monitoring costs at the time of submittal of plans and documents to Engineering Services for review. The deposit will be placed in a refundable account. Condition Compliance/Mitigation Monitoring costs will be charged to this deposit over the life of the project permit and mitigation requirements. Any unused funds will be returned at project completion. If the initial deposit is insufficient to cover actual costs, an additional deposit in an amount determined by the City Engineer will be required. ***(ENGR)***

138. Grading Permit Application:

    a) Pay Grading Permit Fees at submittal of a Grading Permit application. The current fee is determined based on cubic yardage of cut and fill combined, or at the hourly rate of $_238____ if the hourly rate is used.
    b) Provide a $10,000 cash deposit for Erosion Control prior to issuance of Grading Permit. The deposit will be placed in a refundable account. Any unused funds will be returned at project completion. If the initial deposit is insufficient to cover actual costs, an additional deposit in an amount determined by the City Engineer will be required.
    c) Pay Stockpile and Erosion Control Monitoring fee prior to issuance of Grading Permit. The stockpile and erosion control monitoring fee is currently $_38___ per calendar day and is collected for the life of the Grading Permit activity. ***(ENGR)***

139. Improvement Plans:

a) Pay the Improvement Plan review fee at the time of submittal of Improvement Plans and supporting documents to Engineering Services for review. All plan review fees include one initial submission and two revisions. Any additional plan review required will be charged at an hourly rate of $238.00 and will require an adequate deposit to a trust account prior to commencement. Pay the Construction Inspection fee prior to issuance of the Construction Permits or scheduling the Subdivision Agreement for consideration by the City. The current fee is based on 9% of the estimated cost of constructing the required improvements to support the subdivision.

b) Pay the Drainage Acreage Fee prior to issuance of the building permit. The current fee is $_2,709____/acre. (Drainage Area 23/24_____).

c) Pay the current fee for Parkland prior to issuance of the building permit. The current fee is $_9,914____ per living unit for _high Density Designation.

d) Provide a $_1,000.00____ deposit for archiving permanent records prior to approval of the Final Map. Actual fees will be charged following completion of work.

e) Provide a $10,000 deposit for specialty inspections prior to approval of the Final Map.

f) Pay the applicable fees for review of the stormwater control plan, Operation and Maintenance agreement and Bio-Retention inspection.
(ENGR)

g) Submit application and fees for the right of way relinquishment prior to site development permit.

140. Sewer Connection Permit:

a) Pay the current Sanitary Sewer connection fee and sewer service fee. The sewer fees shall be paid prior to occupancy permit.

141. Traffic Mitigation Fee:
Pay Offsite Street Improvement Program (OSIP) fee less possible fee credit. The OSIP fee shall be the fee in effect at the time of approval of the building permit. The current OSIP Fee is $_2,624____ per dwelling unit for multi-family structures and shall be paid prior to issuance of the building permit. ***(ENGR)***

OTHER/MISCELLANEOUS

142. Contact local postal authorities to get their requirements for mail facilities for the project. The design and location of mail receptacles shall be reviewed and approved by the Planning Division and shown on the Utility, Landscape, and Building Plans, prior to issuance of Grading or Building Permits, whichever comes first. Mail facilities shall be installed prior to occupancy approval. ***(PLNG)***

143. Contact the Geographic Information Systems (GIS) Technician, in the Information Technology Department, (925) 671-3051, for addressing requirements, and coordinate with the Contra Costa County Fire Protection District for their approval, prior to issuance of a Building Permit. ***(PLNG)***

144. Comply with the requirements of the Contra Costa County Health Department for the abandonment of existing septic tanks or wells. ***(ENGR) CMC***

145. Comply with the requirements of the Contra Costa County Fire Protection District. Submit complete sets of plans and specifications to the Fire District for review and approval at:

    Contra Costa County Fire Protection District
    2010 Geary Road
    Pleasant Hill CA 94523

    Plan review fees are assessed at that time. The City is not responsible for the collection of fees or enforcement of requirements imposed by the Fire District. ***(CCCFPD)***

146. The applicant shall defend (with counsel approved by City), indemnify and hold harmless the City, any agency or instrumentality thereof, and its/their respective agents, officers, officials, volunteers, and employees from and against any and all administrative and/or legal claims, actions or proceedings to attack, set aside, void, or annul approval of the project, including without limitation, any related application, permit, certification, condition, environmental determination, other approval, compliance or failure to comply with applicable laws and regulations, and/or processing methods ("Challenge"), with the exception of a Challenge arising out of the City's sole negligence or willful misconduct. The City shall have the right to pre-approve any material decision involved in defending any such Challenge, including settlement, and may (but is not obligated to) participate in the defense of any Challenge. If applicant does not promptly defend any Challenge, City may (but is not obligated to) defend such Challenge as City, in its sole discretion, determines appropriate, all at applicant's sole cost and expense. The applicant shall bear any and all losses, damages, injuries, liabilities, costs, and expenses (including, without limitation, staff time and in-house attorney's fees on a fully-loaded basis, attorney's fees for outside legal counsel, expert witness fees, court costs, and other litigation expenses) arising out of or related to any Challenge ("Costs"), whether incurred by Developer, City, or awarded to any third party, and shall pay to the City upon demand any Costs incurred by the City. No modification of the project, any application, permit, certification, condition, environmental determination, other approval, change in applicable laws and regulations, or change in processing methods shall alter the applicant's indemnity obligation. Pursuant to Government Code Section 66474.9, the applicant's indemnification obligation with respect to any claim, action or proceeding to attack, set aside, void, or annul an approval of City concerning a subdivision (tentative, parcel, or final map application or approval) shall be limited to actions brought within the time period provided for in Government Code Section 66499.37, unless such time period is extended for any reason. The City shall promptly notify applicant of any Challenge, and shall cooperate fully in the defense. ***(CA)***

147. The permit and approval shall expire in **(two)** year(s) from the date on which they became effective unless construction permits are obtained and work has begun. All permits approved concurrently with a Tentative Map shall be valid for the life of the map. The effective date of the permit and approval is **December 30, 2016**. ***(PLNG)***

148. A request for a time extension from the expiration date of **December 30, 2018** can be considered if an application with required fee is filed at least 10 days before the original expiration date, otherwise a new application is required. A public hearing will be required for all extension applications, except those involving only Design Review. Extensions are not automatically approved. Changes in conditions, City policies, surrounding neighborhood, and other factors permitted to be considered under the law, may require, or permit denial. ***(PLNG)***

EXHIBIT B

580 Second Street
Suite 200
Oakland, CA 94607
510.272.2910
ktgy.com

ktgy
Architecture+Planning

2400 Willow Pass: Project Description

To: City of Concord
1950 Parkside Drive, MS/53
Concord, CA 94519
Attn: Afshan Hamid

Date: August 12, 2016
Project Name: 2400 Willow Pass
Project No: 20151048.00
Re: Application Submittal

Project Description

Located within a ¼ mile radius of the Concord BART station, as well as 2 blocks from the Downtown, 2400 Willow Pass offers an urban and sustainable living environment. The contemporary design features clean, rhythmic forms and an environmentally conscious, yet rich material palette. The street level accommodates enhanced pedestrian circulation – all edges have been widened to at least 7.5', and in most cases 8'. All edges have been lined with shade and/or ornamental trees in landscaped strips. The landscape design is integrated with the building entrances through two open areas that accommodate both residents and the public. The main entrance lobby is off of Willow Pass Road with a secondary lobby on Concord Boulevard.

The building plan negotiates an irregular shaped site with four frontages. The building design maintains vertical and horizontal interest via modulation in the building, cornices + parapet lines, and balcony projections. Townhomes with entries fronting East Street create a street level pedestrian experience. Above the townhomes the building opens with a podium courtyard between, allowing for views and connection to Downtown's Todos Santos Plaza. At the corner of Willow Pass and East sits the leasing/amenity space and main lobby to create a prominent entry lobby with storefront glazing, metal awning, and raised plaza to activate the ground level. The warm brick façade language from the townhomes wrap around the building to Port Chicago, creating a strong, yet rhythmic building base. In addition, along Willow Pass and Port Chicago visual interest is brought to the ground level via art reliefs that sit beneath the architectural white bays.

The podium level is intended to offer a number of amenities to users of all ages including a swimming pool and seating area that is separated by transparent fencing on all sides. The "dry" areas include lounges, kitchens, fire pit area, and a bocce ball court. The landscape design is integrated with the building by extension of the double height indoor amenity space and breezeways. Private patios are buffered by planting beds.

EXHIBIT C

Request to Planning Commission for 25% Reduction in Required Parking at 2400 Willow Pass Rd. in Concord, CA

11/21/2016

Argent Concord , LLC herein requests a reduction in required parking under Table 18.160.140 due to each of the following facts, findings, and factors:

1. The Parking Demand Study conducted by the City of Concord has determined that we have sufficient parking for the Project
2. The Argent is within walking distance (1/4 mile) of the Concord BART Station, which significantly reduces the need for a regular commuting vehicle for BART commuters, who are a major target residents for the Project.
3. The Argent is directly across the street from the recently improved Safeway grocery store, which enables our residents to conveniently grocery shop without a vehicle.
4. The Argent is two blocks from Todos Santos Plaza, which provides all manner of convenient shopping, restaurants, and business services for all of our residents, and further reduces resident's vehicular needs.
5. The Argent has reserved 6 spaces for car sharing service. For those residents who need an occasional vehicle, Zipcar provides a perfect by-the-hour solution. A further benefit of this service is that these car share stalls are in the guest portion of our parking structure, and will likely reduce non-resident vehicle requirements as well, as they are available for public use.
6. The Argent has many Uber and Lyft users in our target clientele, and many residents under fifty prefer a combination of these on demand car programs in conjunction with Zipcar services in lieu of car ownership.
7. The Argent has 155 bicycle parking spaces, and a bike maintenance/repair area for non-car commuters, and we expect that demographic to be well-represented in our resident mix.
8. We will have controlled parking through a bumper sticker system, and guest parking will be monitored through a dashboard placard system, which will control onsite parking usage to prevent vehicle storage from becoming problematic.

9. Total parking spaces: 263. Including 26 compact spaces. 8 Motorcycle spaces are provided as well
10. We wish our Project to be as affordable as possible, and we know that affordability of housing in Concord has become problematic. Parking spaces are very expensive to provide, and increasing the number of parking spaces over the amount we have proposed will increase the asking rent past what the market will bear and will kill the Project. Current practices of requiring generous free residential parking contradict society's goals to provide affordable housing, reduce environmental impacts, conserve resources and develop a more efficient and diverse transportation system.
11. We believe the request and the TDM sufficiently addresses any deficient parking. Your project is aiming for a Transit Supportive project which is one of the goals in the Downtown Specific Plan.

Respectfully submitted,
David Jones
Argent Concord LLC

EXHIBIT D

Hamid, Afshan

From: Jennifer Renk <JRenk@sheppardmullin.com>
Sent: Monday, November 28, 2016 4:32 PM
To: Hamid, Afshan; 'David Jones'; Kotzebue, Margaret
Cc: 'Bruce Palmbaum'
Subject: RE: 2400 Willow Pass

Margaret and Afshan,

By way of this email, Argent Concord is formally requesting a concession pursuant to the City's Density Bonus ordinance in exchange for the project's designation of 5% of its units as affordable to very low income households. Specifically, Argent Concord seeks a concession from the City's parking design standards under Municipal Code section 18.160.080.

Argent Concord is requesting relief from the City's column grid spacing in order to create the most efficient garage layout at 2.5 levels. If the project were required to meet the City's requirement for column spacing, the parking garage would need to go further underground in order to provide the requisite amount of spaces, which would render the project economically infeasible because of the substantial, additional cost.

Please let us know if you have any questions or if you need anything else from us. Thanks!

Sincerely,

Jen

Jennifer E. Renk
415.774.3143 | direct
415.403.6091 | direct fax
+15105415829 | cell
JRenk@sheppardmullin.com | Bio

SheppardMullin
Sheppard Mullin Richter & Hampton LLP
Four Embarcadero Center, 17th Floor
San Francisco, CA 94111
415.434.9100 | main
www.sheppardmullin.com

EXHIBIT E

Concord

REGULAR MEETING OF THE CITY OF CONCORD DESIGN REVIEW BOARD

Thursday, September 22, 2016
5:30 p.m., Regular Meeting
PERMIT CENTER CONFERENCE ROOM
1950 Parkside Drive, Bldg. D

Board Members Present:	**J. Moore, K. Shelby, R. Barbour, D. Litty, R. Wells**
Board Members Absent:	**J. Laub**
Staff Present:	**R. Lenhardt, F. Abejo, J. Gonzalez, A. Hamid**
Audience Attendance:	**16 people**

DRAFT SUMMARY MINUTES/ANNOTATED AGENDA

PUBLIC COMMENT PERIOD: *None*

ADDITIONS/CONTINUANCES/WITHDRAWALS: Staff added the Concord Toyota Façade Enhancements Staff Report

CONSENT CALENDAR

A. 8/11/16 Meeting Minutes ***(Continued from 8/25/16 meeting)***

ACTION: *Approved, 3-0-2. (Barbour motioned, Shelby seconded, Litty and Wells abstained.)*

B. 8/25/16 Meeting Minutes

ACTION: *Approved, 3-0-2. (Litty motioned, Wells seconded, Barbour and Shelby abstained.)*

STAFF REPORTS

**The Board reordered the agenda as follows: Argent Concord, Cash and Carry, Sprouts Farmers Market, Staff Announcements, Board Considerations/Announcements, and Concord Toyota Façade Enhancements.*

1. Cash and Carry (PL16202 – DR) – Project Planner: Jessica Gonzalez @ (925) 603-5821

ACTION: The Board recommended approval of a corrugated metal equipment roof screen painted gray.

HEARINGS

1. **Argent Concord (PL16333 – DR)** – Preliminary Design Review for a 171-unit apartment project on a 1.6-acre site at 2400 Willow Pass Road. The General Plan designation is Downtown Mixed Use; Zoning classification is DMX (Downtown Mixed Use); APN 126-082-008. **Project Planner: Afshan Hamid @ (925) 671-3281**

   ACTION: The Board provided staff with the following comments: 1)Show more details at the windows of the units, provide a sample of the window, and the color of the vinyl sash. 2) The Board requested the first floor storefront fenestration be anodized frames with wider verticals and horizontals. 2) Requested that the plan along Concord Boulevard be looked at, in terms of how spaces are programmed and their adjacencies, as currently there was a lot of activity on Concord Blvd. 3) It was recommended to move trash and loading / unloading further east on Concord Blvd. 4) Largest townhome on intersection of East Street and Concord Blvd needed more articulation or perhaps step out 5) There was concern about the Concord Blvd elevation and the amount of white cementitious material facing south and lack of articulation or shadow line 6) Re-evaluate the African Sumac at the podium level as it can be messy 7) Provide blow up details of key landscape areas 8) Provide landscape plan and design layouts 9)Provide details of the coping at the roof level 10) The Board ask for elevations at the courtyard, not necessary to see all the courtyard elevations.

2. **Sprouts Farmers Market (PRE16004)** – Conceptual Design Review to construct an approximately 30,000 sq. ft. Sprouts Market on a 2.65-acre site located at 4475 Treat Boulevard. The General Plan designation is Commercial Mixed Use; Zoning classification is CMX (Commercial Mixed Use); APN 132-160-010. **Project Planner: Frank Abejo @ (925) 671-3128**

   ACTION: The Board provided staff with the following comments for incorporation into revised plans and formal application: 1) consider re-orienting the building so that it faces Treat Boulevard; 2) consider lighting and noise impacts in designing utility areas adjacent to residential uses; 3) provide shade and buffering for outdoor area contemplated along Treat Boulevard; 4) provide hydrozone information and bioswale section on landscape plan; 5) provide a master plan concept that provides a comprehensive design for the entire shopping center; and 6) incorporate staff report recommendations related to bicycle parking, landscaping, architecture, etc.

BOARD CONSIDERATIONS/ANNOUNCEMENTS – ***Alternate Barbour mentioned he has been following the progress of the La Vista Residential Subdivision. Chair Moore noted Starbucks at 4290 Clayton Road painted the downspouts rather than removed them from the building and expressed his disappointment that the building's electrical cabinet is in a very visible location along the Treat Boulevard elevation.***

STAFF ANNOUNCEMENTS – ***Staff reminded the Board of the fall tour date and time. Mr. Abejo noted La Vista Residential Subdivision will not be on the tour agenda due to a construction scheduling conflict.***

ADJOURNMENT – ***8:15 p.m. (5-0, Wells motioned, Shelby seconded.)***

NEXT DESIGN REVIEW BOARD MEETINGS:
October 13, 2016
October 27, 2016

EXHIBIT F

PARKING SURVEYS OF MULTI-UNIT RESIDENTIAL BUILDINGS

FOR APPLICATION IN EVALUATING PARKING DEMAND ASSOCIATED WITH PROPOSED RESIDENTIAL PROJECTS IN THE DOWNTOWN CONCORD BART/TRANSIT AREA

November 18, 2016

Prepared by:
Omni-Means, Ltd.
Engineers & Planners
1901 Olympic Blvd., Suite 120
Walnut Creek, CA 94596

R2250TIA002 / 35-2272-54

omni · means
ENGINEERING SOLUTIONS

INTRODUCTION

This report presents the findings of a parking survey study conducted at several multi-unit residential complexes located near BART/Transit centers in order to help identify parking demand associated with residential projects of similar design proposed for downtown Concord. Based on the surveys, parking demand rates were calculated (on a per-unit and per-bedroom basis) and applied to the parking supplies of two proposed multi-unit residential projects in downtown Concord. Published parking demand rates from other sources were also reviewed in comparison to the surveyed rates in order to provide additional information regarding the potential parking demand.

PARKING SURVEYS

In consultation with City of Concord Planning and Transportation staff, three existing multi-unit residential properties were selected to be surveyed. The properties were chosen based on their similar building design characteristics and proximity to transit oriented transportation services. Each of the buildings has a mix of unit sizes and an onsite parking garage for the residents. All three properties are located ¼ - ½ mile of a BART (Bay Area Rapid Transit) station or shuttle bus as well as other transit oriented services and employment centers. Two of the surveyed properties are located in the Jack London Square area of Oakland, California ("The Bond" residential condominiums and the "Aqua Via" residential apartments). The third property is located in downtown Concord near the Concord BART Station (The "Park Central" residential apartments).

In order to identify the peak parking demand at these properties, parking surveys were conducted during early morning hours (5:00 am). The parking surveys counted the number of vehicles in the parking garage and also attempted to determine if any residents were parked on the street by observing if any residents walked to/from their cars during observations for several hours in the morning (5:00 am until 9:00 am).

Information regarding the number of units, bedrooms, and occupancy levels for each property were obtained and applied to the number of parked vehicles in order to calculate parking demand rates. The surveyed parking demand rates for each property are shown in the attached worksheets.

The surveys were conducted beginning at 5:00 am in the morning. The Institute of Transportation Engineers (ITE) provides data regarding parking demand of multi-unit residential properties for each hour of the day as a percentage of the peak demand.[1] The ITE data has found that peak demand (or 100% of demand) typically occurs between 12:00 midnight and 4:00 am, while demand at 5:00 am is 96% of that peak demand. Therefore, the demand we surveyed at 5:00 am was increased by 4% in order to reflect the expected peak demand between midnight and 4:00 am.

Parking rates were calculated for the surveyed onsite demand and total demand including offsite (street) parking. The street parking demand for each property is an estimate based on counts of residents seen walking to/from offsite parked cars during the surveys in combination with observations of overall street parking demand and proximity of other potential street parking generators.

[1] *Institute of Transportation Engineers, Parking Generation Manual, 4th Edition, Multi-Unit Residential, 2010.*

SURVEYED PARKING RATES

Site 1 (The Bond, Oakland) had a surveyed parking rate of 1.08 vehicles per occupied unit. Site 2 (Aqua Via, Oakland) had a surveyed rate of 1.22 vehicles per occupied unit. Site 3 (Park Central, Concord) had a parking rate of 1.44 vehicles per occupied unit.

Parking rates based on the number of bedrooms found Site 1 had a parking rate of 0.71 vehicles/occupied bedroom. Site 2 had a surveyed rate of 0.77 vehicles/bedroom. And Site 3 had a surveyed rate of 0.95 vehicles/bedroom.

The surveys found parking demand for the two Oakland (Jack London Square) sites to be similar to each other. The Concord site had somewhat higher demand. The Oakland units are located in a highly transit oriented location, with BART, bus, ferry, and train transportation available within several blocks. Additionally, large employment centers (downtown Oakland) are within walking distance. The Oakland surveys observed a higher number of residents walking to a transit source or place of employment than was observed at the Concord site.

PUBLISHED PARKING RATES

Published rates provided by the Institute of Transportation Engineers were also evaluated for comparison to the surveyed rates.[2] The ITE rates are based on a database of surveys of study sites throughout the country. The ITE rates for Low/Mid-Rise Apartments (Land use 221) and Residential Condominium/Townhouse (Land use 230) were reviewed. The Low/Mid-Rise Apartment rates are delineated into suburban and urban locations, while the Residential Condominium/Townhouse rates are all classified as suburban locations. The ITE rates provide an average rate as well as a fitted curve equation rate based on the number of dwelling units. The ITE rates and equations are provided in an attached worksheet.

The ITE peak parking demand average rate for low/mid-rise apartments (includes buildings with up to four levels) is 1.20 vehicles/unit for urban locations, and is 1.23 vehicles/unit for suburban locations. The parking rates in the database range from 0.80-1.43 vehicles per unit for urban locations and 0.59-1.94 vehicles per unit for suburban locations.

The ITE average rate for residential condominium/townhouses is 1.38 vehicles/unit. The parking rates range from 1.04-1.96 vehicles per unit.

OTHER PARKING REFERENCE STUDIES

In addition to the surveys we conducted, we reviewed other parking reference materials provided by the City of Concord regarding parking characteristics for multi-unit residential facilities. A study was conducted by The Planning Center which evaluated parking conditions at several properties in Oakland, California (Oakland Multi-Family Residential Parking Survey Report).[3] The study was based on questionnaires regarding parking given to residents of the properties and parking surveys of each property's parking facilities. The parking study is informative and provides additional insight into residential multi-unit parking characteristics.

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[2] *Institute of Transportation Engineers, ibid.*

[3] *The Planning Center DC&E, Oakland Multi-Family Residential Parking Survey, July 22, 2013.*

The study evaluated eleven properties located in three different areas of Oakland. The study found the average overall parking rate to be 0.97 vehicles per unit surveyed. However, it is noted that three of the properties have no onsite parking spaces provided for the residents. Nevertheless, at these properties there were 21 cars owned by the 32 respondents, reflecting a parking rate of 0.66 vehicles per person even though no onsite parking is provided. Given the absence of any parking spaces (all of the vehicles must park on the street), this suggests a parking rate of 0.66 vehicles likely represents the absolute lowest end of parking demand rates.

Two of the properties included in the study are located in the Jack London Square area of Oakland. The two properties had parking rates of 1.45 and 1.73 vehicles/unit, respectively. These rates are similar to, but even higher than the rates we surveyed at two properties in the same area.

The Planning Center study asked respondents about vehicle ownership. The study found 43% of respondents reported owning 1 car, 33% owned 2 cars, 4% owned 3 cars, and 2% owned 4 or more cars (18% did not own a vehicle). The percentages equate to 129 cars owned out of every 100 people, or a parking rate of 1.29 vehicles per person.

The study also found that the majority of residents parked one vehicle onsite, but a higher percentage of second and third owned cars were parked offsite. Based on our review of the study, approximately 10% of residents with one vehicle park it offsite, 30% of residents with two vehicles park one vehicle offsite, and 50% of residents with three vehicles park the third vehicle offsite.

The reasons why residents choose to park offsite are varied and many are specific to each site location, therefore it is difficult to quantify. In general, however, it appears some amount of offsite parking is likely to occur, even if adequate parking supply is provided onsite. This may be due to convenience/proximity of the vehicle to the dwelling unit, parking cost, or owning more cars than are allocated per unit.

PARKING SUPPLY RATIOS OF THE PROPOSED PROJECTS

The two proposed projects in Concord ("2400 Willow Pass" and "Concord Village") were evaluated in terms of the proposed ratio of parking spaces to the number of units and bedrooms.

The "2400 Willow Pass" project consists of 181 units (20 studios, 104 1-bedroom, 56 2-bedroom, and 1 3-bedroom). The project has a proposed supply of 263 parking spaces. The Concord Municipal Code for the project has a base requirement of 350 spaces, but can potentially be reduced up to 25% since it is within the BART TS district, which would equal 263 spaces. Therefore the project would meet the Code assuming a 25% reduction is allowed from the base requirement. The proposed supply of 263 spaces equates to a parking supply ratio of 1.45 spaces per unit and 1.10 spaces per bedroom.

The "Concord Village" project proposes to have 230 units (58 studios, 119 1-bedroom, and 53 2-bedroom). The project proposes to provide 425 vehicle spaces (and 12 motorcycle spaces). The Concord Municipal Code requires 411 vehicle spaces (and 8 motorcycle spaces) for the project. Therefore the supply of spaces meets the Code requirement. The supply of 425 spaces equates to a parking supply ratio of 1.85 vehicle spaces per unit and 1.50 vehicle spaces per bedroom.

FINDINGS

We conducted parking surveys at two properties in the Jack London Square area of Oakland and one survey at a property in Concord, California. The Oakland locations had surveyed parking rates of 1.08 and 1.22 vehicles/unit. The Concord location had a surveyed rate of 1.44 vehicles/unit.

Published ITE rates for multi-unit apartments and condominiums have average rates of 1.20-1.38 vehicles/unit.

Other reference materials reviewed as part of this report included the Planning Center study in Oakland, which found an average rate of 0.97 vehicles/unit. However, the study included properties with no onsite parking supply (which still had an average parking demand of 0.66 vehicles/unit) and the two locations in Jack London Square (the same area where our surveys were conducted) had parking demand rates of 1.45 and 1.73 vehicles per unit.

The findings show that there is a wide range of parking rates (ranging from less than 1 vehicle per unit to closer to 2 vehicles per unit) associated with multi-unit residential buildings. However, based on the parking surveys we conducted and a review of the provided parking reference materials, the surveyed Concord location, with a parking rate of 1.44 vehicles per unit and 0.95 vehicles per bedroom, appears to have the most in common with the proposed projects. The two properties we surveyed in Jack London Square had lower rates, but are located in a highly developed and long established transit area with large-scale employment centers nearby. Even so, the surveys conducted by the Planning Center found rates of 1.45 and 1.73 vehicles per unit at two locations in the same area.

When planning for parking supply based on comparative studies, transportation research has found that using *average* parking rates from studies of similar land uses may only provide adequate parking about half of the time. Therefore, the "design-level parking demand" value, which is the 85th percentile value, is suggested for planning purposes.[4] For comparison, the 85th percentile rate was calculated using the three parking rates we surveyed combined with the eleven surveyed rates in the Planning Center study. The combined surveys have an 85th percentile rate of **1.45 vehicles/unit**.

The "2400 Willow Pass" project has a proposed parking supply rate of 1.45 spaces per unit. The proposed supply is essentially equal to the demand rate we surveyed in Concord (1.44 vehicles/unit) and the 85th percentile rate of the combined surveys we evaluated (1.45 vehicles/unit).

The "Concord Village" project has a proposed parking supply rate of 1.85 spaces/unit. This rate is above the demand rate we surveyed in Concord and above the 85th percentile rate of the combined surveys we evaluated.

We trust this provides the requested information. Feel free to contact us if you have any questions or comments.

[4] *Weant, Robert and Levinson, Herbert, Parking, Parking Demands and Characteristics, Eno Foundation for Transportation, 1990.*

ATTACHMENTS

Parking Survey Summaries of Sites 1, 2, and 3

ITE Published Parking Rates

Calculated Design-Level Parking Rate of Combined Surveys

SITE 1 PARKING SURVEY:

The Bond multi-unit residential building, 311 Second St, Oakland, CA (Jack London Square)

101 units (48 one bedroom + 53 two bedroom)
154 total bedrooms
100% occupied

Resident owned condominiums (previously rental apartments).
150 parking spaces (113 parking slots, some of which are tandem).
Some units allocated one space and some units allocated two spaces.
Parking spaces are bundled (included) in unit price, except motorcycles and electric vehicles.

Parking Survey (10/31/16):

95 vehicles observed parked at 5:00 am.
*Peak parking time adjustment (5:00 am is 96% of peak demand.)
95 vehicles / .96 = 99 vehicles peak demand onsite.

**Offsite parking adjustment (Observations indicate approximately 10 resident vehicles may be parked offsite.)
109 vehicles peak demand with offsite parking adjustment.

Parking Rates:

99 parked onsite / 101 occupied units = 0.98 vehicles/occupied dwelling unit
99 parked onsite / 154 occupied bedrooms = 0.64 vehicles/occupied bedroom

109 parked total / 101 occupied units = **1.08 vehicles/occupied dwelling unit**
109 parked total / 154 occupied bedrooms = **0.71 vehicles/occupied bedroom**

*Institute of Transportation Engineers, Parking Generation Manual, 4th Edition, Land Use 221: Low/Mid-Rise Apartment, Parking demand by hour of day as percentage of peak demand.

**Offsite parking demand estimate based on surveys of residents observed walking to/from vehicle parked offsite between 5:00-9:00 am and overall parking demand on adjacent streets.

SITE 2 PARKING SURVEY:

The Aqua Via multi-unit residential building, 125 Second St, Oakland, CA (Jack London Square)

100 units (41 one bedroom + 59 two bedroom)
159 total bedrooms
95% occupied (= 95 occupied units and 151 occupied bedrooms)

Rental apartments.
133 parking spaces.
All units get one space bundled (included) in unit price. The extra 33 stalls can be rented.

Parking Survey (11/1/16):

102 vehicles observed parked at 5:00 am.
*Peak parking time adjustment (5:00 am is 96% of peak demand.)
102 vehicles / .96 = 106 vehicles peak demand.

**Offsite parking adjustment (Observations indicate approximately 10 resident vehicles may be parked offsite.)
116 vehicles peak demand with offsite parking adjustment.

Parking Rates:

106 parked onsite / 95 occupied units = 1.12 vehicles/occupied dwelling unit
106 parked onsite / 151 occupied bedrooms = 0.70 vehicles/occupied bedroom

116 parked total / 95 occupied units = **1.22 vehicles/occupied dwelling unit**
116 parked total / 151 occupied bedrooms = **0.77 vehicles/occupied bedroom**

*Institute of Transportation Engineers, Parking Generation Manual, 4th Edition, Land Use 221: Low/Mid-Rise Apartment, Parking demand by hour of day as percentage of peak demand.

**Offsite parking demand estimate based on door count surveys of residents observed walking to/from vehicle parked offsite between 5:00-9:00 am and overall parking demand on adjacent streets.

SITE 3 PARKING SURVEY:

The Park Central multi-unit residential building, 1555 Galindo St, Concord, CA

259 units (140 one bedroom + 107 two bedroom + 12 three bedroom)
390 total bedrooms
95% occupied (= 246 occupied units and 371 occupied bedrooms)

Rental apartments.
477 parking spaces.
All units get one space bundled (included) in unit price. Extra stalls can be rented for $55/month.

Parking Survey (11/10/16):

315 vehicles observed parked at 5:00 am.
*Peak parking time adjustment (5:00 am is 96% of peak demand.)
315 vehicles / .96 = 328 vehicles peak demand.

**Offsite parking adjustment (Observations indicate approximately 26 resident vehicles may be parked offsite.)
328 onsite + 26 offsite = 354 vehicles peak demand with offsite parking adjustment.

Parking Rates:

328 parked onsite / 246 occupied units = 1.33 vehicles/occupied dwelling unit
328 parked onsite / 371 occupied bedrooms = 0.88 vehicles/occupied bedroom

354 parked total / 246 occupied units = **1.44 vehicles/occupied dwelling unit**
354 parked total / 371 occupied bedrooms = **0.95 vehicles/occupied bedroom**

*Institute of Transportation Engineers, Parking Generation Manual, 4th Edition, Land Use 221: Low/Mid-Rise Apartment, Parking demand by hour of day as percentage of peak demand.

**Offsite parking demand estimate based on door count surveys of residents observed walking to/from vehicle parked offsite between 5:00-9:00 am and overall parking demand on adjacent streets.

PUBLISHED PARKING RATES:

Institute of Transportation Engineers, Parking Generation Manual, 4th Edition.*

Low/Mid-Rise Apartment (Land Use 221): (up to four levels)

Urban Weekday:

Average = 1.20 veh/du Range = .66-2.50 veh/du Fitted curve: P = (0.92 x # units) + 4

Urban Saturday:

Average = 1.03 veh/du Range = .80-1.43 veh/du Fitted curve: P = 1.04 x # units

Suburban Weekday:

Average = 1.23 veh/du Range = .59-1.94 Fitted curve: P = (1.42 x # units) – 38

Residential Condominium/Townhouse (Land Use 230): (# levels not identified)

Suburban Weekday:

Average = 1.38 veh/du Range = 1.04-1.96 veh/du Fitted curve: P=1.26 x # units + 9

*Institute of Transportation Engineers, Parking Generation Manual, 4th Edition, 2010.

CALCULATION OF DESIGN-LEVEL PARKING DEMAND RATE OF COMBINED SURVEYS:

Parking Rates Surveyed by Omni-Means: Vehicles per unit

1.08 Site 1 (The Bond, Oakland)
1.22 Site 2 (Aqua Via, Oakland)
1.44 Site 3 (Park Central, Concord)

Parking Rates Surveyed in The Planning Center Report:*

0.65 2341 Valley Street
1.33 2447 Telegraph Avenue
0.89 498 25th Street
0.33 509 Sycamore Street
0.40 Harp Plaza Apartments
0.86 Summit Crest Apartments
1.50 Temescal Place
1.45 The Landing
1.73 The Sierra
1.12 Fruitvale Village
0.60 Fruitvale Villas

Rates in ascending order:
0.33, 0.40, 0.60, 0.65, 0.86, 0.89, 1.08, 1,12, 1.22, 1.33, 1.44, 1.45, 1.50, 1.73

Design-Level (85th %) Rate** = (number of samples * percentile) + 0.5
= (14 * .85) + 0.5 = 12.4 or twelfth rate in ascending order
= 1.45 vehicles per unit

*The Planning Center DC&E, Oakland Multi-Family Residential Parking Survey, July 22, 2013.

**Weant, Robert and Levinson, Herbert, Parking, Parking Demands and Characteristics, Eno Foundation for Transportation, 1990.

EXHIBIT G

INFILL INITIAL STUDY

CITY OF CONCORD
ARGENT RESIDENTIAL INFILL PROJECT

NOVEMBER 2016

LEAD AGENCY:

City of Concord, Planning Division
1950 Parkside Drive
Concord, CA 94519
(925) 671-3152
www.cityofconcord.org

Concord
A BETTER FIT FOR BUSINESS

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PREPARED BY:

Analytical Environmental Services
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SECTION 1.0 – INTRODUCTION

The proposed Argent Residential Infill Project is a project consistent with community planning and zoning as defined under the California Environmental Quality Act (CEQA) Guidelines, Section 15183(a) that may not require additional review under CEQA. This Infill Initial Study (IS) was prepared by Analytical Environmental Services for the City of Concord (City), Community and Economic Development Department, Planning Division to determine if peculiar impacts are specific to the project or project site that would require additional review under CEQA. This IS was prepared pursuant to the applicable sections of the California Environmental Quality Act of 1970, Public Resources Code § 21000, et seq., as amended and implementing State CEQA Guidelines, Title 14, Chapter 3 of the California Code of Regulations (collectively, CEQA).

1.	**Project Title:**	Argent Residential Infill Project
2.	**Lead Agency Name and Address:**	City of Concord Community and Economic Development Department Planning Division 1950 Parkside Drive
3.	**Contact Person and Phone Number:**	Afshan Hamid, Senior Planner (925) 671-3281
4.	**Project Location:**	2400 Willow Pass Road, Concord, CA 94519
5.	**Project Sponsor's/Applicant's Name and Address:**	Argent Concord, LLC. 121 7th Avenue Santa Cruz, CA 95062
6.	**General Plan Land Use Designation:**	Downtown Mixed Use (DTMU)
7.	**Zoning:**	Downtown Mixed Use (DMX)
8.	**Surrounding Land Uses and Setting:**	Residential and commercial mixed development and supporting infrastructure
9.	**Description of Project:**	Demolition of an approximately 18,000 square-foot commercial building and the construction of a 181-unit, 7-story apartment complex with 5 percent being affordable units
10.	**Project Entitlements:**	Use Permit, Minor Use Permit, and Design Review (UP, MP, DR)

Date Infill Initial Study Completed: November 2016

1.1 PURPOSE OF STUDY

The Argent Residential Infill Project (Proposed Project) is consistent with the General Plan and Downtown Specific Plan. The Proposed Project meets the performance standards identified in Appendix M of the CEQA Guidelines for infill projects in that the Proposed Project is not located near a high-volume roadway (defined as over 100,000 vehicles per day) and is located within 0.25 miles of an existing major transit stop (Bay Area Rapid Transit). Accordingly, the Proposed Project may not require additional review under CEQA in accordance with Section 15183 of the CEQA Guidelines, unless there may be project-specific effects which are peculiar to the project or site that were not adequately addressed in the EIRs for the General Plan or Specific Plan. In approving a project meeting the requirements of Section 15183 of the CEQA Guidelines, a public agency shall limit its examination of environmental effects to those which the agency determines, in an IS or other analysis:

1) Are peculiar to the project or the parcel on which the project would be located,

2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,

3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or

4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR

The purpose of this IS is to assess consistency between the Proposed Project, General Plan, and the Downtown Specific Plan and to compare the Proposed Project with the effects above to determine if additional environmental review is required under CEQA in accordance with CEQA Guidelines Section 15183. To assess compliance with CEQA Guidelines Section 15183, this IS utilizes the significant criteria presented in Appendix M of the CEQA Guidelines and determines if any of the four effects above apply to the Proposed Project.

This IS is organized into the following sections:

Section 1.0 - Introduction: Provides an overview of the Proposed Project, location, sponsor, when the IS was completed, environmental factors potentially affected by the Proposed Project, and the significance determination of the Proposed Project on the environment by the lead agency.

Section 2.0 – History of Environmental Review: Provides the background to the environmental review process for the applicable General Plan and Specific Plan.

Section 3.0 – Proposed Project Description: Includes a project overview, location, summary of the existing site conditions, and discussion of the project characteristics.

Section 4.0 – Comparison with Approved Project: Includes a discussion of the city's specific plan.

Section 5.0 – Regulatory Requirements, Permits, and Approvals: Provides a list of the permits needed.

Section 6.0 – Environmental Checklist and Discussion: Contains the Environmental Checklist form and discussion of the environmental issues.

Section 7.0 – **List of Preparers**

Section 8.0 – **Bibliography**

1.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below could be potentially affected by the Proposed Project, and constitute an effect requiring additional environmental review in accordance with Section 15183 of the CEQA Guidelines. Impacts to these resources are evaluated using the checklist included in **Section 6.0**. The Proposed Project was determined to have a less-than-significant impact or no impact, even without mitigation, on unchecked resource areas.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Geology and Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use and Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation and Circulation
- ☐ Utilities and Service Systems
- ☐ Mandatory Findings of Significance

1.3 DETERMINATION

On the basis of the environmental evaluation presented in **Section 3.0**:

☐ I find that the Proposed Project qualifies as a Residential Project pursuant to a Specific Plan and is EXEMPT from CEQA in accordance with CEQA Guidelines Section 15182.

☒ I find that the Proposed Project is a Project consistent with a Community Plan or Zoning, that there are no project-specific significant effects which are peculiar to the project or its site, and NO ADDITIONAL ENVIRONMENTAL REVIEW IS REQUIRED.

☐ I find that the Proposed Project qualifies as an Infill Project that would result in new specific effects. However these effects would be substantially mitigated under uniformly applicable development policies. NO FURTHER REVIEW required.

☐ I find that the Proposed Project qualifies as an Infill Project but would result in new specific effects that would not be substantially mitigated under uniformly applicable development policies. A STREAMLINED MITIGATED NEGATIVE DECLARATION is recommended to assess:

<<Resource(s)>>

☐ I find that the Proposed Project qualifies as an Infill Project but would result in new specific effects that would not be substantially mitigated under uniformly applicable development policies, and an ENVIRONMENTAL IMPACT REPORT is required.

Signature	Date
	City of Concord
Printed Name	Lead Agency

SECTION 2.0 – HISTORY OF ENVIRONMENTAL REVIEW

The City of Concord adopted its Concord 2030 Urban Area General Plan (General Plan) on October 2, 2007 as an update to the City's 1994 General Plan. The General Plan includes goals and polices that convey the City's long-term vision and guide for local decision making to reach that vision. As part of the 2030 Plan, the project site is designated as a Downtown Mixed-Use subarea. The Downtown Mixed-Use designation is intended for a high density and intensity mix of commercial, office, and residential uses and allows for a mix of uses that balances jobs and housing opportunities.

The project site is included within the Downtown Concord Specific Plan (Specific Plan), which builds upon the General Plan and sets forth policies focused on the downtown area of Concord. The Specific Plan was adopted on June 24, 2014 and provides a long range vision that reflects the aspirations of the community and outlines steps to achieve the vision; establishes development policies that will guide the community; enhances the character of the downtown; and provides a basis for establishing priorities for Downtown. The Specific Plan area comprises 617 acres of primarily historic areas, shopping, retail, dining, parks, and neighborhoods. The project site is located in an area designated as the Todos Santos District and is identified as residential land use in the Specific Plan. Specifically, the project site is zoned as Downtown Mixed-Use (DMX).

Impacts from the implementation of the General Plan were assessed in an EIR completed in 2007 (General Plan EIR). A Supplemental EIR to the General Plan EIR was prepared in 2012 (2012 Supplement) to assess the Concord Development Code Project. The 2012 Supplement assessed the four major components of the project: (1) amendments to the 2030 Concord General Plan Map; (2) amendments to the General Plan text; (3), a new Development Code; and (4) a new Zoning Map. In January of 2014, the City released an Addendum to the 2012 Supplement (2014 Addendum). The 2014 Addendum was prepared to update the 2012 Supplement based on changes to local, state, and federal regulations and associated environmental data (such as greenhouse gas inventory data) and to assess implementation of the Specific Plan. Accordingly, the 2014 Addendum and related analysis within the General Plan EIR and 2012 Supplement are utilized to determine if the impacts of the Proposed Project require further CEQA analysis.

SECTION 3.0 – PROPOSED PROJECT DESCRIPTION

3.1 PROJECT LOCATION AND EXISTING SETTING

The project site is located within the limits of the City in Contra Costa County (**Figure 1**). The 1.53-acre project site (Assessor Parcel Number [APN] 126-082-00) is located at 2400 Willow Pass Road in the eastern part of the Downtown core City, approximately 0.75 miles east of State Route (SR) 242, 2 blocks from downtown, and one-quarter mile from the Concord Bay Area Rapid Transit's (BART) station (**Figure 2** and **3**). The project site is bordered on the north by Willow Pass Road, on the east by Port Chicago Highway, on the South by Concord Boulevard, and by East Street to the east. Approximately 160 feet east of the project site, BART's Pittsburg/Bay Point line runs northeast to southwest.

3.1.1 ZONING

The project site is zoned as Downtown Mixed Use (DMX) and is intended for high density and a mix of residential, commercial, and office development. It is zoned to allow for a mix of uses that balance jobs and housing opportunities and includes offices, commercial development, hotels, public, and residential uses. The zoning designation allows for residential densities that range from 33 units per acre to a maximum of 100 units per acre. In addition, the zoning designation has floor area ratio (FAR) limitations ranging from 1.0 to 6.0. According to the Specific Plan, the project site has a FAR limitation of 1.3.

3.1.2 EXISTING LAND USES

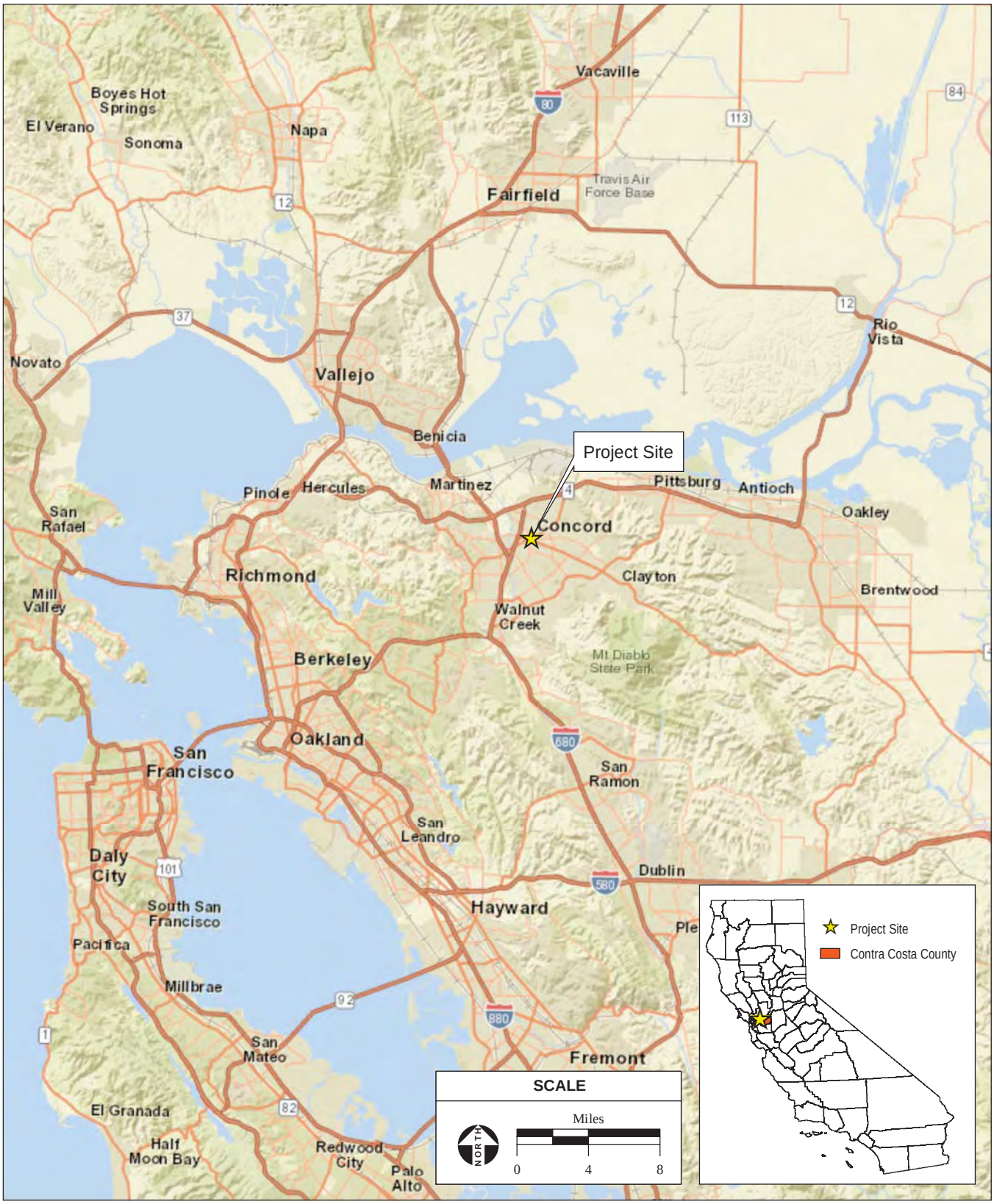
The project site is currently developed with a single-story 18,080 square-foot multi-tenant building recently occupied by a bank, video rental business, stationary store, video and appliance store, and an auto parts supplier. Parking lots are located on the north, west, and south sides of the building. Approximately half of the building is unoccupied. The property slopes down toward the northwest and storm drains are located in the asphalt paved parking areas and along adjacent streets.

3.1.3 SURROUNDING LAND USES

Adjacent land uses include a grocery store to the east across Port Chicago Highway, a vacant lot and building to the north across Willow Pass road, commercial use and local business buildings including a doughnut shop to the west across East Street, and an Auto and Tire Service center to the south across Concord Boulevard. BART system tracks are located approximately 160 feet to the east of the project site and runs in a general north to south direction. Beyond the adjacent land uses, residential and commercial buildings are scattered throughout the project site's block grid.

3.1.4 TRANSPORTATION AND CIRCULATION

Regional access to the project site is provided via Willow Pass Road and Concord Avenue (which provides connection to Willow Pass Road west of the project site). Both provide access from SR 242 and Interstate 680 to the project site. The project site is bounded on the north by Willow Pass Road, on the east by Port Chicago Highway, on the South by Concord Boulevard, and by East Street to the east.



SOURCE: ESRI Data, 2016; AES, 11/15/2016

Figure 1
Regional Location

SOURCE: "Walnut Creek, CA" USGS 7.5 Minute Topographic Quadrangle, T2N R1W, Unsectioned Area of Walnut Creek, Mt. Diablo Baseline & Meridian; ESRI Data, 2016; AES, 11/15/2016

Figure 2
Site and Vicinity

SOURCE: DigitalGlobe aerial phohtograph, 10/30/2015;
ESRI Data, 2016; AES, 11/15/2016

Figure 3
Aerial Photograph

Sidewalks are provided around the entirety of the parcel. The project location is approximately 0.25 miles north of the BART Pittsburg/Bay Point station which provides access from Pittsburg in the East Bay to Millbrae in the southern portion of the San Francisco Peninsula in San Mateo County. Driveways are provided along Willow Pass Road (near the intersections with East Street and Port Chicago Highway), East Street (approximately 65 feet north of the intersection with Concord Boulevard) and Port Chicago Highway (approximately 60 feet north of the intersection with Concord Boulevard). There is no access to the interior of the site directly from Concord Avenue.

3.1.5 DRAINAGE

There are no offsite areas draining onto the project site. The existing buildings, paving, concrete and other impervious surfaces account for approximately 64,085 square-feet (96 percent) of the existing project site. The remaining 2,652 square-feet (4 percent) of the site is covered in pervious surfaces consisting of open space and landscaped areas, with a majority of the pervious cover along the Concord Boulevard and Port Chicago Highway frontage. The site drains by overland flow to the existing City roadway curb drainage system. Drain inlets and manholes are located on East Street near the intersections with Willow Pass Road and Concord Boulevard, Willow Pass Road adjacent to the western driveway, and Port Chicago Highway approximately 70 feet north of the access driveway. There are no inlets along the frontage of the project site along Concord Boulevard.

3.1.6 UTILITIES

The project site is located in an urban area and is currently served by existing utilities, including: water, sanitary sewer, storm drainage, electricity, and telecommunications infrastructure. Electricity and natural gas services to the site are provided by Pacific Gas and Electric Company (PG&E). Existing underground electrical lines and gas mains provide electricity and gas to the project site.

WATER

The Contra costa Water District (CCWD) acts as the City's water supplier, providing water supplies to the City's municipal system from the Sacramento/ San Joaquin Delta. CCWD serves treated and raw water to central and eastern parts of the county.

WASTEWATER

Sewage conveyance is provided by the City Public Works Department, with treatment provided at the Central Contra Costa Sanitary District (CCCSD) Treatment Plant (CCCSDTP) in Martinez, California. CCCSD permits, inspects and treats wastewater discharged by the business and residences of Concord. Wastewater within CCCSD is primarily conveyed to the CCCSDTP through pipes by the force of gravity. The plant has a treatment capacity of 54 million gallons per day (mgd) and 240 mgd of wet weather flow. The facility is staffed 24 hours a day, 365 days a year. Wastewater moves through the District's 1,500 miles of sewer lines, finally arriving at the plant's headworks to begin treatment. Most of the wastewater is treated to a secondary level, disinfected by ultraviolet light, and then discharged into Suisun Bay. Approximately 600 million gallons per year are treated to a tertiary level through additional filtration and disinfection before being distributed as recycled water for landscape irrigation, industrial processes, and plant operations (CCCSD, 2009)

3.2 PROJECT DESCRIPTION

3.2.1 RESIDENTIAL BUILDING

The Proposed Project involves the demolition of an approximately 18,000 square-foot commercial building and the construction of a 181-unit, 7-story apartment complex with 5 percent being affordable units (**Figure 4**). The building would include 6 townhomes, 20 studio units, 104 one-bedroom units, and 51 two-bedroom units (**Figure 5**). In addition to the residential units, the building would contain three levels of parking spaces for residents (the first level being subterranean) along with a podium level (third story) intended for a swimming pool, open space, and seating area. A plaza space would be developed along Willow Pass Road near the intersection with East Street, providing pedestrians with an area to rest.

The projects architecture represents a contemporary design that features clean, rhythmic forms and an environmentally conscious, yet rich material palette. The street level accommodates enhanced pedestrian circulation – all edges have been widened to at least 7.5 feet, and in most cases 8 feet. The main entrance lobby is designed to be off of Willow Pass Road with a secondary lobby on Concord Boulevard.

The building plan demonstrates an irregular shaped site with four frontages. The building design maintains vertical and horizontal interest via modulation in the building, cornices including parapet lines, and balcony projections. Townhomes with entries fronting East Street create a street level pedestrian experience. Above the townhomes, the building opens with a podium courtyard, allowing for views and connection to Downtown's Todos Santos Plaza. At the corner of Willow Pass and East Street sits the leasing/amenity space and main lobby to create a prominent entry lobby with storefront glazing, metal awning, and raised plaza to activate the ground level. The warm brick façade language from the townhomes wrap around the building to Port Chicago, creating a strong, yet rhythmic building base. In addition, along Willow Pass and Port Chicago visual interest is brought to the ground level via art reliefs that sit beneath the architectural white bays.

3.2.2 LANDSCAPING

The Proposed Project would include a total of 38,260 square feet of common and private open space and landscaped areas. Private open space would consist of private patios and balconies within residential units. Common open space for residents would consist of a total of 27,400 square feet and would include various courtyards, pool/spa, fire pit area, bocce ball court, and other amenities. The building would include 3,960 square feet of community amenity space, including a leasing office and amenity spaces. Landscaping would be incorporated throughout the site, including planting strips along Willow Pass Road, East Street, Concord Boulevard and Port Chicago Highway. All edges will be lined with shade and/or ornamental trees in landscaped strips. The landscape design is integrated with the building entrances through two open areas that accommodate both residents and the public.

Approximately 54 new trees and an undetermined amount of shrubs and ground cover would be planted on the site as part of the Proposed Project. An irrigation system will be designed to supply the minimum amount of water necessary to sustain good plant health and while complying with the California water efficient landscape ordinance. Tree species include eastern redbud, Mediterranean fan palm, Chinese flame tree, tupelo tree, African sumac, Mexican fan palm, and village green zelkova. Shrubs include

SOURCE: KTGY Group, Inc., 8/12/2016; AES, 11/15/2016

Figure 4
Proposed Rendition

SOURCE: KTGY Group, Inc., 8/12/2016; DigitalGlobe aerial phohtograph, 10/30/2015; ESRI Data, 2016; AES, 11/15/2016

Figure 5
Proposed Site Plan

nubian aloe, dwarf coyote brush, euphorbia, dwarf tea tree, African boxwood, and coast rosemary. Groundcover includes Berkeley sedge, blue oat grass, groundcover myoporum, and New Zealand wind grass.

3.2.3 TRANSPORTATION AND CIRCULATION

Parking would be provided in the three lower levels (including one subterranean level) of the proposed structure where a total of 218 parking spaces would be provided to residents and guests (25% transportation overlay zone reduction applied). Access to the parking garage is provided via Port Chicago Highway. A portion of the curb along Concord Boulevard, in front of the project site, would accommodate fire and emergency service vehicles, solid waste collectors, and other large vehicles accessing the site. The project would also include approximately 150 bicycle parking spaces.

3.2.4 UTILITIES

According to Section 13.10.130 of the City Municipal Code, all utility facilities installed within public rights-of-way and on private property shall be installed and maintained underground. Water and sewer would be provided by the existing connections feeding the project site. Underground transformers would be installed within the property boundary, with two along the landscaped frontage of Willow Pass Road and one along Concord Boulevard. Gas service would be provided by the existing PG&E line connection located in the northeastern corner of the parcel right of way. Water service would be provided by connecting to six-inch diameter water lines that run through Willow Pass Road. The water lines for domestic and irrigation water would be metered while a third line would be provided specifically for fire flow. The project would be connected to the 12-inch diameter sewer lines running along Willow Pass Road and Concord Boulevard.

3.2.5 STORMWATER

The project site does not currently contain any existing on-site storm drain facilities. The Proposed Project includes the development of a mechanical treatment area to treat stormwater generated by the residential structure with self-treating areas installed along the frontage. Only approximately 2,300 square feet (or 3 percent) of the new development would be untreated. Approximately 12 percent of stormwater runoff would be treated with low-impact development (LID) methods before it enters the storm drain system. The remaining 85 percent of stormwater runoff generated on the project site would be mechanically treated on-site before being discharged to the existing stormwater system. On-site drainage would be designed consistent with the California Regional Water Quality Control Boards for the San Francisco Bay Region and the Central Valley Region revised Provision "C.3" in the NPDES permit governing stormwater discharges in Contra Costs County.

3.2.6 CONSTRUCTION

Project development would include one phase of construction and commence in the spring of 2017 and last approximately 24 months. Construction activities would be limited to 7:30 A.M to 6:00 P.M on the weekdays and 8:00 A.M. to 5:00 P.M. on weekends as per the City of Concord Police Department's (CCPD) *Excessive Noise Resource Guide* Handout. In addition, construction contractors are required to

use power construction equipment with state-of-the-art noise and muffling devices. All internal combustion engines used on the Proposed Project shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poorly maintained engines or other components. Construction contractors are required locate stationary noise generating equipment as far as possible from sensitive receptors. All construction activities would be conducted in accordance with applicable provisions of the California State Building Code (CBC), the Uniform Building Code (UBC), and applicable City requirements. The following equipment may be utilized during construction of the Proposed Project:

- Tunnel boring machine
- Pavement saw
- Jack hammers
- Excavators
- Front-end loaders/Backhoes
- 10-wheel dump trucks
- Bulldozers
- Water truck
- Paving equipment: back hoe, asphalt hauling trucks, compactors, paving machine, rollers Crane Trench shields
- Air compressors
- Flat-back delivery truck
- Concrete trucks
- Sweepers
- Road grader
- Concrete pumper trucks
- Welding trucks
- Side boom pipe handler tractor
- Earth movers
- Cranes

HAZARDOUS MATERIALS

The Applicant would ensure through the enforcement of contractual obligations that all contractors transport, store, and handle construction-required hazardous materials in a manner consistent with relevant regulations and guidelines. Recommendations would include, but are not limited to, transporting and storing materials in appropriate and approved containers, maintaining required clearances, and handling materials using approved protocols.

ASBESTOS CONTAINING BUILDING MATERIALS

DEMOLITION SURVEY

In accordance with Bay Air Quality Management District (BAAQMD) Regulation 11, Rule 2 Section 303.8, the Applicant would have the existing residence and associated structures thoroughly surveyed for the presence of asbestos-containing material (ACM), including Category I and Category II nonfriable ACM. The survey would be performed by a person who is certified by the Division of Occupational Safety and Health, and who has taken and passed an EPA-approved Building Inspector course and who conforms to the procedures outlined in the course. The survey would include sampling laboratory analysis all suspected asbestos-containing materials. This survey would be made available, upon request by the BAAQMD Air Pollution Control Officer (APCO), prior to the commencement of any ACM removal or any demolition.

DEMOLITION AND REMOVAL OF ACMS

Should the results of the survey indicate the presence of ACMs, the Applicant, through contractual obligations, would ensure compliance with BAAQMD Regulation 11, Rule 2, Section 303. Section 303 outlines the procedures required to remove ACMs, ensure oversight is provided by a qualified

professional, and ensure adequate containment is provided to prevent release of asbestos fibers during removal. In addition, waste disposal of ACMs would be accomplished in accordance with BAAQMD Regulation 11, Rule 2, Section 304.

LEAD-BASED PAINT

The Applicant would have the existing building thoroughly surveyed for the presence of lead-based paint by a qualified environmental professional. If lead-based paint is identified and is loose and peeling, the paint would be removed by a qualified lead abatement contractor. In accordance with U.S. EPA and California Department of Toxic Substances Control (DTSC) requirements, if the paint is securely adhering to the substrate, the entire material would be disposed of as demolition debris, which is a nonhazardous waste. Loose and peeling paint would be disposed of as a State and/or federal hazardous waste, if the concentration of lead exceeds applicable waste thresholds. Hazardous wastes would be appropriately managed, labeled, transported, and disposed of in accordance with local requirements by trained workers, as described above. State and federal construction worker health and safety regulations would require air monitoring and other protective measures be conducted during demolition activities should lead-based paint be present.

4.0 COMPARISON WITH LAND USE POLICY

4.1 GENERAL PLAN CONSISTENCY

The site's General Plan land use designation of Downtown Mixed Use is intended for a high density and intensity mix of residential, commercial and office development in Central Concord. It allows for a mix of uses that balances jobs and housing opportunities, including offices, commercial development, hotels, public/quasi-public, and residential uses. The project provides residential uses and is thus consistent with the intent of the Downtown Mixed Use designation to establish housing opportunities in the Downtown. The project is in substantial compliance with the goals, objectives, and policies of the General Plan, including "supporting higher density and mixed use development in Downtown and near transit centers and corridors" as outlined in General Plan Principle LU-1.3.3. The Proposed Project fulfills Policy LU-1.3.1 which encourages a variety of housing types on infill development sites. The Proposed Project supports a higher density of development (LU-1.3.3) and includes a mixture of townhomes, studio apartments, as well as one and two bedroom apartments providing the diversity for infill projects under LU-1.3.1. Additionally, the Proposed Project is consistent with Policy LU-4.2.3 that encourage pedestrian-oriented urban design by incorporating building elements by including ground floor patios for the townhomes with direct access to pedestrian walkways, a courtyard with open space on the third floor, and secure bike parking on the ground floor.

4.2 SPECIFIC PLAN CONSISTENCY

The Specific Plan was adopted on June 24, 2014 and provides a long range vision that reflects the aspirations of the community and outlines steps to achieve the vision; establishes development policies that will guide the community; enhances the character of the downtown; and provides a basis for establishing priorities for Downtown. The Specific Plan provides a vision for how the Downtown will integrate housing, jobs, retail, and transportation linkages including pedestrian, disability access, and vehicular traffic with transit hubs. The purpose of the Specific Plan is to set forth policies focused on what is achievable to implement in the Downtown over the next 20 to 30 years and set forth actions to be undertaken by the City.

The project is consistent with policies that encourage a variety of living opportunities through a range of housing types and prices. The project as proposed includes five unit types at different rental rates, including 5% affordable units. The project proposes high density development within a 5-minute walk of transit and BART that is consistent with the strategy to increase the amount of residential units in Downtown. For these reasons and others, the Proposed Project is consistent with the Specific Plan.

4.3 ZONING CONSISTENCY

As conditioned, the proposed use is allowed within the applicable zoning district and complies with all other applicable provisions of the development code and the City Municipal Code. The proposed use is classified as Multi-family, which is a conditionally permitted use in the DMX Zoning District. The project meets the standards for lot area, floor area ratio, setbacks, and building height of DMX zoning, satisfies applicable requirements under Development Code, Division IV, General Development Standards, and complies with all other applicable provisions of the Development Code and Concord Municipal Code.

4.3.1 DENSITY BONUS

A density between 33 and 100 units per net acre is permitted in the DMX district. The proposed density is 118 units per net acre. The increased density is the result of excluding square footage for public and private easements and the relationship of the number of units divided by the net lot area, as opposed to an increase in the total number of units.

The project site is located within one-quarter mile of the perimeter of a BART station and is located in a Transit Station Overlay District. In accordance with Development Code Section 18.105.040, the maximum density may be increased up to a maximum of 25 percent for residential projects in the Transit Station Overlay District (which equates to 125 units per acre for the Proposed Project). The increase in density shall only be granted as a Minor Use Permit if the project includes a minimum of at least three of the elements listed in the Transit Station Overlay District. The applicant has incorporated the following three elements into the project design.

a) *Continuity of building facades along the street with no interruptions in the progression of building and uses except for pedestrian access.*

The building encompasses an entire block with a continuous façade and congruent building materials along all four elevations. Pedestrian entries are incorporated into the façade of the building and in outdoor spaces at multiple locations and vehicle entries are located on one of the building (from Port Chicago Highway). These elements do not “interrupt” the building façade and the project reads as one building. Along East Street, the access to the entryway porches of the townhomes are provided by stairwells parallel with the sidewalk. This creates a front facing façade that aligns with the elevations above the porches that creates a visual appearance form a distance that the facades are continuous along the length of the building.

b) *Pedestrian friendly street level building design amenities such as highly articulated facades with a variety of high quality materials and architectural detailing, visibility into buildings, awnings, paseos, or arcades, and signage oriented and scaled to the pedestrian, located directly behind the sidewalk.*

The contemporary architecture incorporates modern materials on all four sides of the building. The building is oriented towards East Street where the third floor courtyard level creates a softening of the buildings imposition on the surrounding pedestrians and creates a unique visual design. In addition, the inclusion of decretive artwork screens along the pedestrian level creates a unique environment and visual experience for pedestrians. The ground floor townhomes are outward facing and interact with pedestrians, while created a slight separation by being slightly raised with access parallel to the sidewalk. The aboveground units each has a 59 to 68 square foot deck facing outward toward the street or inward toward an outdoor courtyard with exposure to the surrounding streets.

c) *Contribution to transit-supportive facilities, such as a combination of shelters; benches; or direct connections to transit station or safe and secure bicycle storage and facilities that exceed the requirements of CDC 18.160.120 (Bicycle parking).*

Secure bicycle storage areas for short term and long term parking is proposed on the street level. The project provides the required number of bicycle parking stalls (155) to encourage alternative transportation.

Bus shelters/benches are not proposed with the project given the traffic volumes and direction of traffic on two of the project frontages and the location of transit facilities in close proximity to the site. However, the project design includes development of Willow Pass Plaza which includes raised platforms and moveable tables and chairs to provide an outdoor amenities areas for the area.

For the reasons stated above, the project includes a minimum of at least three of the elements listed in the Transit Station Overlay District and therefore qualifies for a density bonus of 125 units per net acre.

5.0 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

As part of the implementation of the Proposed Project, the following permits and approvals may be necessary:

CITY OF CONCORD

Pursuant to Development Code Section 18.405.020, if an applicant submits more than one planning permit application for the same project, all applications shall be filed and processed concurrently and each application shall be considered and acted upon by the appropriate review authority. The City (Planning Commission based on the requested entitlements) will review the project to determine if a Use Permit, Minor Use Permit, and Design Review should be provided for the Proposed Project.

SECTION 6.0 – ENVIRONMENTAL CHECKLIST AND DISCUSSION

The purpose of the environmental checklist is to evaluate the categories in terms of any "changes" or "new information" that may result in a changed environmental impact evaluation. A "no" answer does not necessarily mean that there are no potential impacts relative to the environmental category, but that there is no relevant change in the condition or status of the impact or its treatment in the General Plan EIR or associated addendums.

Significant impacts were identified in the General Plan EIR and associated addendums. These impacts were reduced to a less-than- significant level by mitigation measures that apply to the Proposed Project. Environmental categories might be answered with a "no" in the checklist because the Proposed Project dose not introduce changes that would conflict with the findings of the General Plan EIR and associated addendums.

The purpose of each column of the environmental checklist is described below.

EXPLANATION OF ENVIRONMENTAL CHECKLIST EVALUATION CATEGORIES

1) **Analyzed in Previous EIR**. This column provides a cross-reference to the pages of the environmental documents for the General Plan and Specific Plan where information and analysis may be found relative to the environmental issue listed under each topic.

2) **Prior Environmental Document Mitigation Measures Addressing Impacts.** Pursuant to Section 15162(a)(3) of the CEQA Guidelines, this column indicates whether other environmental documents provide mitigations to address effects in the related impact category. If "NA" is indicated, a previous environmental document and this environmental checklist conclude that the impact does not occur with this project and, therefore, no mitigation is needed.

3) **Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?** Pursuant to Section 15162(a)(1) of the CEQA Guidelines, this column indicates whether the changes represented by the Proposed Project will result in new significant or peculiar impacts (as defined under Section 15183 of the CEQA Guidelines) not disclosed in the General Plan EIR or associated addendums or that the Proposed Project will result in substantial increases in the severity of a previously identified significant impact. A "yes" answer is only required if such new or worsened significant impacts will require "major revisions of the previous EIR." If a "yes" answer is given, additional mitigation measures or alternatives may be needed or it can be shown that Uniformly Applicable Development Policies would mitigate the peculiar or new significant impact and no further CEQA analysis is required.

4) **Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?** Pursuant to Sections 15162(a)(2) and 15162(a)(3) of the CEQA Guidelines, this column indicates whether changed circumstances affecting the Proposed Project will result in new significant impacts not disclosed in the General Plan EIR or associated addendums or will result

in substantial increases in the severity of a previously identified significant impact. A yes answer is only required if such new or worsened significant impacts will require "major revisions of the previous EIR." If a "yes" answer is given, additional mitigation measures or alternatives may be needed.

Any "new circumstance" is only relevant if it "was not known and could not have been known with reasonable diligence at the time of the previous EIR." To be relevant in this context, such new information must show one or more of the following:

a. The project will have one or more significant effects not discussed in the General Plan EIR or associated addendums;

b. Significant effects previously examined will be substantially more severe than shown in the General Plan EIR or associated addendums;

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d. Mitigation measures or alternatives which are considerably different from those analyzed in the General Plan EIR or associated addendums would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This category of "new circumstance" may apply to any new regulations, enacted after certification of the General Plan EIR or associated addendums which might change the nature of the analysis of impacts or the specifications of a mitigation measure. If the new information shows the existence of new significant effects or significant effects that are substantially more severe than were previously disclosed, then new mitigation measures should be considered. If the new information shows that previously rejected mitigation measures or alternatives are now feasible, such measures or alternatives should be considered anew. If the new information shows the existence of mitigation measures or alternatives that are (i) considerably different from those included in the General Plan EIR or associated addendums, (ii) able to substantially reduce one or more significant effects, and (iii) unacceptable to the project proponents, then such mitigation measures or alternatives should also be considered.

5) New Impacts Substantially Mitigated by Uniformly Applicable Development Policies?
Pursuant to Sections 15183(f) of the CEQA Guidelines, this column indicates whether an effect of a project on the environment shall not be considered peculiar to the project or the parcel if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate an environmental effect when applied to future projects. If the effects are found not to be considered peculiar, then additional CEQA analysis on the specific impact is not required. Examples of uniformly applied development policies or standards include, but are not limited to:

a. Parking ordinances.

b. Public access requirements.

c. Grading ordinances.

d. Hillside development ordinances.

e. Flood plain ordinances.

f. Habitat protection or conservation ordinances.

g. View protection ordinances.

h. Requirements for reducing greenhouse gas emissions, as set forth in adopted land use plans, policies, or regulations.

6.1 AESTHETICS

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.1 Aesthetics **Would the Project:**					
a. Have a substantial adverse effect on a scenic vista?	General Plan EIR pp. 3.12-2 to 3.12-6	N/A	No	No	No
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	General Plan EIR pp. 3.12-8 to 3.12-9; 2012 Supplement pp. 7-1	N/A	No	No	No
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	General Plan EIR pp. 3.12-7 to 3.12-8; 2012 Supplement pp. 7-2	N/A	No	No	No
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	General Plan EIR pp. 3.12-2; 2012 Supplement pp 7-2	N/A	No	No	No

DISCUSSION

6.1a: The scenic quality of the City is characterized by its location within the Ygnacio Valley and Clayton Valley and the rolling hillsides of Los Medanos Hills to the east, Mt. Diablo to the southeast, and the Suisun Bay to the north. Due to the flat nature of the City, views of the surrounding scenic vistas are prominent, especially the views from Todos Santos Plaza, west of the project site (City of Concord, 2007). The General Plan EIR found that the impacts from development to this scenic vista would be minimal with the implementation of General Plan policies that include protecting the ridgelines and visible hillside from inappropriate development and preserving these viewsheds. In particular, General Plan Policy LU-4.2.6 requires a limitation on building heights immediately adjacent to Todos Santos Plaza. The project site is not immediately adjacent to Todos Santos Plaza being separated by two blocks and therefore the policy does not apply. Accordingly, line of site from Todos Santos Plaza to the eastern hillsides would not be adversely affected. Furthermore, the Proposed Project is compliant with the additional General Plan Policies below that protect ridgelines and visible hillsides.

Development on the project site similar to that of the Proposed Project was assessed in the Land Use section of the Specific Plan. **Figure 6** presents the conception rendering of full buildout of the Specific Plan, including the project site, which illustrates that the Proposed Project would have no new impacts to the aesthetics of the City. Based on the Proposed Project's consistency with General Plan policies protecting aesthetics and the Specific Plan Design Guidelines and Land Use Plan, impacts of the Proposed Project to scenic vistas would be consistent with the findings of the General Plan EIR and 2012 Supplement.

6.1b: There are no officially designated State Scenic Highways in the Concord Planning Area nor is the Proposed Project located on a scenic view corridor. Additionally, the Proposed Project site is not within the North Todos Santos historic site. Therefore, there will be no damage to scenic resources within a State Scenic Highway, scenic view corridor, or historic site and no additional review is required.

6.1c: The Proposed Project is consistent with General Plan policies and Specific Plan guidelines designated to protect and enhance the visual character of the project area. The contemporary design of the Proposed Project features clean, rhythmic forms and an environmentally conscious, yet rich material palette. In addition, along Willow Pass Road and Port Chicago Highway, visual interest is brought to the ground level via art reliefs that sit beneath the architectural white bays. The Proposed Project would comply with General Plan Policy LU-1.3.2, which establishes standards including setback requirements and standards for screening, lighting, landscaping, and refuse collection and parking locations. In addition, the Design Guidelines within the Specific Plan that further implement General Plan policies would reduce impacts to the visual character of the area. Accordingly, the Proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings beyond what was anticipated in the General Plan EIR and 2012 Supplement.

6.1d: As addressed in the 2012 Supplement, outdoor lighting standards are included in the Development Code that would reduce the impact of light or glare associated with new development to a less than significant level from development consistent with the General Plan. Accordingly, the Proposed Project is consistent with the general plan and would comply with all outdoor light standards outlined in Development Code Section 18.150.110. Implementation of the Proposed Project would not result in impacts concerning lighting that were not anticipated in the General Plan EIR and 2012 Supplement.

GENERAL PLAN POLICIES

Policy LU-4.2.3: Promote pedestrian-oriented urban design.

Policy LU-9.1.1: Establish design standards that achieve the highest quality of building design and use high-quality materials.

Policy LU-9.1.2: Establish design standards that provide for cohesive, well-integrated, functional development and ensure neighborhood compatibility with appropriate height transitions, setbacks, screening and buffering for adjacent residential development.

Policy LU-9.1.5: Require utilities to be placed underground or screened from public view. This policy is intended for telecommunication lines and electric distribution systems and related ancillary facilities, and

SOURCE: Downtown Specific Plan, 2016; AES 11/15/2016

Figure 6
Visual Simulation

would not apply to solar panels. Using underground vaults and screening for exterior transformers and other types of utility equipment can reduce visual impacts.

Policy LU-9.2.2: Allow unique, diverse, and creative design solutions for infill development that are compatible with and enhance existing neighborhoods and shopping areas. *The Development Code provides for flexibility for infill projects, as long as a project meets General Plan policies and does not adversely impact neighborhoods.*

Policy LU-10.1.2: Require new development to provide and maintain right-of-way improvements along project frontages such as landscaping, street trees, and other amenities that enhance the streetscape appearance.

SPECIFIC PLAN DESIGN GUIDELINES

Buildings located on all streets in the Project Area shall maintain setbacks as required by the City Zoning Codes.

Steps, stoops, porches, patios, and terraces should be allowed in the building setback zone, particularly on residential buildings where ground floor activity is important.

All new developments on primary streets should build to zero front lot line with exceptions for any usable, publicly-accessible, at grade open space such as small plaza, pocket park, or a pedestrian alley.

Buildings downtown should maintain a tight and varied rhythm of façades compatible with the existing character. In particular, they should relate to the typical 50 foot wide parcel width through building vertical modulation and façade articulation to avoid flat, long walls along the street frontage. Such techniques could include the use of change in façade rhythm, façade recesses, or change in materials or color.

Units located at ground level shall have their ground floor elevated a minimum of 18 inches above the street level for privacy, provided that local accessibility codes are met.

Stoops and landscaping create inviting, usable transition spaces. Stoops and entry steps from the street are encouraged for individual unit street entries, consistent with local accessibility requirements. Stoops could extend in to the building setback zone but shall not encroach into the public right-of-way.

Breaks in the ground floor for vehicular and service entries should be minimized.

Multi-unit residential buildings are encouraged to introduce openings along the public street that provide visual or physical access to courtyards. Such openings add an element of surprise and interest at the street level.

CONCLUSION

The Proposed Project is consistent with the land uses designated within the General Plan and the Specific Plan. The Proposed Project would not have any new significant or substantially more severe impacts to aesthetic resources than what was previously analyzed in the General Plan EIR, 2012

Supplement, or 2014 Addendum. Adherence to and implementation of General Plan Policies and the Specific Plan Design Guidelines would ensure that the Proposed Project would result in less-than-significant aesthetic impacts. No additional review is required.

6.2 AGRICULTURAL RESOURCES

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.2 Agricultural Resources **Would the Project:**					
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	General Plan EIR pp. 3.2-15	N/A	No	No	No
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	General Plan EIR pp. 3.2-15	N/A	No	No	No
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farm-land, to non-agricultural use?	General Plan EIR pp. 3.2-15	N/A	No	No	No

DISCUSSION

6.2a-c: The Proposed Project would not convert farmland or change agricultural resources to a non-agricultural use as only 28 acres of farmland have been designated in the General Plan's land use plan. There are no lands designated as Prime Farmland Unique Farmland, or Farmland of Statewide Importance, land under Williamson Act Contract, or Timberland within the Specific Plan Area (City of Concord, 2007).

Furthermore, the Proposed Project is consistent with the General Plan and Specific Plan land use plans. Accordingly, implementation of the Proposed Project would not involve other changes in the existing environment that could result in the conversion of farmland identified as Prime Farmland Unique Farmland, or Farmland of Statewide Importance, land under Williamson Act Contract, or Timberland.

CONCLUSION

The Proposed Project is within the areas defined and assessed within the General Plan as the urban core of the City and would have no effect on agricultural lands. The Proposed Project would not have any new significant or substantially more severe impacts to agricultural resources than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.3 AIR QUALITY

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.3 Air Quality **Would the Project:**					
a. Conflict with or obstruct implementation of the applicable air quality plan?	General Plan EIR pp. 3.1-15 to 3.1-18; 2012 Supplement pp. 3.1-24 to 3.1-25; 2012 Addendum pp. 10	N/A	No	No	No
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	General Plan EIR pp. 3.1-18 to 3.1-21; 2012 Supplement pp. 3.1-26 to 3.1-27; 2012 Addendum pp. 10	N/A	No	Yes	No
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	2012 Supplement pp. 3.1-27 to 3.1-28; 2012 Addendum pp. 10	N/A	No	No	No
d. Expose sensitive receptors to substantial pollutant concentrations?	2012 Supplement pp. 3.1-28 to 3.1-30; 2014 Addendum pp. 10	N/A	No	No	No
e. Create objectionable odors affecting a substantial number of people?	General Plan EIR pp. 3.1-22; 2014 Addendum pp. 10	N/A	No	No	No

DISCUSSION

6.3a and c: As addressed in the 2012 Supplement, buildout of the General Plan would be consistent with the BAAQMD 2010 Clean Air Plan. The projected vehicle miles traveled (VMT) of the General Plan would be greater than that accounted for in the Association of Bay Area Governments' population projections used in the 2005 Ozone Strategy. However, the General Plan EIR found the impact to be less than significant due to the applicable General Plan policies that support infill development, such as the Proposed Project, and lead to reduction of VMTs. Accordingly, impacts of the Proposed Project would be similar to those identified in the 2012 Supplement and would be less than significant, therefore no additional review is required.

6.3b: The General Plan EIR, 2012 Supplement, and 2014 Addendum assess air quality impacts on a programmatic level and recognize that site-specific impacts would be assessed during project review. To determine if further review under CEQA is necessary, emissions from the Proposed Project were calculated using the California Emissions Estimator Model (CalEEMod). Emissions resulting from implementation of the Proposed Project were analyzed in two distinct phases, construction and operation. Construction emissions are temporary in nature and do not overlap with operational emissions. During the construction phase, pollutants of concern for the Proposed Project are NO_X, ROG, $PM_{2.5}$, and PM_{10}. During construction, PM emissions are primarily produced during mass and fine grading activities. NO_X, ROG, PM_{10}, and $PM_{2.5}$ are emitted from earth moving activities, combustion of diesel and gasoline fuels by heavy-duty construction equipment, and employee vehicles. Once the Proposed Project has been constructed and occupied, operational activities associated with residential land uses of the Proposed Project would generate ROG, NOx, PM_{10}, and $PM_{2.5}$ emissions. The majority of ROG, NOx, PM_{10}, and $PM_{2.5}$ emissions would be generated by vehicle trips associated with the residences and visitors to the project site. Consumer products (e.g., cleaning products, aerosol sprays, automotive products) used by residents and maintenance workers would also contribute ROG and NOx emissions. Lesser sources of precursors would include energy use (fuel combustion for heating and cooling of buildings) and the application of architectural coatings.

As shown in **Table 1**, emissions from the Proposed Project are lower than the BAAQMD thresholds. Additionally, as stated in the 2014 Addendum all projects will comply with all BAAQMD standards and applicable best management practices which are included as Standard Condition of Approval AQ-1. Detailed calculations are presented in **Appendix A**.

6.3d: As addressed in the 2014 Addendum, implementation of the Specific Plan and associated projects, such as the Proposed Project, would not expose sensitive receptors to substantial pollutant concentrations. The toxic air contaminants (TAC) of the BAAQMD CEQA guidelines, which in-part were utilized to developed thresholds, were partially invalidated by the Supreme Court. The Supreme Court found that the Lead Agency is not required to assess the impacts from the environment on the project (62 Cal.4th 369). Accordingly, because the Proposed Project does not produce TACs, no further analysis is required.

6.3e: As addressed in the 2014 Addendum, implementation of the Specific Plan and associated projects, such as the Proposed Project, would create objectionable odors affecting a significant number of people. Accordingly, because no components of the Proposed Project would emit odors beyond those assessed

in the previous CEQA review for the General Plan, 2012 Supplement, and 2014 Addendum, no further analysis is required.

TABLE 1
PROJECT EMISSIONS

Emissions	ROG	NOX	PM10 (exhaust)[1]	PM2.5 (exhaust)[1]
	pounds per day			
Construction (Highest Year)	8.34	27.82	1.65	1.55
Operation	4.7	9.74	6.11	1.78
BAAQMD Threshold	**54**	**54**	**82**	**54**
Exceed Threshold	*No*	*No*	*No*	*No*

[2] Per BAAQMD guidance, Standard Conditions of Approval that would ensure implementation of the BAAQMD's Basic Construction Mitigation Measures for construction dust; accordingly, quantification of PM_{10} dust emissions is not required and the thresholds are for vehicle exhaust only.

Source: BAAQMD, 2011; **Appendix A**

STANDARD CONDITIONS OF APPROVAL

AQ-1: The Applicant shall ensure through the enforcement of contractual obligations that construction contractors implement a fugitive dust abatement program during construction, which shall include the following elements consistent with the Basic Construction Mitigation Measures recommended by the BAAQMD:

- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Cover all exposed stockpiles.
- Water all exposed roadway and construction areas two times a day.
- Sweep paved streets three times daily (with water sweepers) if visible soil material is carried onto adjacent streets.
- Limit traffic speeds on unpaved roads to 15 miles per hour (mph).
- After grading is complete, construction of paved surfaces (e.g. roadways, driveways, sidewalks, building pads) should be completed as soon as possible unless protected by seeding, soil binders, or other similar measures.
- Limit idling time to a maximum of five minutes and turn off equipment when not in use; clear signage indicating this shall be displayed at the project site access point.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications and shall be checked by a certified visible emissions evaluator.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.
- Any burning of cleared vegetation shall be conducted according to the rules and regulations of the BAAQMD's Regulation 5 (BAAQMD, 2008). Prior notification to BAAQMD shall be made by submitting an Open Burning Prior Notification Form to BAAQMD's office in San Francisco.

- A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. A response and corrective action shall occur within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

GENERAL PLAN POLICIES

The following General Plan policies would minimize impacts to Air Quality:

Policy S-1.1.2: Site projects in locations and/or in a manner that will reduce air pollution exposure of sensitive receptors.

Policy S-1.1.3: Cooperate with the Bay Area Air Quality Management District in the review of land use proposals to address typical air quality problems.

Policy S-1.1.4: Provide input and assistance to the Bay Area Air Quality Management District's development and implementation of regional air quality strategies.

Policy S-1.2.1: Promote pedestrian, bicycle, and transit modes of travel to reduce air pollutant emissions from automobiles.

Policy S-1.3.2: Promote infill development to reduce automobile travel.

Policy S-1.3.3: Support transit-oriented development to reduce automobile travel.

Policy LU-1.1.4: Mitigate residential uses from impacts of more intensive land uses through good site planning and/or appropriate operational measures.

Policy LU-1.3.3: Support higher density and mixed use development in Downtown and near transit centers and corridors.

Policy LU-4.2.3 Promote pedestrian-oriented urban design.

SUPPLEMENT POLICIES

Policy S-1.1.3: Require project applicants to implement all feasible control measures to reduce combustion emissions from construction equipment.

Policy S-1.1.4: Require new residential developers on a case-by-case basis to inform future residents of any potential health impacts resulting from nearby sources of dust, toxic air contaminants (TACs) or odors, and where mitigation cannot reduce these impacts.

Policy S-1.1.5: Cooperate with the Bay Area Air Quality Management District (BAAQMD)

Policy S-1.3.5 (now S-1.3.7): Prohibit installation of wood-burning fireplaces in new residential development, except for EPA-certified wood-burning devices, and seek grant funding for a wood-burning

stove “changeout” program to encourage owners of wood-burning fireplaces in existing residences to replace them with EPA-certified devices, and prepare homeowner information handouts describing low-emission alternatives to wood-burning fireplaces.

Policy S-1.1.3: Require project applicants to implement all feasible control measures to reduce combustion emissions from construction equipment.

Policy S-1.1.4: Require developers on a case-by-case basis to inform future residents of any potential health impacts resulting from nearby sources of dust, toxic air contaminants (TACs), or odors, and other pollutants or air quality issues.

Policy S-1.1.7: Require new development to comply with all applicable dust control measures promulgated by the BAAQMD for new construction.

CONCLUSION

Based on the air quality policies assessed in the General Plan EIR, 2012 Supplement, and 2014 Addendum, along with the site specific review included above, there are no significant impacts or peculiar circumstances that would require additional review. The Proposed Project would comply with all applicable city and BAAQMD standards. The Proposed Project would not have any new significant or substantially more severe impacts to air quality than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.4 BIOLOGICAL RESOURCES

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.4 Biological Resources **Would the Project:**					
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special- status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	2012 Supplement pp. 7-3 to 3.4-18	N/A	No	No	No
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	2012 Supplement pp. 7-3 to 3.4-18	N/A	No	No	No
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?	2012 Supplement pp. 7-3 to 3.4-18	N/A	No	No	No

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.4 Biological Resources **Would the Project:**					
d. Interfere substantially with the movement of any native resident or migratory fish or wild-life species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	2012 Supplement pp. 7-3 to 3.4-18	N/A	No	No	No
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	2012 Supplement pp. 7-3 to 3.4-18	N/A	No	No	No
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?	2012 Supplement pp. 7-3 to 3.4-18	N/A	No	No	No

DISCUSSION

6.4a: As addressed in the General Plan EIR, development proposed under the General Plan would be situated, for the most part, on infill sites or land contiguous to existing development. Implementation of General Plan Policies and mitigation measures, including those included in the 2012 Supplement, would reduce any potential impacts to less than significant levels. At a project level, the Proposed Project would not have a substantial adverse effect on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS) because no species within these categories have a potential to occur on the project site. The site is completely disturbed with existing development and ornamental landscaping. Lists of protected species and corresponding habitat requirements are presented in **Appendix B**. Standard conditions of approval require preconstruction surveys to ensure no impacts to protected nesting birds. Therefore, a less-than-significant impact would occur as a result of the Proposed Project.

6.4b: Potential impacts to riparian habitat or other sensitive natural resources as well as federally protected wetlands previously were fully analyzed within the General Plan EIR and were found to be less than significant with implementation of General Plan policies and related mitigation measures. Additionally, the Development Code includes resource management provisions regarding creek and riparian habitat protection that would further reduce any potentially significant impacts. Furthermore, the project site does not consist of riparian habitat or any other sensitive natural community identified in local or regional plans, policies, or regulations by the CDFW or USFWS. No impact would occur as a result of the Proposed Project.

6.4c: According to the General Plan EIR, wetlands and other waters protected by Section 404 of the Clean Water Act occur throughout the General Plan Planning Area. Wetlands associated with these drainage features (i.e. in-stream, stream fringe, and wetlands in proximity of streams) also potentially receive protection under Section 404. Additional minor drainage features and wetlands occur and could potentially receive protection under Section 404. Potential impacts in the form of temporary or permanent loss due to filling of wetlands or other waters could result from new development within or in the vicinity of these wetlands and other waters. However, the Proposed Project is not located on or near a federally protected wetland as defined by Section 404 of the Clean Water Act and will not have an adverse effect through direct removal, filling, hydrological interruption, or any other means. Therefore, no impact would occur as a result of the Proposed Project.

6.4d: Development proposed in the General Plan would not be anticipated to interfere with any resident or migratory fish or wildlife movement. General Plan Policy POS-3.4.1 ensures conservation of wildlife corridors, including seasonal migration routes. The project site is not located within a wildlife nursery site and therefore no conservation requirements apply to the Proposed Project. The Proposed Project would not interfere with the movement of any native resident or migratory fish species. Nesting habitat for migratory birds and other birds of prey protected under the MBTA. Therefore no impact would occur as a result of the Proposed Project.

6.4e: Heritage Tree are recognized by either species designation or by size (trees over 24 inches trunk diameter at 4.5 feet above natural grade). Trees meeting this definition are found throughout the existing urban areas of the City. Although the General Plan EIR acknowledges that there is the potential for them to be removed or damaged as a result of new development during implementation of the land use plan, the City of Concord Tree Ordinance provides protection of these trees to reduce identified impacts. While tree removal will be required to implement the Proposed Project, the existing trees were reviewed by a qualified biologist and determined not to quality as heritage trees and therefore are not protected under the City's Tree Ordinance.

6.4f: The project site is not located on or near an area of Habitat Conservation Plan (such as the Eastern Contra Costa County Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or state habitat conservation plan) and thus would not affect any such plans or areas (City of Concord, 2007). Therefore, no impact would occur as a result of the Proposed Project.

STANDARD CONDITIONS OF APPROVAL

B-1: *Preconstruction Nesting Bird Survey*. To the extent practicable, vegetation removal and construction activities shall be performed from September 1 through January 31 to avoid the general nesting period for birds. If construction or vegetation removal cannot be performed during this period, preconstruction surveys will be performed no more than two days prior to construction activities to locate any active nests as follows.

> The applicant shall be responsible for the retention of a qualified biologist to conduct a survey of the project site and surrounding 500 feet for active nests – with particular emphasis on nests of migratory birds – if construction (including site preparation) will begin during the bird nesting season, from February 1 through August 31. If active nests are observed on either the project site or the surrounding area, the project applicant, in coordination with the appropriate City staff, shall establish no-disturbance buffer zones around the nests, with the size to be determined in consultation with the California Department of Fish and Wildlife (usually 100 feet for perching birds and 300 feet for raptors). The no- disturbance buffer will remain in place until the biologist determines the nest is no longer active or the nesting season ends. If construction ceases for two days or more and then resumes during the nesting season, an additional survey will be necessary to avoid impacts on active bird nests that may be present.

GENERAL PLAN POLICIES

Policy POS-3.4.3 states that the project must retain significant vegetation, including native vegetation and heritage tree, where feasible, and require replacement plantings as appropriate for mitigation.

CONCLUSION

The Proposed Project is within the areas defined and assessed within the General Plan as the urban core of the City with minimal protected biological resources. The Proposed Project would not have any new significant or substantially more severe impacts to biological resources than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.5 CULTURAL RESOURCES

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.5 Cultural Resources **Would the Project:**					
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	2012 Supplement pp. 7-4	N/A	No	No	No
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	2012 Supplement pp. 7-4	N/A	No	Yes	No
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	General Plan EIR pp. 3.5-13 to 3.5-14	MM 3.5-3	No	No	No
d. Disturb any human remains, including those interred outside the formal cemeteries?	2012 Supplement pp. 7-5	N/A	No	No	No

DISCUSSION

6.5a and b: Impacts to Cultural Resources were analyzed on a programmatic level in the General Plan EIR, which concluded that the primary impact that could occur would be disturbance of cultural resources during development of property, subsequent to adoption of the General Plan. Projects implemented under the General Plan and associated updates would require supplemental environmental analysis prior to implementation to determine project-specific impacts. In order to comply with the findings of the General Plan EIR, AES conducted a supplemental cultural resources survey (**Appendix A**). A background record search was performed at the Northwest Information Center (NWIC) of the California Historical Resources Information System on November 9, 2016 (IC File Number 16-0718). Additional research was conducted using files and literature maintained at AES, as well as internet resources. The record search included a review of the National Register of Historic Places; The California Register of Historical Resources; California Points of Historical Interest; California Inventory of Historic Resources; California Historical Landmarks; Directory of Properties in the Historic Property Data Files for Contra Costa County; and Archaeological Determinations of Eligibility. A Phase I site assessment (ERAS, 2015) prepared for the Proposed Project included a review of historic development of the property, and included the fact that the current structure dates to 1966.

Between the building and parking lot, the project site was almost entirely developed. The only open areas were in medians within the parking lot and around the parking lot edges, in varying width planted strips between the parking lot and sidewalks. It is highly likely that all soils found within those areas was either transported or disturbed, and no cultural resources were observed. The building lacks a specific architectural style, but could best be described as a contemporary commercial Spanish Colonial revival design. No prehistoric sites, features, or artifacts were identified. The closest natural water source, Galinda Creek, is approximately 0.5 miles to the south, indicating a low potential for buried prehisotirc resources. The building is technically historic, but lacks any association with persons or events significant in California history (CRHR criteria 1 and 2), does not embody the distinctive characteristics of a type, period, region, or method of construction (CRHR Criterion 3), and is unlikely to yield information important in prehistory or history (CRHR Criterion 4). Therefore, a finding of *No Historical Resources Affected* is recommended and no additional review is required for impacts to historic resources. However, as noted in the General Plan EIR, there is the potential to discover previously unknown cultural resources during ground-disturbing activities. However, with the incorporation of standard conditions of approval, impacts would be minimized.

6.5c: The General Plan EIR concludes that while no known significant paleontological resources occur within the planning area, there is potential for adverse impacts to occur if resources are found during earthwork activities and excavation. While no significant archaeological or paleontological deposits or site indicators were observed during the supplemental cultural resources survey, there is some potential for buried resources which could be uncovered during future ground-disturbing activities. These might include, but are not limited to: flakes and chipped stone tools; grinding implements such as millingstones, manos, mortars and pestles; midden soils, fragments of bone, shellfish, and fire affected rock; construction materials and building foundations; wells or privies; deposits of metal, glass, and/or ceramic refuse; and vertebrate and invertebrate fossils. Impacts would be reduced to less than significant with the implementation of General Plan EIR Mitigation Measure 3.5-3, presented below. Because the result of the site survey is consistent with the findings of the General Plan EIR, nor further review is required.

6.5d: The Proposed project would comply with all applicable existing national, state, and local laws, as well as General Plan Policies in order to reduce potential impacts related to human remain disturbance. No new circumstances involving new significant impacts have occurred on the Project Site.

STANDARD CONDITIONS OF APPROVAL

C-1: If potentially significant cultural resources are discovered during ground-disturbing activities associated with project preparation, construction, or completion, work shall halt in that area until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with Contra Costa County and other appropriate agencies and interested parties. For example, a qualified archaeologist shall follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR 523) and locational information to the California Historical Resources Information Center office (Northwestern Information Center). The consulting archaeologist shall also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (Public Resources Code Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that the find does not meet the CEQA standards of significance, construction shall proceed. On the other

hand, if the archaeologist determines that further information is needed to evaluate significance, the Planning Department staff shall be notified and a data recovery plan shall be prepared. All future development in the Planning Area will be accordance with State Laws Pertaining to the Discovery of Human Remains. Accordingly, if human remains of Native American origin are discovered during project construction, the developer and/or the Planning Department would be required to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Pub. Res. Code Sec. 5097). If any human remains are discovered or recognized in any location on the project site, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

a. The Contra Costa County Coroner/Sheriff has been informed and has determined that no investigation of the cause of death is required; and

b. If the remains are of Native American origin:

- The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
- The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.

MITIGATION MEASURES FROM GENERAL PLAN EIR

Mitigation Measure 3.5-3: All grading plans for development projects involving ground displacement shall include a requirement that in the event fossils are encountered, construction shall be temporarily halted, the Planning Division shall be notified immediately, a qualified paleontologist shall evaluate the fossils, and steps needed to photo-document or to recover the fossils shall be taken. If fossils are found during construction activities, grading in the vicinity shall be temporarily suspended while the fossils are evaluated for scientific significance and fossil recovery, if warranted.

CONCLUSION

As addressed in the General Plan EIR, a supplemental cultural resource analysis of the Proposed Project was conducted and a finding of *No Historical Resources Affected* was recommended, consistent with the findings of the General Plan EIR. In addition, implementation of General Plan EIR Mitigation Measure 3.5-3 will be implemented to reduce impacts to paleontological resources to less than significant levels. Accordingly, the Proposed Project would not have any new significant or substantially more severe impacts to cultural resources than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.6 GEOLOGY AND SOILS

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.6 Geology and Soils **Would the Project:**					
a. 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? Refer to Division of Mines and Geology Special Publication 42. Strong seismic ground shaking? Seismic-related ground failure, including liquefaction? Landslides?	General Plan EIR pp. 3.7-1 to 3.7-18	Yes	No	No	No
b. Result in substantial soil erosion or the loss of topsoil?	General Plan EIR pp. 3.7-1 to 3.7-18	N/A	No	No	No
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?	General Plan EIR pp. 3.7-1 to 3.7-18	N/A	No	No	No

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?	General Plan EIR pp. 3.7-1 to 3.7-18	N/A	No	No	No
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?	General Plan EIR pp. 3.7-1 to 3.7-18	N/A	No	No	No

DISCUSSION

6.6a-c: The General Plan EIR concluded that In the event of a major earthquake in the region of Concord, surface fault rupture and seismic ground shaking could potentially injure people and cause collapse or structural damage to existing and proposed structures. Fault-rupture and ground shaking could potentially expose people and property to seismic-related hazards, including localized liquefaction and related ground failure. The closest fault line is the Concord Fault located approximately 600 feet west of the project site (City of Concord, 2007). However, the Proposed Project would be compliant with policies outlined in the General Plan that are listed below, along with all California Building Codes including Section 1803 *Geotechnical Investigations*, reducing impacts to less than significant.

Although the Proposed Project would create ground disturbing activities through the removal of base and fill soils under the currently developed project site, the Proposed Project would not result in substantial soil erosion or the loss of topsoil as the entire site is currently developed and would leave no exposed soil or slopes to have the potential for erosion or soil loss. The proposed Project would follow all building codes including the California Building Code Section 1804 *Excavation, Grading, and Fill*, along with the necessary implementation of a Stormwater Pollution Prevention Plan (SWPPP) required by the EPA under the National Pollutant Discharge Elimination System (NPDES) program.

6.6d-e: The Proposed Project site is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project (City of Concord, 2007). The Proposed Project could potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse during major earthquake events, however compliance with General Plan Policies and the California Building Code and associated seismic provisions for this region of California would reduce the impacts to less than significant.

6.6f: Sewer lines are available to the project site and are currently connected. No septic tanks are proposed to be used and therefore the Proposed Project site would not have an impact on the use of septic tanks or alternative wastewater disposal systems.

GENERAL PLAN POLICIES

The Proposed Project would adhere to all General Plan Policies. The following General Plan policies would minimize potential seismic hazards:

Policy S-3.1.1 in the 2030 General Plan states that in order to minimize potential seismic hazards, that thorough evaluation of geologic-seismic and soils conditions and risks is required as part of the development review process.

Policy S-3.1.2 states all new development is required to design structures and buildings pursuant to applicable state and local standards and codes.

Policy S-3.1.3 requires geologic studies to be conducted or all structures, including hose not for human occupancy, located above and below ground whenever a project is located within an Earthquake Fault Zone.

Policy S-3.1.5 requires cooperation with appropriate government agencies and public and private organizations to address seismic hazards.

Policy S-3.2.3 requires soils and geologic hazards analysis and mitigation as part of development review.

Policy S-3.2.4 requires regulation on all development, including remodeling or structural rehabilitation, to assure adequate mitigation of safety hazards on sites having a history or threat of slope instability, erosion subsidence, ground failure, ground rupture, and/or liquefaction.

Policy S-7.1.3 requires establishment of public and private partnerships and cooperate with other emergency providers to deliver safe and effective emergency response.

Policy S-8.1.1 requires maintenance of an ongoing program for disaster response, including participation in all aspects of emerging, new high-technology solutions.

Policy S-8.1.2 requires coordination of disaster response planning with surrounding cities, agencies, and Contra Costa County.

Policy S-8.1.3 requires coordination with critical use facilities to assure that they can provide alternative sources of electricity, water and sewerage in the event that regular utilities are interrupted in a disaster.

Policy S-8.1.4 requires the implementation of the city's Local Hazards Mitigation Plan, consistent with the guidelines of FEMA and Disaster Act of 2000.

Policy POS-1.2.1: Implement strategies and actions associated with the design, development, and operation of multi-purpose trails as contained in the Trails Master Plan.

CONCLUSION

As addressed in the General Plan EIR, development proposed under the General Plan would be situated on infill sites and land contiguous to existing development. Implementation of General Plan Policies, including those added to the General Plan as analyzed in the 2012 Supplement, would reduce any potential impacts to less than significant levels. The Proposed Project would not have any new significant or substantially more severe impacts to geology and soil resources than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.7 GREENHOUSE GAS EMISSIONS

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.7 Greenhouse Gas Emissions **Would the Project:**					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	2014 Addendum pp. 14 to 16	Yes	No	No	N/A
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	2014 Addendum pp. 14 to 16	Yes	No	No	N/A

DISCUSSION

6.7a and b: As addressed in the 2014 Addendum, the City adopted the *Citywide Climate Action Plan* (Citywide CAP) in 2013 which is anticipated to bring the amended General Plan into compliance with SB 375 and statewide greenhouse gas (GHG) reduction goals. The Citywide CAP was adopted in response to mandates from the State of California intended to reduce the emission of greenhouse gases statewide, because of their contribution to global climate change. The Citywide CAP identifies how the City will take action consistent with the state's goals while supporting the local economy and quality of life. The Citywide CAP is anticipated to bring the amended General Plan into compliance with regional and statewide greenhouse gas emission reduction goals, and incorporate regional reduction targets developed pursuant to SB 375. Implementation of the CAP would result in a city-wide emission demonstration of 5.0 metric tons of CO2e per year per service population. Forecasted GHG emissions for the City of Concord in 2035 without mitigation is 1,503,498 metric tons of CO2 equivalence (MTCO2e). Based on the adopted Citywide CAP, the citywide emissions target for 2035 is 959,474 MTCO2e. With implementation of the Citywide CAP, the projected emissions for 2035 is 741,271 MTCO2e. The Citywide CAP is consistent with the General Plan's goals and policies that support reductions in GHG emissions, particularly in the Specific Plan area. Because land uses and densities assumed in the General Plan and Concord Development Code are consistent with the Specific Plan, implementation of the Specific Plan and subsequently the Proposed Project, would not result in significant GHG emissions impacts. The state has adopted more recent GHG reduction goals; however, compliance with a CAP remains an acceptable threshold, and because the Proposed Project is consistent with the land use plans of the General Plan and Specific Plan, no further analysis is required as the CAP covers the approved land use plans within the City.

CONCLUSION

Based on the analysis of greenhouse gases in the 2014 Addendum that address implementation of the Specific Plan for which the Proposed Project is consistent, there are no new impacts or circumstances that would require additional review of the Proposed Project. The Proposed Project would comply with all applicable city and state standards regarding green building and GHG emission reduction. The Proposed Project would not have any new significant or substantially more severe impacts to greenhouse gas emissions than what was previously analyzed in the General Plan EIR, 2012 Supplement, and specifically the 2014 Addendum. No additional review is required.

6.8 HAZARDS AND HAZARDOUS MATERIALS

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.8 Hazards and Hazardous Materials **Would the Project:**					
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	General Plan EIR pp. 3.8-1; 2012 Supplement pp. 7.2-6	N/A	No	No	No
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?	General Plan EIR pp. 3.8-1; 2012 Supplement pp. 7.2-6	N/A	No	No	No
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	General Plan EIR pp. 3.8-1; 2012 Supplement pp. 7.2-6	Yes	No	No	No
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	General Plan EIR pp. 3.8-1; 2012 Supplement pp. 7.2-6	Yes	No	No	No
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	General Plan EIR pp. 3.8-1; 2012 Supplement pp. 7.2-6	N/A	No	No	No

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.8 Hazards and Hazardous Materials **Would the Project:**					
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working on the project area?	General Plan EIR pp. 3.8-1; 2012 Supplement pp. 7.2-6	Yes	No	No	No
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	General Plan EIR pp. 3.8-1; 2012 Supplement pp. 7.2-6	N/A	No	No	No
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?	General Plan EIR pp. 3.8-1; 2012 Supplement pp. 7.2-6	N/A	No	No	No

DISCUSSION

6.8a-b: The General Plan EIR concluded that development under the General Plan could increase hazardous materials use in the City through policies and principles that support the development of office and industrial business parks and implementation of General Plan Policies would reduce potential impacts to less than significant levels. The Proposed Project is a residential project and would comply with all General Plan Policies listed below in order eliminate potential significant hazards to the public or the environment through the routine transport, use or disposal of hazardous materials as all federal, state, and local regulations and mandatory steps will be taken to ensure any hazardous materials are properly transported, used, and disposed of. During grading and construction activities, it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc. would be brought onto the site. Construction contractors will be required to comply with applicable Federal and State environmental and workplace safety laws, including OSHA and Uniform Building Codes. Adherence to these regulatory requirements would ensure that this impact is less than significant. Additionally, the demolition of the existing building on the project site requires compliance with BAAQMD rules to ensure minimal releases of asbestos-containing materials (ACMs) and

lead-based paint. Therefore, through the compliance with the General Plan Policies below the Proposed Project would result in a less than significant impact.

6.8c: The General Plan EIR states that impacts will be assessed at a project level and depend upon the distance to the school and the nature of the development. The Proposed Project location is located within 0.25 miles of four schools. The closest school is the Beginnings and Beyond Montesorri Christian School approximately 0.09 miles west of the project site. The Olympic Continuation High School and Crossroads High School located approximately 0.20 miles from the project site, and A White Dove School located approximately 0.19 miles from the project site. The project involves the construction of a residential apartment building and would not be a substantial emitter of hazardous materials or hazardous waste, therefore no additional review is required.

6.8d: The General Plan EIR states that impacts will be assessed at a project level. A Phase I Environmental Site Assessment (ESA) and a Phase II ESA were conducted in October 2015 and March 2016, respectively, during the transfer of ownership of the project site (Appendix C). Although there was historic use of fuel and oil storage in above ground storage tanks (ASTs) on the property (1926), results of an Environmental Record Search concluded that the property was not identified on any Environmental database lists. Soil borings where collected form three locations to determine if subsurface contamination exists on the project site from the historical ASTs. No signs of contamination such as odor, discoloration or elevated organic vapor meter (OVM) readings were observed during the drilling of the borings. Based on the sampling and analysis, the subsurface environmental condition of the Property does not appear to have been impacted by the historic presence of fuel/oil ASTs and oil pump. Based on the sampling and analysis, the subsurface environmental condition of the Property does not appear to have been impacted by the historic presence of fuel/oil ASTs and oil pump. Based on the results of this investigation, the Phase II recommended no further actions be performed regarding subsurface environmental conditions at the Property.

6.8e: Accordingly the 2012 Supplement, the Development Code (Section 18.100.020) includes an Airport Overlay District that features development standards for proposed projects within the Airport Influence Area of Buchanan Field Airport. It requires land use applications to be reviewed by the Contra Costa County Airport Land Use Commission and is intended to provide protection to people and property on the ground and to protect Buchanan Field Airport from the encroachment of non-compatible land uses that may interfere with its safe operation. The Proposed Project is located approximately 1.5 miles southeast the Buchanan Field Airport, however, not within the airport influence area, per the Development Code. The airport influence area is defined as area extending 14,000 feet from the ends of the specified runways. The two Buchanan Field Airport runways run northeast to southwest and north-northwest to south-southeast, bypassing the project location which is located southeast of the runways. Therefore, airplanes will not fly directly over the project site, and there would be no safety hazards associated with airports.

6.8g: As stated in the General Plan EIR, the Proposed Project would be subject to review by the CCPD as well as the CCCFPD for compliance with adopted emergency response plans. The Proposed Project is not expected to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Proposed Project would be developed on currently developed lands and would not result in the blockage of access routes or evacuation routes adopted within an

emergency response plan or emergency evaluation plan. Therefore, with review by the CPD and CCCFPD for compliance, impacts would be less than significant.

6.8h: The project area is within a low and moderate fire hazard area as listed by the California Wildland Fire mapping (City of Concord, 2007). The Proposed Project would not 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. Impacts would be less than significant. No Impact.

GENERAL PLAN POLICIES

Policy S-5.1.1 Coordinate with the Contra Costa County Department of Environmental Health, and other appropriate regulatory agencies' review of proposals at sites, which may have toxic contamination or include hazardous materials use.

Policy S-5.1.2 Coordinate review with the appropriate water provider and/or water quality agency for proposals proximate to water canals, pipelines, or reservoirs that include handling potentially hazardous materials.

Policy S-5.1.3 Control the transport of hazardous materials to minimize potential hazards to the local population.

Policy S-5.1.4 Require appropriate clean-up of all former commercial and industrial sites prior to reuse according to relevant State and Federal regulatory agencies.

Policy S-5.1.5 Coordinate with appropriate regulatory agencies during the review of any proposed General Plan Amendment that relates to the Concord Naval Weapons Station to ensure that potential hazards and safety issues are adequately addressed and any risks to existing and future residents are fully mitigated.

CONCLUSION

The Proposed Project does not propose development in areas not previously analyzed in the General Plan EIR. The Proposed Project would not have any new significant or substantially more severe impacts regarding hazards and hazardous materials than what was previously analyzed in the General Plan EIR, 2012 Supplement, or the 2014 Addendum. No additional review is required.

6.9 HYDROLOGY AND WATER QUALITY

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.9 Hydrology and Water Quality **Would the Project:**					
a. Violate any water quality standards or waste discharge requirements?	General Plan EIR pp. 3.13-11 to 3.13-12	N/A	No	No	No
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?	2012 Supplement pp.7-7	N/A	No	No	No
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?	2012 Supplement pp.7-8	N/A	No	No	No
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?	General Plan EIR pp. 3.13-8 to 3.13 10	N/A	No	No	No

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.9 Hydrology and Water Quality **Would the Project:**					
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?	2012 Supplement pp.7-8	N/A	No	No	No
f. Otherwise substantially degrade water quality?	2012 Supplement pp.7-8	N/A	No	No	No
g. Place housing within a 100-ytear flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	General Plan EIR pp. 3.13-11 to 3.13-12; 2012 Supplement pp.7-8	N/A	No	No	No
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	General Plan EIR pp. 3.13-11 to 3.13-12; 2012 Supplement pp.7-8	N/A	No	No	No
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?	2012 Supplement pp.7-8	N/A	No	No	No
j. Inundation by seiche, tsunami, or mudflow?	General Plan EIR pp. 3.7-15 to 3.7-17	3.7(a)	No	No	No

DISCUSSION

6.9a-b, and f: The General Plan EIR states that the increase in urban development proposed under the Urban Area General Plan is generally accompanied by decreases in natural ground cover and an increase in impervious surfaces (such as paved areas and buildings) and provides policies to reduce impacts. However, implementation of the Proposed Project would result in a decrease in the amount of impervious surface at the project site by 16 percent, reducing stormwater runoff compared to existing conditions. The increase in landscaping and inclusion of the plaza with pervious pavement accounts for

the decrease. During construction, impacts related to stormwater would be minimized through the implementation of a Storm Water Pollution Prevention Plan required to obtain coverage under the State's Construction General Permit in accordance with the National Pollutant Discharge Elimination System (NPDES). Furthermore, the City is incorporated into the Contra Costa Clean Water Project and associated NPDES Permit for municipal storm water systems (Municipal Regional Permit). Provision C.3 in the Municipal Regional Permit requires site designs for new developments and redevelopments to minimize the area of new roofs and paving. Where feasible, pervious surfaces should be used instead of paving so that runoff can infiltrate to the underlying soil. Remaining runoff from impervious areas must be captured and used or treated using bioretention. In some developments, the rates and durations of site runoff must also be controlled. The C.3 requirements are separate from, and in addition to, requirements for erosion and sediment control and for pollution prevention measures during construction. Adherence to the C.3 requirements minimizes water quality impacts from new development to maintain regional compliance with the Municipal Regional Permit. The Proposed Project would comply with the C.3 requirements and a stormwater control plan is included in the project application. Stormwater quality control would be achieve through both low impact development (LID) features (landscaped areas) and through mechanical treatment. The existing site does not provide for mechanical treatment and therefore water quality impacts would be less compared to the existing setting. Additionally, General Plan Policies ensure that all future development, including the Proposed Project, will not violate or degrade water quality standards or substantially deplete groundwater supplies.

6.9c-e, and g-h: The Federal Emergency Management Agency (FEMA) is responsible for predicting the potential for flooding in most areas. FEMA routinely performs this function through the update and issuance of Flood Insurance Rate Maps (FIRMs), which depict various levels of predicted inundation. As shown on FIRM parcel no. 06013C0282F, dated June 16, 2009, the Project Site is not located within any FEMA flood zones (FEMA, 2009). Additionally, the Proposed Project will decrease the amount of impervious surface at the project site by 16 percent as described above. The Proposed Project will not alter the existing drainage pattern of the site and it will comply with all applicable General Plan Policies.

6.9j: The Concord area is not located in a tsunami inundation area for emergency planning nor is there a water body near the project site capable of seiche. Based on the topography of the project site and distance to the nearest hill, mudflow is not a concern for the Proposed Project.

CONCLUSION

As addressed in the General Plan EIR, development proposed under the General Plan would not be located within any FEMA flood zones nor would it lead to degradation of water quality. The project site is currently developed therefore stormwater drainage and runoff control is in place. The Proposed Project would not have any new significant or substantially more severe impacts to hydrological resources and water quality than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.10 LAND USE AND PLANNING

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicabl development policie
6.10 Land Use and Planning **Would the Project:**					
a. Physically divide an established community?	General Plan EIR pp. 3.2-15	N/A	No	No	No
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?	2012 Supplement pp. 7-9	N/A	No	No	No
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	2012 Supplement pp. 7-9	N/A	No	No	No

DISCUSSION

6.10a: The General Plan promotes better connectivity within the City and allows for linkages between existing communities, including the Proposed Project site. The project site provides housing to bring more residents closer to central downtown and regional transportation (BART), which are major goals of the General Plan and the Specific Plan.

6.10b: Refer to **Section 4.0** for a comparison between the Proposed Project and land use planning.

6.10c: As addressed in the 2012 Supplement, the planning area is outside of the Eastern Contra Costa County Habitat Conservation Plan; therefore, no development is proposed within this conservation area.

CONCLUSION

As the Proposed Project is consistent with the land use policies in the General Plan and the Land Use Plan presented in the Specific Plan. No additional review is required.

6.11 MINERAL RESOURCES

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.11 Mineral Resources **Would the Project:**					
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	General Plan EIR Section 3.7-3	N/A	No	No	No
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?	General Plan EIR Section 3.7-3	N/A	No	No	No

DISCUSSION

6.11a-b: According to the General Plan EIR, mineral and aggregate resources exist throughout Concord, particularly in developed residential areas east of Clayton Road between Bailey and Kirker Pass, and along the southern city limits. There are no significant mineral resources within the City limits. (City of Concord, 2007). Access to mineral and aggregate resources is restricted by existing development in residential neighborhoods east of Clayton. However, identified resources along the southern city limits are in an undeveloped area. The Proposed Project would not 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, nor would it result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or land use plan as the project site represents an infill project which would not develop currently undeveloped land that has the potential to contain valuable mineral resources.

CONCLUSION

The Proposed Project does not propose development in areas not previously analyzed in the General Plan EIR, nor does it propose to have peculiar or substantiated impacts not covered in the General Plan EIR. The Proposed Project would not have any new significant or substantially more severe impacts to mineral resources than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.12 NOISE

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.12 Noise **Would the Project:**					
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?	General Plan EIR pp. 3.9-7 to 3.9-8; 2012 Supplement pp. 3.3-1 to 3.3-28	N/A	No	No	No
b. Exposure of persons to or generation of excessive groundborne vibration or ground-borne noise levels?	General Plan EIR pp. 3.9-7 to 3.9-9; 2012 Supplement pp. 3.3-1 to 3.3-28	N/A	No	No	No
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	General Plan EIR pp. 3.9-7 to 3.9-8; 2012 Supplement pp. 3.3-27	N/A	No	No	No
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	General Plan EIR pp. 3.9-7 to 3.9-8; 2012 Supplement pp. 3.3-1 to 3.3-28	N/A	No	No	No
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?	2012 Supplement pp. 7-7	N/A	No	No	No
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	2012 Supplement pp. 7-7	N/A	No	No	No

DISCUSSION

6.12a and c-d: Development Code section 18.150.130 states that all noise emanating from a site shall comply with the noise standards of the general plan safety and noise element, with the exception of construction activities. According to the 2012 Supplement, multi-family residential development could expose persons to or generate noise levels in excess of 65 dB along with construction-related noise. Although construction noise could result in higher levels noise levels ranging from 70 dB to 105 dB, it is exempt from the above requirement with the implementation of Condition of Approval N-1. The General Plan EIR conducted noise studies and concluded that Willow Pass Road would exceed the City's 60 dBA CNEL acceptable low density residential noise standard. Because the Traffic noise exceeded the City's standard, the General Plan EIR analyzed traffic noise impacts and it was determined that the project contribution to roadways would be less than 4 dB and considered not to be significant. Additionally, the General Plan EIR states that the BART line would create noise levels of 71 dBA Leq at 35 feet away; the project site is more than 100 feet from the BART line and therefore would not be impacts from rail noise.

6.12b: BART tracks are located across Port Chicago Highway from the Proposed Project site. Vibrations generated by BART measure 64 Vdb at 20 feet, in comparison, project construction would be generate significantly less groundborne vibrations. Additionally, pile drivers, known to generate substantial vibration levels, will not be used in construction of the Proposed Project. Development Code section 18.150.30 states that vibrations caused by temporary activities such as construction are exempt from the Ground Vibration standard but still subject to all conditions of any approved permit. Implementation of Policy S-2.2.6 (2012 Supplement) results in the implementation of construction-specific noise policies to limit the hours of construction activities. The Policy would also limit construction noise to Occupation Safety and Health Administration (OSHA) standards, which are based on the potential for worker injury from high noise levels. These standards also would protect persons at nearby noise-sensitive land uses from similar injury. Through implementation of Policy S-2.2.6, construction-related noise impacts would be reduced to less than significant.

6.12e: The Proposed Project is located approximately 1.5 miles southeast the Buchanan Field Airport, however, not within the airport influence area, per Development Code 18.100.020. The airport influence area is defined as area extending 14,000 feet from the ends of the specified runways. The two Buchanan Field Airport runways run northeast to southwest and north-northwest to south-southeast, bypassing the project location which is located southeast of the runways. Therefore airplanes will not fly directly over the project site, limiting exposure to excessive noise levels. In addition, Buchanan Airport will comply with Airport Ordinances 87-8 and 88-82 along with the Buchanan Field Noise Program in order to prevent excessive noise levels.

6.12g: The project site is not located within two miles of land that is used as a private airport, therefore, creating is no exposure to excessive noise levels.

CONDITION OF APPROVAL

N-1: Construction activities will only occur between the hours of 7:30 am and 6:00 pm on weekdays or as approved by the city as part of a planning permit.

GENERAL PLAN POLICIES

Policy S-2.2.4: Require new noise sources to use best available control technology (BACT) to minimize noise emissions.

Policy S-2.2.5: Require developers to reduce the noise impacts of new development on adjacent properties through appropriate means.

Policy S-2.2.6: Limit all construction in the vicinity of noise-sensitive land uses such as residences or hospitals to between 7:00 a.m. and 7:00 p.m. Construction activities that occur within the allowable times, shall not exceed applicable Occupational Safety and Health Administration noise standards. *The applicable OSHA standard is 90 dB over 8 continuous hours or 105 dB over 1 continuous hour at any nearby noise-sensitive land uses.*

CONCLUSION

With the implementation of General Plan Policies and the Condition of Approval, the Proposed Project would not substantially increase the permanent ambient noise levels or vibrations in the project vicinity above existing levels. The Proposed Project does not propose development in areas not previously analyzed in the General Plan EIR, nor does it propose to have peculiar or substantiated noise impacts not covered in the General Plan EIR or subsequent CEQA documents. The Proposed Project would not have any new significant or substantially more severe impacts concerning noise than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.13 POPULATIONS AND HOUSING

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.13 Population and Housing **Would the Project:**					
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)?	General Plan EIR pp. E-3	N/A	No	No	No
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	General Plan EIR pp. E-3	N/A	No	No	No
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	General Plan EIR pp. E-3	N/A	No	No	No

DISCUSSION

6.13a: The General Plan EIR accounts for a population of 142,210 people at buildout. According to the 2012 Supplement, the concord planning area will accommodate 138,560 people at full build out. This represents fewer people at buildout than previously analyzed in the Concord 2030 Urban Area General Plan EIR. Further, the General Plan Amendment analyzed in the 2012 Supplement, includes goals, policies, and principles regarding orderly and efficient urban growth, efficient land use pattern, and development mitigation intended to ensure that adequate transportation infrastructure and public services and facilities are provided to accommodate new development. Impacts would be similar to or less than those identified in the General Plan EIR and would be less than significant. The Proposed Project has been accounted for in the City's calculation and provides for the anticipated number of new housing to be developed in accordance with the General Plan Land Use Plan. Furthermore, the Proposed Project is consistent with the Land Use Plan of the Specific Plan. Accordingly, the Proposed Project will not directly or indirectly induce substantial population growth as the project is part of the planned growth in the region.

6.13b-c: The Proposed Project is being developed on land that is currently designated as a shopping center therefore would not displace existing housing or people.

CONCLUSION

The Proposed Project does not propose development in areas not previously analyzed in the General Plan EIR, nor does it propose to have peculiar or substantiated impacts to population and housing not covered in the General Plan EIR or subsequent CEQA documents. The Proposed Project would not have any new significant or substantially more severe impacts concerning population and housing than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.14 PUBLIC SERVICES

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.14 Public Services **Would the Project:**					
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 environ-mental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any the public services: Fire protection?	2012 Supplement pp. 7-7; General Plan EIR pp. 3.11-8 to 3.11-12	N/A	No	No	No
Police protection?	2012 Supplement pp. 7-7; General Plan EIR pp. 3.11-12 to 3.11-13	N/A	No	No	No
Schools?	General Plan EIR pp. 3.11-16 to 3.11-18	N/A	No	No	No
Parks?	General Plan EIR pp. 3.10-8 to 3.10-9	N/A	No	No	No
Other public facilities?	2012 Supplement pp. 7-12	N/A	No	No	No

DISCUSSION

6.14a: Fire and Police Protection: The Contra Costa County Fire Protection District (CCCFPD) provides protection, suppression, emergency medical, and rescue services for the City of Concord. The district also maintains mutual-aid agreements with the East Diablo Fire Protection District, the East Bay Regional Park District, the California Department of Forestry, and private industrial companies located within its jurisdiction. Additionally, as shown in Section 3.11 of the General Plan EIR **Figure 3.11-2,** the Project site is located within a low fire hazard zone. As addressed in the General Plan EIR, the CCCFPD has a 5 minute response time to 90 percent of all emergency incidents and 85.2 percent of incorporated Concord is within 1.5 miles of a fully staffed fire station. Proposed development is subject to review by the CCCFPD for compliance with emergency response plans.

Law enforcement services are provided by the City of Concord Police Department along with the California Highway Patrol, and the Contra Costa County Sherriff. Concord has a ratio of 1.29 officers per 1,000 residents, a lower ratio than the California standard of 1.4-1.7 officers per 1,000 residents. Accordingly, the department's response time is 5 to 6 minutes for Priority 1 calls (emergency and potentially life threatening calls). Proposed development is subject to review by the City of Concord Police Department for compliance with emergency response plans.

Fire and police protection demand impacts were evaluated in the General Plan EIR and were found to be less than significant with implementation of applicable General Plan policies, as well as a mitigation measure requiring project proponents to comply with the Contra Costa County Fire Protection District's access and water supply requirements and with Article 9, Appendixes III-A, III-B, III-C, and III-E of the 2001 California Fire Code. The Proposed Project would not result in further impacts than those previously addressed in the General Plan EIR. Additionally, as addressed in the 2012 Supplement under the Emergency Response or Evacuation Plan section, the Proposed Project is subject to review by the City of Concord Police Department and the CCCFPD for compliance with adopted emergency response plans. Under Policy GM-7.2.1 and Policy GM-7.2.2 of the Growth Management Element of the General Plan, new development is required to pay its fair share for fire and police services respectively. Therefore, impacts would be less than significant.

Schools: While new development under the General Plan and Proposed Update would increase the demand for new school facilities, the General Plan EIR analyzed this issue and found impacts to be less than significant with implementation of General Plan policies. Public schools in Concord (2010–2011) have a total enrollment of 16,658 students and a total capacity of 22,154 students. Accordingly, the schools are 26 percent below capacity (2012 Supplement). Schools in the near vicinity of the project site, including Olympic Continuation High School, Crossroads High School, Ayers Elementary, Meadow Homes Elementary, and Cambridge Elementary have a total enrollment of 2,399 students for the 2015/2016 school year. The maximum amount of students within each of these schools in the past years has reached 2,716, therefore the current enrollment doe s not exceed the past maximum amount of students enrolled in the nearby schools.

Parks are addressed in **Section 6.15, Recreation**.

Other Public Facilities: Based on the growing population, the 2012 Supplement requires that the city pursue planning and development for new library facilities and services. Policy PF-2.2.2 requires that the

City support the provision of technology through public/private partnerships to ensure the internet, in addition to the traditional library reference and lending services, is readily available to the community. These policies would ensure that library services are available to the community as needed. Impacts relating to other services would be less than significant. Impacts would be similar to those identified in the General Plan EIR and would be less than significant.

CONCLUSION

Any impacts of the Proposed Project would be similar to those identified in the General Plan EIR and would also be less than significant. The Proposed Project would not have any new significant or substantially more severe impacts to public services than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.15 RECREATION

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.15. Recreation **Would the Project:**					
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	General Plan EIR pp. 3.10-8 to 3.10-9	N/A	No	No	No
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?	General Plan EIR pp. 3.10-8 to 3.10-9	N/A	No	No	No

DISCUSSION

6.15a: The General Plan's park standard establishes requirement for new parkland to be developed at a ratio of 5 acres per 1,000 residents. However, the Proposed Project is considered infill and is therefore incorporated into the General Plan. Additionally, there are six parks within a one mile radius of the project site including: Todos Santos Plaza, Concord Parks and Recreation, John F. Baldwin Park, Willow Pass Community Park, Krueger Fields, and Ellis Lake Park.

6.15b: The Proposed Project does not include any recreational facilities therefore there would be no adverse physical effect on the environment.

CONCLUSION

Impacts of the Proposed Project would be similar to those identified in the General Plan EIR and would be less than significant. The Proposed Project would not have any new significant or substantially more severe impacts concerning recreational resources than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.16 TRANSPORTATION/TRAFFIC

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.16 Transportation / Traffic **Would the Project:**					
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ration on roads, or congestion at intersections)?	General Plan EIR pp. 3.3-1 to 3.3-36; 2012 Supplement pp. 3.5-1 to 3.5-55	N/A	No	No	No
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	General Plan EIR pp. 3.3-1 to 3.3-36; 2012 Supplement pp. 3.5-1 to 3.5-55	N/A	No	No	No
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?	2012 Supplement pp. 7-7	N/A	No	No	No
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	2012 Supplement pp. 7-12	N/A	No	No	No
e. Result in inadequate emergency access?	2012 Supplement pp. 7-12	N/A	No	No	No
f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	2012 Supplement pp. 7-12	N/A	No	No	No

DISCUSSION

6.16a-b: Currently 528,915 trips are generated daily in the city. The General Plan EIR projects that by 2030, with the City's proposed development, daily trips will increase by 38% to 728,607 daily trips. Willow Pass Road adjacent to the project site experiences approximately 21,456 daily trips and operates at a Level of Service (LOS) of D, meaning demand exceeds capacity. Utilizing Institute of Transportation Engineers published trip generation rates (ITE 220 and 230), implementation of the Proposed Project could result in 1,200 new daily vehicle trips distributed throughout the City roadway network. Assuming roughly 75 percent travel along Willow Pass Road, the Proposed Project would result in an increase of 4 percent over the existing daily traffic. This traffic impact was anticipated in the General Plan EIR based on its growth model and land use plan. Accordingly, the addition of traffic does not constitute a peculiar impact of the Proposed Project, was assessed in the General Plan and associated updates, and the standard conditions of approval and applicable Specific Plan policies listed below would further reduce impacts of the Proposed Project. No further analysis is warranted.

6.16c: The 2012 Supplement indicated that implementation of the General Plan and associated updates would have no effect on air traffic patterns at Buchanan Field Airport. The Proposed Project is located approximately 1.5 miles southeast the Buchanan Field Airport, outside of the airport influence area (Development Code 18.100.020). The airport influence area is defined as area extending 14,000 feet from the ends of the specified runways. The two Buchanan Field Airport runways run northeast to southwest and north-northwest to south-southeast, bypassing the project location which is located southeast of the runways. Therefore airplanes will not fly directly over the project site. Due to the distance from the airfield, the proposed seven story building would not impact flight patterns at Buchanan Field Airport.

6.16d-e: As discussed in the 2012 Supplement, Article II of the Development Code includes specific site planning and project design standards intended to address such issues as traffic hazards and emergency access. In addition, the City of Concord Police Department and CCCFPD would review individual development proposals to ensure that access needs are met. As such, traffic hazard and emergency access impacts would be less than significant. Specifically, the Proposed Project will comply with all design standards discussed in Development Code 18.150.170 to ensure that there are no increases in hazards due to design features. The Proposed Project is not expected to impair implementation of or physically interfere with an emergency access. The Proposed Project would be developed on existing developed lands and would not result in the blockage of access routes or evacuation routes adopted within an emergency response plan or emergency evaluation plan. Therefore, with review by the CPD and CCCFPD for compliance, impacts would be less than significant.

6.16f: As addressed in the 2012 Supplement, the Development code implements policies of the Transportation and Circulation element to ensure that there will be no conflict with adopted policies. Additionally, the proposed zoning maps demonstrate a well-integrated and coordinated transit network to further decrease conflict.

STANDARD CONDITIONS OF APPROVAL

1. Traffic control during construction shall be in accordance with the current edition of “Traffic controls in construction and maintenance work zones” by the U.S. Department of Transportation.

2. The controller shall provide al all times, lights, signs, barricades, cones, flag men, or other devices necessary to provide for public safety and to maintain traffic controls.

3. The contractor shall limit any lane closures to one lane at a time and to use one side of the roadway on any undivided street unless otherwise approved in writing by the City of concord Engineering Department, lane closures shall be limited to weekdays (Monday through Friday) except City holidays and from 9:00 AM to 3:30 PM.

4. The permittee shall notify, in writing, any property/business owners of impending detours or lane closures that may impact their property and/or business. The written notice will hand delivered three business days prior to implementing the detour and/or lane closure. The permittee shall submit to the city proof that the notice was given at least 2 business days prior to the start of work.

5. Overnight storage of construction material and/or equipment is not permitted in the public right-of-way unless otherwise approved in writing by the City. No storage of material shall be allowed at any time within 40 feet of an intersection or driveway.

6. The contract shall notify the engineering inspector and transportation inspectors two working days prior to any work that may impact the city’s traffic signal system, wiring interconnect and /or signal poles.

7. The permittee shall notify the central Contra Costa transit authority, Concord Police Department, Contra Costa Fire Protection District 48 hours prior to the beginning of nay work that may interfere with the normal flow of traffic.

8. All damaged traffic equipment, including loops and conduit, shall be repaired within 24 hours.

9. At the preconstruction conference, the contractor shall provide written evidence that he has a licensed traffic signal contractor engaged to provide 24 hour emergency repair services as needed.

SPECIFIC PLAN POLICIES

Policy C-3.1: To the extent feasible, eliminate existing and minimize future driveways and curbcuts within the pedestrian priority zone, specifically along Grant Street and Willow Pass Road. Sidewalks across driveways should be set back from the driveway so that they remain level.

Policy C-3.2: Widen sidewalks within the pedestrian priority zone and provide landscape buffers on connector and transit streets. Sidewalks should generally provide five (5) feet of clear area, although wider (10 to 15 feet) is preferred in some areas that experience high pedestrian volumes, such as Grant Street, connecting the BART station to Todos Santos Plaza. As rights-of way are constrained by existing buildings, mature trees, and the roadway, it may not be feasible to provide a minimum sidewalk width of 5 feet throughout the Pedestrian Priority zone and the Specific Plan area. In those instances, a reduced

sidewalk width of no less than 3 feet is permissible provided there is a passing zone of 5 feet wide by 5 feet long to permit two wheelchair users to pass on another or turnaround at least every 200 feet. The pedestrian clear area needs to be free from obstacles, such as landscaping, tree grates, fire hydrants, vending machines, sign poles, utility boxes, trash cans, transit shelters, and street vendor carts.

CONCLUSION

The Proposed Project is within the areas defined and addressed within the General Plan and the Specific Plan. Adherence to and implementation of General Plan policies and actions and the Specific Plan Guidelines would ensure that the Proposed Project would not result in significant transportation impacts. The Proposed Project would not have any new significant or substantially more severe impacts concerning transportation and circulation than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.17 UTILITIES

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies
6.17 Utilities **Would the Project:**					
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	2012 Supplement pp. 3.4-10 to 3.4-17; 2014 Addendum pp 25	N/A	No	No	No
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construct-tion of which could cause significant environmental effects?	2012 Supplement pp. 3.4-10 to 3.4-17; 2014 Addendum pp 25	N/A	No	No	No
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 environmen-tal effects?	2014 Addendum pp 25-26	N/A	No	No	No
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	2014 Addendum pp 25; 2012 Supplement	N/A	No	No	No
e. Result in a determina-tion 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?	2012 Supplement pp. 3.4-10 to 3.4-17; 2014 Addendum pp 25	N/A	No	No	No
f. Be served by a landfill with sufficient permit-ted capacity to accom-modate the project's solid waste disposal needs?	2014 Addendum pp 26; General Plan EIR pp. 3.11-7	N/A	No	No	No

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe Impacts?	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	5. New Impacts Substantially Mitigated by uniformly applicable development policies?
6.17 Utilities **Would the Project:**					
g. Comply with federal, state, and local statutes and regulations related to solid waste?	2014 Addendum pp 26; General Plan EIR. Pp 3.11-22	N/A	No	No	No

DISCUSSION

6.17a-b, and e: According to the General Plan EIR, while the new development in the City requires an estimated increase of 6,900 acre-feet per year in water demand, the City does not foresee any adverse impacts on water supply. Additional wastewater generated with buildout of the General Plan can be accommodated without the need for additional treatment facilities. Accordingly, the General Plan EIR found potential impacts related to water, wastewater, and stormwater drainage facilities to be less than significant with the implementation of applicable General Plan policies. The 2012 Supplement concluded that proposed amendments to the General Plan will result in a net decrease of three percent compared to the General Plan residential development assumptions. Since the Citywide demand projections are approximately 3 percent lower than the General Plan's proposed buildout, the impacts to water and wastewater of the Proposed Project would be less than anticipated in the General Plan EIR. Additionally, the City will comply with the California Urban Water Management Planning Act (California Water Code Sections 10610-10656) which requires water suppliers to prepare urban water management plans and update them every 5 years. The 2014 Addendum indicated that the Specific Plan is consistent with General Plan policies adopted for the purpose of reducing or avoiding impacts associated with public services and utilities, the CCWD's UWMP and Future Water Supply Study, California's energy efficiency standards, and local, state and federal regulations, would not result in a significant impact on public services or utilities.

CCWD's Future Water Supply Study Update (2002) and 2010 UWMP indicate that the City is on target with meeting the future demands of its service areas, while accounting for future growth throughout the area. Development consistent with the Specific Plan is not anticipated to require any significant upgrades to water supply infrastructure.

Densification of the downtown corridor and changes in land use will likely increase sewage generation. The current Downtown Concord Sewer and Streetscape Improvements Phase II project includes replacement of sewer mains and laterals taking into consideration this increased density as projected by the General Plan. Although local lines may need to be upsized or extended to serve redeveloped parcels, no significant infrastructure deficiency mitigation is anticipated in order to serve the Specific Plan area.

As stated in the 20012 Supplement, water demand with implementation of the General Plan, would not change substantially. Furthermore, the City's future water conservation measures may reduce future water demand. For these reasons, the proposed Specific Plan would not require water supply in excess of the demand assumed in the General Plan and the impacts from the Proposed Project would be similar to those anticipated in the General Plan EIR and the 2012 Supplement.

6.17c: The Proposed Project would comply with the development standard requiring re-developed areas more than 10,000 sf to maintain post-construction stormwater flows from the site at pre-construction levels. The Proposed Project will decrease the amount of impervious surface at the project site by 16 percent; below pre-construction stormwater runoff levels. Additionally, the Proposed Project would have internal stormwater drainage features and mechanical water quality improvement facilities, further decreasing impacts.

6.17d: Water is provided to the Proposed Project by the Contra Costa Water District. With new development in the City, water demand is expected to increase by 6,900 acre-feet per year (AFY) to 25,690 AFY by 2030. The City is on target for meeting these future water demands, while accounting for future growth. Refer to "6.17a-b and e" for additional discussion of water. Therefore, with implementation of General Plan Policies, the city would have sufficient water supplies available for the Proposed Project.

6.17f: Based on the General Plan EIR, the City's solid waste capacity is sufficient to meet the needs of projected growth until 2030. With the implementation of General Plan policies established to reduce waste, solid waste impacts associated with the Specific Plan's new developments would not be significant. Projected population growth under the proposed General Plan is not anticipated to generate significant additional solid waste demand. Furthermore, the Concord Development Code includes development standards relating to solid waste, recycling, and green waste materials storage. The 2012 Supplement updated projections for growth within the General Plan area indicating the growth would be less than anticipated in the General Plan EIR. Impacts of solid waste, associated with the Specific Plan's implementation, on solid waste landfills would be less than significant. New developments would be required to comply with General Plan policies, federal, state, and local solid waste regulations. The City's solid waste and disposal services is provided by the Concord Disposal Service (CDS). In 2004, Concord disposed of 100,937 tons of solid waste at the Potrero Hills Landfill. Located in Suisun City and expected to be in use until 2058. The facility has a capacity of 21.5 million cubic yards and can accept 4,330 tons a day. The Potrero Hills Land fill has sufficient capacity to meet the needs of all projected growth addressed in the 2030 General Plan. Therefore solid waste impacts associated with the Proposed Project would not be significant.

6.17g: As addressed in the 2014 Addendum, the Proposed Project will comply with all federal, state, and local statues and regulations related to solid waste. The City is currently working to achieve compliance with the California Public Resource Code diversion rates (50 percent) by complying with General Plan Policies. Additionally, the Proposed Project would comply with Development Code sections 8.20 and 18.150.150.

GENERAL PLAN POLICIES

Policy PF-1.1.1: Coordinate with the Contra Costa Water District (CCWD) to provide an adequate and safe water supply.

CONCLUSION

As addressed in the General Plan EIR and 2014 Addendum, the Proposed Project would not have any significant impact on utilities, including landfills, sewers, and treatment centers. Accordingly, impacts of the Proposed Project would be similar to those identified in the General Plan EIR and would be less than significant. The Proposed Project would not have any new significant or substantially more severe impacts concerning utilities than what was previously analyzed in the General Plan EIR, 2012 Supplement, or 2014 Addendum. No additional review is required.

6.18 MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue Area	1. Analyzed in Previous EIR	2. Previous EIR's Mitigation Measures Addresses Impacts	3. Proposed Project Involves New Significant Impacts or Substantially More Severe	4. Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts	5. New Impacts Substantially Mitigated by Uniformly Applicable Development Policies
6.18. Mandatory Findings of Significance **Does the Project:**					
a. 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 animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	Refer to Sections 6.5 and 6.4	Yes	No	No	No
b. 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.)	Sections 3-1 through 3-13; Section 5.4	Yes	No	No	No
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Refer to Sections 6.1 through 6.17 above	No	No	No	No

6.18a: Consistent with the findings of the General Plan EIR, 2012 Supplement, and 2014 Addendum, the Proposed Project would not: 1) substantially reduce the habitat of a fish or wildlife species; 2) cause a fish or wildlife species population to drop below self-sustaining levels; 3) threaten to eliminate a plant or

animal community; or 4) reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 6.5, the Proposed Project would not impact or eliminate important examples of the major periods of California history or prehistory, including archaeological or paleontological resources. As such, the Proposed Project would not result in any impacts peculiar to the project beyond those identified in the General Plan EIR and subsequent environmental documents.

6.18b: Conformance with General Plan Policies, Specific Plan Guidelines and Policies, and Conditions of approval, specified, as appropriate, within this document, would ensure that potential impacts would be individually limited and not cumulatively considerable in the context of impacts associated with other pending and planned development projects. Project-related impacts would be typical of redevelopment projects in the General Plan and Specific Plan area, and would be reduced to less-than-significant levels through conformance with General Plan Policies, Specific Plan Guidelines and Policies, and Conditions of Approval. As part of the General Plan EIR and 2012 Supplement, cumulative impacts associated with buildout of the Specific Plan area were analyzed. In general, the Proposed Project is consistent with the General Plan EIR and subsequent documents, and other existing and allowable land uses in the vicinity of the project are not significantly different than what was studied in the cumulative analysis of the General Plan EIR, 2012 Supplement, and 2014 Addendum. For example, a Proposed Project north across Willow Pass Road would result in additional residential infill. However, the project is similar in scope to the Proposed Project and is consistent with the land use policies of the General Plan and Specific Plan. The General Plan as a planning document consists of cumulative analyses of the approved land uses within the planning boundaries. These same land uses would be cumulatively considerable with the project site. The project would not result in significant impacts peculiar to the project site as indicated in Section 6.1 through 6.17 above. Accordingly, nearby development would be required to be consistent with the local planning documents, including the Specific Plan or mitigation would be required to assess the impacts that were not addressed in the General Plan EIR, 2012 Supplement, or the 2014 Addendum. Therefore, the Proposed Projects consistency with the General Plan and Specific Plan, and subsequent analysis above in Section 6.1 through 6.17 indicate the implementation would not result in significant cumulative impacts that were not addressed in the General Plan EIR, 2012 Supplement, or 2014 Addendum.

6.18c: As previously discussed, the Proposed Project would not result in any environmental effects that would cause adverse effects on human beings either directly or indirectly. Potential impacts of the Proposed Project were previously analyzed as part of the General Plan EIR, 2012 Supplement, or the 2014 Addendum which determined that the Proposed Project would not result in any significant impact. Conformance with General Plan Policies, Specific Plan Guidelines and Policies, and Conditions of approval identified in Section 6.1 through 6.17 above would ensure that potential impacts would be reduced to less-than-significant levels and implementation would not result in impacts peculiar to the project site that were not previously addressed in the prior EIRs and addendum.

CONCLUSION

The Proposed Project is consistent with the development density established by existing zoning, specific plan, and general plan policies for which an EIR, supplemental EIR, and addendum to the supplemental EIR was certified. Accordingly, based on the assessments presented in Sections 4.0 and 6.1 through 6.18, the Proposed Project does not require additional environmental review as the impacts:

1. Are not peculiar to the project or the parcel on which the project would be located,
2. Were analyzed as significant effects in a prior EIR on the zoning action, general plan, and specific plan, with which the project is consistent where applicable,
3. Are not potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan and specific plan, and
4. Are not previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

Furthermore, impacts would be further reduced mitigated by the imposition of uniformly applied development policies or standards. Accordingly, implementation of the Proposed Project complies with Section 15183 of the CEQA Guidelines and not further environmental review is required.

SECTION 7.0 – REFERENCES CITED

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APPENDICES

APPENDIX A

CALEEMOD FILES

CalEEMod Inputs

Willow Pass Apartments Infill Exemption Initial Study

Project-Specific Inputs for the Willow Pass Apartments Infill Exemption Initial Study

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Project Name	Project Name	Willow Pass Apartments Infill Exemption Initial Study	Project Description
Project Location	County	Contra Costa	Modeler, based on location
Climate zone	Climate Zone Number	4	Modeler, based on location
Land Use Setting	Urban or Rural	Urban	Modeler, based on location
Operational Year	1st year of operation after full buildout.	2019	Project Description
Utility Company	Utility Company Name	PG&E	USEPA Power Profiler
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See **Table 1.**	See **Table 1.**
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See **Table 1.**	See **Table 1.**
Lot Acreage	Acreage of each Land Use Type	See **Table 1.**	See **Table 1.**
Population	Population based on persons/household	See **Table 1.**	See **Table 1.**
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	See **Table 2.**	See **Table 2.**
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See **Table 2.**	See **Table 2.**
Demolition	Sq ft or tons of Demo	18,080	KTGY Engineering Plans
Construction Trip Gen Rate	Average number of one-way trips per day	--	--
Operational Trip Reductions	% reduction in trips.	--	--
Operational Trip Gen Rate and trip length	Trips and trip lengths	--	--
Area Sources	Hearths – # of wood-burning fireplaces, #of gas fireplaces, and # of units with no fireplace.	Not Applicable	No hearths are included in the project design.
	Landscape Equipment - % of equipment that is electric.	--	--
Energy Use	Project Specific Emission Factors.	--	--

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	--	N/A no GHG analysis
Solid waste	Tons of solid waste generated per year	--	--
	Land Fill Gas Capture Rate		
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	--	--
Sequestration	Type and net number of new trees added	--	--

Source: USEPA, 2015; KTGY, 2016

Project–Mitigation Inputs for the Willow Pass Apartments Infill Exemption Initial Study

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	No	Engine Type, DPF Level, and Oxidation Catalyst	--	--
Soil Stabilizer for Unpaved Roads	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Default % Reduction
	N/A		PM10 (% Reduction)	55%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	No	Vehicle Speed (mph)	--	--
Type of Residential	N/A	Yes	Project Setting	Urban Center	--
Increased Density	LUT-1	Yes	Dwelling Units/Acre	118	KTGY Engineering Plans
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	Yes	Average Distance to Transit Station (miles)	.25	KTGY Engineering Plans
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs ($)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	--
Expand Transit Network	TST-3	No	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount ($)	--	--
Implement Employee Parking “Cash-Out”	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge ($)	--	--
Encourage Telecommuting	TRT-6	No	% employee work 9/80	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
and Alternative Work Schedules		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--
Employee Vanpool/Shuttle	TRT-11	No	% employee eligible	--	--
		No	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	Yes	Yes or No	No	KTGY Engineering Plans
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	No	Emission Factor (EF) (g/l)	--	--
Use low VOC Paint (Residential Exterior)	N/A	No	EF (g/l)	--	--
Use low VOC Paint (Non-residential Interior)	N/A	No	EF (g/l)	--	--
Use low VOC Paint (Non-residential Exterior)	N/A	No	EF (g/l)	--	--
Electric Lawnmower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	No	Percent of equipment type that will be electric.	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Electric Chainsaw	A-1	No	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--
Install High Efficiently Lighting	LE-1	No	% Lighting Energy Reduction	--	--
On-site Renewable Energy	AE-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	Yes	% Reduction in flow	32%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Kitchen Faucet	WUW-1	Yes	% Reduction in flow	18%	Default % reduction assuming implementation of Recommended Mitigation.
Install Low-flow Toilet	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Shower	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Institute Recycling and Composting Service	SW-1	No	% Reduction in Waste Disposal over State requirements	--	--

Table 1 – Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
Residential	Apartments Mid Rise	181	Dwelling Unit	1.53	66,646.8	494

Note: Average household size 2.73 persons per household

Source: KTGY, 2016

Table 2 – Construction Equipment Usage

Equipment	Construction Phase Activities					
	Demolition	Site Prep	Grading	Building Construction	Paving	Architectural Coating
	3/1/2017 -	4/8/2017 -	4/12/2017 -	4/20/2017 -	5/12/2018 -	7/20/2017 -
	4/7/2017	4/11/2017	4/19/2017	5/11/2018	5/31/2018	5/31/2018
Air Compressors						1
Cement and Mortar Mixers					1	
Concreate/Industrial Saws	1					
Cranes	1			1		
Forklifts				1		
Gensets				1		
Graders		1	1			
Pavers					1	
Paving Equipment					1	
Rollers					1	
Rubber Tired Dozers	1	1	1			
Tractors/Loaders/Backhoes	3	1	1	1	1	
Welders				3		

Willow Pass Apartments Infill Exemption Initial Study

Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	181.00	Dwelling Unit	1.53	66,646.80	494

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**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 - Refer to CalEEMod table

Construction Phase - Refer to CalEEMod tables

Demolition -

Woodstoves - No hearths

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	226.00
tblConstructionPhase	NumDays	200.00	277.00
tblConstructionPhase	NumDays	20.00	28.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	PhaseEndDate	2/7/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	1/10/2018	5/11/2018
tblConstructionPhase	PhaseEndDate	3/28/2017	4/7/2017
tblConstructionPhase	PhaseEndDate	4/5/2017	4/19/2017
tblConstructionPhase	PhaseEndDate	1/24/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	3/30/2017	4/11/2017
tblConstructionPhase	PhaseStartDate	1/25/2018	7/20/2017
tblConstructionPhase	PhaseStartDate	4/6/2017	4/20/2017
tblConstructionPhase	PhaseStartDate	3/31/2017	4/12/2017
tblConstructionPhase	PhaseStartDate	1/11/2018	5/12/2018
tblConstructionPhase	PhaseStartDate	3/29/2017	4/8/2017
tblFireplaces	NumberGas	27.15	0.00
tblFireplaces	NumberNoFireplace	7.24	181.00
tblFireplaces	NumberWood	30.77	0.00
tblGrading	AcresOfGrading	2.25	1.50
tblLandUse	BuildingSpaceSquareFeet	181,000.00	66,646.80
tblLandUse	LandUseSquareFeet	181,000.00	66,646.80
tblLandUse	LotAcreage	4.76	1.53
tblLandUse	Population	518.00	494.00
tblProjectCharacteristics	OperationalYear	2018	2019

tblWoodstoves	NumberCatalytic	3.62	0.00
tblWoodstoves	NumberNoncatalytic	3.62	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	0.6516	2.6434	2.2298	4.2400e-003	0.1487	0.1522	0.3009	0.0439	0.1463	0.1902	0.0000	372.2684	372.2684	0.0529	0.0000	373.5898
2018	0.4092	1.1564	1.1000	2.1800e-003	0.0669	0.0642	0.1310	0.0179	0.0620	0.0799	0.0000	190.7332	190.7332	0.0246	0.0000	191.3478
Maximum	**0.6516**	**2.6434**	**2.2298**	**4.2400e-003**	**0.1487**	**0.1522**	**0.3009**	**0.0439**	**0.1463**	**0.1902**	**0.0000**	**372.2684**	**372.2684**	**0.0529**	**0.0000**	**373.5898**

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	0.6516	2.6434	2.2298	4.2400e-003	0.1327	0.1522	0.2849	0.0374	0.1463	0.1837	0.0000	372.2682	372.2682	0.0529	0.0000	373.5895
2018	0.4092	1.1564	1.1000	2.1800e-003	0.0669	0.0642	0.1310	0.0179	0.0620	0.0799	0.0000	190.7331	190.7331	0.0246	0.0000	191.3477
Maximum	**0.6516**	**2.6434**	**2.2298**	**4.2400e-003**	**0.1327**	**0.1522**	**0.2849**	**0.0374**	**0.1463**	**0.1837**	**0.0000**	**372.2682**	**372.2682**	**0.0529**	**0.0000**	**373.5895**

	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**	**7.41**	**0.00**	**3.70**	**10.53**	**0.00**	**2.41**	**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	3-1-2017	5-31-2017	0.8997	0.8997
2	6-1-2017	8-31-2017	0.9629	0.9629
3	9-1-2017	11-30-2017	1.0756	1.0756
4	12-1-2017	2-28-2018	1.0076	1.0076
5	3-1-2018	5-31-2018	0.9094	0.9094
		Highest	1.0756	1.0756

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	0.3486	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Energy	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	339.1740	339.1740	0.0126	4.1300e-003	340.7194
Mobile	0.3757	1.6690	4.2838	0.0126	1.0151	0.0141	1.0292	0.2725	0.0133	0.2857	0.0000	1,151.3293	1,151.3293	0.0470	0.0000	1,152.5044
Waste						0.0000	0.0000		0.0000	0.0000	16.9010	0.0000	16.9010	0.9988	0.0000	41.8716
Water						0.0000	0.0000		0.0000	0.0000	3.7413	26.1333	29.8746	0.3855	9.3200e-003	42.2877
Total	**0.7350**	**1.7770**	**5.6736**	**0.0133**	**1.0151**	**0.0290**	**1.0441**	**0.2725**	**0.0281**	**0.3006**	**20.6424**	**1,518.8320**	**1,539.4743**	**1.4460**	**0.0135**	**1,579.6322**

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	0.3486	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Energy	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	339.1740	339.1740	0.0126	4.1300e-003	340.7194
Mobile	0.3373	1.3739	3.3626	9.0800e-003	0.7106	0.0103	0.7209	0.1907	9.7100e-003	0.2004	0.0000	829.6401	829.6401	0.0376	0.0000	830.5801
Waste						0.0000	0.0000		0.0000	0.0000	16.9010	0.0000	16.9010	0.9988	0.0000	41.8716
Water						0.0000	0.0000		0.0000	0.0000	2.9931	22.4206	25.4137	0.3084	7.4700e-003	35.3501
Total	**0.6967**	**1.4818**	**4.7525**	**9.7400e-003**	**0.7106**	**0.0252**	**0.7358**	**0.1907**	**0.0246**	**0.2153**	**19.8941**	**1,193.4300**	**1,213.3241**	**1.3596**	**0.0116**	**1,250.7703**

	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	**5.22**	**16.61**	**16.24**	**26.55**	**30.00**	**12.99**	**29.53**	**30.00**	**12.59**	**28.37**	**3.62**	**21.42**	**21.19**	**5.98**	**13.75**	**20.82**

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	3/1/2017	4/7/2017	5	28	
2	Site Preparation	Site Preparation	4/8/2017	4/11/2017	5	2	
3	Grading	Grading	4/12/2017	4/19/2017	5	6	
4	Building Construction	Building Construction	4/20/2017	5/11/2018	5	277	
5	Architectural Coating	Architectural Coating	7/20/2017	5/31/2018	5	226	
6	Paving	Paving	5/12/2018	5/31/2018	5	14	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 134,960; Residential Outdoor: 44,987; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	82.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	130.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					8.9000e-003	0.0000	8.9000e-003	1.3500e-003	0.0000	1.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0387	0.3746	0.2178	3.4000e-004		0.0231	0.0231		0.0216	0.0216	0.0000	30.7535	30.7535	7.7800e-003	0.0000	30.9480
Total	**0.0387**	**0.3746**	**0.2178**	**3.4000e-004**	**8.9000e-003**	**0.0231**	**0.0320**	**1.3500e-003**	**0.0216**	**0.0229**	**0.0000**	**30.7535**	**30.7535**	**7.7800e-003**	**0.0000**	**30.9480**

3.2 Demolition - 2017

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	4.6000e-004	0.0146	2.6600e-003	3.0000e-005	6.9000e-004	9.0000e-005	7.8000e-004	1.9000e-004	8.0000e-005	2.7000e-004	0.0000	3.1946	3.1946	1.5000e-004	0.0000	3.1984
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	8.4000e-004	6.6000e-004	6.6200e-003	2.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.3873	1.3873	5.0000e-005	0.0000	1.3885
Total	**1.3000e-003**	**0.0153**	**9.2800e-003**	**5.0000e-005**	**2.1300e-003**	**1.0000e-004**	**2.2300e-003**	**5.7000e-004**	**9.0000e-005**	**6.6000e-004**	**0.0000**	**4.5819**	**4.5819**	**2.0000e-004**	**0.0000**	**4.5869**

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					4.0000e-003	0.0000	4.0000e-003	6.1000e-004	0.0000	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0387	0.3746	0.2178	3.4000e-004		0.0231	0.0231		0.0216	0.0216	0.0000	30.7535	30.7535	7.7800e-003	0.0000	30.9479
Total	**0.0387**	**0.3746**	**0.2178**	**3.4000e-004**	**4.0000e-003**	**0.0231**	**0.0271**	**6.1000e-004**	**0.0216**	**0.0222**	**0.0000**	**30.7535**	**30.7535**	**7.7800e-003**	**0.0000**	**30.9479**

3.2 Demolition - 2017

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	4.6000e-004	0.0146	2.6600e-003	3.0000e-005	6.9000e-004	9.0000e-005	7.8000e-004	1.9000e-004	8.0000e-005	2.7000e-004	0.0000	3.1946	3.1946	1.5000e-004	0.0000	3.1984
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	8.4000e-004	6.6000e-004	6.6200e-003	2.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.3873	1.3873	5.0000e-005	0.0000	1.3885
Total	**1.3000e-003**	**0.0153**	**9.2800e-003**	**5.0000e-005**	**2.1300e-003**	**1.0000e-004**	**2.2300e-003**	**5.7000e-004**	**9.0000e-005**	**6.6000e-004**	**0.0000**	**4.5819**	**4.5819**	**2.0000e-004**	**0.0000**	**4.5869**

3.3 Site Preparation - 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					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	0.0222	8.4000e-003	2.0000e-005		1.0500e-003	1.0500e-003		9.6000e-004	9.6000e-004	0.0000	1.6005	1.6005	4.9000e-004	0.0000	1.6128
Total	**1.9300e-003**	**0.0222**	**8.4000e-003**	**2.0000e-005**	**5.8000e-003**	**1.0500e-003**	**6.8500e-003**	**2.9500e-003**	**9.6000e-004**	**3.9100e-003**	**0.0000**	**1.6005**	**1.6005**	**4.9000e-004**	**0.0000**	**1.6128**

3.3 Site Preparation - 2017

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	4.0000e-005	3.0000e-005	2.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0610	0.0610	0.0000	0.0000	0.0610
Total	**4.0000e-005**	**3.0000e-005**	**2.9000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0610**	**0.0610**	**0.0000**	**0.0000**	**0.0610**

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					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	0.0222	8.4000e-003	2.0000e-005		1.0500e-003	1.0500e-003		9.6000e-004	9.6000e-004	0.0000	1.6005	1.6005	4.9000e-004	0.0000	1.6128
Total	**1.9300e-003**	**0.0222**	**8.4000e-003**	**2.0000e-005**	**2.6100e-003**	**1.0500e-003**	**3.6600e-003**	**1.3300e-003**	**9.6000e-004**	**2.2900e-003**	**0.0000**	**1.6005**	**1.6005**	**4.9000e-004**	**0.0000**	**1.6128**

3.3 Site Preparation - 2017

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	4.0000e-005	3.0000e-005	2.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0610	0.0610	0.0000	0.0000	0.0610
Total	**4.0000e-005**	**3.0000e-005**	**2.9000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0610**	**0.0610**	**0.0000**	**0.0000**	**0.0610**

3.4 Grading - 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					
Fugitive Dust					0.0144	0.0000	0.0144	7.5300e-003	0.0000	7.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8100e-003	0.0549	0.0211	4.0000e-005		2.6200e-003	2.6200e-003		2.4100e-003	2.4100e-003	0.0000	3.9324	3.9324	1.2000e-003	0.0000	3.9625
Total	**4.8100e-003**	**0.0549**	**0.0211**	**4.0000e-005**	**0.0144**	**2.6200e-003**	**0.0170**	**7.5300e-003**	**2.4100e-003**	**9.9400e-003**	**0.0000**	**3.9324**	**3.9324**	**1.2000e-003**	**0.0000**	**3.9625**

3.4 Grading - 2017

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	1.1000e-004	9.0000e-005	8.7000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1829	0.1829	1.0000e-005	0.0000	0.1831
Total	**1.1000e-004**	**9.0000e-005**	**8.7000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1829**	**0.1829**	**1.0000e-005**	**0.0000**	**0.1831**

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					6.4600e-003	0.0000	6.4600e-003	3.3900e-003	0.0000	3.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8100e-003	0.0549	0.0211	4.0000e-005		2.6200e-003	2.6200e-003		2.4100e-003	2.4100e-003	0.0000	3.9324	3.9324	1.2000e-003	0.0000	3.9625
Total	**4.8100e-003**	**0.0549**	**0.0211**	**4.0000e-005**	**6.4600e-003**	**2.6200e-003**	**9.0800e-003**	**3.3900e-003**	**2.4100e-003**	**5.8000e-003**	**0.0000**	**3.9324**	**3.9324**	**1.2000e-003**	**0.0000**	**3.9625**

3.4 Grading - 2017

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	1.1000e-004	9.0000e-005	8.7000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1829	0.1829	1.0000e-005	0.0000	0.1831
Total	**1.1000e-004**	**9.0000e-005**	**8.7000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1829**	**0.1829**	**1.0000e-005**	**0.0000**	**0.1831**

3.5 Building Construction - 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					
Off-Road	0.2698	1.7505	1.3065	2.0100e-003		0.1121	0.1121		0.1081	0.1081	0.0000	168.7288	168.7288	0.0355	0.0000	169.6158
Total	**0.2698**	**1.7505**	**1.3065**	**2.0100e-003**		**0.1121**	**0.1121**		**0.1081**	**0.1081**	**0.0000**	**168.7288**	**168.7288**	**0.0355**	**0.0000**	**169.6158**

3.5 Building Construction - 2017

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	0.0110	0.2496	0.0710	4.8000e-004	0.0114	2.4100e-003	0.0138	3.2900e-003	2.3100e-003	5.5900e-003	0.0000	45.7205	45.7205	2.7100e-003	0.0000	45.7882
Worker	0.0545	0.0428	0.4301	1.0000e-003	0.0938	6.7000e-004	0.0945	0.0250	6.2000e-004	0.0256	0.0000	90.1764	90.1764	3.0200e-003	0.0000	90.2518
Total	**0.0655**	**0.2924**	**0.5010**	**1.4800e-003**	**0.1052**	**3.0800e-003**	**0.1083**	**0.0282**	**2.9300e-003**	**0.0312**	**0.0000**	**135.8968**	**135.8968**	**5.7300e-003**	**0.0000**	**136.0400**

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	0.2698	1.7505	1.3065	2.0100e-003		0.1121	0.1121		0.1081	0.1081	0.0000	168.7286	168.7286	0.0355	0.0000	169.6156
Total	**0.2698**	**1.7505**	**1.3065**	**2.0100e-003**		**0.1121**	**0.1121**		**0.1081**	**0.1081**	**0.0000**	**168.7286**	**168.7286**	**0.0355**	**0.0000**	**169.6156**

3.5 Building Construction - 2017

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	0.0110	0.2496	0.0710	4.8000e-004	0.0114	2.4100e-003	0.0138	3.2900e-003	2.3100e-003	5.5900e-003	0.0000	45.7205	45.7205	2.7100e-003	0.0000	45.7882
Worker	0.0545	0.0428	0.4301	1.0000e-003	0.0938	6.7000e-004	0.0945	0.0250	6.2000e-004	0.0256	0.0000	90.1764	90.1764	3.0200e-003	0.0000	90.2518
Total	**0.0655**	**0.2924**	**0.5010**	**1.4800e-003**	**0.1052**	**3.0800e-003**	**0.1083**	**0.0282**	**2.9300e-003**	**0.0312**	**0.0000**	**135.8968**	**135.8968**	**5.7300e-003**	**0.0000**	**136.0400**

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	0.1231	0.8278	0.6591	1.0500e-003		0.0503	0.0503		0.0485	0.0485	0.0000	87.5114	87.5114	0.0176	0.0000	87.9519
Total	**0.1231**	**0.8278**	**0.6591**	**1.0500e-003**		**0.0503**	**0.0503**		**0.0485**	**0.0485**	**0.0000**	**87.5114**	**87.5114**	**0.0176**	**0.0000**	**87.9519**

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	4.9900e-003	0.1219	0.0327	2.5000e-004	5.9400e-003	1.0000e-003	6.9400e-003	1.7200e-003	9.6000e-004	2.6700e-003	0.0000	23.8252	23.8252	1.3200e-003	0.0000	23.8583
Worker	0.0253	0.0194	0.1963	5.1000e-004	0.0490	3.4000e-004	0.0493	0.0130	3.1000e-004	0.0133	0.0000	45.7567	45.7567	1.3800e-003	0.0000	45.7911
Total	**0.0303**	**0.1414**	**0.2290**	**7.6000e-004**	**0.0549**	**1.3400e-003**	**0.0563**	**0.0148**	**1.2700e-003**	**0.0160**	**0.0000**	**69.5820**	**69.5820**	**2.7000e-003**	**0.0000**	**69.6494**

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	0.1231	0.8278	0.6591	1.0500e-003		0.0503	0.0503		0.0485	0.0485	0.0000	87.5113	87.5113	0.0176	0.0000	87.9518
Total	**0.1231**	**0.8278**	**0.6591**	**1.0500e-003**		**0.0503**	**0.0503**		**0.0485**	**0.0485**	**0.0000**	**87.5113**	**87.5113**	**0.0176**	**0.0000**	**87.9518**

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	4.9900e-003	0.1219	0.0327	2.5000e-004	5.9400e-003	1.0000e-003	6.9400e-003	1.7200e-003	9.6000e-004	2.6700e-003	0.0000	23.8252	23.8252	1.3200e-003	0.0000	23.8583
Worker	0.0253	0.0194	0.1963	5.1000e-004	0.0490	3.4000e-004	0.0493	0.0130	3.1000e-004	0.0133	0.0000	45.7567	45.7567	1.3800e-003	0.0000	45.7911
Total	**0.0303**	**0.1414**	**0.2290**	**7.6000e-004**	**0.0549**	**1.3400e-003**	**0.0563**	**0.0148**	**1.2700e-003**	**0.0160**	**0.0000**	**69.5820**	**69.5820**	**2.7000e-003**	**0.0000**	**69.6494**

3.6 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	0.2429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.1278	0.1093	1.7000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	14.9365	14.9365	1.5800e-003	0.0000	14.9760
Total	**0.2623**	**0.1278**	**0.1093**	**1.7000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**14.9365**	**14.9365**	**1.5800e-003**	**0.0000**	**14.9760**

3.6 Architectural Coating - 2017

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	7.0100e-003	5.5000e-003	0.0553	1.3000e-004	0.0121	9.0000e-005	0.0122	3.2100e-003	8.0000e-005	3.2900e-003	0.0000	11.5941	11.5941	3.9000e-004	0.0000	11.6038
Total	**7.0100e-003**	**5.5000e-003**	**0.0553**	**1.3000e-004**	**0.0121**	**9.0000e-005**	**0.0122**	**3.2100e-003**	**8.0000e-005**	**3.2900e-003**	**0.0000**	**11.5941**	**11.5941**	**3.9000e-004**	**0.0000**	**11.6038**

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	0.2429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.1278	0.1093	1.7000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	14.9365	14.9365	1.5800e-003	0.0000	14.9759
Total	**0.2623**	**0.1278**	**0.1093**	**1.7000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**14.9365**	**14.9365**	**1.5800e-003**	**0.0000**	**14.9759**

3.6 Architectural Coating - 2017

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	7.0100e-003	5.5000e-003	0.0553	1.3000e-004	0.0121	9.0000e-005	0.0122	3.2100e-003	8.0000e-005	3.2900e-003	0.0000	11.5941	11.5941	3.9000e-004	0.0000	11.6038
Total	**7.0100e-003**	**5.5000e-003**	**0.0553**	**1.3000e-004**	**0.0121**	**9.0000e-005**	**0.0122**	**3.2100e-003**	**8.0000e-005**	**3.2900e-003**	**0.0000**	**11.5941**	**11.5941**	**3.9000e-004**	**0.0000**	**11.6038**

3.6 Architectural Coating - 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					
Archit. Coating	0.2263					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1093	0.1011	1.6000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	13.9153	13.9153	1.3200e-003	0.0000	13.9483
Total	**0.2426**	**0.1093**	**0.1011**	**1.6000e-004**		**8.2100e-003**	**8.2100e-003**		**8.2100e-003**	**8.2100e-003**	**0.0000**	**13.9153**	**13.9153**	**1.3200e-003**	**0.0000**	**13.9483**

3.6 Architectural Coating - 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	0.0000	0.0000	0.0000	0.0000	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	5.8000e-003	4.4600e-003	0.0450	1.2000e-004	0.0112	8.0000e-005	0.0113	2.9900e-003	7.0000e-005	3.0600e-003	0.0000	10.5000	10.5000	3.2000e-004	0.0000	10.5079
Total	**5.8000e-003**	**4.4600e-003**	**0.0450**	**1.2000e-004**	**0.0112**	**8.0000e-005**	**0.0113**	**2.9900e-003**	**7.0000e-005**	**3.0600e-003**	**0.0000**	**10.5000**	**10.5000**	**3.2000e-004**	**0.0000**	**10.5079**

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	0.2263					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1093	0.1011	1.6000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	13.9152	13.9152	1.3200e-003	0.0000	13.9483
Total	**0.2426**	**0.1093**	**0.1011**	**1.6000e-004**		**8.2100e-003**	**8.2100e-003**		**8.2100e-003**	**8.2100e-003**	**0.0000**	**13.9152**	**13.9152**	**1.3200e-003**	**0.0000**	**13.9483**

3.6 Architectural Coating - 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	0.0000	0.0000	0.0000	0.0000	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	5.8000e-003	4.4600e-003	0.0450	1.2000e-004	0.0112	8.0000e-005	0.0113	2.9900e-003	7.0000e-005	3.0600e-003	0.0000	10.5000	10.5000	3.2000e-004	0.0000	10.5079
Total	**5.8000e-003**	**4.4600e-003**	**0.0450**	**1.2000e-004**	**0.0112**	**8.0000e-005**	**0.0113**	**2.9900e-003**	**7.0000e-005**	**3.0600e-003**	**0.0000**	**10.5000**	**10.5000**	**3.2000e-004**	**0.0000**	**10.5079**

3.7 Paving - 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	7.1300e-003	0.0732	0.0630	9.0000e-005		4.2700e-003	4.2700e-003		3.9300e-003	3.9300e-003	0.0000	8.5503	8.5503	2.6100e-003	0.0000	8.6156
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.1300e-003**	**0.0732**	**0.0630**	**9.0000e-005**		**4.2700e-003**	**4.2700e-003**		**3.9300e-003**	**3.9300e-003**	**0.0000**	**8.5503**	**8.5503**	**2.6100e-003**	**0.0000**	**8.6156**

3.7 Paving - 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	0.0000	0.0000	0.0000	0.0000	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	3.7000e-004	2.9000e-004	2.8900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6743	0.6743	2.0000e-005	0.0000	0.6748
Total	**3.7000e-004**	**2.9000e-004**	**2.8900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6743**	**0.6743**	**2.0000e-005**	**0.0000**	**0.6748**

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	7.1300e-003	0.0732	0.0630	9.0000e-005		4.2700e-003	4.2700e-003		3.9300e-003	3.9300e-003	0.0000	8.5503	8.5503	2.6100e-003	0.0000	8.6156
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.1300e-003**	**0.0732**	**0.0630**	**9.0000e-005**		**4.2700e-003**	**4.2700e-003**		**3.9300e-003**	**3.9300e-003**	**0.0000**	**8.5503**	**8.5503**	**2.6100e-003**	**0.0000**	**8.6156**

3.7 Paving - 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	0.0000	0.0000	0.0000	0.0000	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	3.7000e-004	2.9000e-004	2.8900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6743	0.6743	2.0000e-005	0.0000	0.6748
Total	**3.7000e-004**	**2.9000e-004**	**2.8900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6743**	**0.6743**	**2.0000e-005**	**0.0000**	**0.6748**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

	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	0.3373	1.3739	3.3626	9.0800e-003	0.7106	0.0103	0.7209	0.1907	9.7100e-003	0.2004	0.0000	829.6401	829.6401	0.0376	0.0000	830.5801
Unmitigated	0.3757	1.6690	4.2838	0.0126	1.0151	0.0141	1.0292	0.2725	0.0133	0.2857	0.0000	1,151.3293	1,151.3293	0.0470	0.0000	1,152.5044

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	2,717,253	1,902,077
Total	1,203.65	1,156.59	1,060.66	2,717,253	1,902,077

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.571348	0.041302	0.187452	0.129481	0.019048	0.005152	0.010609	0.022861	0.001566	0.001884	0.005572	0.002772	0.000953

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	232.2595	232.2595	0.0105	2.1700e-003	233.1696
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	232.2595	232.2595	0.0105	2.1700e-003	233.1696
NaturalGas Mitigated	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.9145	106.9145	2.0500e-003	1.9600e-003	107.5498
NaturalGas Unmitigated	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.9145	106.9145	2.0500e-003	1.9600e-003	107.5498

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					
Apartments Mid Rise	2.0035e+006	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.9145	106.9145	2.0500e-003	1.9600e-003	107.5498
Total		**0.0108**	**0.0923**	**0.0393**	**5.9000e-004**		**7.4600e-003**	**7.4600e-003**		**7.4600e-003**	**7.4600e-003**	**0.0000**	**106.9145**	**106.9145**	**2.0500e-003**	**1.9600e-003**	**107.5498**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Mid Rise	2.0035e+006	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.9145	106.9145	2.0500e-003	1.9600e-003	107.5498
Total		**0.0108**	**0.0923**	**0.0393**	**5.9000e-004**		**7.4600e-003**	**7.4600e-003**		**7.4600e-003**	**7.4600e-003**	**0.0000**	**106.9145**	**106.9145**	**2.0500e-003**	**1.9600e-003**	**107.5498**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	798386	232.2595	0.0105	2.1700e-003	233.1696
Total		**232.2595**	**0.0105**	**2.1700e-003**	**233.1696**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	798386	232.2595	0.0105	2.1700e-003	233.1696
Total		**232.2595**	**0.0105**	**2.1700e-003**	**233.1696**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	0.3486	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Unmitigated	0.3486	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492

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	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0413	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Total	**0.3486**	**0.0156**	**1.3506**	**7.0000e-005**		**7.4000e-003**	**7.4000e-003**		**7.4000e-003**	**7.4000e-003**	**0.0000**	**2.1953**	**2.1953**	**2.1500e-003**	**0.0000**	**2.2492**

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	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0413	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Total	**0.3486**	**0.0156**	**1.3506**	**7.0000e-005**		**7.4000e-003**	**7.4000e-003**		**7.4000e-003**	**7.4000e-003**	**0.0000**	**2.1953**	**2.1953**	**2.1500e-003**	**0.0000**	**2.2492**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	25.4137	0.3084	7.4700e-003	35.3501
Unmitigated	29.8746	0.3855	9.3200e-003	42.2877

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	11.7929 / 7.43464	29.8746	0.3855	9.3200e-003	42.2877
Total		**29.8746**	**0.3855**	**9.3200e-003**	**42.2877**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	9.4343 / 7.43464	25.4137	0.3084	7.4700e-003	35.3501
Total		**25.4137**	**0.3084**	**7.4700e-003**	**35.3501**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.9010	0.9988	0.0000	41.8716
Unmitigated	16.9010	0.9988	0.0000	41.8716

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	83.26	16.9010	0.9988	0.0000	41.8716
Total		**16.9010**	**0.9988**	**0.0000**	**41.8716**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	83.26	16.9010	0.9988	0.0000	41.8716
Total		**16.9010**	**0.9988**	**0.0000**	**41.8716**

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

Willow Pass Apartments Infill Exemption Initial Study

Contra Costa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	181.00	Dwelling Unit	1.53	66,646.80	494

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**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 - Refer to CalEEMod table

Construction Phase - Refer to CalEEMod tables

Demolition -

Woodstoves - No hearths

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	226.00
tblConstructionPhase	NumDays	200.00	277.00
tblConstructionPhase	NumDays	20.00	28.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	PhaseEndDate	2/7/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	1/10/2018	5/11/2018
tblConstructionPhase	PhaseEndDate	3/28/2017	4/7/2017
tblConstructionPhase	PhaseEndDate	4/5/2017	4/19/2017
tblConstructionPhase	PhaseEndDate	1/24/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	3/30/2017	4/11/2017
tblConstructionPhase	PhaseStartDate	1/25/2018	7/20/2017
tblConstructionPhase	PhaseStartDate	4/6/2017	4/20/2017
tblConstructionPhase	PhaseStartDate	3/31/2017	4/12/2017
tblConstructionPhase	PhaseStartDate	1/11/2018	5/12/2018
tblConstructionPhase	PhaseStartDate	3/29/2017	4/8/2017
tblFireplaces	NumberGas	27.15	0.00
tblFireplaces	NumberNoFireplace	7.24	181.00
tblFireplaces	NumberWood	30.77	0.00
tblGrading	AcresOfGrading	2.25	1.50
tblLandUse	BuildingSpaceSquareFeet	181,000.00	66,646.80
tblLandUse	LandUseSquareFeet	181,000.00	66,646.80
tblLandUse	LotAcreage	4.76	1.53
tblLandUse	Population	518.00	494.00
tblProjectCharacteristics	OperationalYear	2018	2019

tblWoodstoves	NumberCatalytic	3.62	0.00
tblWoodstoves	NumberNoncatalytic	3.62	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	8.3443	27.8215	23.2254	0.0447	5.8653	1.6545	6.9108	2.9711	1.5469	3.9330	0.0000	4,313.2118	4,313.2118	0.6282	0.0000	4,326.6672
2018	7.8367	22.4025	21.8810	0.0443	1.4101	1.2382	2.6482	0.3769	1.2001	1.5771	0.0000	4,259.8318	4,259.8318	0.5064	0.0000	4,272.4929
Maximum	**8.3443**	**27.8215**	**23.2254**	**0.0447**	**5.8653**	**1.6545**	**6.9108**	**2.9711**	**1.5469**	**3.9330**	**0.0000**	**4,313.2118**	**4,313.2118**	**0.6282**	**0.0000**	**4,326.6672**

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	8.3443	27.8215	23.2254	0.0447	2.6755	1.6545	3.7210	1.3466	1.5469	2.3085	0.0000	4,313.2118	4,313.2118	0.6282	0.0000	4,326.6672
2018	7.8367	22.4025	21.8810	0.0443	1.4101	1.2382	2.6482	0.3769	1.2001	1.5771	0.0000	4,259.8318	4,259.8318	0.5064	0.0000	4,272.4929
Maximum	**8.3443**	**27.8215**	**23.2254**	**0.0447**	**2.6755**	**1.6545**	**3.7210**	**1.3466**	**1.5469**	**2.3085**	**0.0000**	**4,313.2118**	**4,313.2118**	**0.6282**	**0.0000**	**4,326.6672**

	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**	**43.84**	**0.00**	**33.37**	**48.52**	**0.00**	**29.48**	**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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Energy	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Mobile	2.4964	9.0596	25.3863	0.0760	5.9068	0.0789	5.9857	1.5808	0.0743	1.6550		7,648.0630	7,648.0630	0.2956		7,655.4525
Total	**4.6983**	**9.7392**	**40.6082**	**0.0800**	**5.9068**	**0.2021**	**6.1089**	**1.5808**	**0.1974**	**1.7782**	**0.0000**	**8,320.7211**	**8,320.7211**	**0.3344**	**0.0118**	**8,332.6078**

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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Energy	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Mobile	2.2732	7.4951	19.3740	0.0547	4.1348	0.0578	4.1925	1.1065	0.0543	1.1609		5,505.9293	5,505.9293	0.2331		5,511.7559
Total	**4.4750**	**8.1748**	**34.5960**	**0.0587**	**4.1348**	**0.1809**	**4.3157**	**1.1065**	**0.1775**	**1.2840**	**0.0000**	**6,178.5873**	**6,178.5873**	**0.2718**	**0.0118**	**6,188.9113**

	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	4.75	16.06	14.81	26.63	30.00	10.47	29.35	30.00	10.10	27.79	0.00	25.74	25.74	18.70	0.00	25.73

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	3/1/2017	4/7/2017	5	28	
2	Site Preparation	Site Preparation	4/8/2017	4/11/2017	5	2	
3	Grading	Grading	4/12/2017	4/19/2017	5	6	
4	Building Construction	Building Construction	4/20/2017	5/11/2018	5	277	
5	Architectural Coating	Architectural Coating	7/20/2017	5/31/2018	5	226	
6	Paving	Paving	5/12/2018	5/31/2018	5	14	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 134,960; Residential Outdoor: 44,987; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	82.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	130.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					0.6356	0.0000	0.6356	0.0962	0.0000	0.0962			0.0000			0.0000
Off-Road	2.7625	26.7594	15.5573	0.0241		1.6477	1.6477		1.5404	1.5404		2,421.4229	2,421.4229	0.6125		2,436.7347
Total	**2.7625**	**26.7594**	**15.5573**	**0.0241**	**0.6356**	**1.6477**	**2.2833**	**0.0962**	**1.5404**	**1.6366**		**2,421.4229**	**2,421.4229**	**0.6125**		**2,436.7347**

3.2 Demolition - 2017

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	0.0325	1.0200	0.1833	2.3900e-003	0.0512	6.0600e-003	0.0572	0.0140	5.8000e-003	0.0198		253.2023	253.2023	0.0118		253.4961
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	0.0646	0.0421	0.5221	1.2000e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		119.0387	119.0387	3.9300e-003		119.1369
Total	**0.0972**	**1.0621**	**0.7053**	**3.5900e-003**	**0.1579**	**6.8000e-003**	**0.1647**	**0.0423**	**6.4800e-003**	**0.0488**		**372.2410**	**372.2410**	**0.0157**		**372.6330**

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					0.2860	0.0000	0.2860	0.0433	0.0000	0.0433			0.0000			0.0000
Off-Road	2.7625	26.7594	15.5573	0.0241		1.6477	1.6477		1.5404	1.5404	0.0000	2,421.4229	2,421.4229	0.6125		2,436.7347
Total	**2.7625**	**26.7594**	**15.5573**	**0.0241**	**0.2860**	**1.6477**	**1.9337**	**0.0433**	**1.5404**	**1.5837**	**0.0000**	**2,421.4229**	**2,421.4229**	**0.6125**		**2,436.7347**

3.2 Demolition - 2017

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	0.0325	1.0200	0.1833	2.3900e-003	0.0512	6.0600e-003	0.0572	0.0140	5.8000e-003	0.0198		253.2023	253.2023	0.0118		253.4961
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	0.0646	0.0421	0.5221	1.2000e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		119.0387	119.0387	3.9300e-003		119.1369
Total	**0.0972**	**1.0621**	**0.7053**	**3.5900e-003**	**0.1579**	**6.8000e-003**	**0.1647**	**0.0423**	**6.4800e-003**	**0.0488**		**372.2410**	**372.2410**	**0.0157**		**372.6330**

3.3 Site Preparation - 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					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.9297	22.2106	8.4016	0.0172		1.0451	1.0451		0.9615	0.9615		1,764.2381	1,764.2381	0.5406		1,777.7521
Total	**1.9297**	**22.2106**	**8.4016**	**0.0172**	**5.7996**	**1.0451**	**6.8446**	**2.9537**	**0.9615**	**3.9152**		**1,764.2381**	**1,764.2381**	**0.5406**		**1,777.7521**

3.3 Site Preparation - 2017

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	0.0398	0.0259	0.3213	7.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		73.2546	73.2546	2.4200e-003		73.3150
Total	**0.0398**	**0.0259**	**0.3213**	**7.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**73.2546**	**73.2546**	**2.4200e-003**		**73.3150**

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					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.9297	22.2106	8.4016	0.0172		1.0451	1.0451		0.9615	0.9615	0.0000	1,764.2381	1,764.2381	0.5406		1,777.7521
Total	**1.9297**	**22.2106**	**8.4016**	**0.0172**	**2.6098**	**1.0451**	**3.6549**	**1.3292**	**0.9615**	**2.2906**	**0.0000**	**1,764.2381**	**1,764.2381**	**0.5406**		**1,777.7521**

3.3 Site Preparation - 2017

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	0.0398	0.0259	0.3213	7.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		73.2546	73.2546	2.4200e-003		73.3150
Total	**0.0398**	**0.0259**	**0.3213**	**7.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**73.2546**	**73.2546**	**2.4200e-003**		**73.3150**

3.4 Grading - 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					
Fugitive Dust					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	1.6023	18.2915	7.0342	0.0141		0.8738	0.8738		0.8039	0.8039		1,444.8958	1,444.8958	0.4427		1,455.9636
Total	**1.6023**	**18.2915**	**7.0342**	**0.0141**	**4.7817**	**0.8738**	**5.6554**	**2.5113**	**0.8039**	**3.3152**		**1,444.8958**	**1,444.8958**	**0.4427**		**1,455.9636**

3.4 Grading - 2017

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	0.0398	0.0259	0.3213	7.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		73.2546	73.2546	2.4200e-003		73.3150
Total	**0.0398**	**0.0259**	**0.3213**	**7.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**73.2546**	**73.2546**	**2.4200e-003**		**73.3150**

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					2.1518	0.0000	2.1518	1.1301	0.0000	1.1301			0.0000			0.0000
Off-Road	1.6023	18.2915	7.0342	0.0141		0.8738	0.8738		0.8039	0.8039	0.0000	1,444.8958	1,444.8958	0.4427		1,455.9636
Total	**1.6023**	**18.2915**	**7.0342**	**0.0141**	**2.1518**	**0.8738**	**3.0255**	**1.1301**	**0.8039**	**1.9339**	**0.0000**	**1,444.8958**	**1,444.8958**	**0.4427**		**1,455.9636**

3.4 Grading - 2017

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	0.0398	0.0259	0.3213	7.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		73.2546	73.2546	2.4200e-003		73.3150
Total	**0.0398**	**0.0259**	**0.3213**	**7.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**73.2546**	**73.2546**	**2.4200e-003**		**73.3150**

3.5 Building Construction - 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					
Off-Road	2.9653	19.2365	14.3568	0.0220		1.2313	1.2313		1.1875	1.1875		2,043.8641	2,043.8641	0.4298		2,054.6085
Total	**2.9653**	**19.2365**	**14.3568**	**0.0220**		**1.2313**	**1.2313**		**1.1875**	**1.1875**		**2,043.8641**	**2,043.8641**	**0.4298**		**2,054.6085**

3.5 Building Construction - 2017

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	0.1192	2.7001	0.7357	5.3200e-003	0.1286	0.0264	0.1550	0.0370	0.0252	0.0622		559.4352	559.4352	0.0316		560.2245
Worker	0.6464	0.4206	5.2207	0.0120	1.0679	7.4100e-003	1.0753	0.2833	6.8400e-003	0.2901		1,190.3870	1,190.3870	0.0393		1,191.3694
Total	**0.7656**	**3.1206**	**5.9564**	**0.0173**	**1.1965**	**0.0338**	**1.2303**	**0.3203**	**0.0321**	**0.3523**		**1,749.8222**	**1,749.8222**	**0.0709**		**1,751.5939**

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	2.9653	19.2365	14.3568	0.0220		1.2313	1.2313		1.1875	1.1875	0.0000	2,043.8641	2,043.8641	0.4298		2,054.6085
Total	**2.9653**	**19.2365**	**14.3568**	**0.0220**		**1.2313**	**1.2313**		**1.1875**	**1.1875**	**0.0000**	**2,043.8641**	**2,043.8641**	**0.4298**		**2,054.6085**

3.5 Building Construction - 2017

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	0.1192	2.7001	0.7357	5.3200e-003	0.1286	0.0264	0.1550	0.0370	0.0252	0.0622		559.4352	559.4352	0.0316		560.2245
Worker	0.6464	0.4206	5.2207	0.0120	1.0679	7.4100e-003	1.0753	0.2833	6.8400e-003	0.2901		1,190.3870	1,190.3870	0.0393		1,191.3694
Total	**0.7656**	**3.1206**	**5.9564**	**0.0173**	**1.1965**	**0.0338**	**1.2303**	**0.3203**	**0.0321**	**0.3523**		**1,749.8222**	**1,749.8222**	**0.0709**		**1,751.5939**

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	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**		**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

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	0.1032	2.5299	0.6465	5.3100e-003	0.1286	0.0210	0.1496	0.0370	0.0201	0.0571		558.7169	558.7169	0.0295		559.4546
Worker	0.5759	0.3658	4.5863	0.0116	1.0679	7.1800e-003	1.0751	0.2833	6.6200e-003	0.2899		1,157.3563	1,157.3563	0.0345		1,158.2180
Total	**0.6792**	**2.8956**	**5.2329**	**0.0169**	**1.1965**	**0.0281**	**1.2247**	**0.3203**	**0.0267**	**0.3470**		**1,716.0732**	**1,716.0732**	**0.0640**		**1,717.6726**

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	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**	**0.0000**	**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

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	0.1032	2.5299	0.6465	5.3100e-003	0.1286	0.0210	0.1496	0.0370	0.0201	0.0571		558.7169	558.7169	0.0295		559.4546
Worker	0.5759	0.3658	4.5863	0.0116	1.0679	7.1800e-003	1.0751	0.2833	6.6200e-003	0.2899		1,157.3563	1,157.3563	0.0345		1,158.2180
Total	**0.6792**	**2.8956**	**5.2329**	**0.0169**	**1.1965**	**0.0281**	**1.2247**	**0.3203**	**0.0267**	**0.3470**		**1,716.0732**	**1,716.0732**	**0.0640**		**1,717.6726**

3.6 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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.1909
Total	**4.4841**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 2017

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	0.1293	0.0841	1.0442	2.3900e-003	0.2136	1.4800e-003	0.2151	0.0567	1.3700e-003	0.0580		238.0774	238.0774	7.8600e-003		238.2739
Total	**0.1293**	**0.0841**	**1.0442**	**2.3900e-003**	**0.2136**	**1.4800e-003**	**0.2151**	**0.0567**	**1.3700e-003**	**0.0580**		**238.0774**	**238.0774**	**7.8600e-003**		**238.2739**

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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.1909
Total	**4.4841**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 2017

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	0.1293	0.0841	1.0442	2.3900e-003	0.2136	1.4800e-003	0.2151	0.0567	1.3700e-003	0.0580		238.0774	238.0774	7.8600e-003		238.2739
Total	**0.1293**	**0.0841**	**1.0442**	**2.3900e-003**	**0.2136**	**1.4800e-003**	**0.2151**	**0.0567**	**1.3700e-003**	**0.0580**		**238.0774**	**238.0774**	**7.8600e-003**		**238.2739**

3.6 Architectural Coating - 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					
Archit. Coating	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**4.4505**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 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	0.0000	0.0000	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	0.1152	0.0732	0.9173	2.3300e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3200e-003	0.0580		231.4713	231.4713	6.8900e-003		231.6436
Total	**0.1152**	**0.0732**	**0.9173**	**2.3300e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3200e-003**	**0.0580**		**231.4713**	**231.4713**	**6.8900e-003**		**231.6436**

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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**4.4505**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 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	0.0000	0.0000	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	0.1152	0.0732	0.9173	2.3300e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3200e-003	0.0580		231.4713	231.4713	6.8900e-003		231.6436
Total	**0.1152**	**0.0732**	**0.9173**	**2.3300e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3200e-003**	**0.0580**		**231.4713**	**231.4713**	**6.8900e-003**		**231.6436**

3.7 Paving - 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	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618		1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0182**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**		**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.7 Paving - 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	0.0000	0.0000	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	0.0576	0.0366	0.4586	1.1600e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		115.7356	115.7356	3.4500e-003		115.8218
Total	**0.0576**	**0.0366**	**0.4586**	**1.1600e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**115.7356**	**115.7356**	**3.4500e-003**		**115.8218**

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	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618	0.0000	1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0182**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**	**0.0000**	**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.7 Paving - 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	0.0000	0.0000	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	0.0576	0.0366	0.4586	1.1600e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		115.7356	115.7356	3.4500e-003		115.8218
Total	**0.0576**	**0.0366**	**0.4586**	**1.1600e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**115.7356**	**115.7356**	**3.4500e-003**		**115.8218**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

	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	2.2732	7.4951	19.3740	0.0547	4.1348	0.0578	4.1925	1.1065	0.0543	1.1609		5,505.9293	5,505.9293	0.2331		5,511.7559
Unmitigated	2.4964	9.0596	25.3863	0.0760	5.9068	0.0789	5.9857	1.5808	0.0743	1.6550		7,648.0630	7,648.0630	0.2956		7,655.4525

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	2,717,253	1,902,077
Total	1,203.65	1,156.59	1,060.66	2,717,253	1,902,077

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.571348	0.041302	0.187452	0.129481	0.019048	0.005152	0.010609	0.022861	0.001566	0.001884	0.005572	0.002772	0.000953

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	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
NaturalGas Unmitigated	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076

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					
Apartments Mid Rise	5489.05	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Total		**0.0592**	**0.5059**	**0.2153**	**3.2300e-003**		**0.0409**	**0.0409**		**0.0409**	**0.0409**		**645.7701**	**645.7701**	**0.0124**	**0.0118**	**649.6076**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Mid Rise	5.48905	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Total		**0.0592**	**0.5059**	**0.2153**	**3.2300e-003**		**0.0409**	**0.0409**		**0.0409**	**0.0409**		**645.7701**	**645.7701**	**0.0124**	**0.0118**	**649.6076**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Unmitigated	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4594	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822		26.8880	26.8880	0.0264		27.5478
Total	**2.1427**	**0.1738**	**15.0067**	**7.9000e-004**		**0.0822**	**0.0822**		**0.0822**	**0.0822**	**0.0000**	**26.8880**	**26.8880**	**0.0264**	**0.0000**	**27.5478**

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4594	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822		26.8880	26.8880	0.0264		27.5478
Total	**2.1427**	**0.1738**	**15.0067**	**7.9000e-004**		**0.0822**	**0.0822**		**0.0822**	**0.0822**	**0.0000**	**26.8880**	**26.8880**	**0.0264**	**0.0000**	**27.5478**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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

Willow Pass Apartments Infill Exemption Initial Study

Contra Costa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	181.00	Dwelling Unit	1.53	66,646.80	494

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**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 - Refer to CalEEMod table

Construction Phase - Refer to CalEEMod tables

Demolition -

Woodstoves - No hearths

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	226.00
tblConstructionPhase	NumDays	200.00	277.00
tblConstructionPhase	NumDays	20.00	28.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	PhaseEndDate	2/7/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	1/10/2018	5/11/2018
tblConstructionPhase	PhaseEndDate	3/28/2017	4/7/2017
tblConstructionPhase	PhaseEndDate	4/5/2017	4/19/2017
tblConstructionPhase	PhaseEndDate	1/24/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	3/30/2017	4/11/2017
tblConstructionPhase	PhaseStartDate	1/25/2018	7/20/2017
tblConstructionPhase	PhaseStartDate	4/6/2017	4/20/2017
tblConstructionPhase	PhaseStartDate	3/31/2017	4/12/2017
tblConstructionPhase	PhaseStartDate	1/11/2018	5/12/2018
tblConstructionPhase	PhaseStartDate	3/29/2017	4/8/2017
tblFireplaces	NumberGas	27.15	0.00
tblFireplaces	NumberNoFireplace	7.24	181.00
tblFireplaces	NumberWood	30.77	0.00
tblGrading	AcresOfGrading	2.25	1.50
tblLandUse	BuildingSpaceSquareFeet	181,000.00	66,646.80
tblLandUse	LandUseSquareFeet	181,000.00	66,646.80
tblLandUse	LotAcreage	4.76	1.53
tblLandUse	Population	518.00	494.00
tblProjectCharacteristics	OperationalYear	2018	2019

tblWoodstoves	NumberCatalytic	3.62	0.00
tblWoodstoves	NumberNoncatalytic	3.62	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	8.3658	27.8585	22.9276	0.0432	5.8653	1.6546	6.9108	2.9711	1.5470	3.9330	0.0000	4,166.0803	4,166.0803	0.6287	0.0000	4,179.5339
2018	7.8526	22.5435	21.5808	0.0428	1.4101	1.2385	2.6486	0.3769	1.2004	1.5774	0.0000	4,115.6911	4,115.6911	0.5063	0.0000	4,128.3483
Maximum	**8.3658**	**27.8585**	**22.9276**	**0.0432**	**5.8653**	**1.6546**	**6.9108**	**2.9711**	**1.5470**	**3.9330**	**0.0000**	**4,166.0803**	**4,166.0803**	**0.6287**	**0.0000**	**4,179.5339**

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	8.3658	27.8585	22.9276	0.0432	2.6755	1.6546	3.7210	1.3466	1.5470	2.3085	0.0000	4,166.0803	4,166.0803	0.6287	0.0000	4,179.5339
2018	7.8526	22.5435	21.5808	0.0428	1.4101	1.2385	2.6486	0.3769	1.2004	1.5774	0.0000	4,115.6911	4,115.6911	0.5063	0.0000	4,128.3483
Maximum	**8.3658**	**27.8585**	**22.9276**	**0.0432**	**2.6755**	**1.6546**	**3.7210**	**1.3466**	**1.5470**	**2.3085**	**0.0000**	**4,166.0803**	**4,166.0803**	**0.6287**	**0.0000**	**4,179.5339**

	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**	**43.84**	**0.00**	**33.37**	**48.52**	**0.00**	**29.48**	**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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Energy	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Mobile	2.0811	9.6115	25.3878	0.0701	5.9068	0.0797	5.9865	1.5808	0.0750	1.6558		7,051.8356	7,051.8356	0.2998		7,059.3305
Total	**4.2829**	**10.2912**	**40.6097**	**0.0741**	**5.9068**	**0.2029**	**6.1097**	**1.5808**	**0.1982**	**1.7789**	**0.0000**	**7,724.4937**	**7,724.4937**	**0.3386**	**0.0118**	**7,736.4858**

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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Energy	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Mobile	1.8635	7.8795	20.1950	0.0504	4.1348	0.0586	4.1933	1.1065	0.0551	1.1616		5,076.2025	5,076.2025	0.2418		5,082.2473
Total	**4.0654**	**8.5592**	**35.4170**	**0.0545**	**4.1348**	**0.1817**	**4.3165**	**1.1065**	**0.1782**	**1.2848**	**0.0000**	**5,748.8606**	**5,748.8606**	**0.2806**	**0.0118**	**5,759.4027**

	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	5.08	16.83	12.79	26.49	30.00	10.43	29.35	30.00	10.06	27.78	0.00	25.58	25.58	17.13	0.00	25.56

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	3/1/2017	4/7/2017	5	28	
2	Site Preparation	Site Preparation	4/8/2017	4/11/2017	5	2	
3	Grading	Grading	4/12/2017	4/19/2017	5	6	
4	Building Construction	Building Construction	4/20/2017	5/11/2018	5	277	
5	Architectural Coating	Architectural Coating	7/20/2017	5/31/2018	5	226	
6	Paving	Paving	5/12/2018	5/31/2018	5	14	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 134,960; Residential Outdoor: 44,987; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	82.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	130.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					0.6356	0.0000	0.6356	0.0962	0.0000	0.0962			0.0000			0.0000
Off-Road	2.7625	26.7594	15.5573	0.0241		1.6477	1.6477		1.5404	1.5404		2,421.4229	2,421.4229	0.6125		2,436.7347
Total	**2.7625**	**26.7594**	**15.5573**	**0.0241**	**0.6356**	**1.6477**	**2.2833**	**0.0962**	**1.5404**	**1.6366**		**2,421.4229**	**2,421.4229**	**0.6125**		**2,436.7347**

3.2 Demolition - 2017

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	0.0335	1.0471	0.2004	2.3500e-003	0.0512	6.1600e-003	0.0573	0.0140	5.9000e-003	0.0199		249.2201	249.2201	0.0126		249.5340
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	0.0660	0.0519	0.4889	1.0900e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		107.8899	107.8899	3.6800e-003		107.9821
Total	**0.0994**	**1.0990**	**0.6892**	**3.4400e-003**	**0.1579**	**6.9000e-003**	**0.1648**	**0.0423**	**6.5800e-003**	**0.0489**		**357.1100**	**357.1100**	**0.0162**		**357.5160**

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					0.2860	0.0000	0.2860	0.0433	0.0000	0.0433			0.0000			0.0000
Off-Road	2.7625	26.7594	15.5573	0.0241		1.6477	1.6477		1.5404	1.5404	0.0000	2,421.4229	2,421.4229	0.6125		2,436.7347
Total	**2.7625**	**26.7594**	**15.5573**	**0.0241**	**0.2860**	**1.6477**	**1.9337**	**0.0433**	**1.5404**	**1.5837**	**0.0000**	**2,421.4229**	**2,421.4229**	**0.6125**		**2,436.7347**

3.2 Demolition - 2017

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	0.0335	1.0471	0.2004	2.3500e-003	0.0512	6.1600e-003	0.0573	0.0140	5.9000e-003	0.0199		249.2201	249.2201	0.0126		249.5340
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	0.0660	0.0519	0.4889	1.0900e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		107.8899	107.8899	3.6800e-003		107.9821
Total	**0.0994**	**1.0990**	**0.6892**	**3.4400e-003**	**0.1579**	**6.9000e-003**	**0.1648**	**0.0423**	**6.5800e-003**	**0.0489**		**357.1100**	**357.1100**	**0.0162**		**357.5160**

3.3 Site Preparation - 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					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.9297	22.2106	8.4016	0.0172		1.0451	1.0451		0.9615	0.9615		1,764.2381	1,764.2381	0.5406		1,777.7521
Total	**1.9297**	**22.2106**	**8.4016**	**0.0172**	**5.7996**	**1.0451**	**6.8446**	**2.9537**	**0.9615**	**3.9152**		**1,764.2381**	**1,764.2381**	**0.5406**		**1,777.7521**

3.3 Site Preparation - 2017

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	0.0406	0.0319	0.3008	6.7000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		66.3938	66.3938	2.2700e-003		66.4505
Total	**0.0406**	**0.0319**	**0.3008**	**6.7000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**66.3938**	**66.3938**	**2.2700e-003**		**66.4505**

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					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.9297	22.2106	8.4016	0.0172		1.0451	1.0451		0.9615	0.9615	0.0000	1,764.2381	1,764.2381	0.5406		1,777.7521
Total	**1.9297**	**22.2106**	**8.4016**	**0.0172**	**2.6098**	**1.0451**	**3.6549**	**1.3292**	**0.9615**	**2.2906**	**0.0000**	**1,764.2381**	**1,764.2381**	**0.5406**		**1,777.7521**

3.3 Site Preparation - 2017

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	0.0406	0.0319	0.3008	6.7000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		66.3938	66.3938	2.2700e-003		66.4505
Total	**0.0406**	**0.0319**	**0.3008**	**6.7000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**66.3938**	**66.3938**	**2.2700e-003**		**66.4505**

3.4 Grading - 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					
Fugitive Dust					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	1.6023	18.2915	7.0342	0.0141		0.8738	0.8738		0.8039	0.8039		1,444.8958	1,444.8958	0.4427		1,455.9636
Total	**1.6023**	**18.2915**	**7.0342**	**0.0141**	**4.7817**	**0.8738**	**5.6554**	**2.5113**	**0.8039**	**3.3152**		**1,444.8958**	**1,444.8958**	**0.4427**		**1,455.9636**

3.4 Grading - 2017

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	0.0406	0.0319	0.3008	6.7000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		66.3938	66.3938	2.2700e-003		66.4505
Total	**0.0406**	**0.0319**	**0.3008**	**6.7000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**66.3938**	**66.3938**	**2.2700e-003**		**66.4505**

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					2.1518	0.0000	2.1518	1.1301	0.0000	1.1301			0.0000			0.0000
Off-Road	1.6023	18.2915	7.0342	0.0141		0.8738	0.8738		0.8039	0.8039	0.0000	1,444.8958	1,444.8958	0.4427		1,455.9636
Total	**1.6023**	**18.2915**	**7.0342**	**0.0141**	**2.1518**	**0.8738**	**3.0255**	**1.1301**	**0.8039**	**1.9339**	**0.0000**	**1,444.8958**	**1,444.8958**	**0.4427**		**1,455.9636**

3.4 Grading - 2017

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	0.0406	0.0319	0.3008	6.7000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		66.3938	66.3938	2.2700e-003		66.4505
Total	**0.0406**	**0.0319**	**0.3008**	**6.7000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**66.3938**	**66.3938**	**2.2700e-003**		**66.4505**

3.5 Building Construction - 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					
Off-Road	2.9653	19.2365	14.3568	0.0220		1.2313	1.2313		1.1875	1.1875		2,043.8641	2,043.8641	0.4298		2,054.6085
Total	**2.9653**	**19.2365**	**14.3568**	**0.0220**		**1.2313**	**1.2313**		**1.1875**	**1.1875**		**2,043.8641**	**2,043.8641**	**0.4298**		**2,054.6085**

3.5 Building Construction - 2017

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	0.1247	2.7462	0.8365	5.1900e-003	0.1286	0.0267	0.1553	0.0370	0.0256	0.0626		546.0888	546.0888	0.0344		546.9498
Worker	0.6597	0.5190	4.8886	0.0109	1.0679	7.4100e-003	1.0753	0.2833	6.8400e-003	0.2901		1,078.8994	1,078.8994	0.0368		1,079.8205
Total	**0.7844**	**3.2651**	**5.7251**	**0.0160**	**1.1965**	**0.0341**	**1.2307**	**0.3203**	**0.0324**	**0.3527**		**1,624.9883**	**1,624.9883**	**0.0713**		**1,626.7704**

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	2.9653	19.2365	14.3568	0.0220		1.2313	1.2313		1.1875	1.1875	0.0000	2,043.8641	2,043.8641	0.4298		2,054.6085
Total	**2.9653**	**19.2365**	**14.3568**	**0.0220**		**1.2313**	**1.2313**		**1.1875**	**1.1875**	**0.0000**	**2,043.8641**	**2,043.8641**	**0.4298**		**2,054.6085**

3.5 Building Construction - 2017

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	0.1247	2.7462	0.8365	5.1900e-003	0.1286	0.0267	0.1553	0.0370	0.0256	0.0626		546.0888	546.0888	0.0344		546.9498
Worker	0.6597	0.5190	4.8886	0.0109	1.0679	7.4100e-003	1.0753	0.2833	6.8400e-003	0.2901		1,078.8994	1,078.8994	0.0368		1,079.8205
Total	**0.7844**	**3.2651**	**5.7251**	**0.0160**	**1.1965**	**0.0341**	**1.2307**	**0.3203**	**0.0324**	**0.3527**		**1,624.9883**	**1,624.9883**	**0.0713**		**1,626.7704**

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	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**		**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

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	0.1081	2.5682	0.7384	5.1800e-003	0.1286	0.0213	0.1499	0.0370	0.0204	0.0574		544.8787	544.8787	0.0322		545.6835
Worker	0.5852	0.4514	4.2597	0.0105	1.0679	7.1800e-003	1.0751	0.2833	6.6200e-003	0.2899		1,048.7709	1,048.7709	0.0321		1,049.5734
Total	**0.6933**	**3.0195**	**4.9981**	**0.0157**	**1.1965**	**0.0285**	**1.2250**	**0.3203**	**0.0270**	**0.3473**		**1,593.6496**	**1,593.6496**	**0.0643**		**1,595.2569**

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	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**	**0.0000**	**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

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	0.1081	2.5682	0.7384	5.1800e-003	0.1286	0.0213	0.1499	0.0370	0.0204	0.0574		544.8787	544.8787	0.0322		545.6835
Worker	0.5852	0.4514	4.2597	0.0105	1.0679	7.1800e-003	1.0751	0.2833	6.6200e-003	0.2899		1,048.7709	1,048.7709	0.0321		1,049.5734
Total	**0.6933**	**3.0195**	**4.9981**	**0.0157**	**1.1965**	**0.0285**	**1.2250**	**0.3203**	**0.0270**	**0.3473**		**1,593.6496**	**1,593.6496**	**0.0643**		**1,595.2569**

3.6 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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.1909
Total	**4.4841**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 2017

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	0.1319	0.1038	0.9777	2.1700e-003	0.2136	1.4800e-003	0.2151	0.0567	1.3700e-003	0.0580		215.7799	215.7799	7.3700e-003		215.9641
Total	**0.1319**	**0.1038**	**0.9777**	**2.1700e-003**	**0.2136**	**1.4800e-003**	**0.2151**	**0.0567**	**1.3700e-003**	**0.0580**		**215.7799**	**215.7799**	**7.3700e-003**		**215.9641**

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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.1909
Total	**4.4841**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 2017

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	0.1319	0.1038	0.9777	2.1700e-003	0.2136	1.4800e-003	0.2151	0.0567	1.3700e-003	0.0580		215.7799	215.7799	7.3700e-003		215.9641
Total	**0.1319**	**0.1038**	**0.9777**	**2.1700e-003**	**0.2136**	**1.4800e-003**	**0.2151**	**0.0567**	**1.3700e-003**	**0.0580**		**215.7799**	**215.7799**	**7.3700e-003**		**215.9641**

3.6 Architectural Coating - 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					
Archit. Coating	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**4.4505**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 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	0.0000	0.0000	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	0.1170	0.0903	0.8519	2.1100e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3200e-003	0.0580		209.7542	209.7542	6.4200e-003		209.9147
Total	**0.1170**	**0.0903**	**0.8519**	**2.1100e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3200e-003**	**0.0580**		**209.7542**	**209.7542**	**6.4200e-003**		**209.9147**

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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**4.4505**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 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	0.0000	0.0000	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	0.1170	0.0903	0.8519	2.1100e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3200e-003	0.0580		209.7542	209.7542	6.4200e-003		209.9147
Total	**0.1170**	**0.0903**	**0.8519**	**2.1100e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3200e-003**	**0.0580**		**209.7542**	**209.7542**	**6.4200e-003**		**209.9147**

3.7 Paving - 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	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618		1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0182**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**		**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.7 Paving - 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	0.0000	0.0000	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	0.0585	0.0451	0.4260	1.0500e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		104.8771	104.8771	3.2100e-003		104.9573
Total	**0.0585**	**0.0451**	**0.4260**	**1.0500e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**104.8771**	**104.8771**	**3.2100e-003**		**104.9573**

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	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618	0.0000	1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0182**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**	**0.0000**	**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.7 Paving - 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	0.0000	0.0000	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	0.0585	0.0451	0.4260	1.0500e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		104.8771	104.8771	3.2100e-003		104.9573
Total	**0.0585**	**0.0451**	**0.4260**	**1.0500e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**104.8771**	**104.8771**	**3.2100e-003**		**104.9573**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

	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	1.8635	7.8795	20.1950	0.0504	4.1348	0.0586	4.1933	1.1065	0.0551	1.1616		5,076.2025	5,076.2025	0.2418		5,082.2473
Unmitigated	2.0811	9.6115	25.3878	0.0701	5.9068	0.0797	5.9865	1.5808	0.0750	1.6558		7,051.8356	7,051.8356	0.2998		7,059.3305

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	2,717,253	1,902,077
Total	1,203.65	1,156.59	1,060.66	2,717,253	1,902,077

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.571348	0.041302	0.187452	0.129481	0.019048	0.005152	0.010609	0.022861	0.001566	0.001884	0.005572	0.002772	0.000953

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	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
NaturalGas Unmitigated	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076

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					
Apartments Mid Rise	5489.05	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Total		**0.0592**	**0.5059**	**0.2153**	**3.2300e-003**		**0.0409**	**0.0409**		**0.0409**	**0.0409**		**645.7701**	**645.7701**	**0.0124**	**0.0118**	**649.6076**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Mid Rise	5.48905	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Total		**0.0592**	**0.5059**	**0.2153**	**3.2300e-003**		**0.0409**	**0.0409**		**0.0409**	**0.0409**		**645.7701**	**645.7701**	**0.0124**	**0.0118**	**649.6076**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Unmitigated	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4594	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822		26.8880	26.8880	0.0264		27.5478
Total	**2.1427**	**0.1738**	**15.0067**	**7.9000e-004**		**0.0822**	**0.0822**		**0.0822**	**0.0822**	**0.0000**	**26.8880**	**26.8880**	**0.0264**	**0.0000**	**27.5478**

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4594	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822		26.8880	26.8880	0.0264		27.5478
Total	**2.1427**	**0.1738**	**15.0067**	**7.9000e-004**		**0.0822**	**0.0822**		**0.0822**	**0.0822**	**0.0000**	**26.8880**	**26.8880**	**0.0264**	**0.0000**	**27.5478**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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

APPENDIX B

PROTECTED SPECIES LISTS

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: (Federal Listing Status IS (Endangered OR Threatened) OR State Listing Status IS (Endangered OR Threatened))
 AND County IS (Contra Costa)
 AND Quad IS (Walnut Creek (3712281))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Masticophis lateralis euryxanthus Alameda whipsnake	ARADB21031	Threatened	Threatened	G4T2	S2	
Oenothera deltoides ssp. howellii Antioch Dunes evening-primrose	PDONA0C0B4	Endangered	Endangered	G5T1	S1	1B.1
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC

Record Count: 5

U.S. Fish & Wildlife Service

Willow Pass Apartments Infill Exemption IS

IPaC Trust Resources Report

Generated November 10, 2016 12:55 PM MST, IPaC v3.0.9

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.

IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

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U.S. Fish & Wildlife Service

IPaC Trust Resources Report

NAME

Willow Pass Apartments Infill Exemption IS

LOCATION

Contra Costa County, California

DESCRIPTION

2400 Willow Pass Road, Concord, California

IPAC LINK

https://ecos.fws.gov/ipac/project/PS2WJ-F4YC5-E5RCU-23L7N-ZBTSJQ

U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Amphibians

California Red-legged Frog Rana draytonii — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=D02D

California Tiger Salamander Ambystoma californiense — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=D01T

Birds

California Clapper Rail Rallus longirostris obsoletus — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B04A

California Least Tern Sterna antillarum browni — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B03X

Crustaceans

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K03G

Fishes

Delta Smelt Hypomesus transpacificus — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E070

Steelhead Oncorhynchus (=Salmo) mykiss — Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E08D

Flowering Plants

Antioch Dunes Evening-primrose Oenothera deltoides ssp. howellii — Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q1ZN

Contra Costa Goldfields Lasthenia conjugens — Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q122

Insects

Callippe Silverspot Butterfly Speyeria callippe callippe — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I019

San Bruno Elfin Butterfly Callophrys mossii bayensis — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I00Q

Reptiles

Alameda Whipsnake (=striped Racer) Masticophis lateralis euryxanthus — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C04A

Giant Garter Snake Thamnophis gigas — Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C057

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.[1] There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

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1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern
  http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data
  http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The following species of migratory birds could potentially be affected by activities in this location:

Allen's Hummingbird Selasphorus sasin — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0LI

Bald Eagle Haliaeetus leucocephalus — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008

Bell's Sparrow Amphispiza belli — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HE

Black Oystercatcher Haematopus bachmani — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0KJ

Black Rail Laterallus jamaicensis — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B09A

Burrowing Owl Athene cunicularia — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0NC

Costa's Hummingbird Calypte costae — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JE

Fox Sparrow Passerella iliaca — Bird of conservation concern
Season: Wintering

Lawrence's Goldfinch Carduelis lawrencei — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0J8

Least Bittern Ixobrychus exilis
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B092

Lesser Yellowlegs Tringa flavipes — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MD

Lewis's Woodpecker Melanerpes lewis — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HQ

Long-billed Curlew Numenius americanus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S

Marbled Godwit Limosa fedoa — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JL

Mountain Plover Charadrius montanus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B078

Nuttall's Woodpecker Picoides nuttallii — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HT

Oak Titmouse Baeolophus inornatus — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ

Peregrine Falcon Falco peregrinus — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Rufous-crowned Sparrow Aimophila ruficeps — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MX

Short-billed Dowitcher Limnodromus griseus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JK

Short-eared Owl Asio flammeus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Snowy Plover Charadrius alexandrinus — Bird of conservation concern
Season: Breeding

Swainson's Hawk Buteo swainsoni — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B070

Tricolored Blackbird Agelaius tricolor — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06P

Western Grebe aechmophorus occidentalis — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA

Yellow Rail Coturnicops noveboracensis — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JG

Yellow-billed Magpie Pica nuttalli — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0N8

Wildlife refuges and fish hatcheries

There are no refuges or fish hatcheries in this location

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

There are no wetlands in this location

APPENDIX C

CULTURAL RESOURCES TECHNICAL MEMORANDUM

ANALYTICAL ENVIRONMENTAL SERVICES

TECHNICAL MEMORANDUM

DATE: November 15, 2016
TO: City of Concord
FROM: Trenton Wilson, Charlane Gross
SUBJECT: Summary for Argent Residential Infill Project, Concord, CA

BACKGROUND OF PROJECT

The programmatic Environmental Impact Report (EIR) (City of Concord, 2007) prepared for the Concord 2030 Urban Area General Plan EIR (General Plan EIR), and subsequent updates, requires projects that are implemented under the General Plan to conduct a project-specific level analysis to determine if there are significant impacts to cultural and archaeological resources that would result from development of individual projects. As a result, this Technical Memorandum has been prepared, summarizing the results of a background record search, archaeological survey, and historical resources evaluation for the Argent Residential Infill Project (Proposed Project).

INTRODUCTION

The Proposed Project is located at 2400 Willow Pass Road, in Concord, CA on a block bounded by Willow Pass Road, East Street, Concord Boulevard and Port Chicago Highway (**Figures 1 and 2**). The Property consists of one parcel (APN 126-082-008) of approximately 1.49 acre total area. The parcel is mostly developed, with a multi-tenant commercial building and parking (**Figure 3**). The Proposed Project would replace the commercial building with a seven-story (one subterranean level) apartment complex and attendant parking, landscaping, etc.

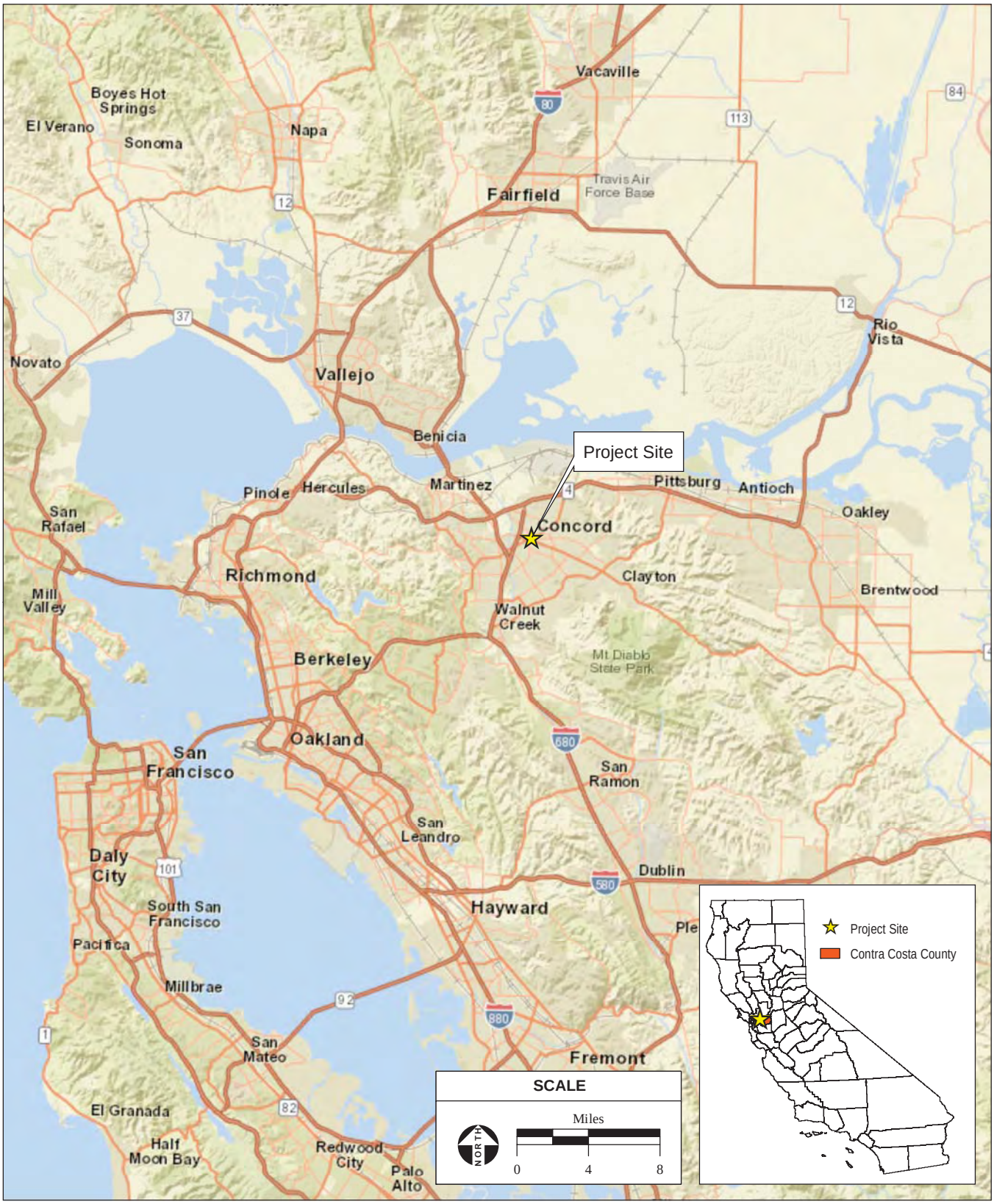
The Proposed Project site is located in an unsectioned area within Township 2 North, Range 1 West, as depicted on the Walnut Creek, CA 7.5' USGS quadrangle map.

REGULATORY SETTING

California Environmental Quality Act

CEQA requires that, for projects financed by, or requiring the discretionary approval of public agencies in California, that the effects that a proposed project has on historical or unique archaeological resources be considered (Public Resources Code Section 21083.2). Historical resources are buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance (PRC Section 50201). CEQA Guidelines Section 15064.5 define three cases in which a property may qualify as a historical resource for the purpose of CEQA review:

1. If it is listed in, or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (CRHR); or



SOURCE: ESRI Data, 2016; AES, 11/15/2016

Figure 1
Project Location

SOURCE: "Walnut Creek, CA" USGS 7.5 Minute Topographic Quadrangle, T2N R1W, Unsectioned Area of Walnut Creek, Mt. Diablo Baseline & Meridian; ESRI Data, 2016; AES, 11/15/2016

Figure 2
Site and Vicinity

SOURCE: DigitalGlobe aerial phohtograph, 10/30/2015; ESRI Data, 2016; AES, 11/15/2016

Figure 3
Aerial of Project Site

2. It is included in a local register of historical resource or identified as significant in a qualifying historical resource survey; or
3. The resource appears in, or is determined eligible for the listing, in the CRHR. Public Resources Code Section 5024.1 and CEQA Guidelines 15064.5 define eligibility requirements and states that a resource may be eligible for inclusion in the CRHR if it:
    1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    2. is associated with the lives of persons important in our past;
    3. embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
    4. has yielded, or may be likely to yield, information important in prehistory or history.

Sites younger than 45 years, unless of exceptional importance, are not eligible for listing in the CRHR. Properties must retain integrity to be eligible for listing on the CRHR. Properties that are listed in or eligible for listing in the National Register of Historic Places are automatically considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (PRC section 5024.1(d)(1)).

a) The resource is included in a local register of historic resources, as defined in section 5020.1(k) of the PRC, or is identified as significant in a historical resources survey that meets the requirements of section 5024.1(g) of the PRC (unless the preponderance of evidence demonstrates that the resource is not historically or culturally significant).
b) The lead agency determines that the resource may be a historical resource as defined in PRC section 5020.1(j), 5024.1, or significant as supported by substantial evidence in light of the whole record.

Public Resources Code Section 21083.2 governs the treatment of unique archaeological resources, defined as "an archaeological artifact, object, or site about which it can be clearly demonstrated" as meeting any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CULTURAL SETTING

Prehistory

The proposed project site is located at the northeastern edge of an area that was occupied by the Penutian–speaking Bay Miwok at the time the Spanish arrived in northern California in the 18th century. Their territory encompassed much of the San Francisco Bay area and extended eastward to the Central Valley. The Bay Miwok are known to have occupied this region at least since 300 A.D., though their presence may date back as far as 2500 B.C. At the time of contact with the Europeans, there were an estimated 7,000 to 10,000 Native Americans living in the coastal area stretching from Point Sur in Monterey County, northward through the Coast Ranges to the Sacramento River Delta and eastward to the San Joaquin River. The Bay Miwok were one of five geographically and linguistically distinct groups in the area, including Costanoan, Patwin, Wappo, Coast Miwok and Bay Miwok (Basin, 2013; ESA, 2009).

The Bay Miwok Indians were organized in triblets of related families, who were well-placed to exploit the rich resources offered by estuaries and grasslands. Proximity to Spanish missions led to early resettlement and conversion at the same time European diseases were taking significant toll on the population by the first half of the 19th century (Basin, 2013; ESA, 2009).

History

The first expedition into the East Bay occurred in 1772 when Pedro Fages and his party explored the San Francisco Bay and Carquinez Strait, including the Diablo and Livermore Valleys near Concord. In the spring of 1776, Captain Juan Bautista de Anza established the San Francisco Presidio and by April 1, de Anza's men had traveled through San Francisco, down the peninsula and up the East Bay shoreline, passing through Antioch and the plains of eastern Contra Costa County toward Tracy (Basin, 2013; ESA, 2009).

The establishment of the Mission Dolores in San Francisco in the same year began the "Mission Period" in the San Francisco Bay area, part of an effort by the Spanish to spread Christianity through the establishment of 21 Roman Catholic missions in Alta California in the late 18th and early 19th centuries. The missions in the East Bay were used to graze thousands of cattle and sheep, as well as for grain production and housed several hundred native Bay Miwok Indian converts (Basin, 2013; ESA, 2009).

In 1833–34, the Mexican government secularized the Spanish missions and many mission lands were also subsequently granted to individuals who established the great ranchos, or vast cattle raising estates. The project site was part of the *Rancho Monte del Diablo*, granted to Salvio Pacheco in 1834 (Basin, 2013; Beck and Haase, 1974; ESA, 2009; Hoover, et al., 2002).

Historical information indicates that the Proposed Project site was vacant and undeveloped in 1915 and 1917. Neighboring blocks were being developed by the 1920s, and by 1945 an office/warehouse building occupied the site. That structure was present in 1948 but removed by 1959. By 1966, a single building similar to the current structure was located on the Property. No city directory listings were found for the Property between 1960 and 1980. Occupants of this building from 1980 and later have included retail

businesses; Sattler's TV Video and Appliances, Gamba's TV Service, an auto parts store, a credit union office, banks, a video rental store, a stationery and office supply store, and a Halloween costume and make up store (ERAS Environmental, 2015).

METHODS

A background record search was performed at the Northwest Information Center (NWIC) of the California Historical Resources Information System on November 9, 2016 (IC File Number 16-0718). Additional research was conducted using files and literature maintained at AES, as well as internet resources. The record search included a review of the National Register of Historic Places; The California Register of Historical Resources; California Points of Historical Interest; California Inventory of Historic Resources; California Historical Landmarks; Directory of Properties in the Historic Property Data Files for Contra Costa County; and Archaeological Determinations of Eligibility. A Phase I site assessment (ERAS, 2015) prepared for the Proposed Project included a review of historic development of the property, and included the fact that the current structure dates to 1966.

Native American Consultation

A request was sent to the Native American Heritage Commission (NAHC) on November 7, 2016. No response has been received as of this writing.

RESULTS

AES archaeologist Charlane Gross, M.A., RPA, who meets the Secretary of the Interior's Standards and Guidelines for Archaeology completed an archaeological site survey on November 9, 2016. Between the building and parking lot, the project site was almost entirely developed. The only open areas were in medians within the parking lot and around the parking lot edges (**Figure 4**), in varying width planted strips between the parking lot and sidewalks. It is highly likely that all soils found within those areas was either transported or disturbed, and no cultural resources were observed. The building (**Figure 5)** lacks a specific architectural style, but could best be described as a contemporary commercial Spanish Colonial revival design.

RECOMMENDATIONS

No prehistoric sites, features, or artifacts were identified. The closest natural water source, Galinda Creek, is approximately 0.5 miles to the south, indicating a low potential for buried prehisotirc resources. The building is technically historic, but lacks any association with persons or events significant in California history (CRHR criteria 1 and 2), does not embody the distinctive characteristics of a type, period, region, or method of construction (CRHR Criterion 3), and is unlikely to yield information important in prehistory or history (CRHR Criterion 4). Therefore, AES recommends a finding of *No Historical Resources Affected*.

While no significant archaeological or paleontological deposits or site indicators were observed, there is some potential for buried resources which could be uncovered during future ground-disturbing activities.

Figure 4. Open Median Behind Building

Figure 5. Building

These might include, but are not limited to: flakes and chipped stone tools; grinding implements such as millingstones, manos, mortars and pestles; midden soils, fragments of bone, shellfish, and fire affected rock; construction materials and building foundations; wells or privies; deposits of metal, glass, and/or

ceramic refuse; and vertebrate and invertebrate fossils. If these or similar resources are uncovered at the Proposed Project site, all work within 50 feet of the discovery should be halted until a qualified professional archaeologist or paleontologist can evaluate the find and recommend appropriate mitigation.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all activities within a 100-foot radius of the find shall be halted immediately and the City's designated representative shall be notified. The City or their designated representative shall immediately notify the county coroner and a qualified professional archaeologist. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The City or its appointed representative and the professional archaeologist shall contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the City and the archaeologist shall determine the ultimate disposition of the remains.

REFERENCES

Basin Research Associates, 2013. *Archaeological Resources Assessment Report, Saranap Village Project, Walnut Creek, Contra Costa County*. Report prepared for Hall Equities Group.

Beck, W.A., and Y.D. Haase. *Historical Atlas of California*. University of Oklahoma Press. Norman and London.

Dyett & Bhatia, 2007. *Draft Environmental Impact Report, Concord 2030 Urban Area General Plan*.

ERAS Environmental, 2015. *Phase I Environmental Site Assessment, 2400 Willow Pass Road, Concord, California*. Prepared for Argent Pacific Group, Santa Cruz, California.

ESA, 2009. *Draft Bayview Residential Project Envirnmental Impact Report. State Clearing House No. 2008032074*. Prepared for Contra Costa County Department of Conservation and Development.

Hoover, M. B., H. E. Rensch, E. G. Rensch, and W. N. Abeloe, 2002. *Historic Spots in California*. Revised by D. E. Kyle. Stanford University Press, Stanford, CA.

PREPARER'S QUALIFICATIONS

Charlane Gross conducted the research and field survey and wrote this report. Ms. Gross has been a professional archaeologist for 28 years. She holds a Master of Arts in Social Sciences, with an emphasis on physical anthropology and archaeology, from San Jose State University. Ms. Gross' experience includes work that has been completed in compliance with local ordinances, CEQA, and Section 106 requirements. Her professional affiliations include the Society for California Archaeology and the Register of Professional Archaeologists.

STATEMENT OF CONFIDENTIALITY

As nonrenewable resources, archaeological sites can be significantly impacted by disturbances that can affect their cultural, scientific, and artistic values. Disclosure of site information to the public may be in violation of both federal and state laws. To discourage damage resulting from vandalism and artifact looting, cultural resources locations should be kept confidential and report distribution restricted. Applicable U.S. laws include, but are not be limited to, Section 304 of the National Historic Preservation Act (16 USC 470w-3) and the Archeological Resources Protection Act of 1979, as amended (PL 96-95; 93 Stat. 721; 16 USC 47Oaa et seq.). California state laws that apply include, but are not be limited to, Government Code Sections 6250 et seq. and 6254 et seq.

APPENDICES

APPENDIX A

CALEEMOD FILES

CalEEMod Inputs

Willow Pass Apartments Infill Exemption Initial Study

Project-Specific Inputs for the Willow Pass Apartments Infill Exemption Initial Study

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Project Name	Project Name	Willow Pass Apartments Infill Exemption Initial Study	Project Description
Project Location	County	Contra Costa	Modeler, based on location
Climate zone	Climate Zone Number	4	Modeler, based on location
Land Use Setting	Urban or Rural	Urban	Modeler, based on location
Operational Year	1st year of operation after full buildout.	2019	Project Description
Utility Company	Utility Company Name	PG&E	USEPA Power Profiler
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See **Table 1.**	See **Table 1.**
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See **Table 1.**	See **Table 1.**
Lot Acreage	Acreage of each Land Use Type	See **Table 1.**	See **Table 1.**
Population	Population based on persons/household	See **Table 1.**	See **Table 1.**
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	See **Table 2.**	See **Table 2.**
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See **Table 2.**	See **Table 2.**
Demolition	Sq ft or tons of Demo	18,080	KTGY Engineering Plans
Construction Trip Gen Rate	Average number of one-way trips per day	--	--
Operational Trip Reductions	% reduction in trips.	--	--
Operational Trip Gen Rate and trip length	Trips and trip lengths	--	--
Area Sources	Hearths – # of wood-burning fireplaces, #of gas fireplaces, and # of units with no fireplace.	Not Applicable	No hearths are included in the project design.
	Landscape Equipment - % of equipment that is electric.	--	--
Energy Use	Project Specific Emission Factors.	--	--

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	--	N/A no GHG analysis
Solid waste	Tons of solid waste generated per year	--	--
	Land Fill Gas Capture Rate		
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	--	--
Sequestration	Type and net number of new trees added	--	--

Source: USEPA, 2015; KTGY, 2016

Project–Mitigation Inputs for the Willow Pass Apartments Infill Exemption Initial Study

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	No	Engine Type, DPF Level, and Oxidation Catalyst	--	--
Soil Stabilizer for Unpaved Roads	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Default % Reduction
	N/A		PM10 (% Reduction)	55%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	No	Vehicle Speed (mph)	--	--
Type of Residential	N/A	Yes	Project Setting	Urban Center	--
Increased Density	LUT-1	Yes	Dwelling Units/Acre	118	KTGY Engineering Plans
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	Yes	Average Distance to Transit Station (miles)	.25	KTGY Engineering Plans
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs ($)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	--
Expand Transit Network	TST-3	No	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount ($)	--	--
Implement Employee Parking “Cash-Out”	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge ($)	--	--
Encourage Telecommuting	TRT-6	No	% employee work 9/80	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
and Alternative Work Schedules		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--
Employee Vanpool/Shuttle	TRT-11	No	% employee eligible	--	--
		No	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	Yes	Yes or No	No	KTGY Engineering Plans
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	No	Emission Factor (EF) (g/l)	--	--
Use low VOC Paint (Residential Exterior)	N/A	No	EF (g/l)	--	--
Use low VOC Paint (Non-residential Interior)	N/A	No	EF (g/l)	--	--
Use low VOC Paint (Non-residential Exterior)	N/A	No	EF (g/l)	--	--
Electric Lawnmower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	No	Percent of equipment type that will be electric.	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Electric Chainsaw	A-1	No	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--
Install High Efficiently Lighting	LE-1	No	% Lighting Energy Reduction	--	--
On-site Renewable Energy	AE-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	Yes	% Reduction in flow	32%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Kitchen Faucet	WUW-1	Yes	% Reduction in flow	18%	Default % reduction assuming implementation of Recommended Mitigation.
Install Low-flow Toilet	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Shower	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Institute Recycling and Composting Service	SW-1	No	% Reduction in Waste Disposal over State requirements	--	--

Table 1 – Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
Residential	Apartments Mid Rise	181	Dwelling Unit	1.53	66,646.8	494

Note: Average household size 2.73 persons per household

Source: KTGY, 2016

Table 2 – Construction Equipment Usage

Equipment	Construction Phase Activities					
	Demolition	Site Prep	Grading	Building Construction	Paving	Architectural Coating
	3/1/2017 -	4/8/2017 -	4/12/2017 -	4/20/2017 -	5/12/2018 -	7/20/2017 -
	4/7/2017	4/11/2017	4/19/2017	5/11/2018	5/31/2018	5/31/2018
Air Compressors						1
Cement and Mortar Mixers					1	
Concreate/Industrial Saws	1					
Cranes	1			1		
Forklifts				1		
Gensets				1		
Graders		1	1			
Pavers					1	
Paving Equipment					1	
Rollers					1	
Rubber Tired Dozers	1	1	1			
Tractors/Loaders/Backhoes	3	1	1	1	1	
Welders				3		

Willow Pass Apartments Infill Exemption Initial Study

Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	181.00	Dwelling Unit	1.53	66,646.80	494

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**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 - Refer to CalEEMod table

Construction Phase - Refer to CalEEMod tables

Demolition -

Woodstoves - No hearths

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	226.00
tblConstructionPhase	NumDays	200.00	277.00
tblConstructionPhase	NumDays	20.00	28.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	PhaseEndDate	2/7/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	1/10/2018	5/11/2018
tblConstructionPhase	PhaseEndDate	3/28/2017	4/7/2017
tblConstructionPhase	PhaseEndDate	4/5/2017	4/19/2017
tblConstructionPhase	PhaseEndDate	1/24/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	3/30/2017	4/11/2017
tblConstructionPhase	PhaseStartDate	1/25/2018	7/20/2017
tblConstructionPhase	PhaseStartDate	4/6/2017	4/20/2017
tblConstructionPhase	PhaseStartDate	3/31/2017	4/12/2017
tblConstructionPhase	PhaseStartDate	1/11/2018	5/12/2018
tblConstructionPhase	PhaseStartDate	3/29/2017	4/8/2017
tblFireplaces	NumberGas	27.15	0.00
tblFireplaces	NumberNoFireplace	7.24	181.00
tblFireplaces	NumberWood	30.77	0.00
tblGrading	AcresOfGrading	2.25	1.50
tblLandUse	BuildingSpaceSquareFeet	181,000.00	66,646.80
tblLandUse	LandUseSquareFeet	181,000.00	66,646.80
tblLandUse	LotAcreage	4.76	1.53
tblLandUse	Population	518.00	494.00
tblProjectCharacteristics	OperationalYear	2018	2019

tblWoodstoves	NumberCatalytic	3.62	0.00
tblWoodstoves	NumberNoncatalytic	3.62	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	0.6516	2.6434	2.2298	4.2400e-003	0.1487	0.1522	0.3009	0.0439	0.1463	0.1902	0.0000	372.2684	372.2684	0.0529	0.0000	373.5898
2018	0.4092	1.1564	1.1000	2.1800e-003	0.0669	0.0642	0.1310	0.0179	0.0620	0.0799	0.0000	190.7332	190.7332	0.0246	0.0000	191.3478
Maximum	**0.6516**	**2.6434**	**2.2298**	**4.2400e-003**	**0.1487**	**0.1522**	**0.3009**	**0.0439**	**0.1463**	**0.1902**	**0.0000**	**372.2684**	**372.2684**	**0.0529**	**0.0000**	**373.5898**

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	0.6516	2.6434	2.2298	4.2400e-003	0.1327	0.1522	0.2849	0.0374	0.1463	0.1837	0.0000	372.2682	372.2682	0.0529	0.0000	373.5895
2018	0.4092	1.1564	1.1000	2.1800e-003	0.0669	0.0642	0.1310	0.0179	0.0620	0.0799	0.0000	190.7331	190.7331	0.0246	0.0000	191.3477
Maximum	**0.6516**	**2.6434**	**2.2298**	**4.2400e-003**	**0.1327**	**0.1522**	**0.2849**	**0.0374**	**0.1463**	**0.1837**	**0.0000**	**372.2682**	**372.2682**	**0.0529**	**0.0000**	**373.5895**

	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**	**7.41**	**0.00**	**3.70**	**10.53**	**0.00**	**2.41**	**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	3-1-2017	5-31-2017	0.8997	0.8997
2	6-1-2017	8-31-2017	0.9629	0.9629
3	9-1-2017	11-30-2017	1.0756	1.0756
4	12-1-2017	2-28-2018	1.0076	1.0076
5	3-1-2018	5-31-2018	0.9094	0.9094
		Highest	1.0756	1.0756

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	0.3486	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Energy	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	339.1740	339.1740	0.0126	4.1300e-003	340.7194
Mobile	0.3757	1.6690	4.2838	0.0126	1.0151	0.0141	1.0292	0.2725	0.0133	0.2857	0.0000	1,151.3293	1,151.3293	0.0470	0.0000	1,152.5044
Waste						0.0000	0.0000		0.0000	0.0000	16.9010	0.0000	16.9010	0.9988	0.0000	41.8716
Water						0.0000	0.0000		0.0000	0.0000	3.7413	26.1333	29.8746	0.3855	9.3200e-003	42.2877
Total	**0.7350**	**1.7770**	**5.6736**	**0.0133**	**1.0151**	**0.0290**	**1.0441**	**0.2725**	**0.0281**	**0.3006**	**20.6424**	**1,518.8320**	**1,539.4743**	**1.4460**	**0.0135**	**1,579.6322**

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	0.3486	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Energy	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	339.1740	339.1740	0.0126	4.1300e-003	340.7194
Mobile	0.3373	1.3739	3.3626	9.0800e-003	0.7106	0.0103	0.7209	0.1907	9.7100e-003	0.2004	0.0000	829.6401	829.6401	0.0376	0.0000	830.5801
Waste						0.0000	0.0000		0.0000	0.0000	16.9010	0.0000	16.9010	0.9988	0.0000	41.8716
Water						0.0000	0.0000		0.0000	0.0000	2.9931	22.4206	25.4137	0.3084	7.4700e-003	35.3501
Total	**0.6967**	**1.4818**	**4.7525**	**9.7400e-003**	**0.7106**	**0.0252**	**0.7358**	**0.1907**	**0.0246**	**0.2153**	**19.8941**	**1,193.4300**	**1,213.3241**	**1.3596**	**0.0116**	**1,250.7703**

	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	**5.22**	**16.61**	**16.24**	**26.55**	**30.00**	**12.99**	**29.53**	**30.00**	**12.59**	**28.37**	**3.62**	**21.42**	**21.19**	**5.98**	**13.75**	**20.82**

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	3/1/2017	4/7/2017	5	28	
2	Site Preparation	Site Preparation	4/8/2017	4/11/2017	5	2	
3	Grading	Grading	4/12/2017	4/19/2017	5	6	
4	Building Construction	Building Construction	4/20/2017	5/11/2018	5	277	
5	Architectural Coating	Architectural Coating	7/20/2017	5/31/2018	5	226	
6	Paving	Paving	5/12/2018	5/31/2018	5	14	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 134,960; Residential Outdoor: 44,987; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	82.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	130.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					8.9000e-003	0.0000	8.9000e-003	1.3500e-003	0.0000	1.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0387	0.3746	0.2178	3.4000e-004		0.0231	0.0231		0.0216	0.0216	0.0000	30.7535	30.7535	7.7800e-003	0.0000	30.9480
Total	**0.0387**	**0.3746**	**0.2178**	**3.4000e-004**	**8.9000e-003**	**0.0231**	**0.0320**	**1.3500e-003**	**0.0216**	**0.0229**	**0.0000**	**30.7535**	**30.7535**	**7.7800e-003**	**0.0000**	**30.9480**

3.2 Demolition - 2017

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	4.6000e-004	0.0146	2.6600e-003	3.0000e-005	6.9000e-004	9.0000e-005	7.8000e-004	1.9000e-004	8.0000e-005	2.7000e-004	0.0000	3.1946	3.1946	1.5000e-004	0.0000	3.1984
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	8.4000e-004	6.6000e-004	6.6200e-003	2.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.3873	1.3873	5.0000e-005	0.0000	1.3885
Total	**1.3000e-003**	**0.0153**	**9.2800e-003**	**5.0000e-005**	**2.1300e-003**	**1.0000e-004**	**2.2300e-003**	**5.7000e-004**	**9.0000e-005**	**6.6000e-004**	**0.0000**	**4.5819**	**4.5819**	**2.0000e-004**	**0.0000**	**4.5869**

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					4.0000e-003	0.0000	4.0000e-003	6.1000e-004	0.0000	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0387	0.3746	0.2178	3.4000e-004		0.0231	0.0231		0.0216	0.0216	0.0000	30.7535	30.7535	7.7800e-003	0.0000	30.9479
Total	**0.0387**	**0.3746**	**0.2178**	**3.4000e-004**	**4.0000e-003**	**0.0231**	**0.0271**	**6.1000e-004**	**0.0216**	**0.0222**	**0.0000**	**30.7535**	**30.7535**	**7.7800e-003**	**0.0000**	**30.9479**

3.2 Demolition - 2017

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	4.6000e-004	0.0146	2.6600e-003	3.0000e-005	6.9000e-004	9.0000e-005	7.8000e-004	1.9000e-004	8.0000e-005	2.7000e-004	0.0000	3.1946	3.1946	1.5000e-004	0.0000	3.1984
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	8.4000e-004	6.6000e-004	6.6200e-003	2.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.3873	1.3873	5.0000e-005	0.0000	1.3885
Total	**1.3000e-003**	**0.0153**	**9.2800e-003**	**5.0000e-005**	**2.1300e-003**	**1.0000e-004**	**2.2300e-003**	**5.7000e-004**	**9.0000e-005**	**6.6000e-004**	**0.0000**	**4.5819**	**4.5819**	**2.0000e-004**	**0.0000**	**4.5869**

3.3 Site Preparation - 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					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	0.0222	8.4000e-003	2.0000e-005		1.0500e-003	1.0500e-003		9.6000e-004	9.6000e-004	0.0000	1.6005	1.6005	4.9000e-004	0.0000	1.6128
Total	**1.9300e-003**	**0.0222**	**8.4000e-003**	**2.0000e-005**	**5.8000e-003**	**1.0500e-003**	**6.8500e-003**	**2.9500e-003**	**9.6000e-004**	**3.9100e-003**	**0.0000**	**1.6005**	**1.6005**	**4.9000e-004**	**0.0000**	**1.6128**

3.3 Site Preparation - 2017

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	4.0000e-005	3.0000e-005	2.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0610	0.0610	0.0000	0.0000	0.0610
Total	**4.0000e-005**	**3.0000e-005**	**2.9000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0610**	**0.0610**	**0.0000**	**0.0000**	**0.0610**

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					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	0.0222	8.4000e-003	2.0000e-005		1.0500e-003	1.0500e-003		9.6000e-004	9.6000e-004	0.0000	1.6005	1.6005	4.9000e-004	0.0000	1.6128
Total	**1.9300e-003**	**0.0222**	**8.4000e-003**	**2.0000e-005**	**2.6100e-003**	**1.0500e-003**	**3.6600e-003**	**1.3300e-003**	**9.6000e-004**	**2.2900e-003**	**0.0000**	**1.6005**	**1.6005**	**4.9000e-004**	**0.0000**	**1.6128**

3.3 Site Preparation - 2017

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	4.0000e-005	3.0000e-005	2.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0610	0.0610	0.0000	0.0000	0.0610
Total	**4.0000e-005**	**3.0000e-005**	**2.9000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0610**	**0.0610**	**0.0000**	**0.0000**	**0.0610**

3.4 Grading - 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					
Fugitive Dust					0.0144	0.0000	0.0144	7.5300e-003	0.0000	7.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8100e-003	0.0549	0.0211	4.0000e-005		2.6200e-003	2.6200e-003		2.4100e-003	2.4100e-003	0.0000	3.9324	3.9324	1.2000e-003	0.0000	3.9625
Total	**4.8100e-003**	**0.0549**	**0.0211**	**4.0000e-005**	**0.0144**	**2.6200e-003**	**0.0170**	**7.5300e-003**	**2.4100e-003**	**9.9400e-003**	**0.0000**	**3.9324**	**3.9324**	**1.2000e-003**	**0.0000**	**3.9625**

3.4 Grading - 2017

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	1.1000e-004	9.0000e-005	8.7000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1829	0.1829	1.0000e-005	0.0000	0.1831
Total	**1.1000e-004**	**9.0000e-005**	**8.7000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1829**	**0.1829**	**1.0000e-005**	**0.0000**	**0.1831**

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					6.4600e-003	0.0000	6.4600e-003	3.3900e-003	0.0000	3.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8100e-003	0.0549	0.0211	4.0000e-005		2.6200e-003	2.6200e-003		2.4100e-003	2.4100e-003	0.0000	3.9324	3.9324	1.2000e-003	0.0000	3.9625
Total	**4.8100e-003**	**0.0549**	**0.0211**	**4.0000e-005**	**6.4600e-003**	**2.6200e-003**	**9.0800e-003**	**3.3900e-003**	**2.4100e-003**	**5.8000e-003**	**0.0000**	**3.9324**	**3.9324**	**1.2000e-003**	**0.0000**	**3.9625**

3.4 Grading - 2017

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	1.1000e-004	9.0000e-005	8.7000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1829	0.1829	1.0000e-005	0.0000	0.1831
Total	**1.1000e-004**	**9.0000e-005**	**8.7000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1829**	**0.1829**	**1.0000e-005**	**0.0000**	**0.1831**

3.5 Building Construction - 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					
Off-Road	0.2698	1.7505	1.3065	2.0100e-003		0.1121	0.1121		0.1081	0.1081	0.0000	168.7288	168.7288	0.0355	0.0000	169.6158
Total	**0.2698**	**1.7505**	**1.3065**	**2.0100e-003**		**0.1121**	**0.1121**		**0.1081**	**0.1081**	**0.0000**	**168.7288**	**168.7288**	**0.0355**	**0.0000**	**169.6158**

3.5 Building Construction - 2017

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	0.0110	0.2496	0.0710	4.8000e-004	0.0114	2.4100e-003	0.0138	3.2900e-003	2.3100e-003	5.5900e-003	0.0000	45.7205	45.7205	2.7100e-003	0.0000	45.7882
Worker	0.0545	0.0428	0.4301	1.0000e-003	0.0938	6.7000e-004	0.0945	0.0250	6.2000e-004	0.0256	0.0000	90.1764	90.1764	3.0200e-003	0.0000	90.2518
Total	**0.0655**	**0.2924**	**0.5010**	**1.4800e-003**	**0.1052**	**3.0800e-003**	**0.1083**	**0.0282**	**2.9300e-003**	**0.0312**	**0.0000**	**135.8968**	**135.8968**	**5.7300e-003**	**0.0000**	**136.0400**

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	0.2698	1.7505	1.3065	2.0100e-003		0.1121	0.1121		0.1081	0.1081	0.0000	168.7286	168.7286	0.0355	0.0000	169.6156
Total	**0.2698**	**1.7505**	**1.3065**	**2.0100e-003**		**0.1121**	**0.1121**		**0.1081**	**0.1081**	**0.0000**	**168.7286**	**168.7286**	**0.0355**	**0.0000**	**169.6156**

3.5 Building Construction - 2017

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	0.0110	0.2496	0.0710	4.8000e-004	0.0114	2.4100e-003	0.0138	3.2900e-003	2.3100e-003	5.5900e-003	0.0000	45.7205	45.7205	2.7100e-003	0.0000	45.7882
Worker	0.0545	0.0428	0.4301	1.0000e-003	0.0938	6.7000e-004	0.0945	0.0250	6.2000e-004	0.0256	0.0000	90.1764	90.1764	3.0200e-003	0.0000	90.2518
Total	**0.0655**	**0.2924**	**0.5010**	**1.4800e-003**	**0.1052**	**3.0800e-003**	**0.1083**	**0.0282**	**2.9300e-003**	**0.0312**	**0.0000**	**135.8968**	**135.8968**	**5.7300e-003**	**0.0000**	**136.0400**

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	0.1231	0.8278	0.6591	1.0500e-003		0.0503	0.0503		0.0485	0.0485	0.0000	87.5114	87.5114	0.0176	0.0000	87.9519
Total	**0.1231**	**0.8278**	**0.6591**	**1.0500e-003**		**0.0503**	**0.0503**		**0.0485**	**0.0485**	**0.0000**	**87.5114**	**87.5114**	**0.0176**	**0.0000**	**87.9519**

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	4.9900e-003	0.1219	0.0327	2.5000e-004	5.9400e-003	1.0000e-003	6.9400e-003	1.7200e-003	9.6000e-004	2.6700e-003	0.0000	23.8252	23.8252	1.3200e-003	0.0000	23.8583
Worker	0.0253	0.0194	0.1963	5.1000e-004	0.0490	3.4000e-004	0.0493	0.0130	3.1000e-004	0.0133	0.0000	45.7567	45.7567	1.3800e-003	0.0000	45.7911
Total	**0.0303**	**0.1414**	**0.2290**	**7.6000e-004**	**0.0549**	**1.3400e-003**	**0.0563**	**0.0148**	**1.2700e-003**	**0.0160**	**0.0000**	**69.5820**	**69.5820**	**2.7000e-003**	**0.0000**	**69.6494**

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	0.1231	0.8278	0.6591	1.0500e-003		0.0503	0.0503		0.0485	0.0485	0.0000	87.5113	87.5113	0.0176	0.0000	87.9518
Total	**0.1231**	**0.8278**	**0.6591**	**1.0500e-003**		**0.0503**	**0.0503**		**0.0485**	**0.0485**	**0.0000**	**87.5113**	**87.5113**	**0.0176**	**0.0000**	**87.9518**

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	4.9900e-003	0.1219	0.0327	2.5000e-004	5.9400e-003	1.0000e-003	6.9400e-003	1.7200e-003	9.6000e-004	2.6700e-003	0.0000	23.8252	23.8252	1.3200e-003	0.0000	23.8583
Worker	0.0253	0.0194	0.1963	5.1000e-004	0.0490	3.4000e-004	0.0493	0.0130	3.1000e-004	0.0133	0.0000	45.7567	45.7567	1.3800e-003	0.0000	45.7911
Total	**0.0303**	**0.1414**	**0.2290**	**7.6000e-004**	**0.0549**	**1.3400e-003**	**0.0563**	**0.0148**	**1.2700e-003**	**0.0160**	**0.0000**	**69.5820**	**69.5820**	**2.7000e-003**	**0.0000**	**69.6494**

3.6 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	0.2429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.1278	0.1093	1.7000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	14.9365	14.9365	1.5800e-003	0.0000	14.9760
Total	**0.2623**	**0.1278**	**0.1093**	**1.7000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**14.9365**	**14.9365**	**1.5800e-003**	**0.0000**	**14.9760**

3.6 Architectural Coating - 2017

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	7.0100e-003	5.5000e-003	0.0553	1.3000e-004	0.0121	9.0000e-005	0.0122	3.2100e-003	8.0000e-005	3.2900e-003	0.0000	11.5941	11.5941	3.9000e-004	0.0000	11.6038
Total	**7.0100e-003**	**5.5000e-003**	**0.0553**	**1.3000e-004**	**0.0121**	**9.0000e-005**	**0.0122**	**3.2100e-003**	**8.0000e-005**	**3.2900e-003**	**0.0000**	**11.5941**	**11.5941**	**3.9000e-004**	**0.0000**	**11.6038**

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	0.2429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.1278	0.1093	1.7000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	14.9365	14.9365	1.5800e-003	0.0000	14.9759
Total	**0.2623**	**0.1278**	**0.1093**	**1.7000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**14.9365**	**14.9365**	**1.5800e-003**	**0.0000**	**14.9759**

3.6 Architectural Coating - 2017

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	7.0100e-003	5.5000e-003	0.0553	1.3000e-004	0.0121	9.0000e-005	0.0122	3.2100e-003	8.0000e-005	3.2900e-003	0.0000	11.5941	11.5941	3.9000e-004	0.0000	11.6038
Total	**7.0100e-003**	**5.5000e-003**	**0.0553**	**1.3000e-004**	**0.0121**	**9.0000e-005**	**0.0122**	**3.2100e-003**	**8.0000e-005**	**3.2900e-003**	**0.0000**	**11.5941**	**11.5941**	**3.9000e-004**	**0.0000**	**11.6038**

3.6 Architectural Coating - 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					
Archit. Coating	0.2263					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1093	0.1011	1.6000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	13.9153	13.9153	1.3200e-003	0.0000	13.9483
Total	**0.2426**	**0.1093**	**0.1011**	**1.6000e-004**		**8.2100e-003**	**8.2100e-003**		**8.2100e-003**	**8.2100e-003**	**0.0000**	**13.9153**	**13.9153**	**1.3200e-003**	**0.0000**	**13.9483**

3.6 Architectural Coating - 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	0.0000	0.0000	0.0000	0.0000	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	5.8000e-003	4.4600e-003	0.0450	1.2000e-004	0.0112	8.0000e-005	0.0113	2.9900e-003	7.0000e-005	3.0600e-003	0.0000	10.5000	10.5000	3.2000e-004	0.0000	10.5079
Total	**5.8000e-003**	**4.4600e-003**	**0.0450**	**1.2000e-004**	**0.0112**	**8.0000e-005**	**0.0113**	**2.9900e-003**	**7.0000e-005**	**3.0600e-003**	**0.0000**	**10.5000**	**10.5000**	**3.2000e-004**	**0.0000**	**10.5079**

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	0.2263					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1093	0.1011	1.6000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	13.9152	13.9152	1.3200e-003	0.0000	13.9483
Total	**0.2426**	**0.1093**	**0.1011**	**1.6000e-004**		**8.2100e-003**	**8.2100e-003**		**8.2100e-003**	**8.2100e-003**	**0.0000**	**13.9152**	**13.9152**	**1.3200e-003**	**0.0000**	**13.9483**

3.6 Architectural Coating - 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	0.0000	0.0000	0.0000	0.0000	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	5.8000e-003	4.4600e-003	0.0450	1.2000e-004	0.0112	8.0000e-005	0.0113	2.9900e-003	7.0000e-005	3.0600e-003	0.0000	10.5000	10.5000	3.2000e-004	0.0000	10.5079
Total	**5.8000e-003**	**4.4600e-003**	**0.0450**	**1.2000e-004**	**0.0112**	**8.0000e-005**	**0.0113**	**2.9900e-003**	**7.0000e-005**	**3.0600e-003**	**0.0000**	**10.5000**	**10.5000**	**3.2000e-004**	**0.0000**	**10.5079**

3.7 Paving - 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	7.1300e-003	0.0732	0.0630	9.0000e-005		4.2700e-003	4.2700e-003		3.9300e-003	3.9300e-003	0.0000	8.5503	8.5503	2.6100e-003	0.0000	8.6156
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.1300e-003**	**0.0732**	**0.0630**	**9.0000e-005**		**4.2700e-003**	**4.2700e-003**		**3.9300e-003**	**3.9300e-003**	**0.0000**	**8.5503**	**8.5503**	**2.6100e-003**	**0.0000**	**8.6156**

3.7 Paving - 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	0.0000	0.0000	0.0000	0.0000	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	3.7000e-004	2.9000e-004	2.8900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6743	0.6743	2.0000e-005	0.0000	0.6748
Total	**3.7000e-004**	**2.9000e-004**	**2.8900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6743**	**0.6743**	**2.0000e-005**	**0.0000**	**0.6748**

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	7.1300e-003	0.0732	0.0630	9.0000e-005		4.2700e-003	4.2700e-003		3.9300e-003	3.9300e-003	0.0000	8.5503	8.5503	2.6100e-003	0.0000	8.6156
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.1300e-003**	**0.0732**	**0.0630**	**9.0000e-005**		**4.2700e-003**	**4.2700e-003**		**3.9300e-003**	**3.9300e-003**	**0.0000**	**8.5503**	**8.5503**	**2.6100e-003**	**0.0000**	**8.6156**

3.7 Paving - 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	0.0000	0.0000	0.0000	0.0000	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	3.7000e-004	2.9000e-004	2.8900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6743	0.6743	2.0000e-005	0.0000	0.6748
Total	**3.7000e-004**	**2.9000e-004**	**2.8900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6743**	**0.6743**	**2.0000e-005**	**0.0000**	**0.6748**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

	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	0.3373	1.3739	3.3626	9.0800e-003	0.7106	0.0103	0.7209	0.1907	9.7100e-003	0.2004	0.0000	829.6401	829.6401	0.0376	0.0000	830.5801
Unmitigated	0.3757	1.6690	4.2838	0.0126	1.0151	0.0141	1.0292	0.2725	0.0133	0.2857	0.0000	1,151.3293	1,151.3293	0.0470	0.0000	1,152.5044

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	2,717,253	1,902,077
Total	1,203.65	1,156.59	1,060.66	2,717,253	1,902,077

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.571348	0.041302	0.187452	0.129481	0.019048	0.005152	0.010609	0.022861	0.001566	0.001884	0.005572	0.002772	0.000953

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	232.2595	232.2595	0.0105	2.1700e-003	233.1696
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	232.2595	232.2595	0.0105	2.1700e-003	233.1696
NaturalGas Mitigated	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.9145	106.9145	2.0500e-003	1.9600e-003	107.5498
NaturalGas Unmitigated	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.9145	106.9145	2.0500e-003	1.9600e-003	107.5498

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					
Apartments Mid Rise	2.0035e+006	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.9145	106.9145	2.0500e-003	1.9600e-003	107.5498
Total		**0.0108**	**0.0923**	**0.0393**	**5.9000e-004**		**7.4600e-003**	**7.4600e-003**		**7.4600e-003**	**7.4600e-003**	**0.0000**	**106.9145**	**106.9145**	**2.0500e-003**	**1.9600e-003**	**107.5498**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Mid Rise	2.0035e+006	0.0108	0.0923	0.0393	5.9000e-004		7.4600e-003	7.4600e-003		7.4600e-003	7.4600e-003	0.0000	106.9145	106.9145	2.0500e-003	1.9600e-003	107.5498
Total		**0.0108**	**0.0923**	**0.0393**	**5.9000e-004**		**7.4600e-003**	**7.4600e-003**		**7.4600e-003**	**7.4600e-003**	**0.0000**	**106.9145**	**106.9145**	**2.0500e-003**	**1.9600e-003**	**107.5498**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	798386	232.2595	0.0105	2.1700e-003	233.1696
Total		**232.2595**	**0.0105**	**2.1700e-003**	**233.1696**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	798386	232.2595	0.0105	2.1700e-003	233.1696
Total		**232.2595**	**0.0105**	**2.1700e-003**	**233.1696**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	0.3486	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Unmitigated	0.3486	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492

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	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0413	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Total	**0.3486**	**0.0156**	**1.3506**	**7.0000e-005**		**7.4000e-003**	**7.4000e-003**		**7.4000e-003**	**7.4000e-003**	**0.0000**	**2.1953**	**2.1953**	**2.1500e-003**	**0.0000**	**2.2492**

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	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2603					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0413	0.0156	1.3506	7.0000e-005		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	2.1953	2.1953	2.1500e-003	0.0000	2.2492
Total	**0.3486**	**0.0156**	**1.3506**	**7.0000e-005**		**7.4000e-003**	**7.4000e-003**		**7.4000e-003**	**7.4000e-003**	**0.0000**	**2.1953**	**2.1953**	**2.1500e-003**	**0.0000**	**2.2492**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	25.4137	0.3084	7.4700e-003	35.3501
Unmitigated	29.8746	0.3855	9.3200e-003	42.2877

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	11.7929 / 7.43464	29.8746	0.3855	9.3200e-003	42.2877
Total		**29.8746**	**0.3855**	**9.3200e-003**	**42.2877**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	9.4343 / 7.43464	25.4137	0.3084	7.4700e-003	35.3501
Total		**25.4137**	**0.3084**	**7.4700e-003**	**35.3501**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.9010	0.9988	0.0000	41.8716
Unmitigated	16.9010	0.9988	0.0000	41.8716

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	83.26	16.9010	0.9988	0.0000	41.8716
Total		**16.9010**	**0.9988**	**0.0000**	**41.8716**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	83.26	16.9010	0.9988	0.0000	41.8716
Total		**16.9010**	**0.9988**	**0.0000**	**41.8716**

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

Willow Pass Apartments Infill Exemption Initial Study

Contra Costa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	181.00	Dwelling Unit	1.53	66,646.80	494

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**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 - Refer to CalEEMod table

Construction Phase - Refer to CalEEMod tables

Demolition -

Woodstoves - No hearths

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	226.00
tblConstructionPhase	NumDays	200.00	277.00
tblConstructionPhase	NumDays	20.00	28.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	PhaseEndDate	2/7/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	1/10/2018	5/11/2018
tblConstructionPhase	PhaseEndDate	3/28/2017	4/7/2017
tblConstructionPhase	PhaseEndDate	4/5/2017	4/19/2017
tblConstructionPhase	PhaseEndDate	1/24/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	3/30/2017	4/11/2017
tblConstructionPhase	PhaseStartDate	1/25/2018	7/20/2017
tblConstructionPhase	PhaseStartDate	4/6/2017	4/20/2017
tblConstructionPhase	PhaseStartDate	3/31/2017	4/12/2017
tblConstructionPhase	PhaseStartDate	1/11/2018	5/12/2018
tblConstructionPhase	PhaseStartDate	3/29/2017	4/8/2017
tblFireplaces	NumberGas	27.15	0.00
tblFireplaces	NumberNoFireplace	7.24	181.00
tblFireplaces	NumberWood	30.77	0.00
tblGrading	AcresOfGrading	2.25	1.50
tblLandUse	BuildingSpaceSquareFeet	181,000.00	66,646.80
tblLandUse	LandUseSquareFeet	181,000.00	66,646.80
tblLandUse	LotAcreage	4.76	1.53
tblLandUse	Population	518.00	494.00
tblProjectCharacteristics	OperationalYear	2018	2019

tblWoodstoves	NumberCatalytic	3.62	0.00
tblWoodstoves	NumberNoncatalytic	3.62	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	8.3443	27.8215	23.2254	0.0447	5.8653	1.6545	6.9108	2.9711	1.5469	3.9330	0.0000	4,313.2118	4,313.2118	0.6282	0.0000	4,326.6672
2018	7.8367	22.4025	21.8810	0.0443	1.4101	1.2382	2.6482	0.3769	1.2001	1.5771	0.0000	4,259.8318	4,259.8318	0.5064	0.0000	4,272.4929
Maximum	**8.3443**	**27.8215**	**23.2254**	**0.0447**	**5.8653**	**1.6545**	**6.9108**	**2.9711**	**1.5469**	**3.9330**	**0.0000**	**4,313.2118**	**4,313.2118**	**0.6282**	**0.0000**	**4,326.6672**

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	8.3443	27.8215	23.2254	0.0447	2.6755	1.6545	3.7210	1.3466	1.5469	2.3085	0.0000	4,313.2118	4,313.2118	0.6282	0.0000	4,326.6672
2018	7.8367	22.4025	21.8810	0.0443	1.4101	1.2382	2.6482	0.3769	1.2001	1.5771	0.0000	4,259.8318	4,259.8318	0.5064	0.0000	4,272.4929
Maximum	**8.3443**	**27.8215**	**23.2254**	**0.0447**	**2.6755**	**1.6545**	**3.7210**	**1.3466**	**1.5469**	**2.3085**	**0.0000**	**4,313.2118**	**4,313.2118**	**0.6282**	**0.0000**	**4,326.6672**

	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**	**43.84**	**0.00**	**33.37**	**48.52**	**0.00**	**29.48**	**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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Energy	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Mobile	2.4964	9.0596	25.3863	0.0760	5.9068	0.0789	5.9857	1.5808	0.0743	1.6550		7,648.0630	7,648.0630	0.2956		7,655.4525
Total	**4.6983**	**9.7392**	**40.6082**	**0.0800**	**5.9068**	**0.2021**	**6.1089**	**1.5808**	**0.1974**	**1.7782**	**0.0000**	**8,320.7211**	**8,320.7211**	**0.3344**	**0.0118**	**8,332.6078**

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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Energy	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Mobile	2.2732	7.4951	19.3740	0.0547	4.1348	0.0578	4.1925	1.1065	0.0543	1.1609		5,505.9293	5,505.9293	0.2331		5,511.7559
Total	**4.4750**	**8.1748**	**34.5960**	**0.0587**	**4.1348**	**0.1809**	**4.3157**	**1.1065**	**0.1775**	**1.2840**	**0.0000**	**6,178.5873**	**6,178.5873**	**0.2718**	**0.0118**	**6,188.9113**

	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	4.75	16.06	14.81	26.63	30.00	10.47	29.35	30.00	10.10	27.79	0.00	25.74	25.74	18.70	0.00	25.73

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	3/1/2017	4/7/2017	5	28	
2	Site Preparation	Site Preparation	4/8/2017	4/11/2017	5	2	
3	Grading	Grading	4/12/2017	4/19/2017	5	6	
4	Building Construction	Building Construction	4/20/2017	5/11/2018	5	277	
5	Architectural Coating	Architectural Coating	7/20/2017	5/31/2018	5	226	
6	Paving	Paving	5/12/2018	5/31/2018	5	14	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 134,960; Residential Outdoor: 44,987; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	82.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	130.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					0.6356	0.0000	0.6356	0.0962	0.0000	0.0962			0.0000			0.0000
Off-Road	2.7625	26.7594	15.5573	0.0241		1.6477	1.6477		1.5404	1.5404		2,421.4229	2,421.4229	0.6125		2,436.7347
Total	**2.7625**	**26.7594**	**15.5573**	**0.0241**	**0.6356**	**1.6477**	**2.2833**	**0.0962**	**1.5404**	**1.6366**		**2,421.4229**	**2,421.4229**	**0.6125**		**2,436.7347**

3.2 Demolition - 2017

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	0.0325	1.0200	0.1833	2.3900e-003	0.0512	6.0600e-003	0.0572	0.0140	5.8000e-003	0.0198		253.2023	253.2023	0.0118		253.4961
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	0.0646	0.0421	0.5221	1.2000e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		119.0387	119.0387	3.9300e-003		119.1369
Total	**0.0972**	**1.0621**	**0.7053**	**3.5900e-003**	**0.1579**	**6.8000e-003**	**0.1647**	**0.0423**	**6.4800e-003**	**0.0488**		**372.2410**	**372.2410**	**0.0157**		**372.6330**

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					0.2860	0.0000	0.2860	0.0433	0.0000	0.0433			0.0000			0.0000
Off-Road	2.7625	26.7594	15.5573	0.0241		1.6477	1.6477		1.5404	1.5404	0.0000	2,421.4229	2,421.4229	0.6125		2,436.7347
Total	**2.7625**	**26.7594**	**15.5573**	**0.0241**	**0.2860**	**1.6477**	**1.9337**	**0.0433**	**1.5404**	**1.5837**	**0.0000**	**2,421.4229**	**2,421.4229**	**0.6125**		**2,436.7347**

3.2 Demolition - 2017

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	0.0325	1.0200	0.1833	2.3900e-003	0.0512	6.0600e-003	0.0572	0.0140	5.8000e-003	0.0198		253.2023	253.2023	0.0118		253.4961
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	0.0646	0.0421	0.5221	1.2000e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		119.0387	119.0387	3.9300e-003		119.1369
Total	**0.0972**	**1.0621**	**0.7053**	**3.5900e-003**	**0.1579**	**6.8000e-003**	**0.1647**	**0.0423**	**6.4800e-003**	**0.0488**		**372.2410**	**372.2410**	**0.0157**		**372.6330**

3.3 Site Preparation - 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					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.9297	22.2106	8.4016	0.0172		1.0451	1.0451		0.9615	0.9615		1,764.2381	1,764.2381	0.5406		1,777.7521
Total	**1.9297**	**22.2106**	**8.4016**	**0.0172**	**5.7996**	**1.0451**	**6.8446**	**2.9537**	**0.9615**	**3.9152**		**1,764.2381**	**1,764.2381**	**0.5406**		**1,777.7521**

3.3 Site Preparation - 2017

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	0.0398	0.0259	0.3213	7.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		73.2546	73.2546	2.4200e-003		73.3150
Total	**0.0398**	**0.0259**	**0.3213**	**7.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**73.2546**	**73.2546**	**2.4200e-003**		**73.3150**

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					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.9297	22.2106	8.4016	0.0172		1.0451	1.0451		0.9615	0.9615	0.0000	1,764.2381	1,764.2381	0.5406		1,777.7521
Total	**1.9297**	**22.2106**	**8.4016**	**0.0172**	**2.6098**	**1.0451**	**3.6549**	**1.3292**	**0.9615**	**2.2906**	**0.0000**	**1,764.2381**	**1,764.2381**	**0.5406**		**1,777.7521**

3.3 Site Preparation - 2017

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	0.0398	0.0259	0.3213	7.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		73.2546	73.2546	2.4200e-003		73.3150
Total	**0.0398**	**0.0259**	**0.3213**	**7.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**73.2546**	**73.2546**	**2.4200e-003**		**73.3150**

3.4 Grading - 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					
Fugitive Dust					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	1.6023	18.2915	7.0342	0.0141		0.8738	0.8738		0.8039	0.8039		1,444.8958	1,444.8958	0.4427		1,455.9636
Total	**1.6023**	**18.2915**	**7.0342**	**0.0141**	**4.7817**	**0.8738**	**5.6554**	**2.5113**	**0.8039**	**3.3152**		**1,444.8958**	**1,444.8958**	**0.4427**		**1,455.9636**

3.4 Grading - 2017

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	0.0398	0.0259	0.3213	7.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		73.2546	73.2546	2.4200e-003		73.3150
Total	**0.0398**	**0.0259**	**0.3213**	**7.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**73.2546**	**73.2546**	**2.4200e-003**		**73.3150**

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					2.1518	0.0000	2.1518	1.1301	0.0000	1.1301			0.0000			0.0000
Off-Road	1.6023	18.2915	7.0342	0.0141		0.8738	0.8738		0.8039	0.8039	0.0000	1,444.8958	1,444.8958	0.4427		1,455.9636
Total	**1.6023**	**18.2915**	**7.0342**	**0.0141**	**2.1518**	**0.8738**	**3.0255**	**1.1301**	**0.8039**	**1.9339**	**0.0000**	**1,444.8958**	**1,444.8958**	**0.4427**		**1,455.9636**

3.4 Grading - 2017

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	0.0398	0.0259	0.3213	7.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		73.2546	73.2546	2.4200e-003		73.3150
Total	**0.0398**	**0.0259**	**0.3213**	**7.4000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**73.2546**	**73.2546**	**2.4200e-003**		**73.3150**

3.5 Building Construction - 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					
Off-Road	2.9653	19.2365	14.3568	0.0220		1.2313	1.2313		1.1875	1.1875		2,043.8641	2,043.8641	0.4298		2,054.6085
Total	**2.9653**	**19.2365**	**14.3568**	**0.0220**		**1.2313**	**1.2313**		**1.1875**	**1.1875**		**2,043.8641**	**2,043.8641**	**0.4298**		**2,054.6085**

3.5 Building Construction - 2017

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	0.1192	2.7001	0.7357	5.3200e-003	0.1286	0.0264	0.1550	0.0370	0.0252	0.0622		559.4352	559.4352	0.0316		560.2245
Worker	0.6464	0.4206	5.2207	0.0120	1.0679	7.4100e-003	1.0753	0.2833	6.8400e-003	0.2901		1,190.3870	1,190.3870	0.0393		1,191.3694
Total	**0.7656**	**3.1206**	**5.9564**	**0.0173**	**1.1965**	**0.0338**	**1.2303**	**0.3203**	**0.0321**	**0.3523**		**1,749.8222**	**1,749.8222**	**0.0709**		**1,751.5939**

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	2.9653	19.2365	14.3568	0.0220		1.2313	1.2313		1.1875	1.1875	0.0000	2,043.8641	2,043.8641	0.4298		2,054.6085
Total	**2.9653**	**19.2365**	**14.3568**	**0.0220**		**1.2313**	**1.2313**		**1.1875**	**1.1875**	**0.0000**	**2,043.8641**	**2,043.8641**	**0.4298**		**2,054.6085**

3.5 Building Construction - 2017

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	0.1192	2.7001	0.7357	5.3200e-003	0.1286	0.0264	0.1550	0.0370	0.0252	0.0622		559.4352	559.4352	0.0316		560.2245
Worker	0.6464	0.4206	5.2207	0.0120	1.0679	7.4100e-003	1.0753	0.2833	6.8400e-003	0.2901		1,190.3870	1,190.3870	0.0393		1,191.3694
Total	**0.7656**	**3.1206**	**5.9564**	**0.0173**	**1.1965**	**0.0338**	**1.2303**	**0.3203**	**0.0321**	**0.3523**		**1,749.8222**	**1,749.8222**	**0.0709**		**1,751.5939**

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	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**		**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

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	0.1032	2.5299	0.6465	5.3100e-003	0.1286	0.0210	0.1496	0.0370	0.0201	0.0571		558.7169	558.7169	0.0295		559.4546
Worker	0.5759	0.3658	4.5863	0.0116	1.0679	7.1800e-003	1.0751	0.2833	6.6200e-003	0.2899		1,157.3563	1,157.3563	0.0345		1,158.2180
Total	**0.6792**	**2.8956**	**5.2329**	**0.0169**	**1.1965**	**0.0281**	**1.2247**	**0.3203**	**0.0267**	**0.3470**		**1,716.0732**	**1,716.0732**	**0.0640**		**1,717.6726**

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	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**	**0.0000**	**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

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	0.1032	2.5299	0.6465	5.3100e-003	0.1286	0.0210	0.1496	0.0370	0.0201	0.0571		558.7169	558.7169	0.0295		559.4546
Worker	0.5759	0.3658	4.5863	0.0116	1.0679	7.1800e-003	1.0751	0.2833	6.6200e-003	0.2899		1,157.3563	1,157.3563	0.0345		1,158.2180
Total	**0.6792**	**2.8956**	**5.2329**	**0.0169**	**1.1965**	**0.0281**	**1.2247**	**0.3203**	**0.0267**	**0.3470**		**1,716.0732**	**1,716.0732**	**0.0640**		**1,717.6726**

3.6 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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.1909
Total	**4.4841**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 2017

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	0.1293	0.0841	1.0442	2.3900e-003	0.2136	1.4800e-003	0.2151	0.0567	1.3700e-003	0.0580		238.0774	238.0774	7.8600e-003		238.2739
Total	**0.1293**	**0.0841**	**1.0442**	**2.3900e-003**	**0.2136**	**1.4800e-003**	**0.2151**	**0.0567**	**1.3700e-003**	**0.0580**		**238.0774**	**238.0774**	**7.8600e-003**		**238.2739**

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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.1909
Total	**4.4841**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 2017

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	0.1293	0.0841	1.0442	2.3900e-003	0.2136	1.4800e-003	0.2151	0.0567	1.3700e-003	0.0580		238.0774	238.0774	7.8600e-003		238.2739
Total	**0.1293**	**0.0841**	**1.0442**	**2.3900e-003**	**0.2136**	**1.4800e-003**	**0.2151**	**0.0567**	**1.3700e-003**	**0.0580**		**238.0774**	**238.0774**	**7.8600e-003**		**238.2739**

3.6 Architectural Coating - 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					
Archit. Coating	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**4.4505**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 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	0.0000	0.0000	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	0.1152	0.0732	0.9173	2.3300e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3200e-003	0.0580		231.4713	231.4713	6.8900e-003		231.6436
Total	**0.1152**	**0.0732**	**0.9173**	**2.3300e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3200e-003**	**0.0580**		**231.4713**	**231.4713**	**6.8900e-003**		**231.6436**

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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**4.4505**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 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	0.0000	0.0000	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	0.1152	0.0732	0.9173	2.3300e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3200e-003	0.0580		231.4713	231.4713	6.8900e-003		231.6436
Total	**0.1152**	**0.0732**	**0.9173**	**2.3300e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3200e-003**	**0.0580**		**231.4713**	**231.4713**	**6.8900e-003**		**231.6436**

3.7 Paving - 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	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618		1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0182**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**		**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.7 Paving - 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	0.0000	0.0000	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	0.0576	0.0366	0.4586	1.1600e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		115.7356	115.7356	3.4500e-003		115.8218
Total	**0.0576**	**0.0366**	**0.4586**	**1.1600e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**115.7356**	**115.7356**	**3.4500e-003**		**115.8218**

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	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618	0.0000	1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0182**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**	**0.0000**	**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.7 Paving - 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	0.0000	0.0000	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	0.0576	0.0366	0.4586	1.1600e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		115.7356	115.7356	3.4500e-003		115.8218
Total	**0.0576**	**0.0366**	**0.4586**	**1.1600e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**115.7356**	**115.7356**	**3.4500e-003**		**115.8218**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

	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	2.2732	7.4951	19.3740	0.0547	4.1348	0.0578	4.1925	1.1065	0.0543	1.1609		5,505.9293	5,505.9293	0.2331		5,511.7559
Unmitigated	2.4964	9.0596	25.3863	0.0760	5.9068	0.0789	5.9857	1.5808	0.0743	1.6550		7,648.0630	7,648.0630	0.2956		7,655.4525

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	2,717,253	1,902,077
Total	1,203.65	1,156.59	1,060.66	2,717,253	1,902,077

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.571348	0.041302	0.187452	0.129481	0.019048	0.005152	0.010609	0.022861	0.001566	0.001884	0.005572	0.002772	0.000953

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	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
NaturalGas Unmitigated	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076

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					
Apartments Mid Rise	5489.05	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Total		**0.0592**	**0.5059**	**0.2153**	**3.2300e-003**		**0.0409**	**0.0409**		**0.0409**	**0.0409**		**645.7701**	**645.7701**	**0.0124**	**0.0118**	**649.6076**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Mid Rise	5.48905	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Total		**0.0592**	**0.5059**	**0.2153**	**3.2300e-003**		**0.0409**	**0.0409**		**0.0409**	**0.0409**		**645.7701**	**645.7701**	**0.0124**	**0.0118**	**649.6076**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Unmitigated	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4594	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822		26.8880	26.8880	0.0264		27.5478
Total	**2.1427**	**0.1738**	**15.0067**	**7.9000e-004**		**0.0822**	**0.0822**		**0.0822**	**0.0822**	**0.0000**	**26.8880**	**26.8880**	**0.0264**	**0.0000**	**27.5478**

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4594	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822		26.8880	26.8880	0.0264		27.5478
Total	**2.1427**	**0.1738**	**15.0067**	**7.9000e-004**		**0.0822**	**0.0822**		**0.0822**	**0.0822**	**0.0000**	**26.8880**	**26.8880**	**0.0264**	**0.0000**	**27.5478**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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

Willow Pass Apartments Infill Exemption Initial Study

Contra Costa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	181.00	Dwelling Unit	1.53	66,646.80	494

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**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 - Refer to CalEEMod table

Construction Phase - Refer to CalEEMod tables

Demolition -

Woodstoves - No hearths

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	226.00
tblConstructionPhase	NumDays	200.00	277.00
tblConstructionPhase	NumDays	20.00	28.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	PhaseEndDate	2/7/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	1/10/2018	5/11/2018
tblConstructionPhase	PhaseEndDate	3/28/2017	4/7/2017
tblConstructionPhase	PhaseEndDate	4/5/2017	4/19/2017
tblConstructionPhase	PhaseEndDate	1/24/2018	5/31/2018
tblConstructionPhase	PhaseEndDate	3/30/2017	4/11/2017
tblConstructionPhase	PhaseStartDate	1/25/2018	7/20/2017
tblConstructionPhase	PhaseStartDate	4/6/2017	4/20/2017
tblConstructionPhase	PhaseStartDate	3/31/2017	4/12/2017
tblConstructionPhase	PhaseStartDate	1/11/2018	5/12/2018
tblConstructionPhase	PhaseStartDate	3/29/2017	4/8/2017
tblFireplaces	NumberGas	27.15	0.00
tblFireplaces	NumberNoFireplace	7.24	181.00
tblFireplaces	NumberWood	30.77	0.00
tblGrading	AcresOfGrading	2.25	1.50
tblLandUse	BuildingSpaceSquareFeet	181,000.00	66,646.80
tblLandUse	LandUseSquareFeet	181,000.00	66,646.80
tblLandUse	LotAcreage	4.76	1.53
tblLandUse	Population	518.00	494.00
tblProjectCharacteristics	OperationalYear	2018	2019

tblWoodstoves	NumberCatalytic	3.62	0.00
tblWoodstoves	NumberNoncatalytic	3.62	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	8.3658	27.8585	22.9276	0.0432	5.8653	1.6546	6.9108	2.9711	1.5470	3.9330	0.0000	4,166.0803	4,166.0803	0.6287	0.0000	4,179.5339
2018	7.8526	22.5435	21.5808	0.0428	1.4101	1.2385	2.6486	0.3769	1.2004	1.5774	0.0000	4,115.6911	4,115.6911	0.5063	0.0000	4,128.3483
Maximum	**8.3658**	**27.8585**	**22.9276**	**0.0432**	**5.8653**	**1.6546**	**6.9108**	**2.9711**	**1.5470**	**3.9330**	**0.0000**	**4,166.0803**	**4,166.0803**	**0.6287**	**0.0000**	**4,179.5339**

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	8.3658	27.8585	22.9276	0.0432	2.6755	1.6546	3.7210	1.3466	1.5470	2.3085	0.0000	4,166.0803	4,166.0803	0.6287	0.0000	4,179.5339
2018	7.8526	22.5435	21.5808	0.0428	1.4101	1.2385	2.6486	0.3769	1.2004	1.5774	0.0000	4,115.6911	4,115.6911	0.5063	0.0000	4,128.3483
Maximum	**8.3658**	**27.8585**	**22.9276**	**0.0432**	**2.6755**	**1.6546**	**3.7210**	**1.3466**	**1.5470**	**2.3085**	**0.0000**	**4,166.0803**	**4,166.0803**	**0.6287**	**0.0000**	**4,179.5339**

	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**	**43.84**	**0.00**	**33.37**	**48.52**	**0.00**	**29.48**	**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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Energy	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Mobile	2.0811	9.6115	25.3878	0.0701	5.9068	0.0797	5.9865	1.5808	0.0750	1.6558		7,051.8356	7,051.8356	0.2998		7,059.3305
Total	**4.2829**	**10.2912**	**40.6097**	**0.0741**	**5.9068**	**0.2029**	**6.1097**	**1.5808**	**0.1982**	**1.7789**	**0.0000**	**7,724.4937**	**7,724.4937**	**0.3386**	**0.0118**	**7,736.4858**

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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Energy	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Mobile	1.8635	7.8795	20.1950	0.0504	4.1348	0.0586	4.1933	1.1065	0.0551	1.1616		5,076.2025	5,076.2025	0.2418		5,082.2473
Total	**4.0654**	**8.5592**	**35.4170**	**0.0545**	**4.1348**	**0.1817**	**4.3165**	**1.1065**	**0.1782**	**1.2848**	**0.0000**	**5,748.8606**	**5,748.8606**	**0.2806**	**0.0118**	**5,759.4027**

	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	5.08	16.83	12.79	26.49	30.00	10.43	29.35	30.00	10.06	27.78	0.00	25.58	25.58	17.13	0.00	25.56

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	3/1/2017	4/7/2017	5	28	
2	Site Preparation	Site Preparation	4/8/2017	4/11/2017	5	2	
3	Grading	Grading	4/12/2017	4/19/2017	5	6	
4	Building Construction	Building Construction	4/20/2017	5/11/2018	5	277	
5	Architectural Coating	Architectural Coating	7/20/2017	5/31/2018	5	226	
6	Paving	Paving	5/12/2018	5/31/2018	5	14	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 134,960; Residential Outdoor: 44,987; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Willow Pass Apartments Infill Exemption Initial Study - Contra Costa County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	82.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	130.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					0.6356	0.0000	0.6356	0.0962	0.0000	0.0962			0.0000			0.0000
Off-Road	2.7625	26.7594	15.5573	0.0241		1.6477	1.6477		1.5404	1.5404		2,421.4229	2,421.4229	0.6125		2,436.7347
Total	**2.7625**	**26.7594**	**15.5573**	**0.0241**	**0.6356**	**1.6477**	**2.2833**	**0.0962**	**1.5404**	**1.6366**		**2,421.4229**	**2,421.4229**	**0.6125**		**2,436.7347**

3.2 Demolition - 2017

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	0.0335	1.0471	0.2004	2.3500e-003	0.0512	6.1600e-003	0.0573	0.0140	5.9000e-003	0.0199		249.2201	249.2201	0.0126		249.5340
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	0.0660	0.0519	0.4889	1.0900e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		107.8899	107.8899	3.6800e-003		107.9821
Total	**0.0994**	**1.0990**	**0.6892**	**3.4400e-003**	**0.1579**	**6.9000e-003**	**0.1648**	**0.0423**	**6.5800e-003**	**0.0489**		**357.1100**	**357.1100**	**0.0162**		**357.5160**

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					0.2860	0.0000	0.2860	0.0433	0.0000	0.0433			0.0000			0.0000
Off-Road	2.7625	26.7594	15.5573	0.0241		1.6477	1.6477		1.5404	1.5404	0.0000	2,421.4229	2,421.4229	0.6125		2,436.7347
Total	**2.7625**	**26.7594**	**15.5573**	**0.0241**	**0.2860**	**1.6477**	**1.9337**	**0.0433**	**1.5404**	**1.5837**	**0.0000**	**2,421.4229**	**2,421.4229**	**0.6125**		**2,436.7347**

3.2 Demolition - 2017

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	0.0335	1.0471	0.2004	2.3500e-003	0.0512	6.1600e-003	0.0573	0.0140	5.9000e-003	0.0199		249.2201	249.2201	0.0126		249.5340
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	0.0660	0.0519	0.4889	1.0900e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		107.8899	107.8899	3.6800e-003		107.9821
Total	**0.0994**	**1.0990**	**0.6892**	**3.4400e-003**	**0.1579**	**6.9000e-003**	**0.1648**	**0.0423**	**6.5800e-003**	**0.0489**		**357.1100**	**357.1100**	**0.0162**		**357.5160**

3.3 Site Preparation - 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					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.9297	22.2106	8.4016	0.0172		1.0451	1.0451		0.9615	0.9615		1,764.2381	1,764.2381	0.5406		1,777.7521
Total	**1.9297**	**22.2106**	**8.4016**	**0.0172**	**5.7996**	**1.0451**	**6.8446**	**2.9537**	**0.9615**	**3.9152**		**1,764.2381**	**1,764.2381**	**0.5406**		**1,777.7521**

3.3 Site Preparation - 2017

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	0.0406	0.0319	0.3008	6.7000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		66.3938	66.3938	2.2700e-003		66.4505
Total	**0.0406**	**0.0319**	**0.3008**	**6.7000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**66.3938**	**66.3938**	**2.2700e-003**		**66.4505**

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					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.9297	22.2106	8.4016	0.0172		1.0451	1.0451		0.9615	0.9615	0.0000	1,764.2381	1,764.2381	0.5406		1,777.7521
Total	**1.9297**	**22.2106**	**8.4016**	**0.0172**	**2.6098**	**1.0451**	**3.6549**	**1.3292**	**0.9615**	**2.2906**	**0.0000**	**1,764.2381**	**1,764.2381**	**0.5406**		**1,777.7521**

3.3 Site Preparation - 2017

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	0.0406	0.0319	0.3008	6.7000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		66.3938	66.3938	2.2700e-003		66.4505
Total	**0.0406**	**0.0319**	**0.3008**	**6.7000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**66.3938**	**66.3938**	**2.2700e-003**		**66.4505**

3.4 Grading - 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					
Fugitive Dust					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	1.6023	18.2915	7.0342	0.0141		0.8738	0.8738		0.8039	0.8039		1,444.8958	1,444.8958	0.4427		1,455.9636
Total	**1.6023**	**18.2915**	**7.0342**	**0.0141**	**4.7817**	**0.8738**	**5.6554**	**2.5113**	**0.8039**	**3.3152**		**1,444.8958**	**1,444.8958**	**0.4427**		**1,455.9636**

3.4 Grading - 2017

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	0.0406	0.0319	0.3008	6.7000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		66.3938	66.3938	2.2700e-003		66.4505
Total	**0.0406**	**0.0319**	**0.3008**	**6.7000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**66.3938**	**66.3938**	**2.2700e-003**		**66.4505**

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					2.1518	0.0000	2.1518	1.1301	0.0000	1.1301			0.0000			0.0000
Off-Road	1.6023	18.2915	7.0342	0.0141		0.8738	0.8738		0.8039	0.8039	0.0000	1,444.8958	1,444.8958	0.4427		1,455.9636
Total	**1.6023**	**18.2915**	**7.0342**	**0.0141**	**2.1518**	**0.8738**	**3.0255**	**1.1301**	**0.8039**	**1.9339**	**0.0000**	**1,444.8958**	**1,444.8958**	**0.4427**		**1,455.9636**

3.4 Grading - 2017

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	0.0406	0.0319	0.3008	6.7000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		66.3938	66.3938	2.2700e-003		66.4505
Total	**0.0406**	**0.0319**	**0.3008**	**6.7000e-004**	**0.0657**	**4.6000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**		**66.3938**	**66.3938**	**2.2700e-003**		**66.4505**

3.5 Building Construction - 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					
Off-Road	2.9653	19.2365	14.3568	0.0220		1.2313	1.2313		1.1875	1.1875		2,043.8641	2,043.8641	0.4298		2,054.6085
Total	**2.9653**	**19.2365**	**14.3568**	**0.0220**		**1.2313**	**1.2313**		**1.1875**	**1.1875**		**2,043.8641**	**2,043.8641**	**0.4298**		**2,054.6085**

3.5 Building Construction - 2017

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	0.1247	2.7462	0.8365	5.1900e-003	0.1286	0.0267	0.1553	0.0370	0.0256	0.0626		546.0888	546.0888	0.0344		546.9498
Worker	0.6597	0.5190	4.8886	0.0109	1.0679	7.4100e-003	1.0753	0.2833	6.8400e-003	0.2901		1,078.8994	1,078.8994	0.0368		1,079.8205
Total	**0.7844**	**3.2651**	**5.7251**	**0.0160**	**1.1965**	**0.0341**	**1.2307**	**0.3203**	**0.0324**	**0.3527**		**1,624.9883**	**1,624.9883**	**0.0713**		**1,626.7704**

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	2.9653	19.2365	14.3568	0.0220		1.2313	1.2313		1.1875	1.1875	0.0000	2,043.8641	2,043.8641	0.4298		2,054.6085
Total	**2.9653**	**19.2365**	**14.3568**	**0.0220**		**1.2313**	**1.2313**		**1.1875**	**1.1875**	**0.0000**	**2,043.8641**	**2,043.8641**	**0.4298**		**2,054.6085**

3.5 Building Construction - 2017

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	0.1247	2.7462	0.8365	5.1900e-003	0.1286	0.0267	0.1553	0.0370	0.0256	0.0626		546.0888	546.0888	0.0344		546.9498
Worker	0.6597	0.5190	4.8886	0.0109	1.0679	7.4100e-003	1.0753	0.2833	6.8400e-003	0.2901		1,078.8994	1,078.8994	0.0368		1,079.8205
Total	**0.7844**	**3.2651**	**5.7251**	**0.0160**	**1.1965**	**0.0341**	**1.2307**	**0.3203**	**0.0324**	**0.3527**		**1,624.9883**	**1,624.9883**	**0.0713**		**1,626.7704**

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	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**		**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

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	0.1081	2.5682	0.7384	5.1800e-003	0.1286	0.0213	0.1499	0.0370	0.0204	0.0574		544.8787	544.8787	0.0322		545.6835
Worker	0.5852	0.4514	4.2597	0.0105	1.0679	7.1800e-003	1.0751	0.2833	6.6200e-003	0.2899		1,048.7709	1,048.7709	0.0321		1,049.5734
Total	**0.6933**	**3.0195**	**4.9981**	**0.0157**	**1.1965**	**0.0285**	**1.2250**	**0.3203**	**0.0270**	**0.3473**		**1,593.6496**	**1,593.6496**	**0.0643**		**1,595.2569**

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	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**	**0.0000**	**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

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	0.1081	2.5682	0.7384	5.1800e-003	0.1286	0.0213	0.1499	0.0370	0.0204	0.0574		544.8787	544.8787	0.0322		545.6835
Worker	0.5852	0.4514	4.2597	0.0105	1.0679	7.1800e-003	1.0751	0.2833	6.6200e-003	0.2899		1,048.7709	1,048.7709	0.0321		1,049.5734
Total	**0.6933**	**3.0195**	**4.9981**	**0.0157**	**1.1965**	**0.0285**	**1.2250**	**0.3203**	**0.0270**	**0.3473**		**1,593.6496**	**1,593.6496**	**0.0643**		**1,595.2569**

3.6 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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.1909
Total	**4.4841**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 2017

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	0.1319	0.1038	0.9777	2.1700e-003	0.2136	1.4800e-003	0.2151	0.0567	1.3700e-003	0.0580		215.7799	215.7799	7.3700e-003		215.9641
Total	**0.1319**	**0.1038**	**0.9777**	**2.1700e-003**	**0.2136**	**1.4800e-003**	**0.2151**	**0.0567**	**1.3700e-003**	**0.0580**		**215.7799**	**215.7799**	**7.3700e-003**		**215.9641**

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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.1909
Total	**4.4841**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.1909**

3.6 Architectural Coating - 2017

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	0.1319	0.1038	0.9777	2.1700e-003	0.2136	1.4800e-003	0.2151	0.0567	1.3700e-003	0.0580		215.7799	215.7799	7.3700e-003		215.9641
Total	**0.1319**	**0.1038**	**0.9777**	**2.1700e-003**	**0.2136**	**1.4800e-003**	**0.2151**	**0.0567**	**1.3700e-003**	**0.0580**		**215.7799**	**215.7799**	**7.3700e-003**		**215.9641**

3.6 Architectural Coating - 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					
Archit. Coating	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**4.4505**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 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	0.0000	0.0000	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	0.1170	0.0903	0.8519	2.1100e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3200e-003	0.0580		209.7542	209.7542	6.4200e-003		209.9147
Total	**0.1170**	**0.0903**	**0.8519**	**2.1100e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3200e-003**	**0.0580**		**209.7542**	**209.7542**	**6.4200e-003**		**209.9147**

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	4.1518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**4.4505**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 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	0.0000	0.0000	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	0.1170	0.0903	0.8519	2.1100e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3200e-003	0.0580		209.7542	209.7542	6.4200e-003		209.9147
Total	**0.1170**	**0.0903**	**0.8519**	**2.1100e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3200e-003**	**0.0580**		**209.7542**	**209.7542**	**6.4200e-003**		**209.9147**

3.7 Paving - 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	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618		1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0182**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**		**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.7 Paving - 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	0.0000	0.0000	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	0.0585	0.0451	0.4260	1.0500e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		104.8771	104.8771	3.2100e-003		104.9573
Total	**0.0585**	**0.0451**	**0.4260**	**1.0500e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**104.8771**	**104.8771**	**3.2100e-003**		**104.9573**

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	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618	0.0000	1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0182**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**	**0.0000**	**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.7 Paving - 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	0.0000	0.0000	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	0.0585	0.0451	0.4260	1.0500e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		104.8771	104.8771	3.2100e-003		104.9573
Total	**0.0585**	**0.0451**	**0.4260**	**1.0500e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**		**104.8771**	**104.8771**	**3.2100e-003**		**104.9573**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

	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	1.8635	7.8795	20.1950	0.0504	4.1348	0.0586	4.1933	1.1065	0.0551	1.1616		5,076.2025	5,076.2025	0.2418		5,082.2473
Unmitigated	2.0811	9.6115	25.3878	0.0701	5.9068	0.0797	5.9865	1.5808	0.0750	1.6558		7,051.8356	7,051.8356	0.2998		7,059.3305

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,203.65	1,156.59	1060.66	2,717,253	1,902,077
Total	1,203.65	1,156.59	1,060.66	2,717,253	1,902,077

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.571348	0.041302	0.187452	0.129481	0.019048	0.005152	0.010609	0.022861	0.001566	0.001884	0.005572	0.002772	0.000953

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	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
NaturalGas Unmitigated	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076

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					
Apartments Mid Rise	5489.05	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Total		**0.0592**	**0.5059**	**0.2153**	**3.2300e-003**		**0.0409**	**0.0409**		**0.0409**	**0.0409**		**645.7701**	**645.7701**	**0.0124**	**0.0118**	**649.6076**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Mid Rise	5.48905	0.0592	0.5059	0.2153	3.2300e-003		0.0409	0.0409		0.0409	0.0409		645.7701	645.7701	0.0124	0.0118	649.6076
Total		**0.0592**	**0.5059**	**0.2153**	**3.2300e-003**		**0.0409**	**0.0409**		**0.0409**	**0.0409**		**645.7701**	**645.7701**	**0.0124**	**0.0118**	**649.6076**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478
Unmitigated	2.1427	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822	0.0000	26.8880	26.8880	0.0264	0.0000	27.5478

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4594	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822		26.8880	26.8880	0.0264		27.5478
Total	**2.1427**	**0.1738**	**15.0067**	**7.9000e-004**		**0.0822**	**0.0822**		**0.0822**	**0.0822**	**0.0000**	**26.8880**	**26.8880**	**0.0264**	**0.0000**	**27.5478**

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4262					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4594	0.1738	15.0067	7.9000e-004		0.0822	0.0822		0.0822	0.0822		26.8880	26.8880	0.0264		27.5478
Total	**2.1427**	**0.1738**	**15.0067**	**7.9000e-004**		**0.0822**	**0.0822**		**0.0822**	**0.0822**	**0.0000**	**26.8880**	**26.8880**	**0.0264**	**0.0000**	**27.5478**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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

APPENDIX B

PROTECTED SPECIES LISTS

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: (Federal Listing Status IS (Endangered OR Threatened) OR State Listing Status IS (Endangered OR Threatened))
 AND County IS (Contra Costa)
 AND Quad IS (Walnut Creek (3712281))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Masticophis lateralis euryxanthus Alameda whipsnake	ARADB21031	Threatened	Threatened	G4T2	S2	
Oenothera deltoides ssp. howellii Antioch Dunes evening-primrose	PDONA0C0B4	Endangered	Endangered	G5T1	S1	1B.1
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC

Record Count: 5

U.S. Fish & Wildlife Service

Willow Pass Apartments Infill Exemption IS

IPaC Trust Resources Report

Generated November 10, 2016 12:55 PM MST, IPaC v3.0.9

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.

IPaC - Information for Planning and Conservation (https://ecos.fws.gov/ipac/): A project planning tool to help streamline the U.S. Fish & Wildlife Service environmental review process.

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U.S. Fish & Wildlife Service

IPaC Trust Resources Report

NAME

Willow Pass Apartments Infill Exemption IS

LOCATION

Contra Costa County, California

DESCRIPTION

2400 Willow Pass Road, Concord, California

IPAC LINK

https://ecos.fws.gov/ipac/project/PS2WJ-F4YC5-E5RCU-23L7N-ZBTSJQ

U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Amphibians

California Red-legged Frog Rana draytonii — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=D02D

California Tiger Salamander Ambystoma californiense — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=D01T

Birds

California Clapper Rail Rallus longirostris obsoletus — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B04A

California Least Tern Sterna antillarum browni — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B03X

Crustaceans

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K03G

Fishes

Delta Smelt Hypomesus transpacificus — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E070

Steelhead Oncorhynchus (=Salmo) mykiss — Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E08D

Flowering Plants

Antioch Dunes Evening-primrose Oenothera deltoides ssp. howellii — Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q1ZN

Contra Costa Goldfields Lasthenia conjugens — Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q122

Insects

Callippe Silverspot Butterfly Speyeria callippe callippe — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I019

San Bruno Elfin Butterfly Callophrys mossii bayensis — Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I00Q

Reptiles

Alameda Whipsnake (=striped Racer) Masticophis lateralis euryxanthus — Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C04A

Giant Garter Snake Thamnophis gigas — Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=C057

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.[1] There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

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1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern
  http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds
  http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data
  http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The following species of migratory birds could potentially be affected by activities in this location:

Allen's Hummingbird Selasphorus sasin — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0LI

Bald Eagle Haliaeetus leucocephalus — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008

Bell's Sparrow Amphispiza belli — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HE

Black Oystercatcher Haematopus bachmani — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0KJ

Black Rail Laterallus jamaicensis — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B09A

Burrowing Owl Athene cunicularia — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0NC

Costa's Hummingbird Calypte costae — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JE

Fox Sparrow Passerella iliaca — Bird of conservation concern
Season: Wintering

Lawrence's Goldfinch Carduelis lawrencei — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0J8

Least Bittern Ixobrychus exilis
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B092

Lesser Yellowlegs Tringa flavipes — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MD

Lewis's Woodpecker Melanerpes lewis — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HQ

Long-billed Curlew Numenius americanus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S

Marbled Godwit Limosa fedoa — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JL

Mountain Plover Charadrius montanus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B078

Nuttall's Woodpecker Picoides nuttallii — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HT

Oak Titmouse Baeolophus inornatus — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ

Peregrine Falcon Falco peregrinus — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Rufous-crowned Sparrow Aimophila ruficeps — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MX

Short-billed Dowitcher Limnodromus griseus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JK

Short-eared Owl Asio flammeus — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Snowy Plover Charadrius alexandrinus — Bird of conservation concern
Season: Breeding

Swainson's Hawk Buteo swainsoni — Bird of conservation concern
Season: Breeding
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B070

Tricolored Blackbird Agelaius tricolor — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06P

Western Grebe aechmophorus occidentalis — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA

Yellow Rail Coturnicops noveboracensis — Bird of conservation concern
Season: Wintering
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JG

Yellow-billed Magpie Pica nuttalli — Bird of conservation concern
Season: Year-round
http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0N8

Wildlife refuges and fish hatcheries

There are no refuges or fish hatcheries in this location

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

There are no wetlands in this location

APPENDIX C

CULTURAL RESOURCES TECHNICAL MEMORANDUM

ANALYTICAL ENVIRONMENTAL SERVICES

TECHNICAL MEMORANDUM

DATE: November 15, 2016
TO: City of Concord
FROM: Trenton Wilson, Charlane Gross
SUBJECT: Summary for Argent Residential Infill Project, Concord, CA

BACKGROUND OF PROJECT

The programmatic Environmental Impact Report (EIR) (City of Concord, 2007) prepared for the Concord 2030 Urban Area General Plan EIR (General Plan EIR), and subsequent updates, requires projects that are implemented under the General Plan to conduct a project-specific level analysis to determine if there are significant impacts to cultural and archaeological resources that would result from development of individual projects. As a result, this Technical Memorandum has been prepared, summarizing the results of a background record search, archaeological survey, and historical resources evaluation for the Argent Residential Infill Project (Proposed Project).

INTRODUCTION

The Proposed Project is located at 2400 Willow Pass Road, in Concord, CA on a block bounded by Willow Pass Road, East Street, Concord Boulevard and Port Chicago Highway (**Figures 1 and 2**). The Property consists of one parcel (APN 126-082-008) of approximately 1.49 acre total area. The parcel is mostly developed, with a multi-tenant commercial building and parking (**Figure 3**). The Proposed Project would replace the commercial building with a seven-story (one subterranean level) apartment complex and attendant parking, landscaping, etc.

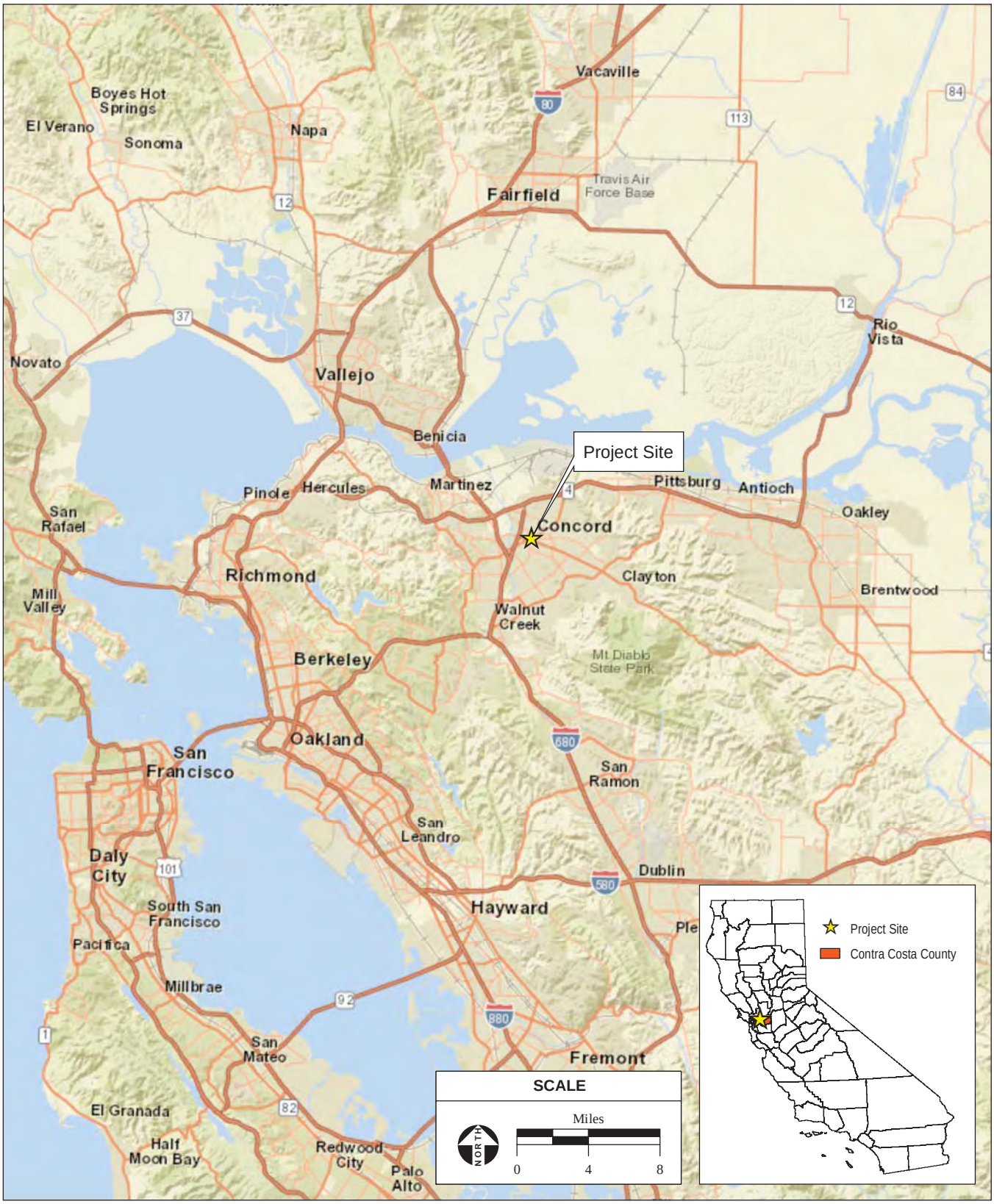
The Proposed Project site is located in an unsectioned area within Township 2 North, Range 1 West, as depicted on the Walnut Creek, CA 7.5' USGS quadrangle map.

REGULATORY SETTING

California Environmental Quality Act

CEQA requires that, for projects financed by, or requiring the discretionary approval of public agencies in California, that the effects that a proposed project has on historical or unique archaeological resources be considered (Public Resources Code Section 21083.2). Historical resources are buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance (PRC Section 50201). CEQA Guidelines Section 15064.5 define three cases in which a property may qualify as a historical resource for the purpose of CEQA review:

1. If it is listed in, or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (CRHR); or



SOURCE: ESRI Data, 2016; AES, 11/15/2016

Figure 1
Project Location

SOURCE: "Walnut Creek, CA" USGS 7.5 Minute Topographic Quadrangle, T2N R1W, Unsectioned Area of Walnut Creek, Mt. Diablo Baseline & Meridian; ESRI Data, 2016; AES, 11/15/2016

Figure 2
Site and Vicinity

SOURCE: DigitalGlobe aerial phohtograph, 10/30/2015; ESRI Data, 2016; AES, 11/15/2016

Figure 3
Aerial of Project Site

2. It is included in a local register of historical resource or identified as significant in a qualifying historical resource survey; or
3. The resource appears in, or is determined eligible for the listing, in the CRHR. Public Resources Code Section 5024.1 and CEQA Guidelines 15064.5 define eligibility requirements and states that a resource may be eligible for inclusion in the CRHR if it:
    1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    2. is associated with the lives of persons important in our past;
    3. embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
    4. has yielded, or may be likely to yield, information important in prehistory or history.

Sites younger than 45 years, unless of exceptional importance, are not eligible for listing in the CRHR. Properties must retain integrity to be eligible for listing on the CRHR. Properties that are listed in or eligible for listing in the National Register of Historic Places are automatically considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (PRC section 5024.1(d)(1)).

a) The resource is included in a local register of historic resources, as defined in section 5020.1(k) of the PRC, or is identified as significant in a historical resources survey that meets the requirements of section 5024.1(g) of the PRC (unless the preponderance of evidence demonstrates that the resource is not historically or culturally significant).
b) The lead agency determines that the resource may be a historical resource as defined in PRC section 5020.1(j), 5024.1, or significant as supported by substantial evidence in light of the whole record.

Public Resources Code Section 21083.2 governs the treatment of unique archaeological resources, defined as "an archaeological artifact, object, or site about which it can be clearly demonstrated" as meeting any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CULTURAL SETTING

Prehistory

The proposed project site is located at the northeastern edge of an area that was occupied by the Penutian–speaking Bay Miwok at the time the Spanish arrived in northern California in the 18th century. Their territory encompassed much of the San Francisco Bay area and extended eastward to the Central Valley. The Bay Miwok are known to have occupied this region at least since 300 A.D., though their presence may date back as far as 2500 B.C. At the time of contact with the Europeans, there were an estimated 7,000 to 10,000 Native Americans living in the coastal area stretching from Point Sur in Monterey County, northward through the Coast Ranges to the Sacramento River Delta and eastward to the San Joaquin River. The Bay Miwok were one of five geographically and linguistically distinct groups in the area, including Costanoan, Patwin, Wappo, Coast Miwok and Bay Miwok (Basin, 2013; ESA, 2009).

The Bay Miwok Indians were organized in triblets of related families, who were well-placed to exploit the rich resources offered by estuaries and grasslands. Proximity to Spanish missions led to early resettlement and conversion at the same time European diseases were taking significant toll on the population by the first half of the 19th century (Basin, 2013; ESA, 2009).

History

The first expedition into the East Bay occurred in 1772 when Pedro Fages and his party explored the San Francisco Bay and Carquinez Strait, including the Diablo and Livermore Valleys near Concord. In the spring of 1776, Captain Juan Bautista de Anza established the San Francisco Presidio and by April 1, de Anza's men had traveled through San Francisco, down the peninsula and up the East Bay shoreline, passing through Antioch and the plains of eastern Contra Costa County toward Tracy (Basin, 2013; ESA, 2009).

The establishment of the Mission Dolores in San Francisco in the same year began the "Mission Period" in the San Francisco Bay area, part of an effort by the Spanish to spread Christianity through the establishment of 21 Roman Catholic missions in Alta California in the late 18th and early 19th centuries. The missions in the East Bay were used to graze thousands of cattle and sheep, as well as for grain production and housed several hundred native Bay Miwok Indian converts (Basin, 2013; ESA, 2009).

In 1833–34, the Mexican government secularized the Spanish missions and many mission lands were also subsequently granted to individuals who established the great ranchos, or vast cattle raising estates. The project site was part of the *Rancho Monte del Diablo*, granted to Salvio Pacheco in 1834 (Basin, 2013; Beck and Haase, 1974; ESA, 2009; Hoover, et al., 2002).

Historical information indicates that the Proposed Project site was vacant and undeveloped in 1915 and 1917. Neighboring blocks were being developed by the 1920s, and by 1945 an office/warehouse building occupied the site. That structure was present in 1948 but removed by 1959. By 1966, a single building similar to the current structure was located on the Property. No city directory listings were found for the Property between 1960 and 1980. Occupants of this building from 1980 and later have included retail

businesses; Sattler's TV Video and Appliances, Gamba's TV Service, an auto parts store, a credit union office, banks, a video rental store, a stationery and office supply store, and a Halloween costume and make up store (ERAS Environmental, 2015).

METHODS

A background record search was performed at the Northwest Information Center (NWIC) of the California Historical Resources Information System on November 9, 2016 (IC File Number 16-0718). Additional research was conducted using files and literature maintained at AES, as well as internet resources. The record search included a review of the National Register of Historic Places; The California Register of Historical Resources; California Points of Historical Interest; California Inventory of Historic Resources; California Historical Landmarks; Directory of Properties in the Historic Property Data Files for Contra Costa County; and Archaeological Determinations of Eligibility. A Phase I site assessment (ERAS, 2015) prepared for the Proposed Project included a review of historic development of the property, and included the fact that the current structure dates to 1966.

Native American Consultation

A request was sent to the Native American Heritage Commission (NAHC) on November 7, 2016. No response has been received as of this writing.

RESULTS

AES archaeologist Charlane Gross, M.A., RPA, who meets the Secretary of the Interior's Standards and Guidelines for Archaeology completed an archaeological site survey on November 9, 2016. Between the building and parking lot, the project site was almost entirely developed. The only open areas were in medians within the parking lot and around the parking lot edges (**Figure 4**), in varying width planted strips between the parking lot and sidewalks. It is highly likely that all soils found within those areas was either transported or disturbed, and no cultural resources were observed. The building (**Figure 5)** lacks a specific architectural style, but could best be described as a contemporary commercial Spanish Colonial revival design.

RECOMMENDATIONS

No prehistoric sites, features, or artifacts were identified. The closest natural water source, Galinda Creek, is approximately 0.5 miles to the south, indicating a low potential for buried prehisotirc resources. The building is technically historic, but lacks any association with persons or events significant in California history (CRHR criteria 1 and 2), does not embody the distinctive characteristics of a type, period, region, or method of construction (CRHR Criterion 3), and is unlikely to yield information important in prehistory or history (CRHR Criterion 4). Therefore, AES recommends a finding of *No Historical Resources Affected*.

While no significant archaeological or paleontological deposits or site indicators were observed, there is some potential for buried resources which could be uncovered during future ground-disturbing activities.

Figure 4. Open Median Behind Building

Figure 5. Building

These might include, but are not limited to: flakes and chipped stone tools; grinding implements such as millingstones, manos, mortars and pestles; midden soils, fragments of bone, shellfish, and fire affected rock; construction materials and building foundations; wells or privies; deposits of metal, glass, and/or

ceramic refuse; and vertebrate and invertebrate fossils. If these or similar resources are uncovered at the Proposed Project site, all work within 50 feet of the discovery should be halted until a qualified professional archaeologist or paleontologist can evaluate the find and recommend appropriate mitigation.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all activities within a 100-foot radius of the find shall be halted immediately and the City's designated representative shall be notified. The City or their designated representative shall immediately notify the county coroner and a qualified professional archaeologist. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The City or its appointed representative and the professional archaeologist shall contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the City and the archaeologist shall determine the ultimate disposition of the remains.

REFERENCES

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Beck, W.A., and Y.D. Haase. *Historical Atlas of California*. University of Oklahoma Press. Norman and London.

Dyett & Bhatia, 2007. *Draft Environmental Impact Report, Concord 2030 Urban Area General Plan*.

ERAS Environmental, 2015. *Phase I Environmental Site Assessment, 2400 Willow Pass Road, Concord, California*. Prepared for Argent Pacific Group, Santa Cruz, California.

ESA, 2009. *Draft Bayview Residential Project Envirnmental Impact Report. State Clearing House No. 2008032074*. Prepared for Contra Costa County Department of Conservation and Development.

Hoover, M. B., H. E. Rensch, E. G. Rensch, and W. N. Abeloe, 2002. *Historic Spots in California*. Revised by D. E. Kyle. Stanford University Press, Stanford, CA.

PREPARER'S QUALIFICATIONS

Charlane Gross conducted the research and field survey and wrote this report. Ms. Gross has been a professional archaeologist for 28 years. She holds a Master of Arts in Social Sciences, with an emphasis on physical anthropology and archaeology, from San Jose State University. Ms. Gross' experience includes work that has been completed in compliance with local ordinances, CEQA, and Section 106 requirements. Her professional affiliations include the Society for California Archaeology and the Register of Professional Archaeologists.

STATEMENT OF CONFIDENTIALITY

As nonrenewable resources, archaeological sites can be significantly impacted by disturbances that can affect their cultural, scientific, and artistic values. Disclosure of site information to the public may be in violation of both federal and state laws. To discourage damage resulting from vandalism and artifact looting, cultural resources locations should be kept confidential and report distribution restricted. Applicable U.S. laws include, but are not be limited to, Section 304 of the National Historic Preservation Act (16 USC 470w-3) and the Archeological Resources Protection Act of 1979, as amended (PL 96-95; 93 Stat. 721; 16 USC 47Oaa et seq.). California state laws that apply include, but are not be limited to, Government Code Sections 6250 et seq. and 6254 et seq.

2400 WILLOW PASS

Argent Concord LLC
121 7th Avenue
Santa Cruz, CA 95062

CONCORD, CA

KTGY # 2015-1048 11.07.2016

KTGY Group, Inc.
Architecture+Planning
580 Second St., Suite 200
Oakland, CA 94607
510.272.2910
ktgy.com

EXHIBIT H

SHEET INDEX

Architectural

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A0.3 Existing Site Conditions
A0.4 Conceptual Fire Wall Diagram
A0.5 Solar Study
A0.6 Solar Study

A1.0 Conceptual Site Plan

A2.0 Building Elevations
A2.1 Building Elevations

A3.0 Conceptual Building Plan - Sub-Terranean Level
A3.1 Conceptual Building Plan - Level 1
A3.2 Conceptual Building Plan - Level 2
A3.3 Conceptual Building Plan - Level 3 - Podium
A3.4 Conceptual Building Plan - Level 4
A3.5 Conceptual Building Plan - Levels 5-6
A3.6 Conceptual Building Plan - Level 7
A3.7 Conceptual Building Plan - Roof

A4.0 Conceptual Building Sections
A4.1 Conceptual Building Sections

A5.0 Typical Unit Plans
A5.1 Townhome Unit Plan
A5.2 Townhome Unit Plan

A6.0 Conceptual Details
A6.1 Conceptual Details
A6.2 Conceptual Details
A6.3 Conceptual Details
A6.4 Conceptual Details- Lighting

A7.0 Perspective - Concord Boulevard
A7.1 Perspective - East Street
A7.2 Perspective - Willow Pass Road
A7.3 Perspective - Port Chicago Hwy.
A7.4 Perspective - Port Chicago Hwy. Bart View
A7.5 Perspective - Art Component

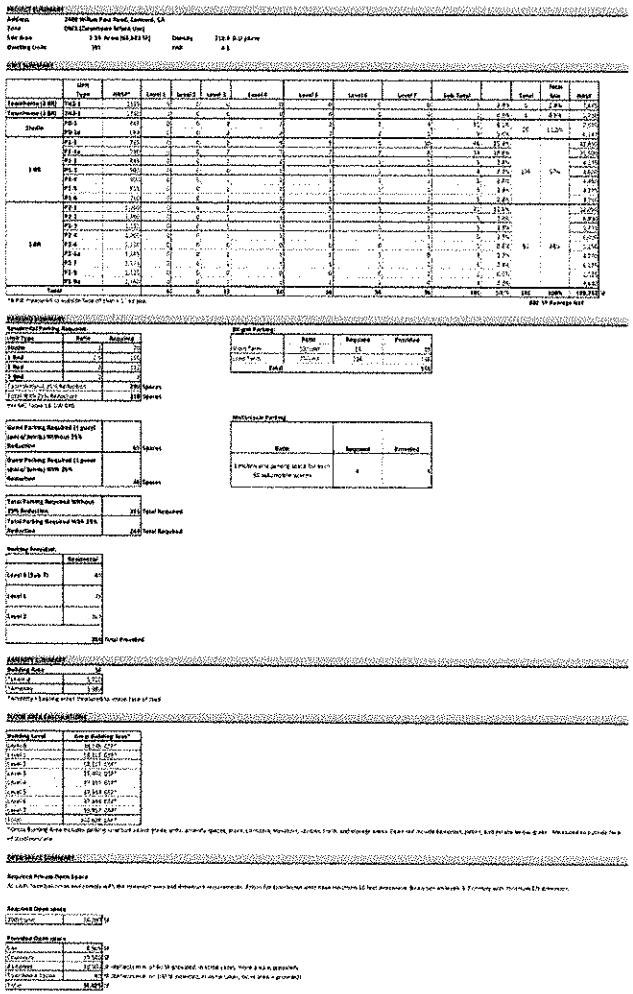
Landscape

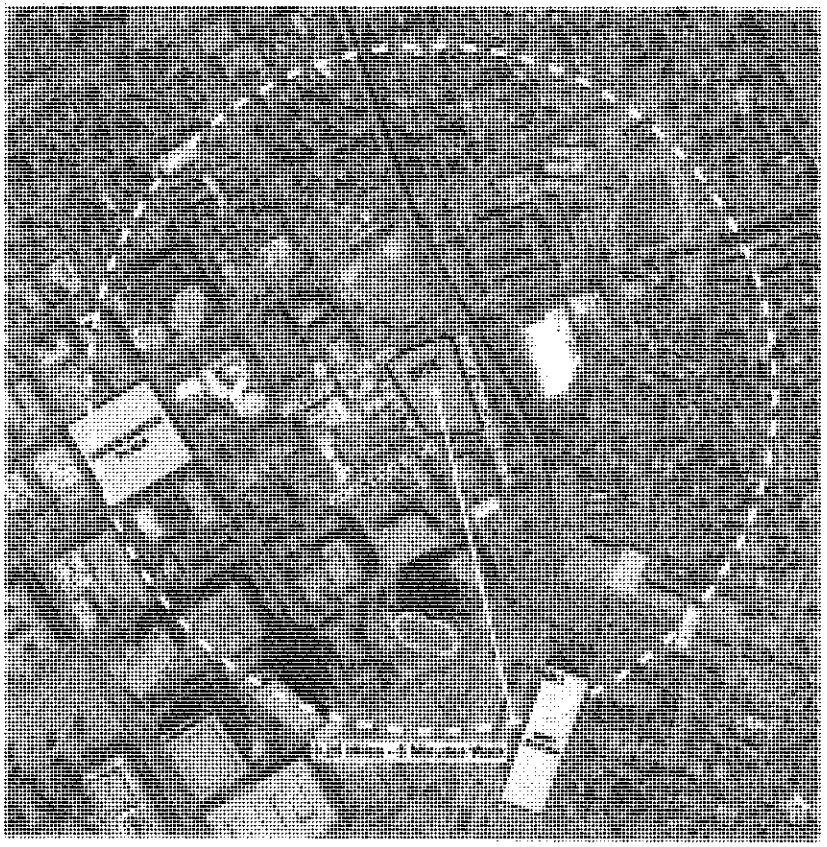
L1.0 Street Level Plan (Concept)
L1.1 Willow Pass Plaza (Concept)
L2.0 Podium Level Plan (Concept)
L3.1 Material & Furnishings Images
L3.2 Preliminary Plant Palette
L3.3 Product Specifications

Civil

C1.00 Cover
C1.01 Notes
C2.00 Sections & Details
C3.00 Topographic Survey
C4.00 Demolition Plan
C5.00 Horizontal Control Plan
C6.00 Grading and Drainage Plan
C7.00 Utility Plan
C8.00 Stormwater Control Plan
C8.01 Stormwater Control Plan Notes

Visibility Triangle Exhibit





Vicinity Map

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PROJECT DATA

CONCORD, CA

KTGY # 2015-1048 11.01.2016

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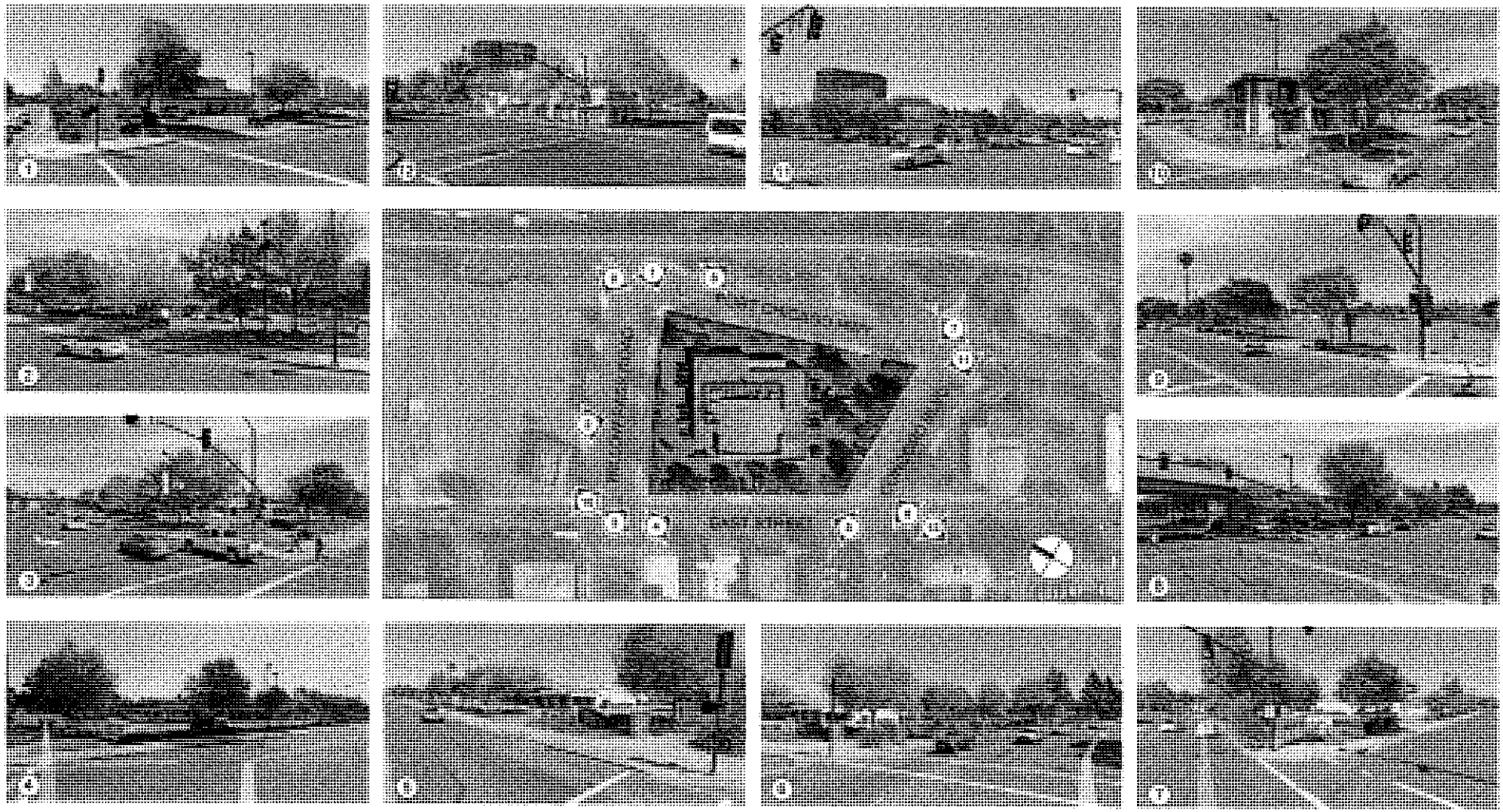

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EXISTING SITE CONDITIONS

CONCORD, CA

KTGY # 2013-0048 11.07.2014

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CBC 504.2 Building Height Increase
Allowable building heights (Per CBC 503): TYPE IIIA R2 = 85 feet, 4 Stories
Allowable building heights with Sprinkler Increase: TYPE IIIA R2 = 85 feet, 5 Stories

CBC 506.1 Building Area Increase
Aa = {At + [At x If] + [At x Is]}
Aa = Allowable building area per story
At = (Per Table 503)

CBC 506.2 Frontage Increase (If)
If = [F/P -0.25] x W/30 = 0 (Frontage Increase not taken)

CBC 506.3 Sprinkler Increase
Is = 0 (Sprinkler Used for Building Height Increase)

Max. Area per Building
Amax = Aa x 2

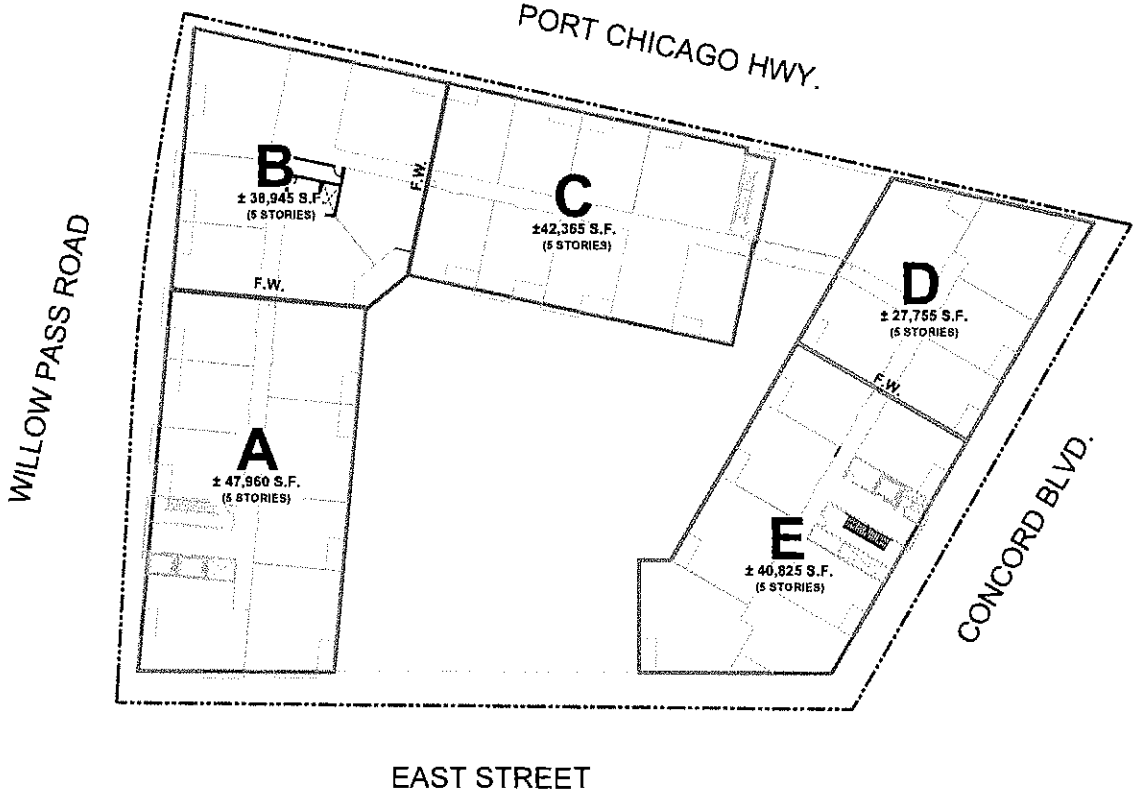
Aa = {At + [At x If] + [At x Is]}
Aa = {24,000 + [24,000 x 0] + {24,000 x 0]}
Aa = 24,000

Amax = Aa x 2
Amax = 24,000 x 2
Amax = 48,000

Therefore, 48,000sf is the max. allowable building area.
As shown in calculations below.

Fire Wall Areas

A	9,592 s.f. x (5 Floors)	=	±47,960 S.F.
B	7,789 s.f. x (5 floors)	=	±38,945 S.F.
C	8,473 s.f. x (5 floors)	=	±42,365 S.F.
D	5,551 s.f. x (5 floors)	=	±27,755 S.F.
E	8,165 s.f. x (5 floors)	=	±40,825 S.F.



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CONCEPTUAL FIREWALL DIAGRAM

CONCORD, CA

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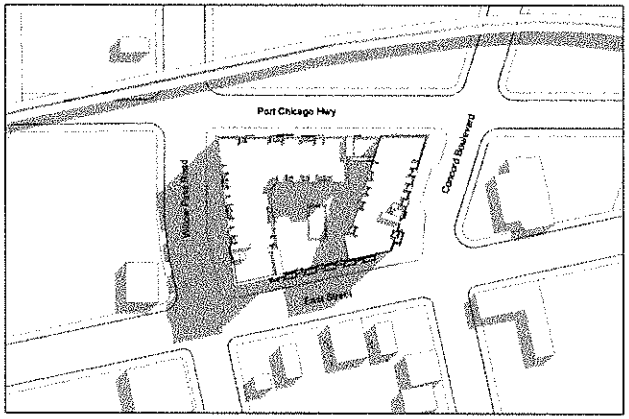
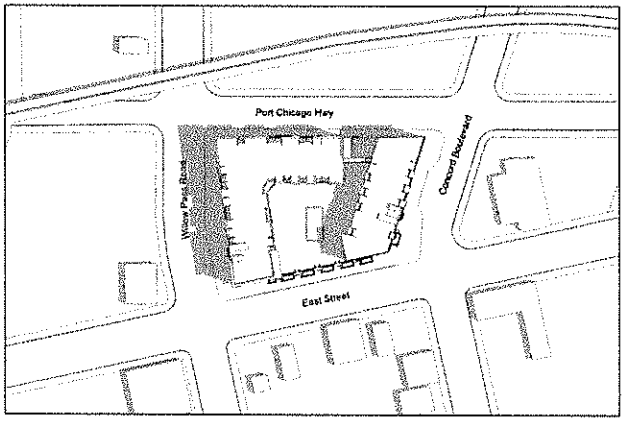


March 21
9:00 AM



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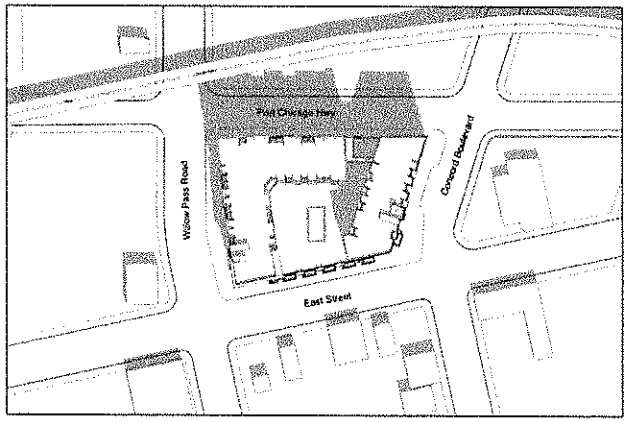

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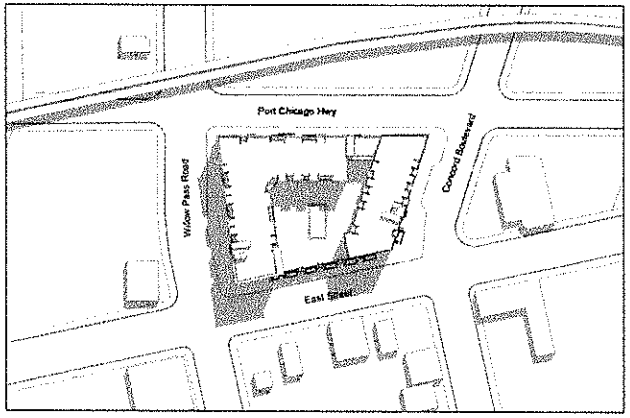

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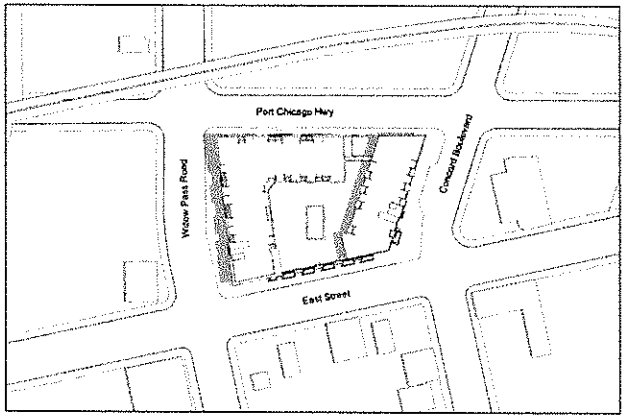

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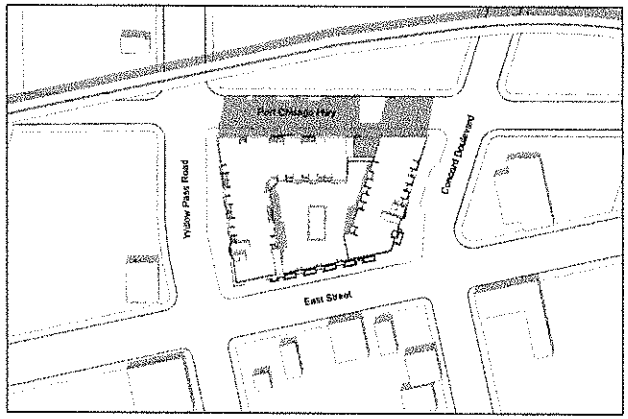

June 21
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SHADOW STUDY - MARCH AND JUNE

CONCORD, CA

KTGY # 2015-1048 11.07.2016

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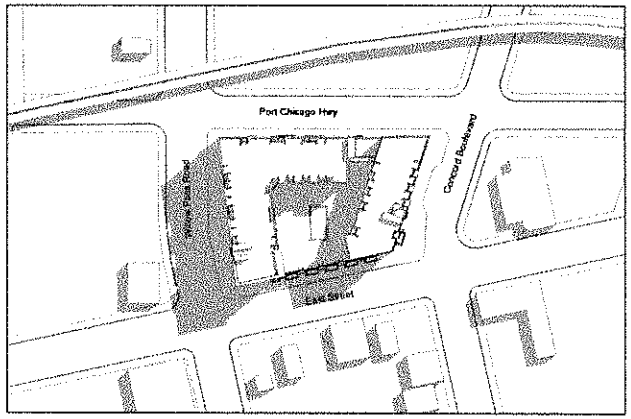

September 21
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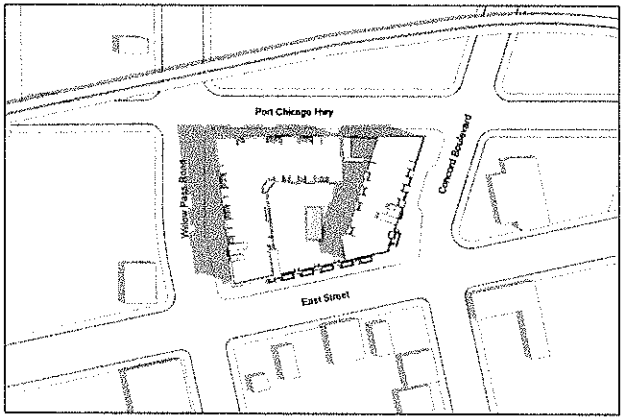

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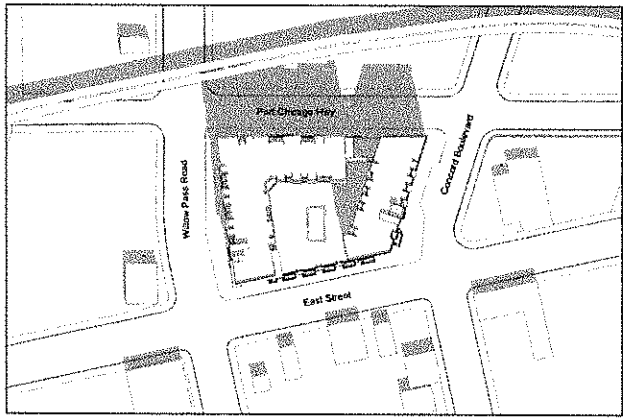

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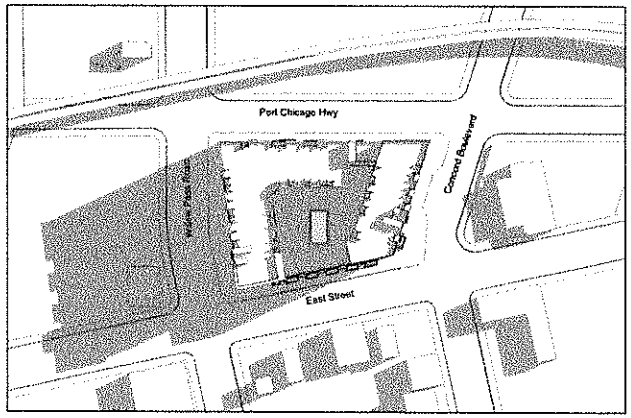

December 21
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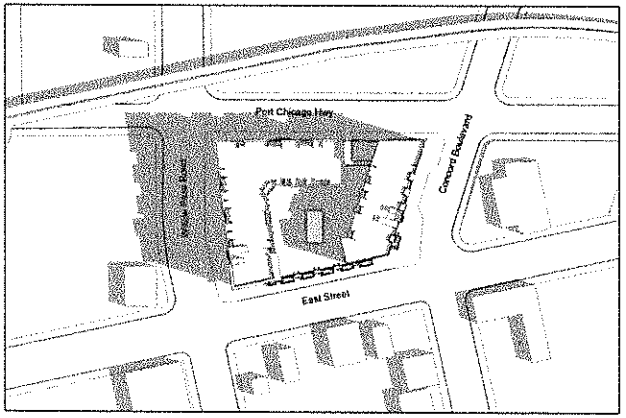

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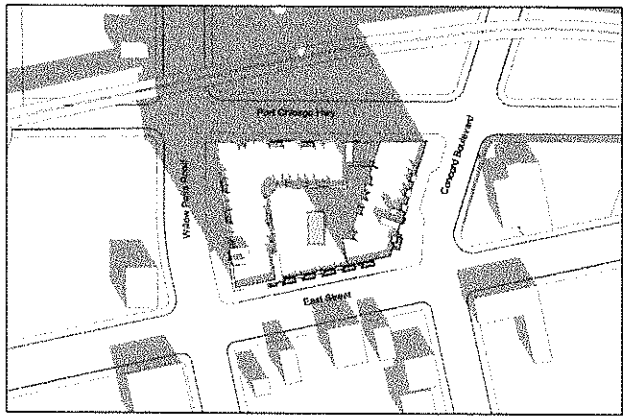

December 21
3:00 PM

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SHADOW STUDY - SEPTEMBER AND DECEMBER

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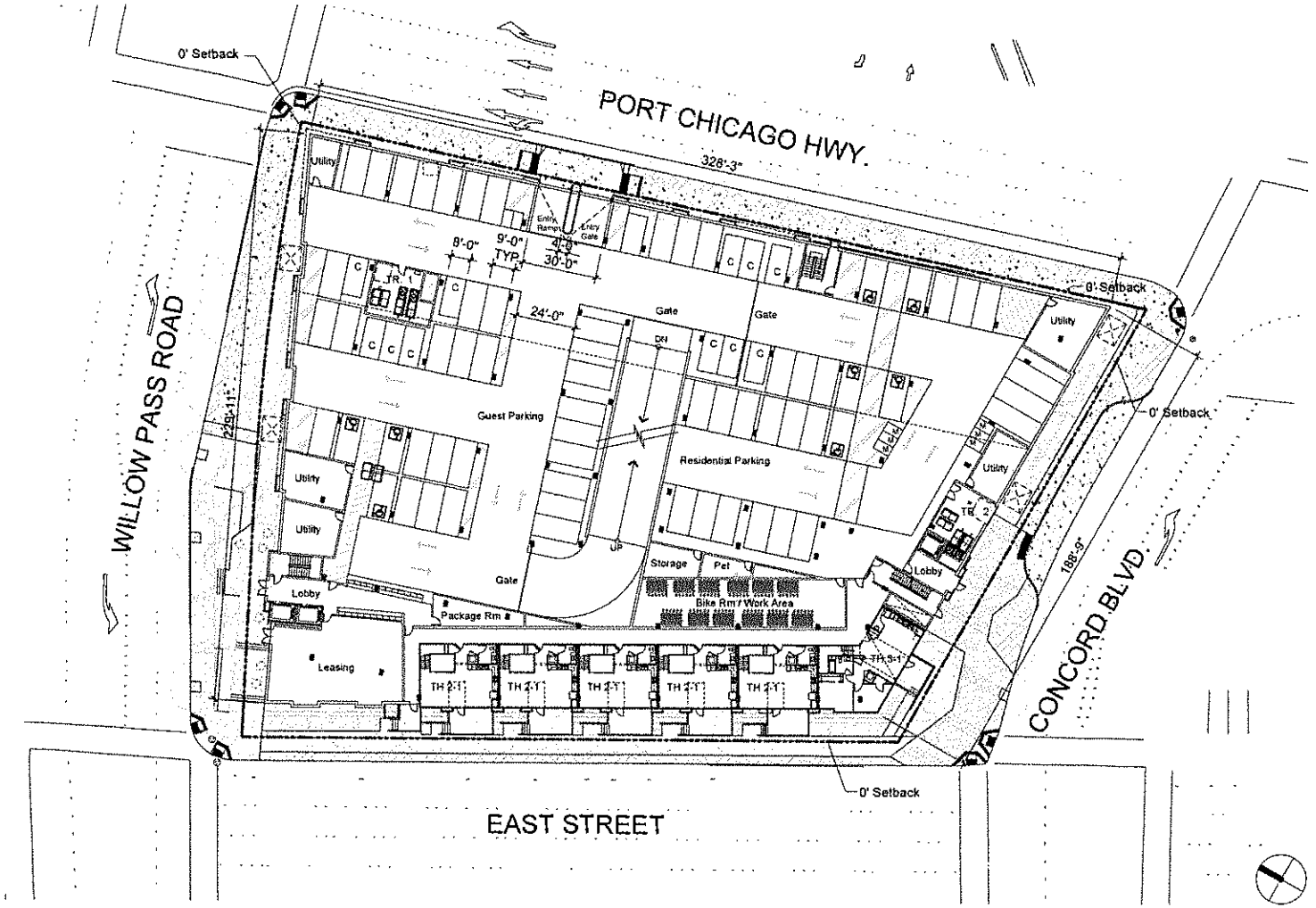

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CONCEPTUAL SITE PLAN

CONCORD, CA

KTGY # 2015-1068 11.07.2016

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A1.0

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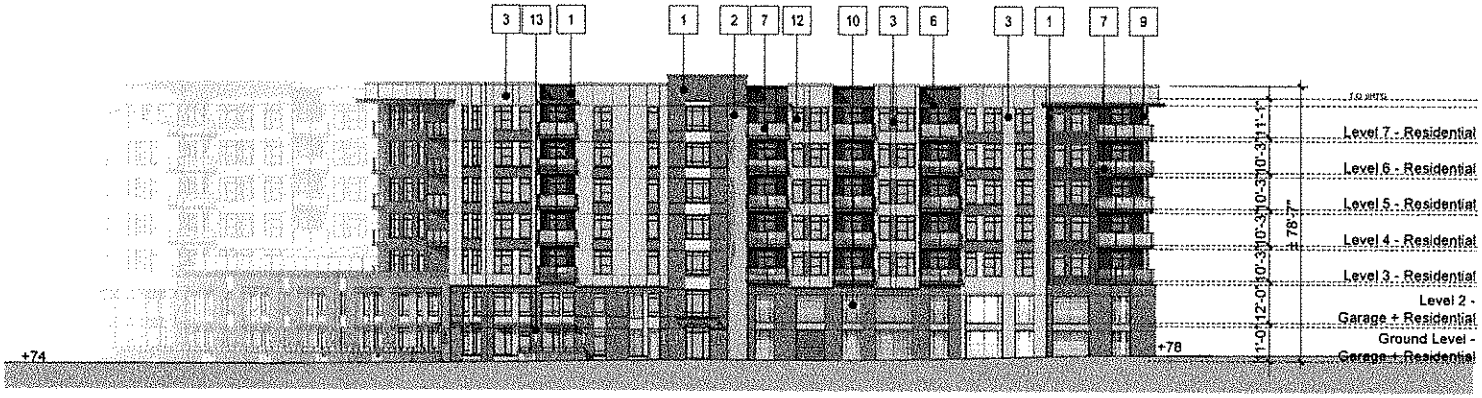
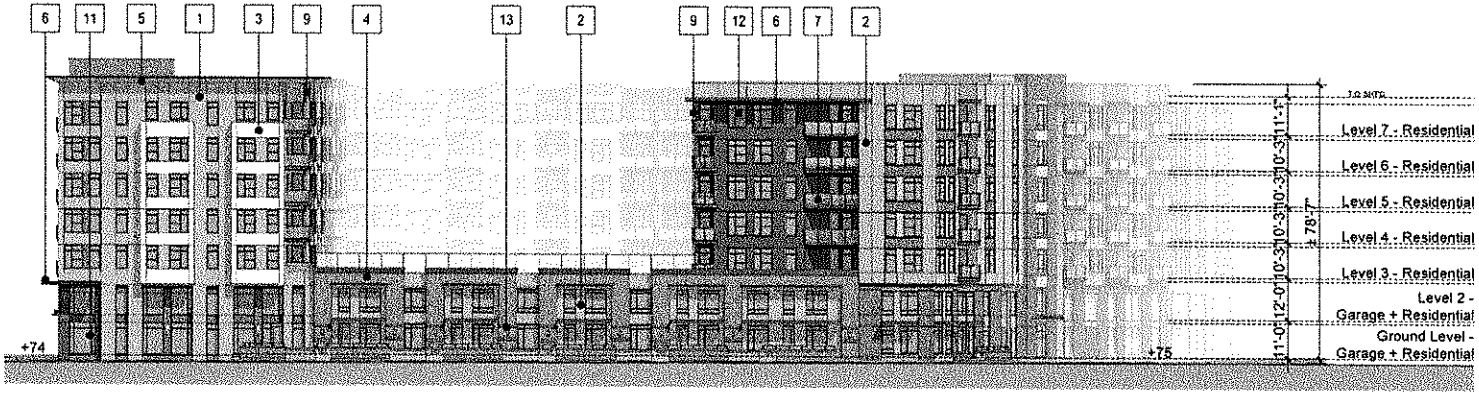
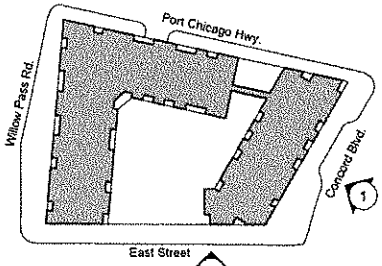


1. Concord Blvd. Elevation



2. East Street Elevation



Key Map n.t.s. 2

Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panels
4. Brick Veneer
5. Composite Panels @ Underside
6. Metal Awning
7. Metal Railing
8. Composite Railing
9. Metal Column
10. Green Screen/Metal Screen
11. Storefront Glazing
12. Vinyl Window
13. Decorative Light Fixture
14. Metal Panel
15. Art Element (by others)

0 8 16 32

2400 WILLOW PASS

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BUILDING ELEVATIONS

CONCORD, CA

KTGY # 2015-1068 11.07.2016

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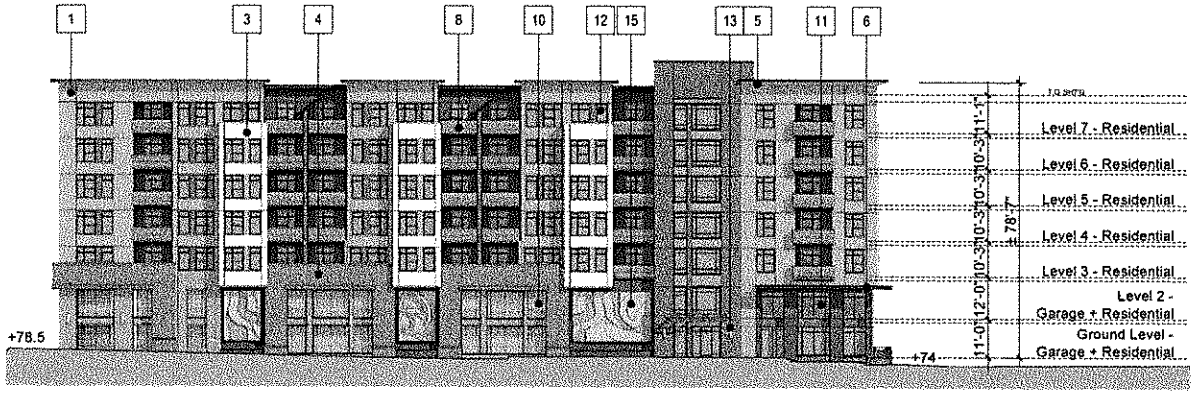
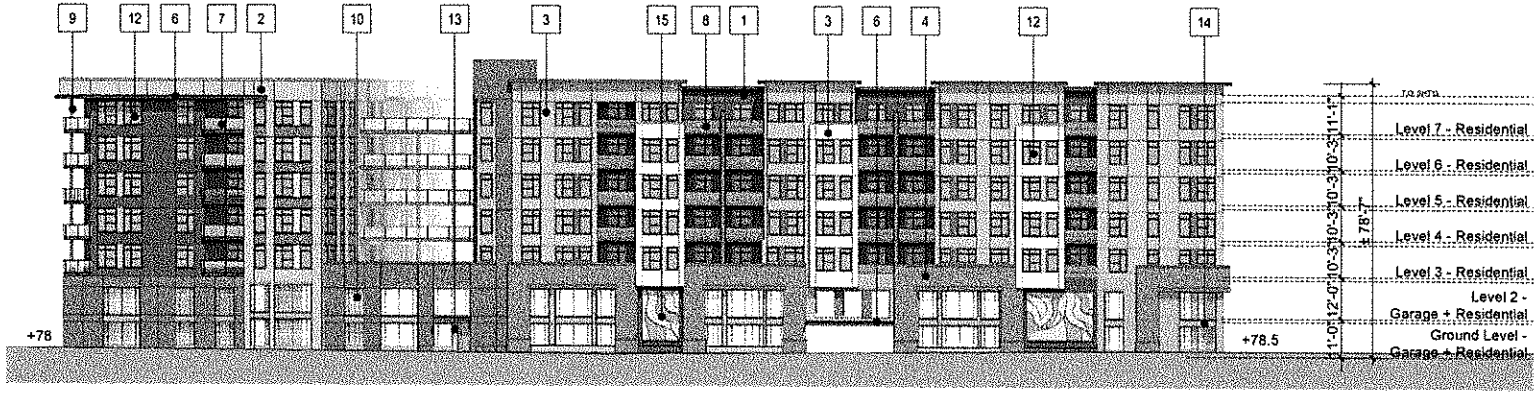
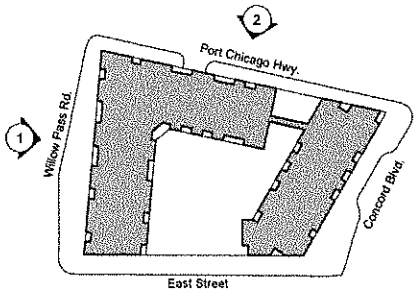


1. Willow Pass Road Elevation



2. Port Chicago Hwy. Elevation



Key Map n.t.s.

Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panels
4. Brick Veneer
5. Composite Panels @ Underside
6. Metal Awning
7. Metal Railing
8. Composite Railing
9. Metal Column
10. Green Screen/Metal Screen
11. Storefront Glazing
12. Vinyl Window
13. Decorative Light Fixture
14. Metal Panel
15. Art Element (by others)

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BUILDING ELEVATIONS

CONCORD, CA

KTGY # 2015-1068 01.07.2016

0 8 16 32

A2.1

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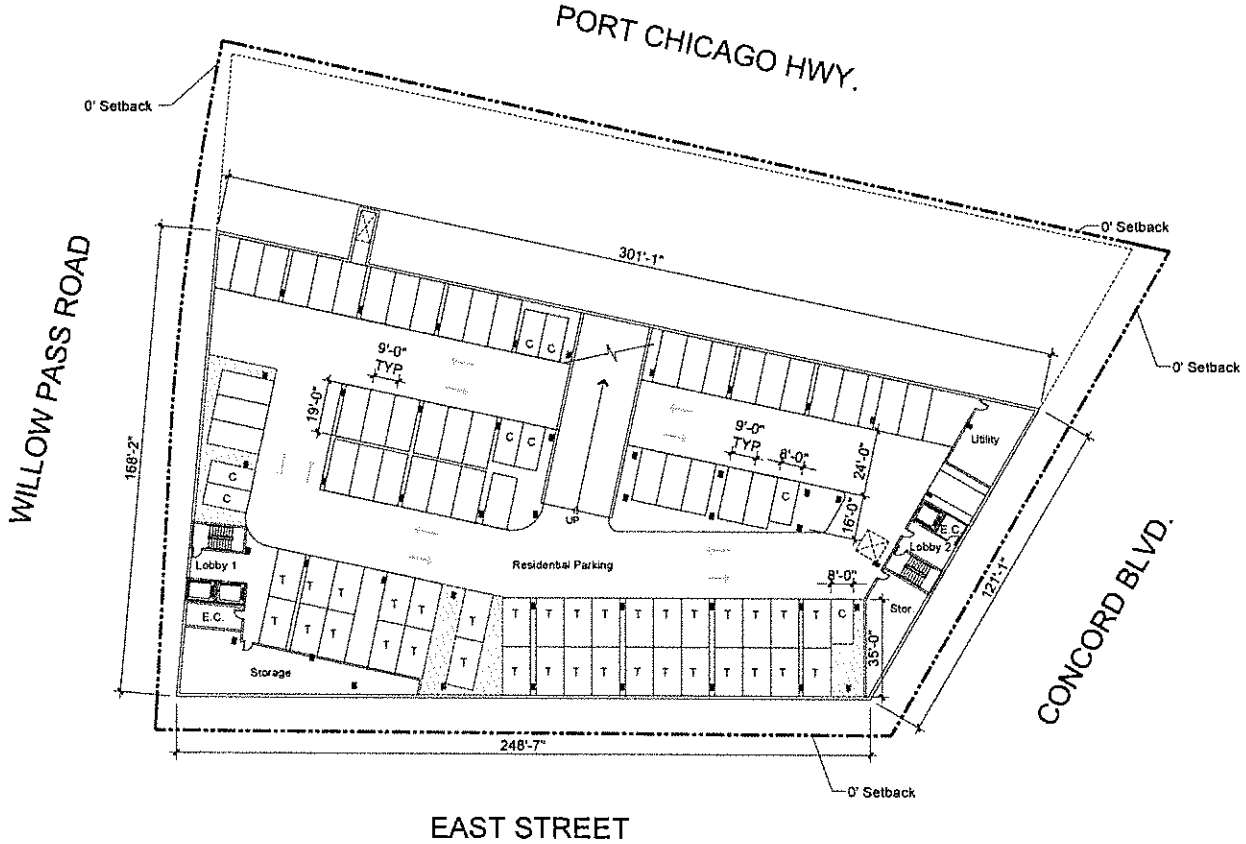

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CONCEPTUAL BUILDING PLAN - SUB-TERRANEAN LEVEL

A3.0

CONCORD, CA

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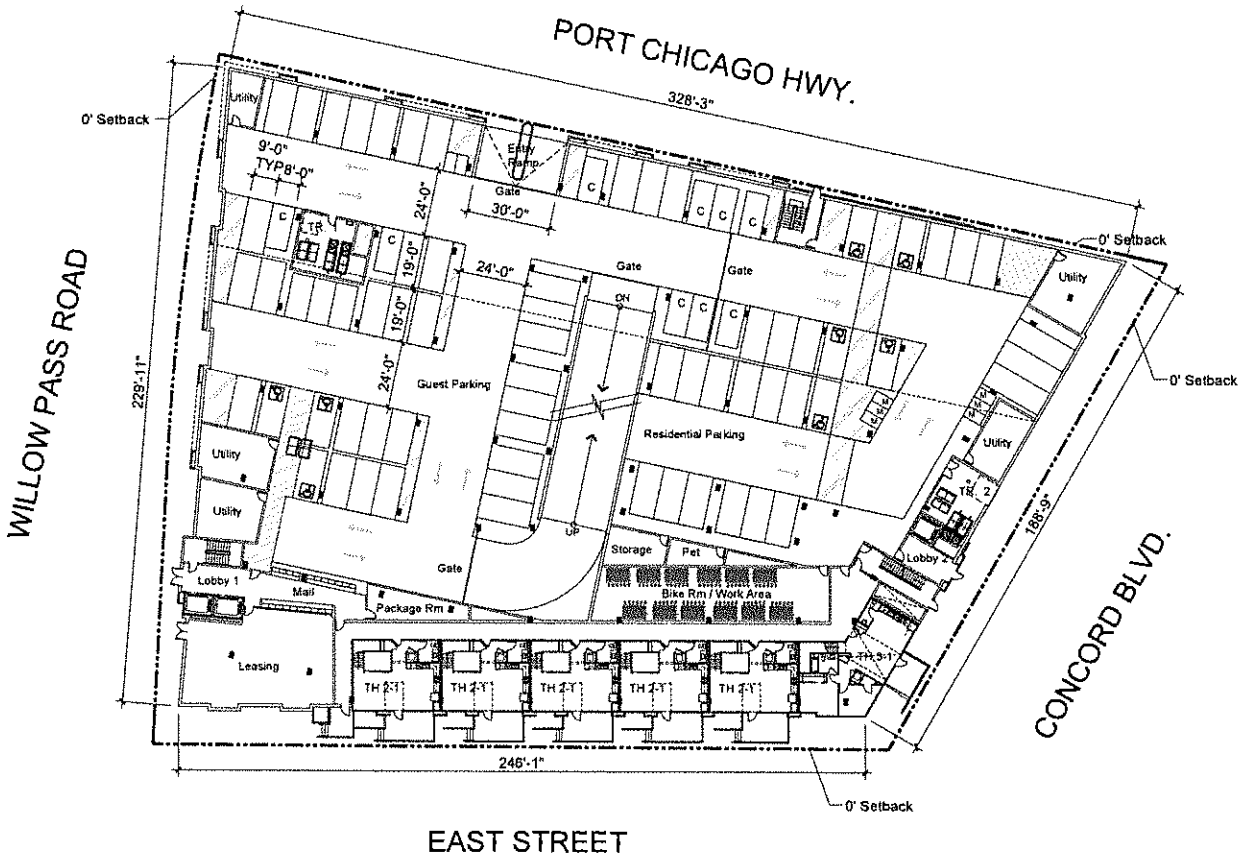

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CONCEPTUAL BUILDING PLAN - LEVEL 1

CONCORD, CA

KTGY # 2015-1048 11.03.2016

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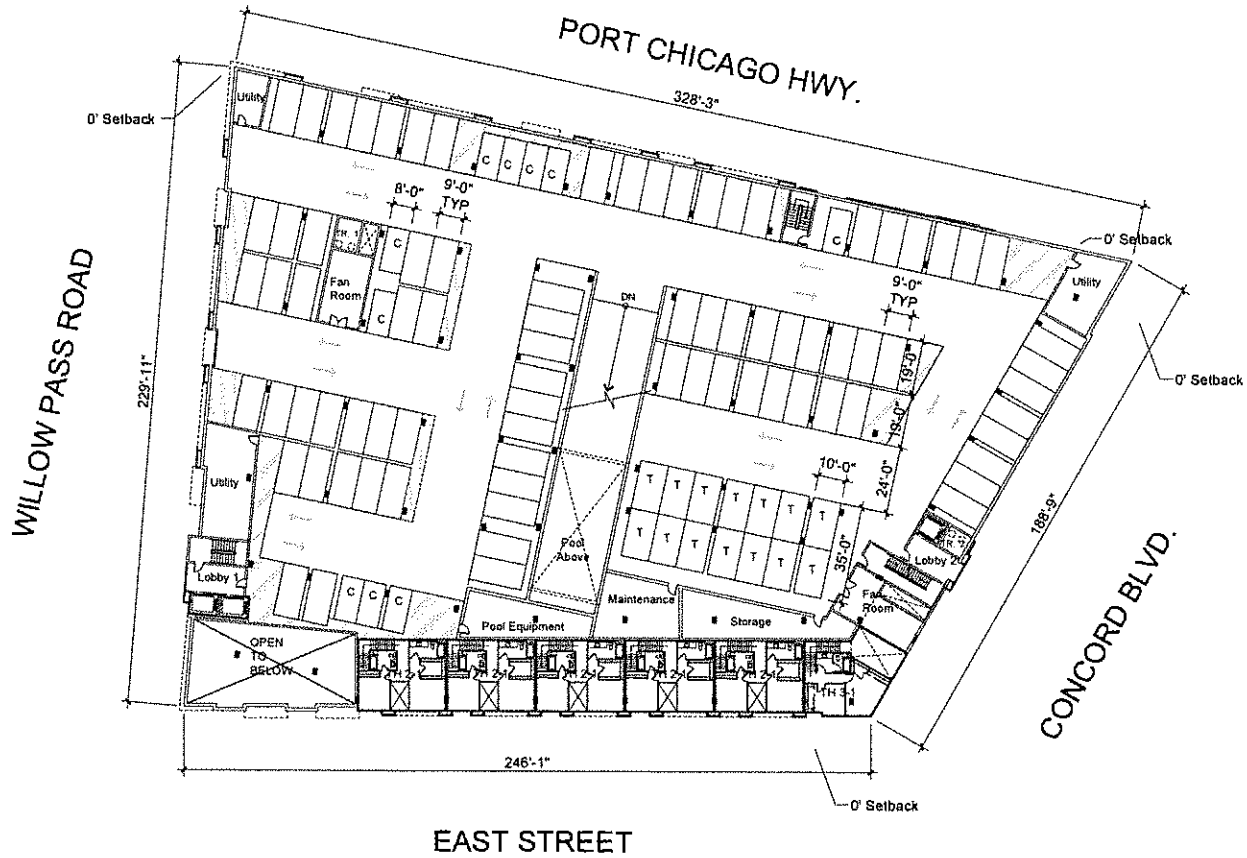

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CONCEPTUAL BUILDING PLAN - LEVEL 2

CONCORD, CA

KTGY # 2015-1048 11.07.2016

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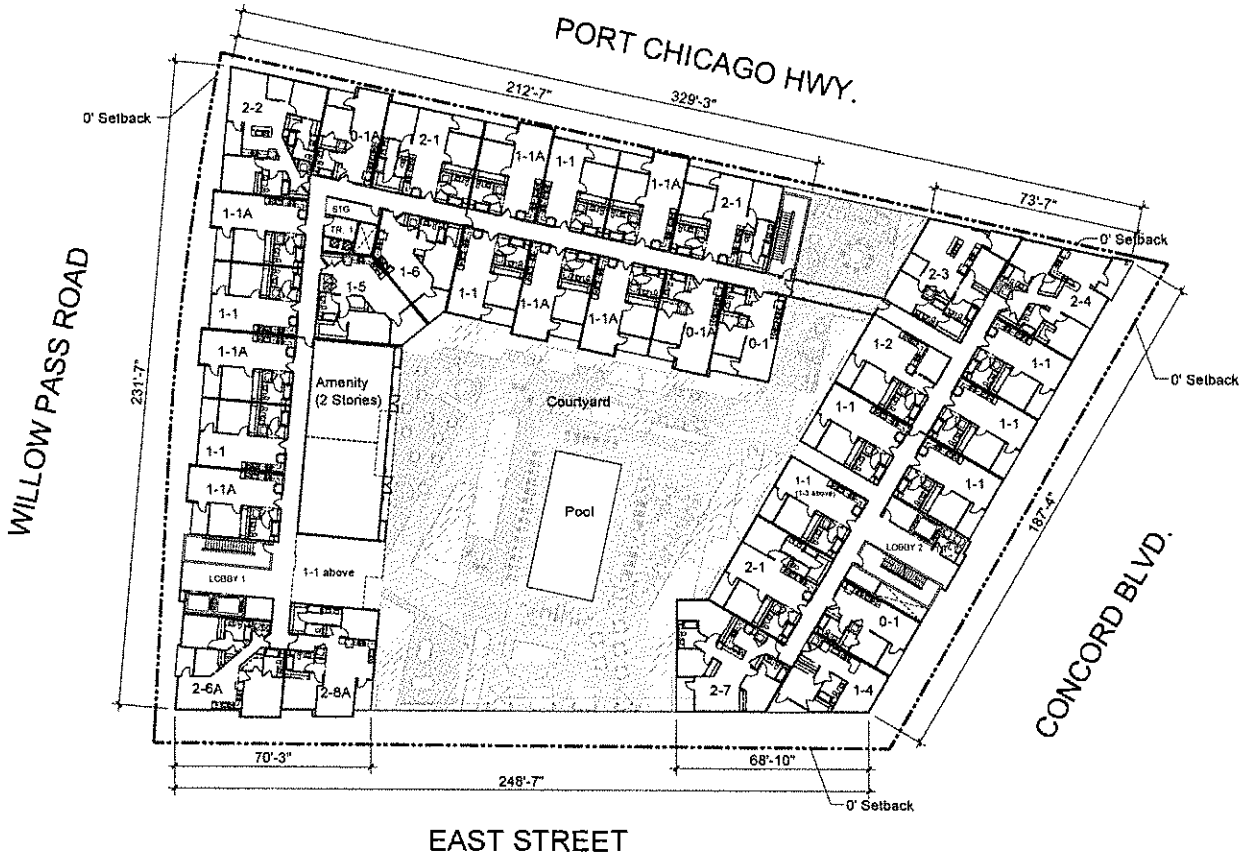

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CONCEPTUAL BUILDING PLAN - LEVEL 3- PODIUM

CONCORD, CA

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0 10 20 40

A3.3

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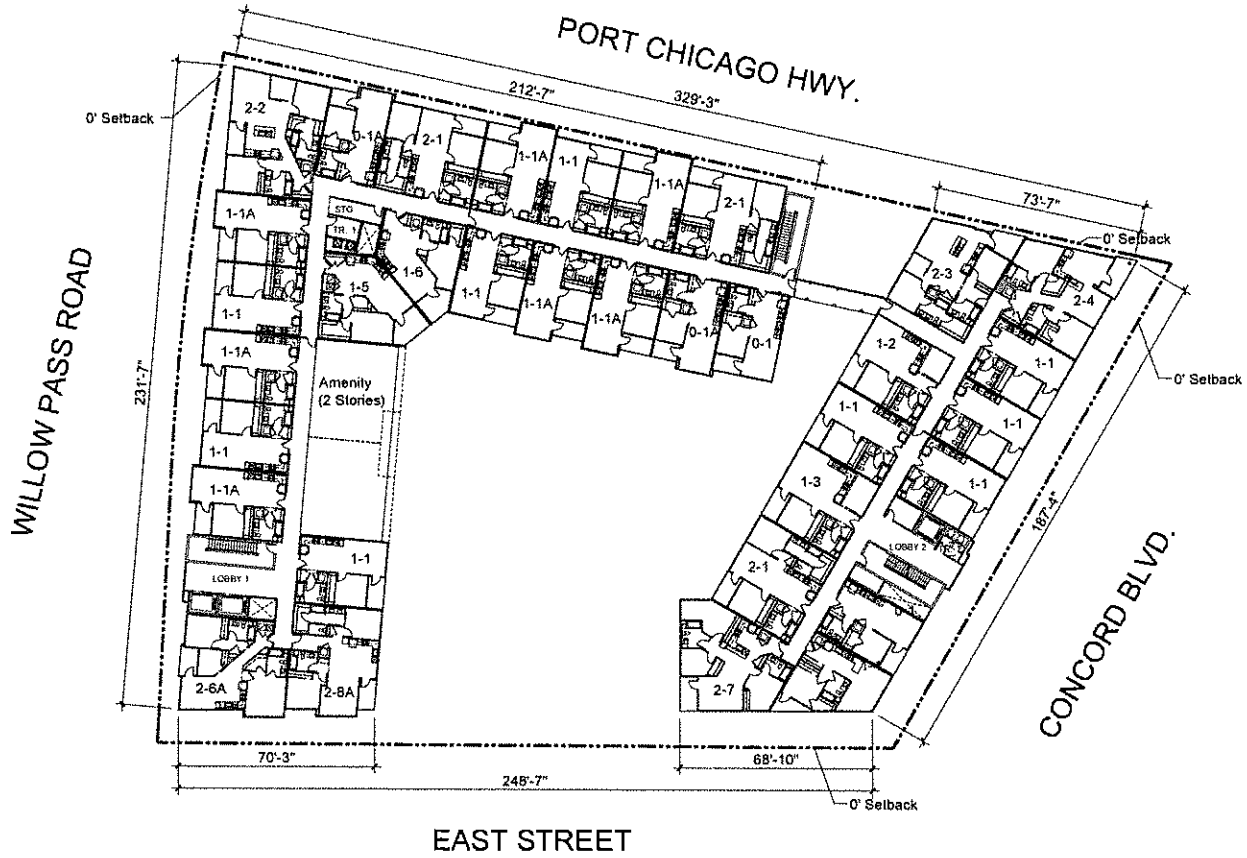

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CONCEPTUAL BUILDING PLAN - LEVEL 4

CONCORD, CA

KTGY # 2015-1046 11.03.2016

0 10 20 40

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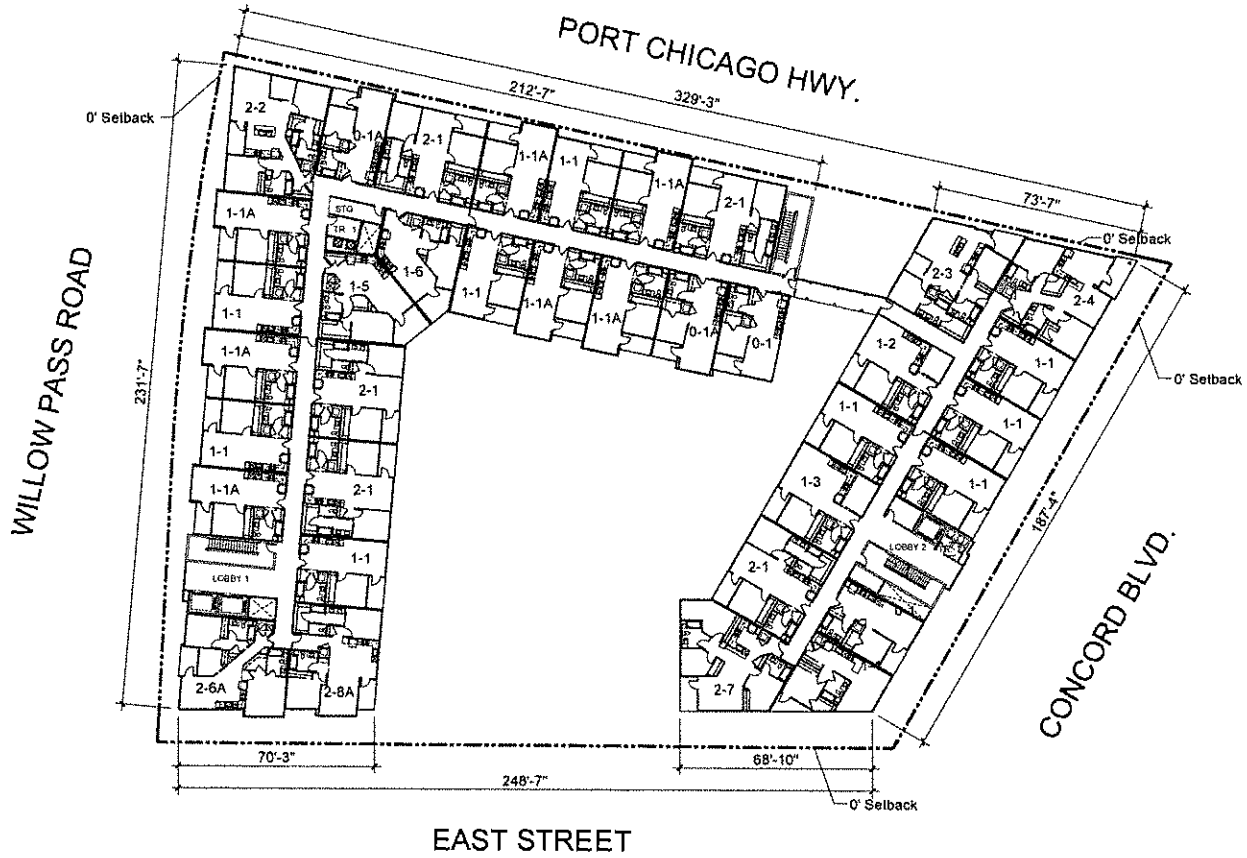

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CONCEPTUAL BUILDING PLAN - LEVELS 5-6

CONCORD, CA

KTGY # 2015-1068 11.07.2016

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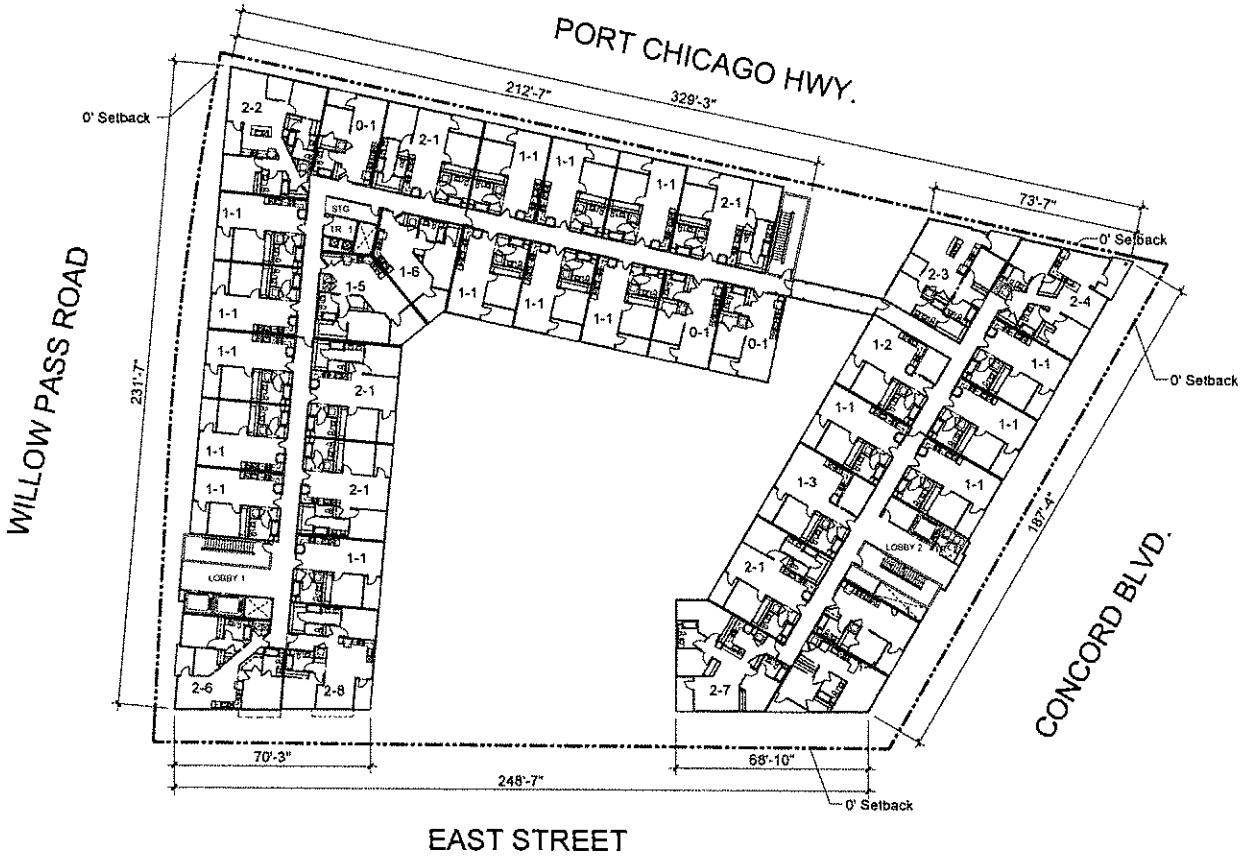

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CONCEPTUAL BUILDING PLAN - LEVEL 7

CONCORD, CA

KTGY # 3015-1049 11.07.2016

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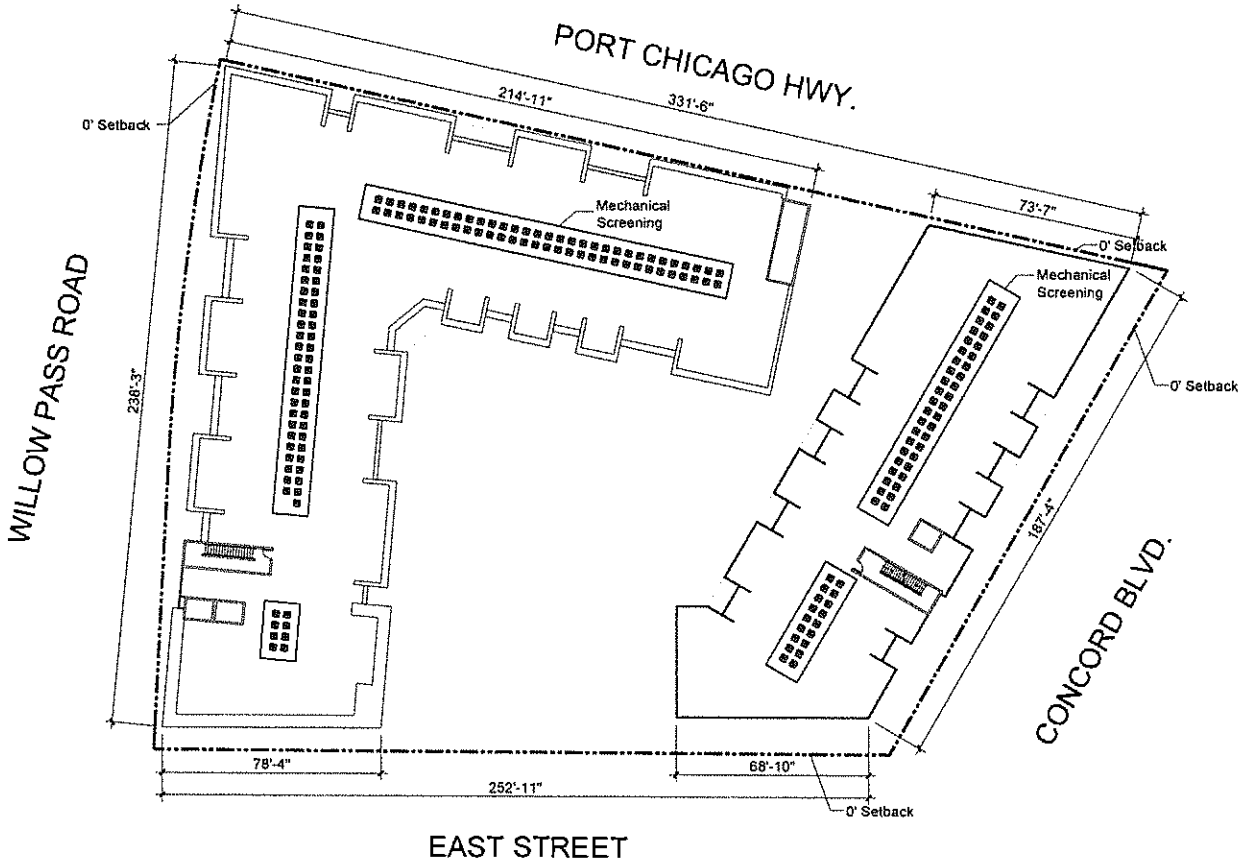

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CONCEPTUAL BUILDING PLAN - ROOF

CONCORD, CA

KTGY # 2015-1066 11.07.2014

0 10 20 40

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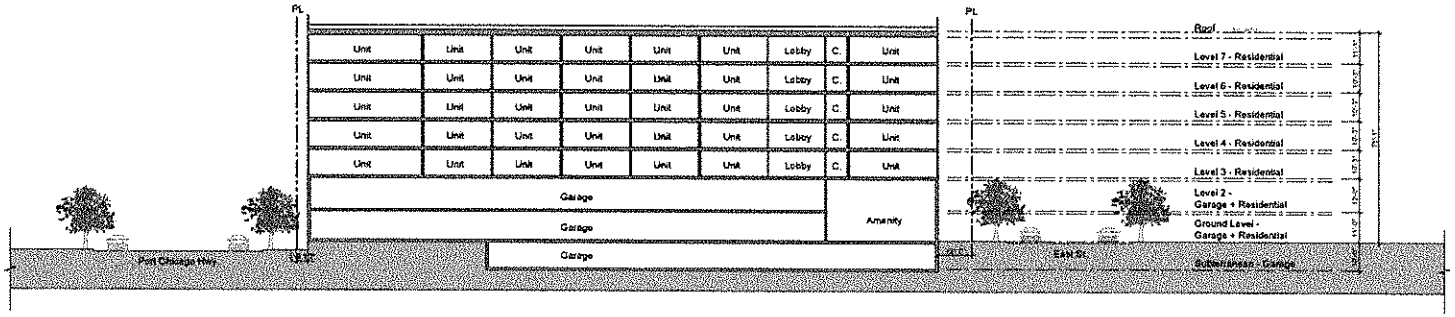
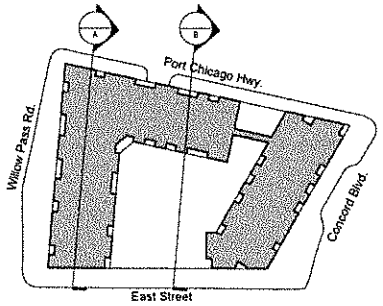
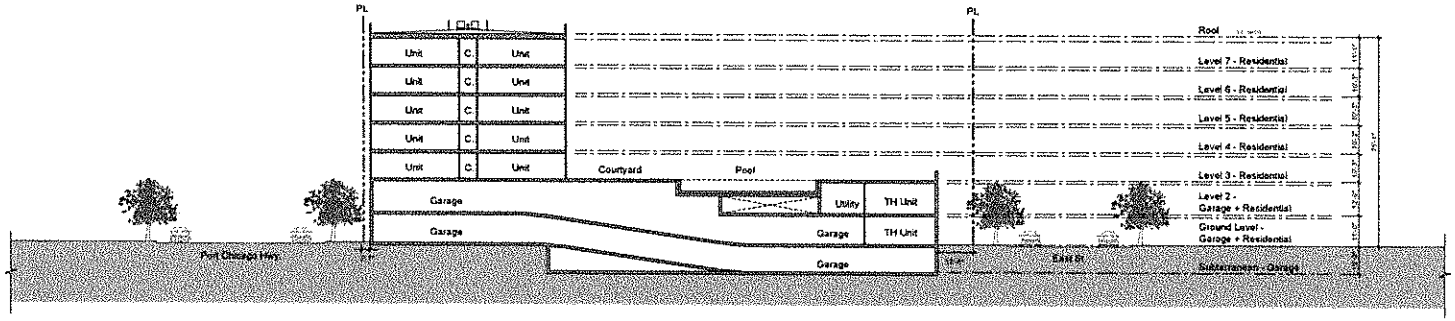


Section A



Key Map n.t.s.



Section B

2400 WILLOW PASS

Argent Concord LLC
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Santa Cruz, CA 95062

CONCEPTUAL BUILDING SECTIONS

CONCORD, CA

KTGY # 2015-1046 11.07.2016

0 10 20 40

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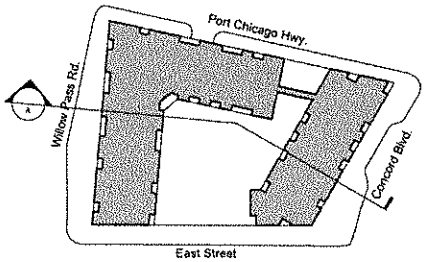
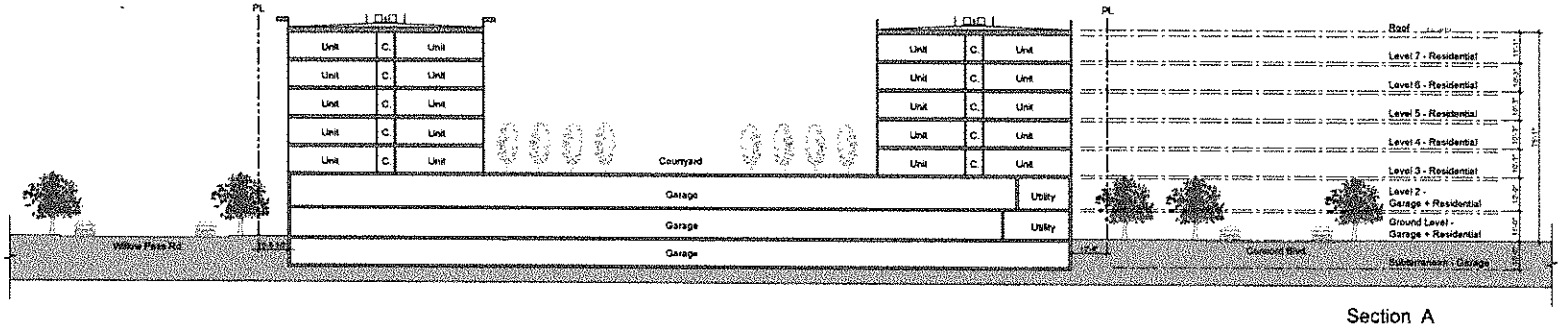


Key Map n.t.s.



Section A

2400 WILLOW PASS

Argent Concord LLC
121 7th Avenue
Santa Cruz, CA 95062

CONCEPTUAL BUILDING SECTIONS

CONCORD, CA

KTGY # 2015-1048 11.07.2016

0 10 20 40

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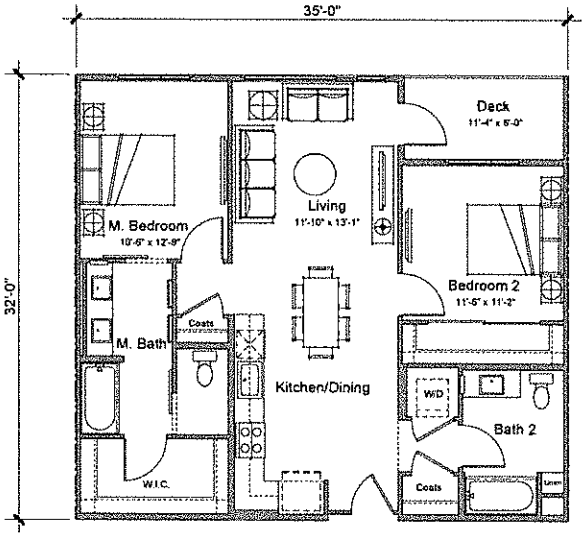
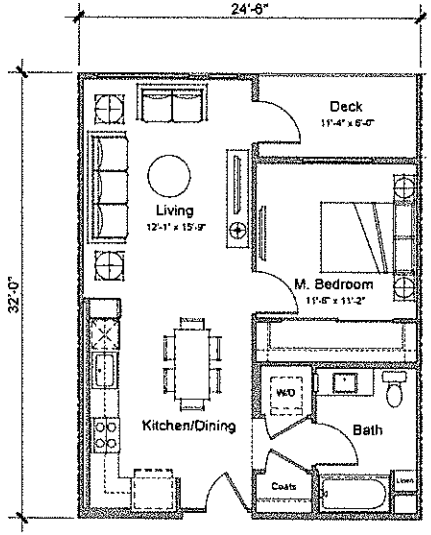
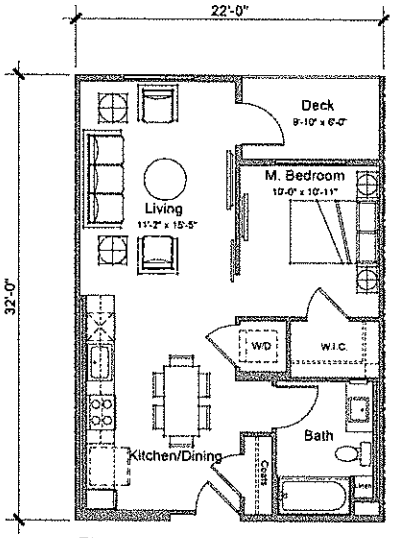


Plan 2-1
2 Bedroom / 2 Bathroom
*1053 SQ. FT.



Plan 1-1
1 Bedroom / 1 Bathroom
*717 SQ. FT.



Plan 0-1
Studio / 1 Bathroom
*546 SQ. FT.

*Net rentable area: To face of exterior stud +1" air gap; Does not reflect recess at windows; Does not include balcony area; Includes shafts

0 2 4 8

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TYPICAL UNIT PLANS

CONCORD, CA

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A5.0

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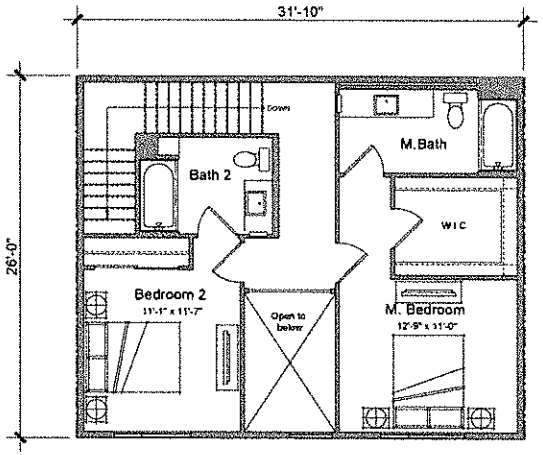
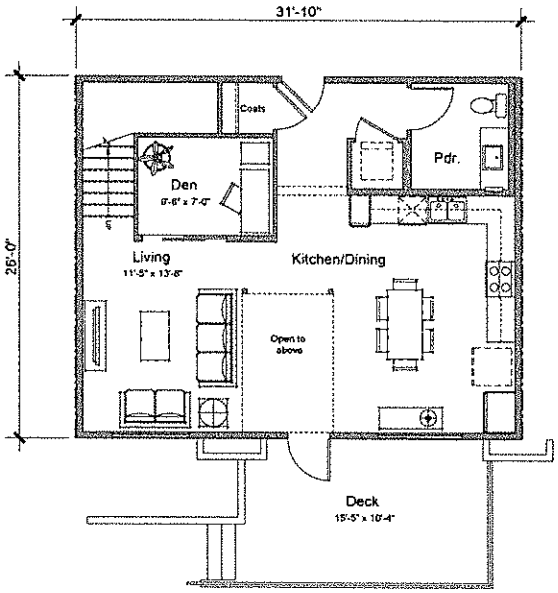


Plan TH 2-1_2



Plan TH 2-1_1
2 Bedroom + Den / 2 Bathroom
*1,535 SQ. FT.

*Net rentable area: To face of exterior stud +1" air gap; Does not reflect recess at windows; Does not include balcony area; Includes shafts; Stairway counted once

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UNIT PLANS - 2 BEDROOM TOWNHOME

CONCORD, CA

0 2 4 8

A5.1

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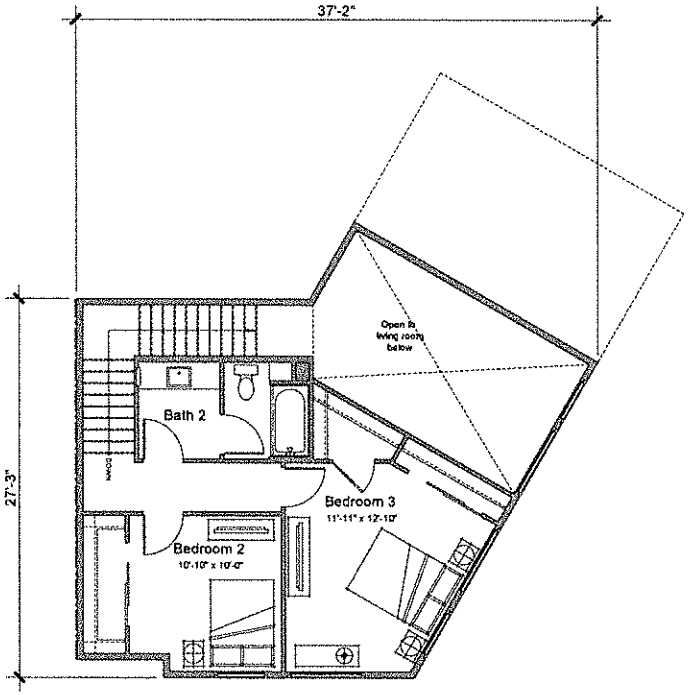
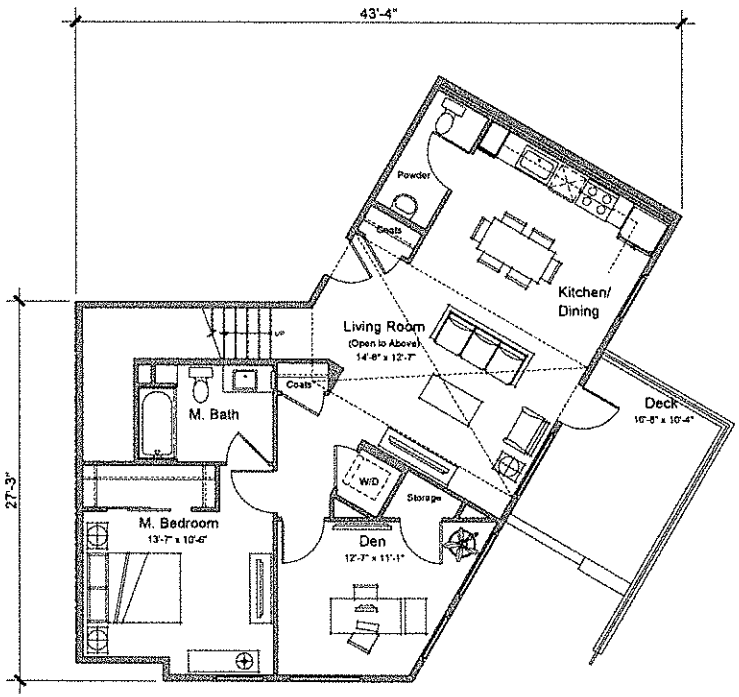


Plan TH 3-1_2



Plan TH 3-1_1
3 Bedroom + Den / 2 Bathroom
*1750 SQ. FT.
1 D.U.

*Net rentable area: To face of exterior stud +1" air gap; Does not reflect recess at windows; Does not include balcony area; Includes shafts; Stairway counted once

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UNIT PLANS - 3 BEDROOM TOWNHOME

CONCORD, CA

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0 2 4 8

A5.2

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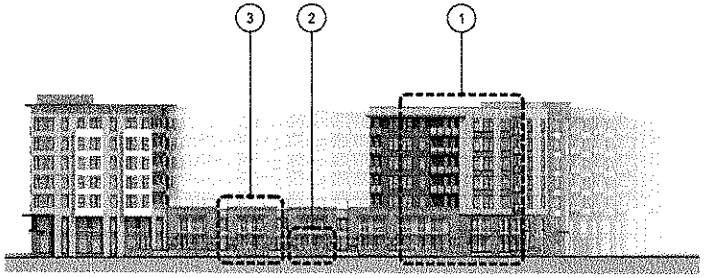
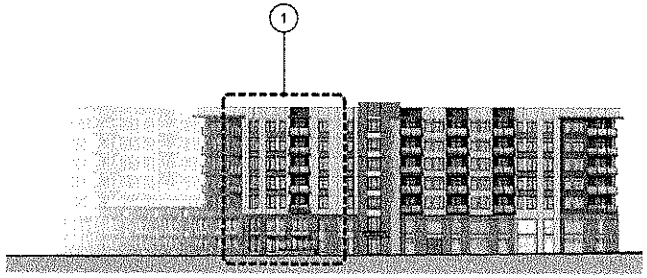
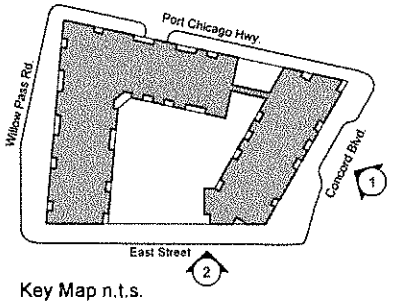


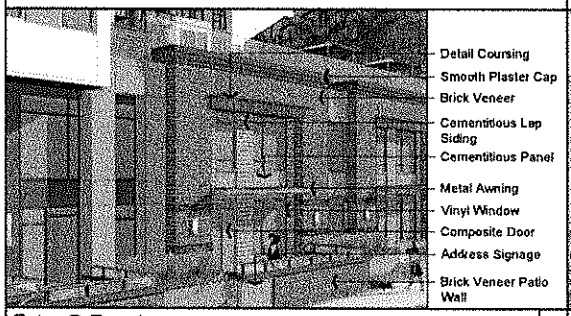
2. Key Elevation: East Street
n.t.s.



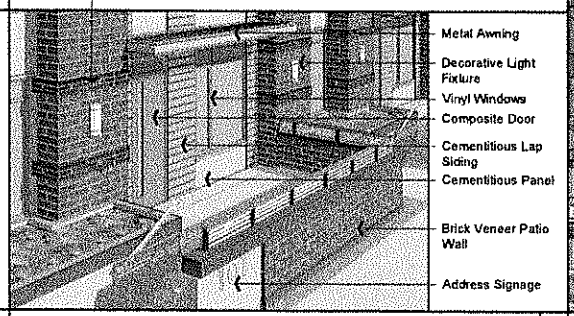
1. Key Elevation: Concord Blvd.
n.t.s.



Key Map n.t.s.



Entry @ Townhomes | 3



Typical Entry @ Townhomes | 2

Corner @ East St. & Concord Blvd. | 1

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CONCEPTUAL DETAILS

CONCORD, CA

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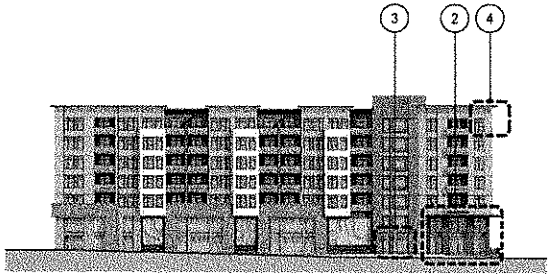
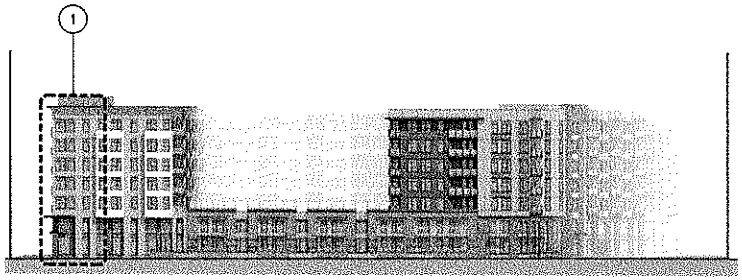
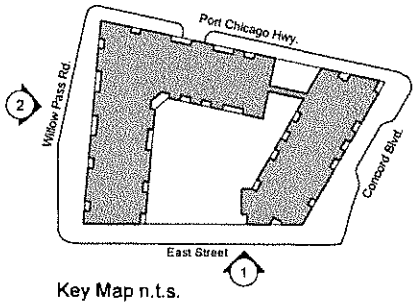


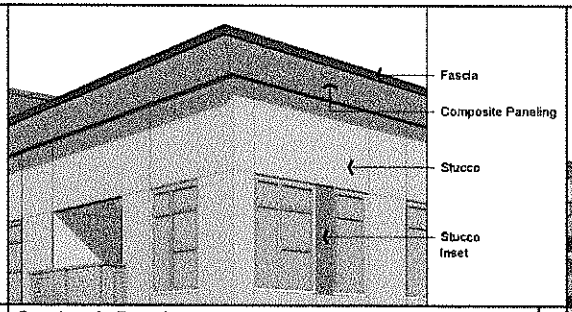
2. Key Elevation: Willow Pass Road
n.t.s.



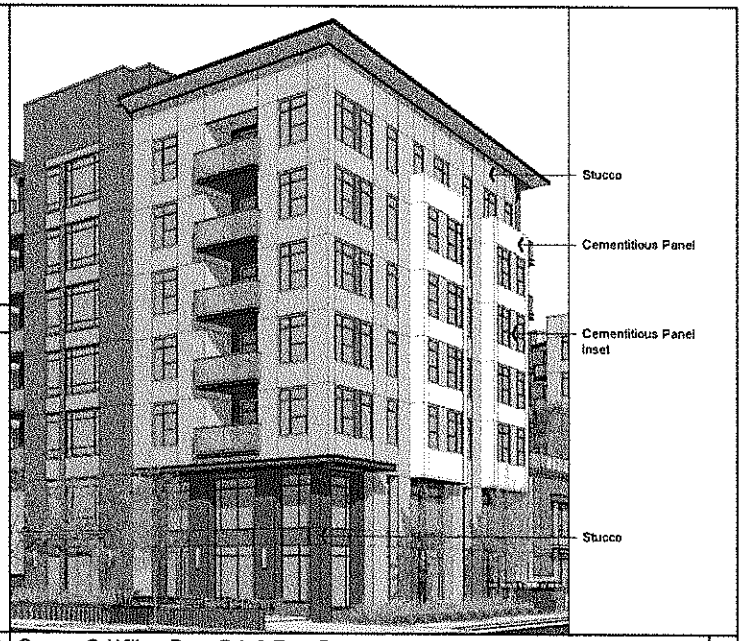
1. Key Elevation: East Street
n.t.s.



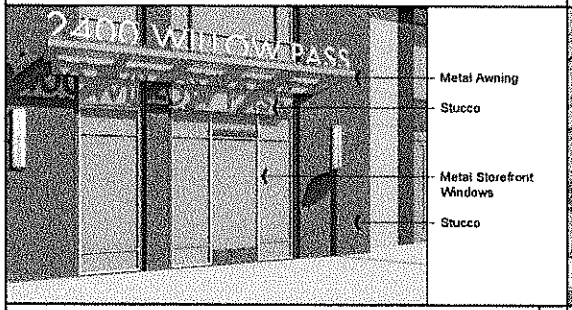
Key Map n.t.s.



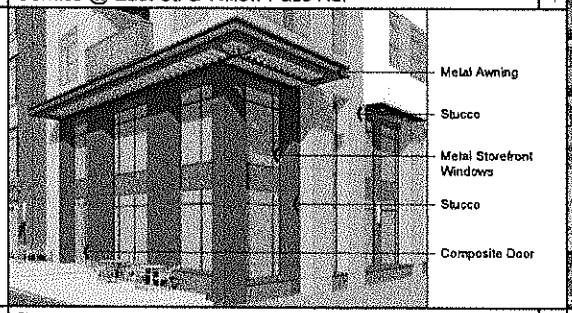
Cornice @ East St. & Willow Pass Rd. 4



Corner @ Willow Pass Rd. & East St. 1



Storefront @ Leasing 3



Entry @ Leasing 2

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CONCEPTUAL DETAILS

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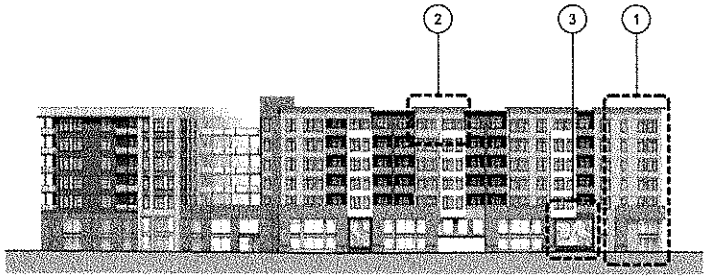
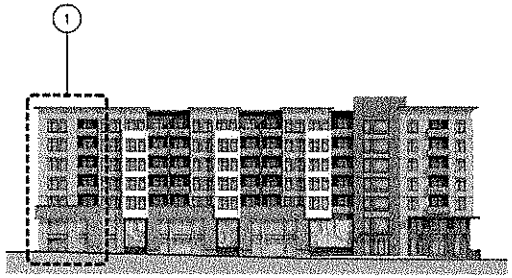
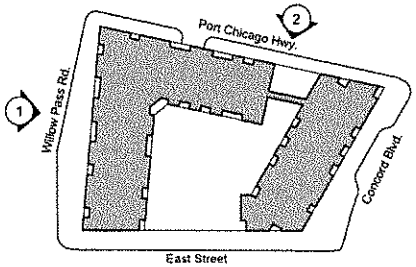


2. Key Elevation: Port Chicago Hwy.
n.t.s.

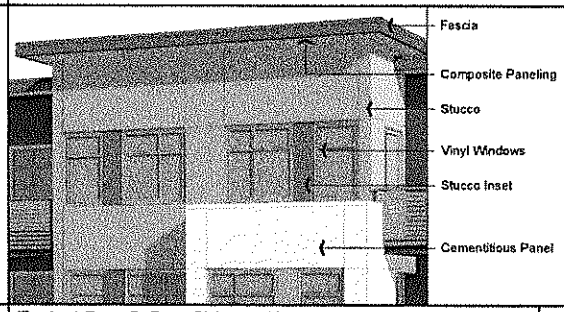


1. Key Elevation: Willow Pass Rd.
n.t.s.

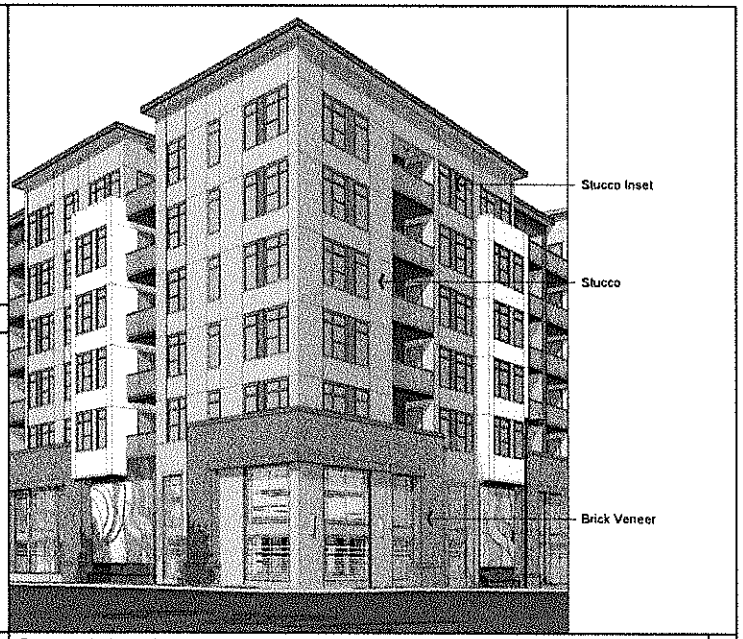


Key Map n.t.s.

Screen @ Residential Garage | 3



Typical Bay @ Port Chicago Hwy. | 2



Corner @ Port Chicago Hwy. & Willow Pass Rd. | 1

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CONCEPTUAL DETAILS

A6.2

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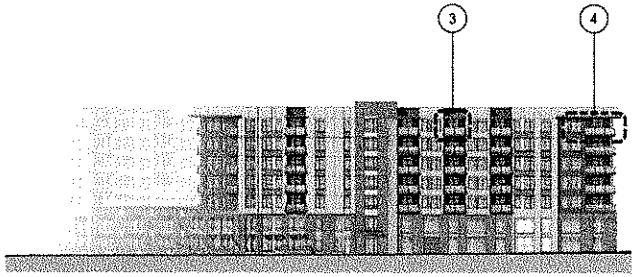
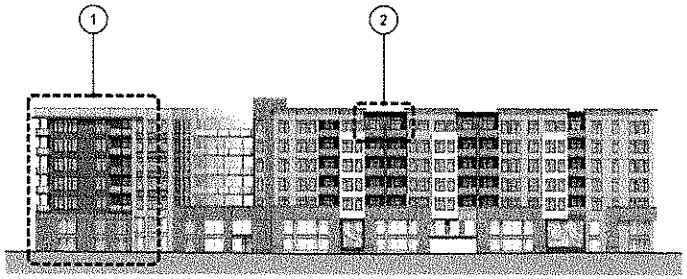
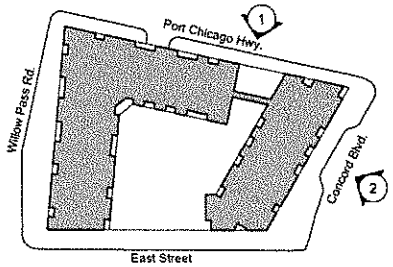


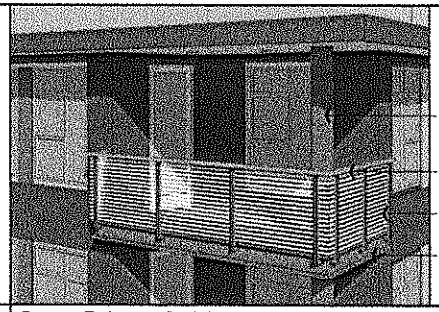
2. Key Elevation: Concord Blvd.
n.t.s.



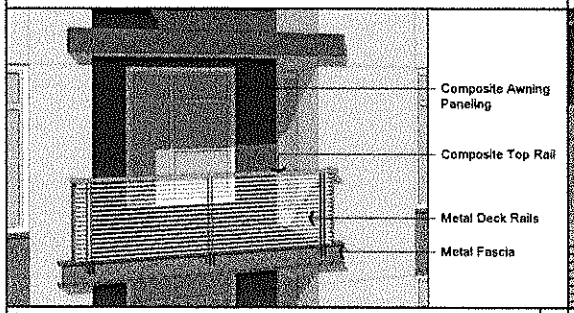
1. Key Elevation: Port Chicago Hwy.
n.t.s.



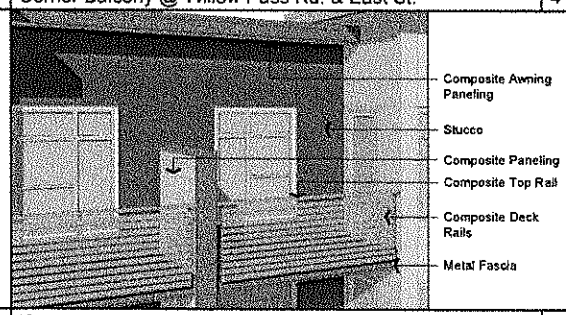
Key Map n.t.s.



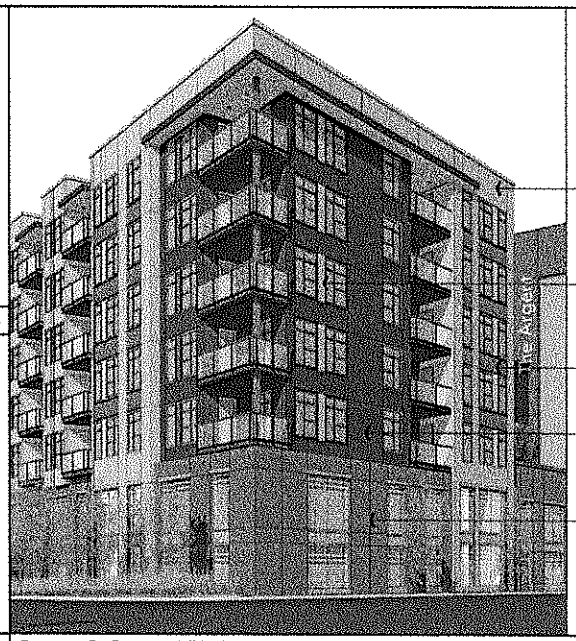
Corner Balcony @ Willow Pass Rd. & East St. | 4



Typical Balcony @ Upper Residential Unit | 3



Typical Balcony @ Residential Unit | 2



Corner @ Concord Blvd. & Port Chicago Hwy. | 1

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CONCEPTUAL DETAILS

CONCORD, CA

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A6.3

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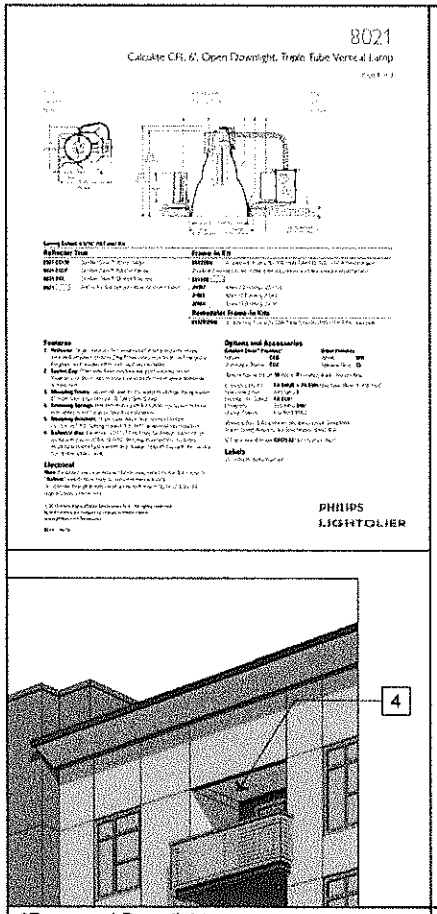
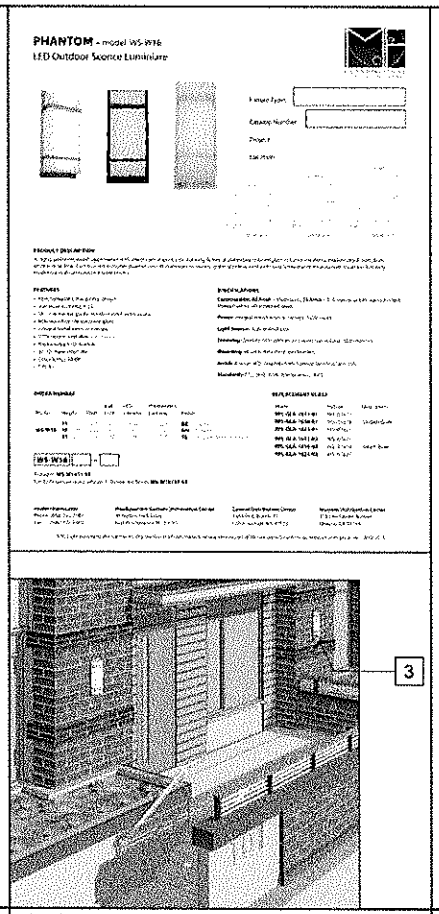
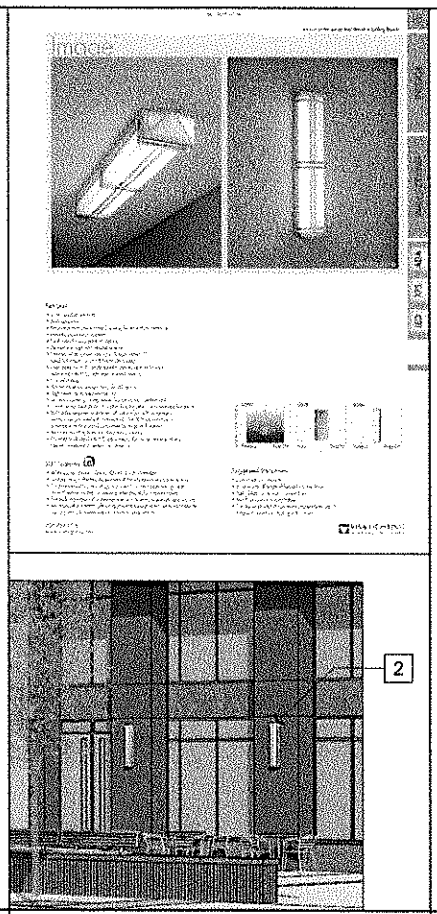


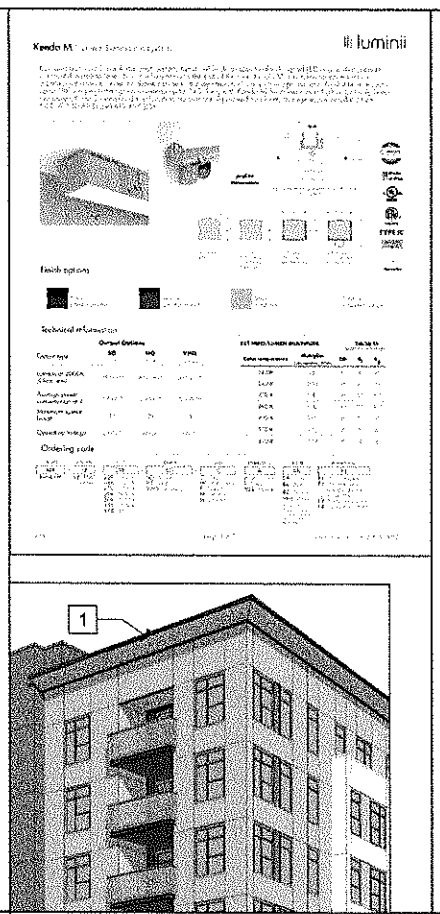
*Recessed Downlight | 4



*Residential Wall Sconce | 3



*Amenity/Leasing Wall Sconce | 2



*Linear LED Strip | 1

*Representative of general aesthetic of fixture or equal

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CONCEPTUAL BUILDING LIGHTING

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PERSPECTIVE-CONCORD BOULEVARD

CONCORD, CA

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A7.0

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PERSPECTIVE-EAST STREET

CONCORD, CA

KTGY # 2015-1048 11.07.2016

A7.1

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PERSPECTIVE-WILLOW PASS ROAD

CONCORD, CA

KTGY # 2015 1068 11.07.2014

A7.2

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PERSPECTIVE-PORT CHICAGO HWY.

CONCORD, CA

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A7.3

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PERSPECTIVE-PORT CHICAGO HWY. BART VIEW

CONCORD, CA

KTGY # 2015-1048 11.07.2016

A7.4

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ART COMPONENT - INSET WALL PANELS

CONCORD, CA

KTGY # 2015-1049 11.07.2016

A7.5

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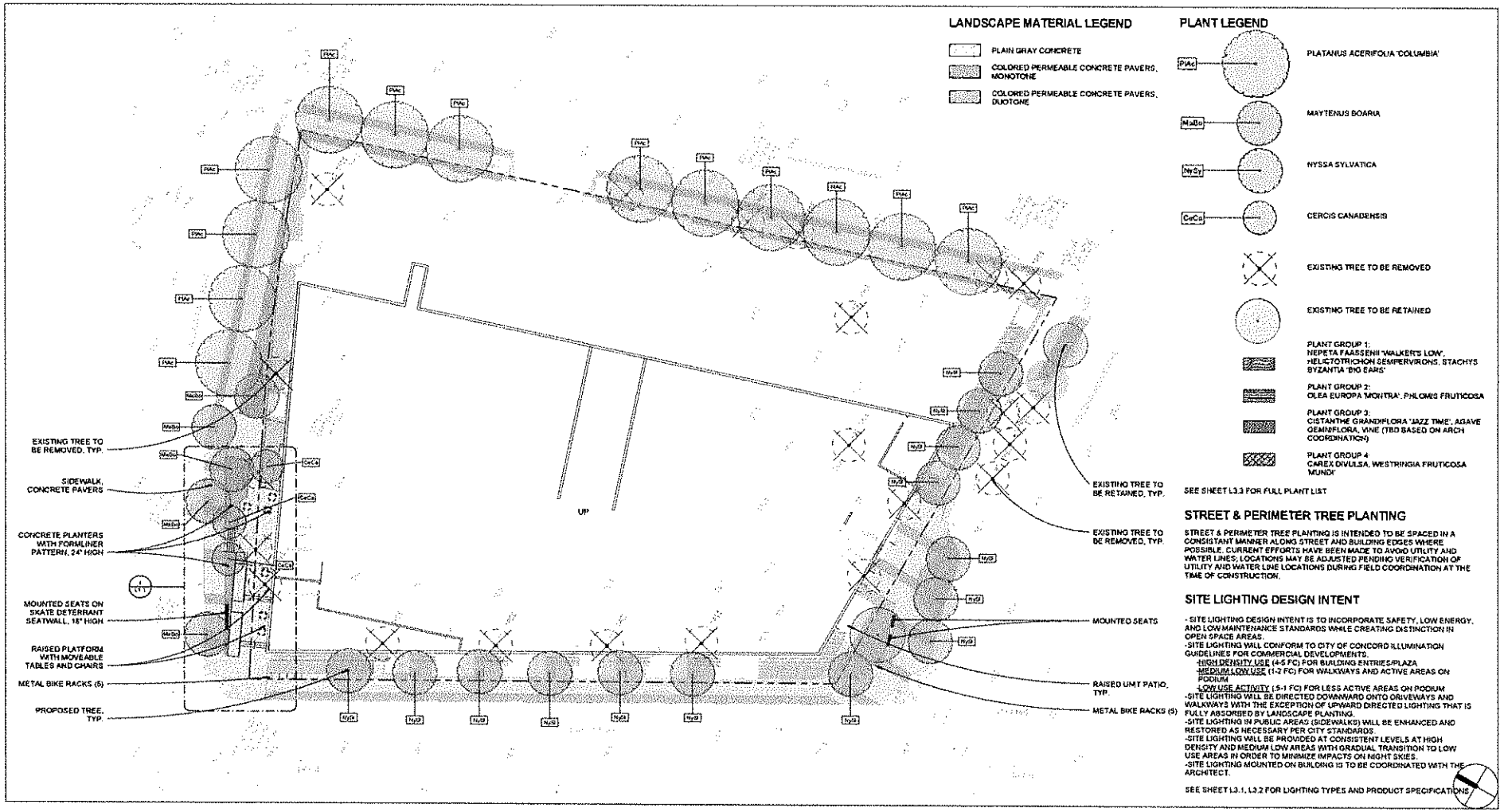
2400 Willow Pass
Plant Palette Description

As stated on Sheet L3.2, the plant palette and design (L1& L3) complies with California MWELO (Model Water Efficiency Landscape Ordinance) which implies that the all species will require very low, low, and moderate (trees only) water use. Since all plants (except some trees) are considered drought tolerant and native adaptive species, it will be conducive to efficient hydrozone (grouping method for irrigation requirements) planning. Trees will each have separate bubblers for water requirements.

Additionally, the plant palette (L1& L3) has been developed to incorporate fragrance and year round color (foliage and flowers) / form (branching patterns) interest through trees, shrubs, grasses, succulents and perennials. Annuals are not incorporated into the design because they require more water than drought tolerant species and are not low-maintenance as they would have to be planted each year. The proposed plants along the street edges were intentionally chosen for their tolerance to typical street conditions, including traffic and debris collection.

Finally, the intent of the stormwater plantings on L1 is to appear consistent with the adjacent planting areas. Helictotrichon sempervirens (California native), one on three plants in Plant Group 1, will be used in the stormwater planter and along East Street wherever Plant Group 1 is defined on Sheet L1.0.



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STREET LEVEL PLAN

L1.0

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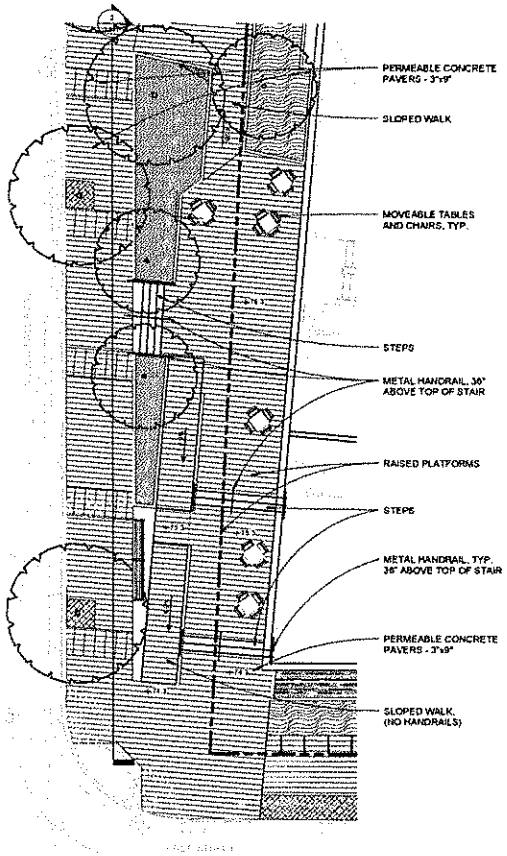
Santa Cruz, CA 95062

CONCORD, CA

11/107/16

NOT FOR CONSTRUCTION

PGAdesign



1 Plan Enlargement - Willow Pass Plaza
1/8" = 1'-0"

2 Elevation - Willow Pass Plaza
3/16" = 1'-0"

2400 WILLOW PASS

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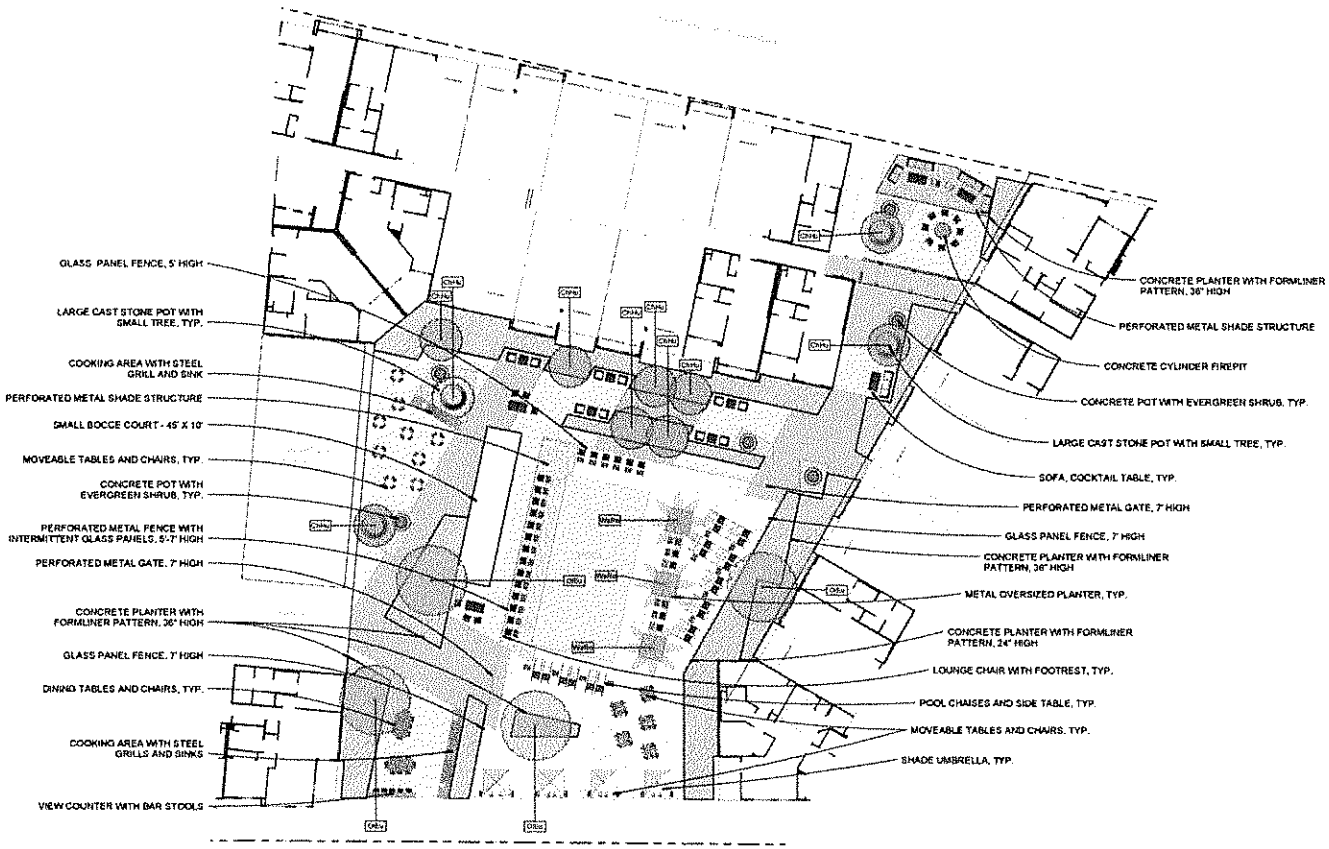
WILLOW PASS PLAZA

CONCORD, CA

11/07/16

L1.1

PGAdesign



LANDSCAPE MATERIAL LEGEND

- THERMAL WOOD DECKING
- PORCELAIN TILE
- LARGE COLORED CONCRETE PAVERS, MONOTONE
- PODIUM PLANTINGS
- PEA GRAVEL
- LANDSCAPE GLASS
- PERFORATED METAL SHADE STRUCTURE
- GLASS PANEL FENCE
- PERFORATED METAL GATE
- PERFORATED METAL FENCE

TREE LEGEND

- WaRo — WASHINGTONIA ROBUSTA
- ChHu — CHAMAEROPS HUMILIS
- OlEu — OLEA EUROPA 'SWAN HILL'

SEE SHEET L3.3 FOR FULL PLANT LIST

0 8 16 32

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PODIUM LEVEL PLAN

L2.0

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CONCORD, CA

11/07/16

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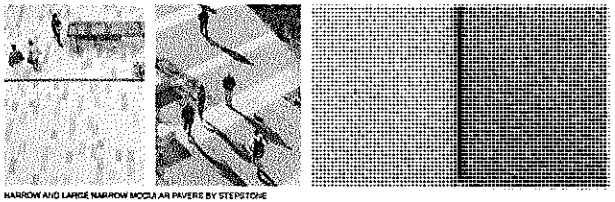
PGAdesign

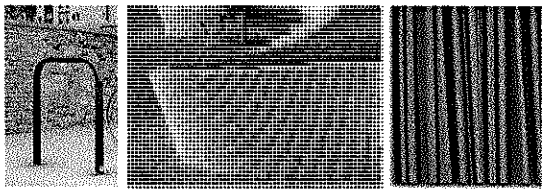
STREET LEVEL

PAVING



NARROW AND LARGE NARROW MODULAR PAVERS BY STEPSTONE
SMALL SIZE: AND 3"X9", LARGE SIZE: 12"X36"
COLORS: PORCELAIN #1313 AND AGAVE #1812
DUOTONE: 67% AND 33% (PORCELAIN/AGAVE) WITH MONOTONE SOLID COLOR BANDS (AGAVE)

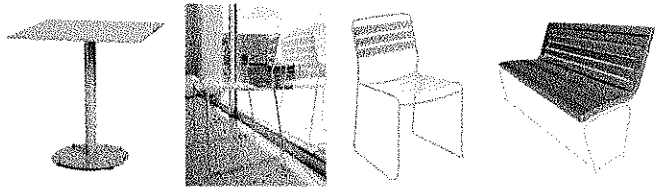
SPECIALTY FURNISHINGS



DOWNTOWN BIKE RACK BY DERO
MATERIAL: POWDER COATED METAL, BLACK

CONCRETE WALLS WITH FORMLINER PATTERN (US FORMLINER)
PATTERN: COLUMBIA
COLOR: DAVIS COLOR GRAPHITE

SEATING AND TABLES

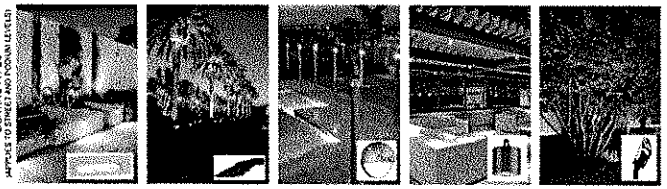


PARC CENTRE SQUARE TABLE BY LANDSCAPE FORMS

SURPRISING CHAIR BY FERMOB
COLORS: HONEY, STEEL GRAY

EP 1960 MOUNTED SEAT BY EDURPARC
SIZE: 23" LONG
MATERIAL: JAT WOOD WITH SILVER COATED METAL

LIGHTING TYPES
(APPLIES TO STREET AND PODIUM LEVELS)



LEGEND RECESSED STEP AND WALL LIGHT BY LIGMAN

JB LED DOWN LIGHT BY F/X LUMINAIRE

MS LED POST LIGHT BY F/X LUMINAIRE

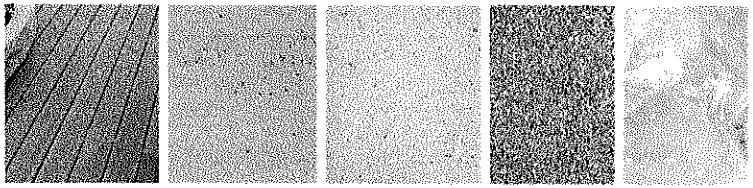
VB LED DOWN LIGHT BY F/X LUMINAIRE

NR LED UP LIGHT BY F/X LUMINAIRE

NOTE: SEE SHEETS L3.3 AND L3.4 FOR PRODUCT SPECIFICATIONS

PODIUM LEVEL

PAVING



THERMAL WOOD DECKING

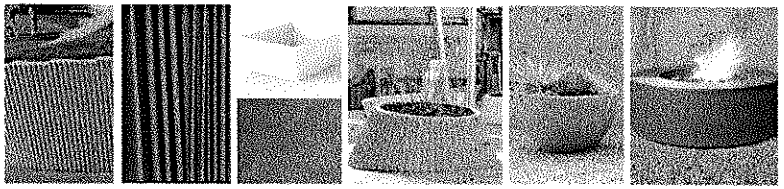
SPECSTONES PORCELAIN PAVERS
COLOR: ICON TRAVERTINE
SIZE: 12" X 12"

LARGE NARROW MODULAR PAVER BY STEPSTONE
COLOR: GRANADA WHITE
SIZE: 12"X36"

PEA GRAVEL 3/8"

LANDSCAPE GLASS BY AMERICAN SPECIALTY GLASS
COLOR/SIZE: CRYSTAL TEAL MEDIUM

SPECIALTY FURNISHING



FORMLINER CONCRETE WALLS
PATTERN: COLUMBIA
COLOR: GRAPHITE

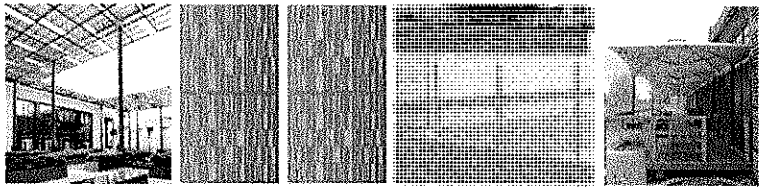
SITE TAPERED SQUARE BY PLANTERWORX
8 x 8 x 4
FINISH: OXIDIZED ZINC

LEHA PLANTERS BY LANDSCAPE FORMS
SIZE: 57" DIA., 39" HEIGHT
COLOR: GREY

MARCAS PLANTER BY CONCRETEWORKS
SIZE: 31"X31"
COLOR: TBD

TINDER CYLINDER BY CONCRETEWORKS
COLOR: GRAPHITE

SHADE STRUCTURES/FENCING



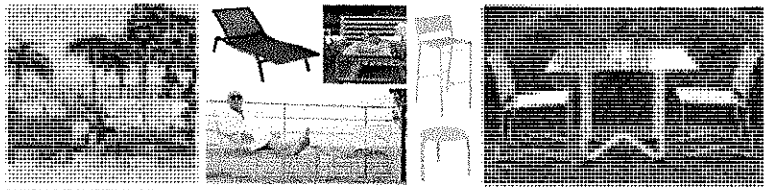
STEEL POST AND PERFORATED METAL SHADE PANEL BY BOK MODERN
8' HIGH

PERFORATED FENCE PANEL AND GATE BY BOK MODERN
HEIGHT - 5'-7' HIGH

GLASS PANEL FENCING BY KINSLO
HEIGHT: 5' TO 7'

SQUARE SHADE UMBRELLA BY SHELTER OUTDOOR
SIZE: 10'-12' X 10'-12'
COLOR: CARBON GRAY

SEATING AND TABLES



IL VIALE LOUNGE COLLECTION BY BROWN JORDAN
PIECES: LOUNGE CHAIR, LOVESEAT, SOFA
MATERIALS: REGINWEAVE AND METAL BASE WITH SUNBRELLA CUSHION
COLORS: SANDAL, PEWTER, GRANITE

SURPRISING CHAIR, BELLAVE KNOCKDOWN TABLE, WITH FOOTREST BY FERMOB
BELLAVE KNOCKDOWN TABLE BY FERMOB
ALIZE DINLOUNGER AND LOW TABLE
COSTA HIGH CHAIR BY FERMOB
COLORS: RUSSET, HONEY, STEEL GRAY

WINDMARK TABLE AND CHAIRS BY LANDSCAPE FORMS
SIZES: 42"X42" AND 52" X 96"
MATERIAL: GLASS TOP WITH POWDER COAT METAL BASE
COLOR: WHITE

2400 WILLOW PASS

MATERIALS & FURNISHINGS

L3.1

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Santa Cruz, CA 95062

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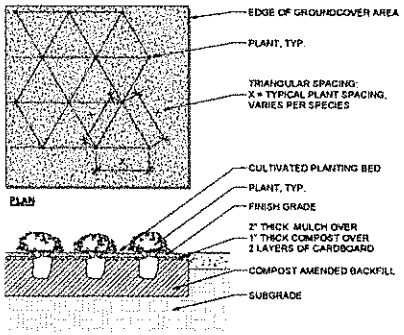
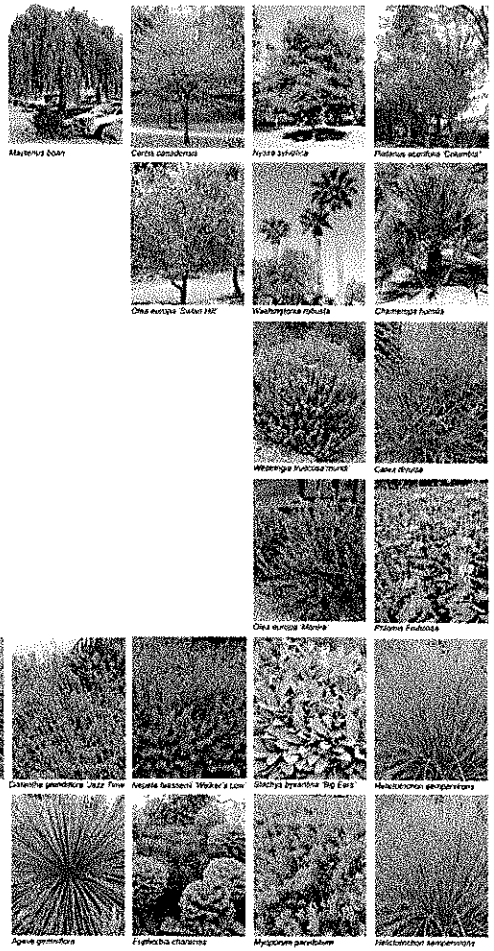


PLAN

SECTION

NOTES:
1. INSTALL DRIP IRRIGATION ABOVE CARDBOARD. OVERLAP CARDBOARD PIECES - 6" MINIMUM.
2. NO COMPOST LAYER OR CARDBOARD LAYER AT PLANTING AREAS IN ON STUCTURE SOIL MIX.

1 GROUNDCOVER LAYOUT
3/4" = 1'-0"



PLANT LIST

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING
TREE					
CeCa	3	CERCIS CANADENSIS	EASTERN REDBUD	24" BOX	25'-0"
ChHu	10	CHAMAEROPS HUMILIS	MEDITERRANEAN FAN PALM	15 GAL	12'
MaBo	5	MAYTENUS BOARI	MAYTEN TREE	24" BOX	20'-0"
NySl	14	NYSSA SYLVATICA	TUPELO TREE	24" BOX	20'
OlEu	4	OLEA EUROPAEA 'SWAN HILL'	SWAN HILL OLIVE	24" BOX	30'-0"
PlAc	13	PLATANUS X ACERIFOLIA 'COLUMBIA'	LONDON PLANE TREE	24" BOX	30'-0"
WaRo	3	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	24" BOX	10'-0"
SHRUB					
	TBD	AGAVE GEMINIFLORA	TWIN-FLOWERED AGAVE	5 GAL	4'
	TBD	EUPHORBIA CHARACIAS	EUPHORBIA	5 GAL	30"
	TBD	OLEA EUROPAEA 'MONTRA'	LITTLE OLIVE		4'-0"
	TBD	PHLOMIS FRUTICOSA	JERUSALEM SAGE	5 GAL	4'-0"
	TBD	WESTRINGIA FRUTICOSA MUNDI	MUNDI COAST ROSEMARY	5 GAL	5'-0"
GROUNDCOVER					
	TBD	CAREX DIVULSA	BERKELEY SEDGE	1 GAL	14"
	TBD	CISTANTHE GRANDIFLORA 'JAZZ TIME'	ROCK PURSLANE	1 GAL	2'-6
	TBD	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	1 GAL	2'
	TBD	MYOPORUM PARVIFOLIUM	GROUNDCOVER MYOPORUM	5 GAL	6'
	TBD	NEPETA X FAASSENII 'WALKER'S LOW'	CATMINT	1 GAL	1'-0"
	TBD	STACHYS BYZANTINA 'BIG EARS'	LAMB'S EARS	1 GAL	3'-0"

STATE MODEL WATER EFFICIENCY LANDSCAPING ORDINANCE

THE IRRIGATION SYSTEM WILL BE DESIGNED TO SUPPLY THE MINIMUM AMOUNT OF WATER NECESSARY TO SUSTAIN GOOD PLANT HEALTH. THE DESIGN AND INSTALLED SYSTEM WILL COMPLY WITH THE CALIFORNIA WATER EFFICIENT LANDSCAPE ORDINANCE (WELO - 2015 VERSION) AND APPLICABLE CITY OF CONCORD REQUIREMENTS. IN THE CASE OF OVERLAPPING STATE AND LOCAL REQUIREMENTS, THE STRICTER REQUIREMENT WILL BE APPLIED. THE IRRIGATION SYSTEM WILL CONSIST OF LOW VOLUME, LOW PRESSURE DRIP, BUBBLER OR SUBSURFACE APPLICATION METHODS TO ACHIEVE HIGHEST POSSIBLE EFFICIENCY AND ELIMINATE WATER WASTE BY WIND DRIFT, OVERSPRAY OR RUN-OFF. CONTROL OF THE SYSTEM WILL BE BY STATE-OF-THE-ART 'SMART' CONTROLLERS, CAPABLE OF DAILY SELF-ADJUSTMENT BASED ON REAL-TIME LOCAL WEATHER DATA FROM AN ON-SITE WEATHER SENSOR. ALL SPECIFIED IRRIGATION EQUIPMENT WILL BE COMMERCIAL GRADE, SELECTED FOR DURABILITY AND MINIMAL MAINTENANCE BURDEN.

IRRIGATION DESIGN INTENT

THE IRRIGATION SYSTEM IS DESIGNED TO PROVIDE THE MINIMUM AMOUNT OF WATER NECESSARY TO SUSTAIN GOOD PLANT HEALTH. ALL SELECTED COMPONENTS ARE COMMERCIAL GRADE, SELECTED FOR DURABILITY, VANDAL RESISTANCE AND MINIMUM MAINTENANCE REQUIREMENT. THE SYSTEM IS A COMBINATION OF OVERHEAD SPRINKLER AND SUBSURFACE IRRIGATION AS APPROPRIATE TO PLANT TYPE, EXPOSURE AND SLOPE CONDITIONS.

CONTROL OF THE SYSTEM IS VIA A WEATHER-ENABLED CONTROLLER CAPABLE OF DAILY SELF-ADJUSTMENT BASED ON REAL-TIME WEATHER CONDITIONS AS MEASURED BY AN ON-SITE WEATHER SENSOR.

THE SYSTEM INCLUDES A MASTER CONTROL VALVE AND FLOW SENSING CAPABILITY WHICH WILL SHUT DOWN ALL OR PART OF THE SYSTEM IF LEAKS ARE DETECTED.

2400 WILLOW PASS

PRELIMINARY PLANT PALETTE

L3.2

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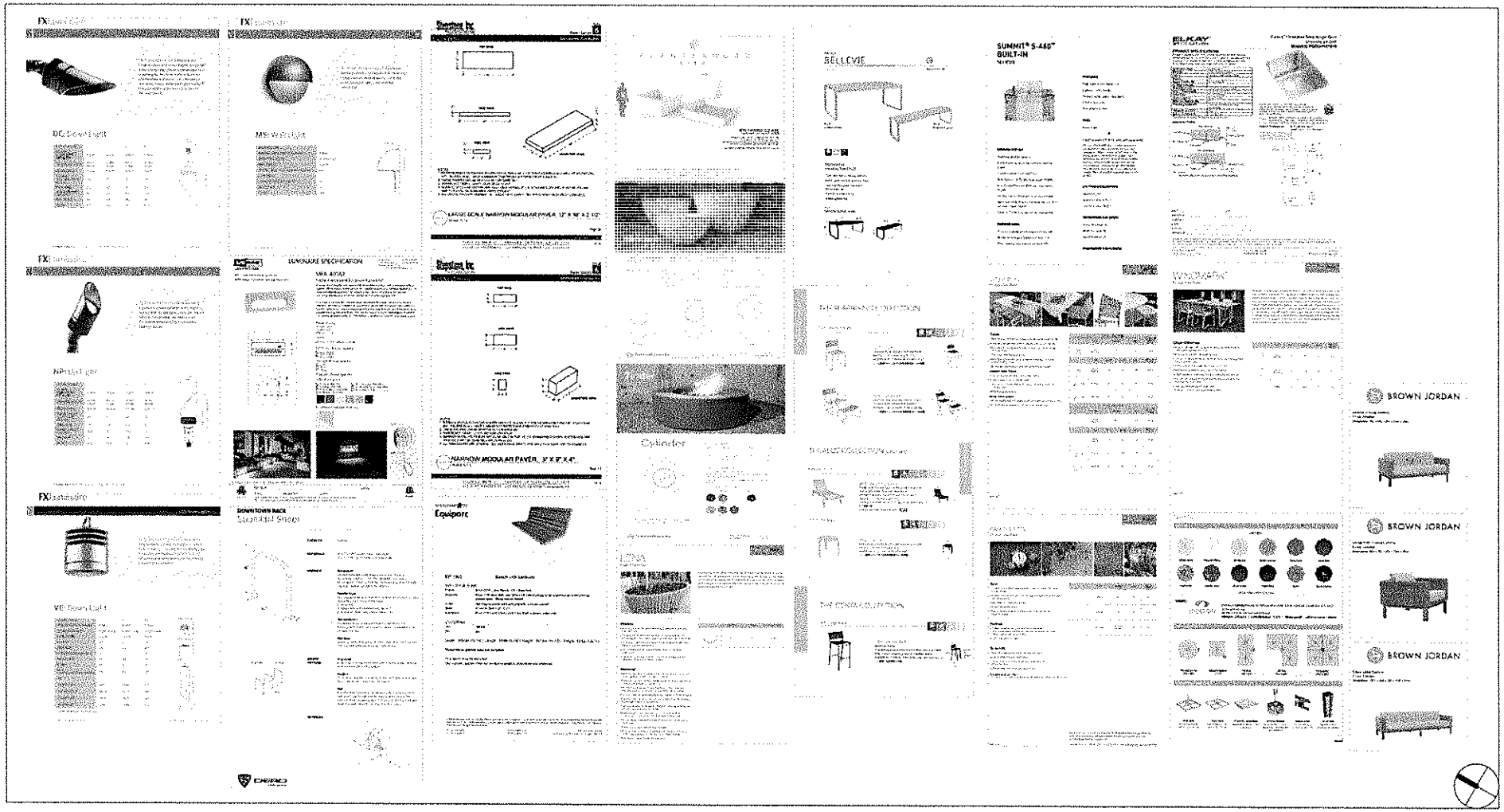

2400 WILLOW PASS

PRODUCT SPECIFICATIONS

L3.3

Argent Concord LLC
121 7th Avenue
Santa Cruz, CA 95062

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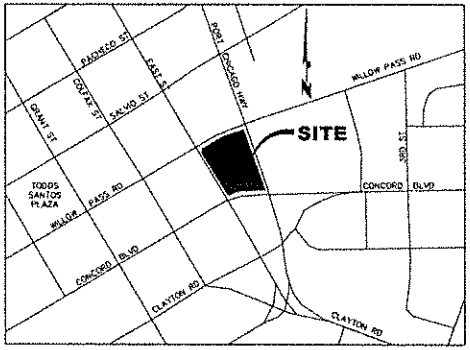
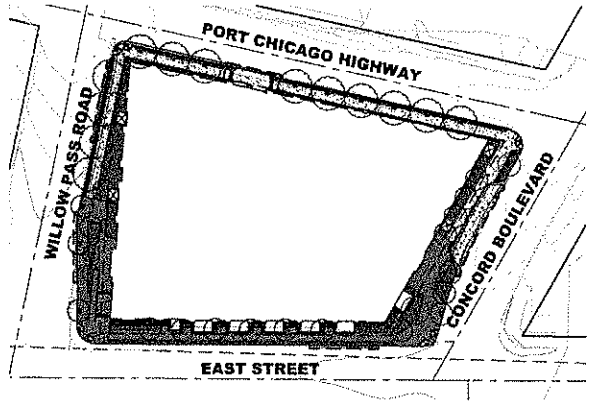


VICINITY MAP
NOT TO SCALE



SITE MAP

LEGEND

PROPERTY LINE
CENTER LINE
MONUMENT LINE, STANDARD STREET MONUMENT
ROW OF WAY LINE
ADJOINER PROPERTY LINE
EASEMENT LINE
BUILDING LINE

PARKING AND STRIPING
CHAIN LINK FENCE
WALL
RETAINING WALL
RAILROAD BART TRACK
OVERHEAD BRIDGE FOR BART
BACK/FACE OF CURB AND GUTTER LIP
CONCRETE
SIDEWALK
CONTOUR LINES

STORM DRAIN LINE, MANHOLE,
CATCHBASIN, FIELD INLET, AREA DRAIN, AREA
DRAIN WITH SOLID-GRATE
RECORD STORM DRAIN
SANITARY SEWER LINE, MANHOLE

RECORD SANITARY SEWER LINE
RECORD FIBER OPTIC LINE
WATER MAIN, METER, VALVE, HYDRANT
BACK FLOW PREVENTER
IRRIGATION CONTROL VALVE
JOINT TRENCH
UNKNOWN LINE, TIPC
UNDERGROUND ELECTRIC, METER
GAS LINE
UNKNOWN MANHOLE, VALVE, UTILITY BOX
CABLE TV BOX
SIGNAL LIGHT POLE WITH LIGHTS, SIGNAL BOX
ELECTROLIER WITH STREET LIGHT CONTROL BOX
TREE, DIAMETER OF TRUNK
DRIP LINE, VEGETATION
SIGN, POST, ROCK
SAWCUT
CURB RETURN, TRUNCATED DOMES

CONCRETE DITCH AND FLOWLINE

PAVER AREA (PERVIOUS), PER LANDSCAPE PLAN

PLANTING AREA, PER LANDSCAPE PLAN
GARAGE FOOTPRINT

ABBREVIATIONS

AB	AGGREGATE BASE	INTX	INTERSECTION
AC	ASPHALT CONCRETE	INV	INVERT
AD	AREA DRAIN	IRR	IRRIGATION
AP	ANGLE POINT	L	LEFT
ARV	AIR RELEASE VALVE	LE	LANDSCAPE EASEMENT
BC	BEGINNING OF CURVE	LF	LINEAL FEET
BFP	BACKFLOW PREVENTER	LIP	LIP OF GUTTER
BOV	BLOW-OFF VALVE	LP	LOW POINT
BSW	BACK OF SIDEWALK	MAX	MAXIMUM
BW	BOTTOM OF WALL	MIN	MINIMUM
BVC	BEGINNING OF VERTICAL CURVE	MOM	MONUMENT
C&G	CURB & GUTTER	(N)	NORTH
CB	CATCH BASIN	OC	ON CENTER
CTV	CABLE TELEVISION	PCC	POINT OF COMPOUND CURVE
CL	CENTERLINE	PG	PAVEMENT GRADE
CMP	CORRUGATED METAL PIPE	PL	PROPERTY LINE
CONC	CONCRETE	POC	POINT OF CONNECTION
CONST	CONSTRUCT	PR	PEDESTRIAN RAMP
COTG	CLEANOUT TO GRADE	PRC	POINT OF REVERSE CURVE
CR	CURB RETURN	PUE	PUBLIC UTILITY EASEMENT
D/W	DRIVEWAY	PVC	POLYVINYL CHLORIDE
DIA	DIAMETER	PVI	POINT OF VERTICAL INTERSECTION
DPA	DRIP-LINE PROTECTION AREA	RCP	REINFORCED CONCRETE PIPE
DTL	DETAIL	R	RADIUS
DWG	DRAWING	(R)	RADIAL
(E)	EAST	REC	RECORD INFORMATION
EC	END OF CURVE	R/W	RIGHT OF WAY
EG	EXISTING GRADE	RL	RESTRAIN LENGTH
ELEC	ELECTRICAL	(S)	SOUTH
EP	EDGE OF PAVEMENT	SBL	SETBACK LINE
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT	S/W	SIDEWALK
EVC	END OF VERTICAL CURVE	SD	STORM DRAIN
EX	EXISTING	SDMH	STORM DRAIN MANHOLE
(F)	FUTURE	SHT	SHEET
FB	FLUSHING BRANCH	SS	SANITARY SEWER
FC	FACE OF CURB	SSMH	SANITARY SEWER MANHOLE
FDC	FIRE DEPARTMENT CONNECTION	SF	SQUARE FEET
FES	FLARED END SECTION	STD	STANDARD
FG	FINISH GRADE	T	TELEPHONE
FH	FIRE HYDRANT	TC	TOP OF CURB
FI	FIELD INLET	TD	TRENCH DRAIN
FL	FLOW LINE	T-MAIN	TRANSMISSION MAIN
F-MAIN	FORCE MAIN	TS	TOP OF SLAB
G	GAS	TW	TOP OF WALL
GB	GRADE BREAK	TYP	TYPICAL
GR	GRATE	VC	VERTICAL CURB
HDPE	HIGH DENSITY POLYETHYLENE	VLT	VAULT
HGLB	HYDRAULIC GRADE LINE (DESIGN STORM)	W	WATER MAIN
HP	HIGH POINT	(W)	WEST

PROJECT TEAM

1. DEVELOPER/CONTRACTOR — ARGENT CONCORD, LLC
   121 7TH AVENUE
   SANTA CRUZ, CA 95062
   (830) 318-8411
   CONTACT – DAVID JONES
2. CIVIL ENGINEER — dk CONSULTING
   1931 SAN MIGUEL, SUITE 100
   WALNUT CREEK, CA 94596
   (925) 932-6868
   CONTACT – SCOTT HARTSTEIN
3. ARCHITECT — KTGY GROUP, INC.
   580 SECOND STREET, SUITE 200
   OAKLAND, CA 94607
   (510) 272-2910
   CONTACT – LILY CHANN/MICHELLA
4. LANDSCAPE ARCHITECT — PGA DESIGN
   444 17TH STREET
   OAKLAND, CA 94612
   (510) 465-1294
   CONTACT – CATHY GARRETT
5. SOILS ENGINEER — BERLOGAR STEVENS & ASSOCIATES
   5967 SUNOL BLVD
   PLEASANTON, CA 94566
   (925) 484-0220
   CONTACT – FRANK BERLOGAR

PROJECT INFORMATION

1. PROJECT SUMMARY — APN: 126-082-008
   ADDRESS: 2400 WILLOW PASS ROAD,
   CONCORD, CA
   ZONE: DWX (DOWNTOWN MIXED USE)
   SITE AREA: 1.53 ACRES (66,682 SQUARE FEET)
   DENSITY: 111.8 D.U./ACRE
   DWELLING UNITS: 171*
   FAR: 4.5
   OPEN SPACE: 38,260 SQUARE FEET*

   * REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
2. BENCH MARK — TOP OF CURB WEST RETURN OF THE EAST CORNER OF SALVIO STREET AND EAST STREET, WITH AN ELEVATION OF 71.82 FEET PER THE CITY OF CONCORD MONUMENT BENCHMARK.
3. BASIS OF BEARING — THE MONUMENT LINE ON CONCORD BOULEVARD TAKEN AS NORTH 88°47'23" EAST AS SHOWN ON RECORD OF SURVEY RECORDED AUGUST 18, 1988 IN BOOK 88 OF LAND SURVEYOR MAPS AT PAGES 15-19

SHEET INDEX

SHEET	DESCRIPTION
C1.00	COVER
C1.01	NOTES
C2.00	TYPICAL SECTIONS & DETAILS
C3.00	TOPOGRAPHIC SURVEY
C4.00	DEMOLITION PLAN
C5.00	HORIZONTAL CONTROL PLAN
C6.00	GRADING AND DRAINAGE PLAN
C7.00	UTILITY PLAN
C8.00	STORMWATER CONTROL PLAN
C8.01	STORMWATER CONTROL PLAN NOTES

2400 WILLOW PASS

COVER

C1.00

Argent Concord LLC
121 7th Avenue
Santa Cruz, CA 95062

PRELIMINARY
REGISTERED PROFESSIONAL ENGINEER
SCOTT E. HARTSTEIN
No. C 61000
CIVIL
STATE OF CALIFORNIA
EXP. DATE 09-30-18

CONCORD, CA

dk # 15-049-10 11.07.2016

dk Consulting
1931 San Miguel Rd.,
Suite 100
Walnut Creek, CA 94596
925.932.6868
dkassoc.com

dk CONSULTING
PLANNING ENGINEERING CONSTRUCTION

\\V3TLAN_FILES\PROJECTS\2015\15-1049-2400 WILLOW PASS\DWG\DESIGN REVIEW\1000\SHEETS\C1.00-COVER-1549.DWG 11/4/2016

GENERAL NOTES

1. REFERENCE APPROVED DEMOLITION, GRADING AND EROSION CONTROL PLANS PREPARED BY DK CONSULTING.
2. THE ENGINEER ASSUMES NO RESPONSIBILITY BEYOND THE ADEQUACY OF HIS DESIGN CONTAINED HEREIN.
3. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE ARCHITECT, OWNER, THE ENGINEER, AND THE CITY OF CONCORD HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER, OR THE ARCHITECT, OR THE CITY OF CONCORD PUBLIC WORKS DEPARTMENT.
4. CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
5. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE ENGINEER ASSUMES RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL BE THE OBSTRUCTIONS ENCOUNTERED. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (800) 227-2600, 48 HOURS PRIOR TO ANY EXCAVATION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AIRBORNE DUST NUISANCE FROM THE CONSTRUCTION SITE BY WATERING AND/OR TREATING THE SITE IN SUCH A MANNER TO CONFINE DUST PARTICLES TO THE IMMEDIATE SURFACE OF WORK.
7. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY. SHOULD THE CONTRACTOR FAIL TO PROVIDE THE NECESSARY SAFETY DEVICES AND THEY ARE PROVIDED BY THE CITY, THE CONTRACTOR SHALL PAY THE CITY TIME AND MATERIAL COSTS FOR PROVIDING NECESSARY SAFETY DEVICES.
8. THE CONTRACTOR SHALL NOT DISTURB OR DESTROY ANY PERMANENT SURVEY POINTS WITHOUT THE WRITTEN CONSENT OF THE CITY ENGINEER. ANY PERMANENT MONUMENTS OR POINT DISTURBED OR DESTROYED SHALL BE REPLACED BY A LICENSED ENGINEER OR SURVEYOR AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL MAINTAIN ALL SITES OF WORK DURING CONSTRUCTION SO AS TO KEEP THEM REASONABLY NEAT AND FREE OF TRASH, RUBBISH, AND OTHER DEBRIS. UPON COMPLETION OF WORK, CONTRACTOR SHALL REMOVE FROM SITES OF WORK, AND FROM PUBLIC AND PRIVATE PROPERTY, ALL TEMPORARY STRUCTURES, RUBBISH AND WASTE MATERIAL, AND SHALL PROPERLY DISPOSE OF EXCAVATED MATERIALS BEYOND THAT NEEDED TO BRING TO THE SITE TO THE ELEVATIONS SHOWN.
10. THE CONTRACTOR SHALL PROPERLY COORDINATE HIS WORK WITH THE WORK UNDER OTHER CONTRACTS THAT MAY BE UNDER WAY CONCURRENTLY WITH THIS PROJECT.
11. THE CONTRACTOR SHALL APPOINT A PROJECT FOREMAN OR SUPERINTENDENT WHO SHALL BE ON THE SITE AT ALL TIMES DURING PROGRESS AND WHO SHALL HAVE THE AUTHORITY TO ACT FOR THE CONTRACTOR. THE FOREMAN OR SUPERINTENDENT SHALL MAINTAIN AT LEAST ONE SET OF THE PROJECT PLANS AND SPECIFICATIONS AT THE SITE AT ALL TIMES.
12. THE CONTRACTOR SHALL PERFORM ALL WORK WITHIN CITY RIGHT-OF-WAY IN ACCORDANCE WITH THE MOST CURRENT SPECIFICATIONS FOR CONSTRUCTION OF IMPROVEMENTS FOR THE CITY OF CONCORD, CALIFORNIA, AND THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION, AND SHALL MEET THE APPROVAL OF THE CITY ENGINEER OF THE CITY OF CONCORD.
13. THE CONTRACTOR SHALL OBTAIN ALL ENCROACHMENT PERMITS REQUIRED FOR WORK WITHIN EXISTING PUBLIC RIGHT-OF-WAYS.
14. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THESE PLANS IN THE FIELD, SUBJECT TO APPROVAL OF THE ARCHITECT.
15. ALL OF TREES, STUMPS, STUMPS, ROCKS AND ASSOCIATED VEGETATION AND SOILS RESULTING FROM LAND CLEARING SHALL BE REUSED OR RECYCLED. SUCH MATERIAL MAY BE STOCKPILED ON SITE UNTIL THE STORAGE SITE IS DEVELOPED.

GRADING NOTES

1. GRADING OPERATION SHALL BE CONDUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE CITY OF CONCORD AND CHAPTERS 32 & 33 OF THE CALIFORNIA BUILDING CODE AND THE RECOMMENDATIONS SPECIFIED IN THE GEOTECHNICAL STUDY. THE SOILS ENGINEER WILL BE RESPONSIBLE FOR TESTING AND OBSERVATION SERVICES DURING GRADING OPERATIONS. PLAN REQUIREMENTS AND CONSTRUCTION CONTROL WITH RESPECT TO EARTHWORK SLOPE STABILITY, SETTLEMENT, COMPACTION, ETC., AS SHOWN HEREIN SHALL BE PROVIDED BY THE SOILS ENGINEER AND ARE NOT THE RESPONSIBILITY OF DK ASSOCIATES, INC. THE CONTRACTOR SHALL READ AND BE FULLY AWARE OF THE SOILS REPORT.
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. COMPACTION TESTS BY THE SOILS ENGINEER AND PAD ELEVATION CERTIFICATION BY THE CIVIL ENGINEER ARE REQUIRED ON ALL PADS.
7. ADJUST TOPS OF CATCH BASINS, MANHOLE UTILITY STRUCTURES, VAULTS, ETC TO BE FLUSH WITH SLOPE OF FINISHED GRADING.
8. THE GRADING OPERATION SHALL TAKE PLACE AT A TIME AND IN A MANNER AS TO NOT ALLOW EROSION AND SEDIMENTATION. THE SLOPES SHALL BE RESEEDED AS SOON AS POSSIBLE AFTER THE GRADING OPERATION CEASES. EROSION MEASURES SHALL BE IMPLEMENTED DURING ALL CONSTRUCTION PHASES IN ACCORDANCE WITH AN APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
9. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES (SEEDED) TO THE SATISFACTION OF THE INSPECTOR.

IMPROVEMENT NOTES

1. ALL CUT, FILL, AND TRENCH BACKFILL MUST BE TESTED BY A LICENSED SOILS ENGINEER WHO WILL PROVIDE CERTIFICATION THAT THE WORK CONFORMS TO THE REQUIREMENTS OF CITY AND STATE CODES.
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. EXISTING CURB, GUTTER AND SIDEWALK THAT ARE DAMAGED OR DISPLACED, BUT ARE NOT SHOWN TO BE REMOVED, SHALL BE REPAIRED OR REPLACED, EVEN IF DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO ANY WORK PERFORMED BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL EXPOSE AND VERIFY INVERT ELEVATIONS ON EXISTING SANITARY AND STORM SEWERS, AND CLEARANCES OF KNOWN UTILITY CROSSINGS, BEFORE CONSTRUCTING SUCH UTILITIES.
8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK TO AVOID CONFLICTS BETWEEN SEWER LATERALS, STORM DRAINS AND WATER MAINS.
9. PAYMENT OF ALL FEES, PERMITS AND BOND PREMIUMS SHALL BE AT THE CONTRACTORS EXPENSE EXCEPT WATER AND SEWER HOOKUP FEES.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO ACQUIRE ALL NECESSARY PERMITS AND BOND PREMIUMS.
11. ALL UNDERGROUND FACILITIES, INCLUDING ALL ELECTRICAL AND GAS UTILITIES TO BE PROVIDED BY PACIFIC GAS AND ELECTRIC, SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF CURBS, FINAL PREPARATION OF SUBGRADE, AND PLACEMENT OF BASE MATERIAL. CURBS AND GUTTERS TO BE COMPLETED PRIOR TO PLACEMENT OF ROADWAY BASE ROCK.

CITY OF CONCORD GENERAL NOTES

1. ALL MATERIALS AND METHOD OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST CITY OF CONCORD STANDARD PLANS AND SPECIFICATIONS, AND SUBJECT TO INSPECTION BY THE CITY OF CONCORD ENGINEERING DIVISION.
2. THE PERMITTEE/CONTRACTOR SHALL NOTIFY THE CITY OF CONCORD ENGINEERING DIVISION TWO (2) BUSINESS DAYS PRIOR TO THE START OF ANY WORK.
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]
9. [illegible]
10. [illegible]
11. [illegible]
12. [illegible]
13. [illegible]
14. [illegible]
15. THE CONTRACTOR SHALL PROVIDE EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, AMBULANCE, POLICE AND FIRE DEPARTMENTS AT THE JOB SITE.
16. THE CONTRACTOR SHALL NOT DISTURB OR DESTROY ANY PERMANENT SURVEY POINTS WITHOUT THE CONSENT OF THE CITY OF CONCORD CITY ENGINEER. ANY PERMANENT MONUMENTS OR POINTS DISTURBED OR DESTROYED SHALL BE REPLACED BY A REGISTERED CIVIL ENGINEER OR LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.

CITY OF CONCORD GENERAL NOTES CONTINUED

17. ALL CONSTRUCTION STAKING SHALL BE DONE BY A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR. UPON COMPLETION OF GRADING, THE CONTRACTOR SHALL REQUEST THE LICENSED LAND SURVEYOR TO CHECK THE GRADES AND CERTIFY THAT THE PADS ARE GRADED TO WITHIN ±0.10 FOOT OF FINISH PAD GRADE.
18. THE CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS FOR PRIVATE PROPERTY ADJACENT TO THE WORK AREA THROUGHOUT THE PERIOD OF CONSTRUCTION.
19. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING STREETS, SURROUNDING LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN GRADE, AVOIDING ANY ABRUPT OR APPARENT CHANGES IN GRADE OR CROSS SLOPE, LOW SPOTS OR HAZARDOUS CONDITIONS.
20. EXISTING CURB AND SIDEWALK WITHIN THE PROJECT LIMITS THAT ARE DAMAGED OR DISPLACED, EVEN THOUGH THEY WERE NOT TO BE REMOVED, SHALL BE REPAIRED OR REPLACED, EVEN IF THE DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO ANY WORK PERFORMED BY THE CONTRACTOR.
21. THE CONTRACTOR SHALL CONTROL DUST BY WATERING EXPOSED SURFACES AS NEEDED. INCREASED WATERING SHALL BE REQUIRED WHEN WIND SPEEDS EXCEED 10 MPH OR WHEN DIRECTED BY THE CITY.
22. NO PERSON SHALL, WHEN HAULING ANY EARTH, SAND, GRAVEL, STONE, DEBRIS, PAPER, OR ANY OTHER SUBSTANCE OVER ANY PUBLIC STREETS OR OTHER PUBLIC PLACE, ALLOW MATERIAL TO BLOW OR SPILL OVER AND UPON SAID PUBLIC OR ADJACENT PRIVATE PROPERTY. ALL LOADS LEAVING THE SITE SHALL BE COVERED.
23. THE CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION DRIVES TO PREVENT THE TRACKING OF SOIL, DUST, MUD, OR CONSTRUCTION DEBRIS ON PUBLIC STREETS.
24. MUD TRACKED ONTO STREETS OR ADJACENT PROPERTIES SHALL BE REMOVED IMMEDIATELY. STREET SHALL BE SWEPT WITH A POWER SWEEPER (NOT PRESSURE WASHED) AS DIRECTED BY THE CITY.
25. A DISPOSAL SITE FOR ANY OFF-SITE HAUL OF DIRT MATERIALS SHALL BE APPROVED BY THE CITY PRIOR TO APPROVAL OF THE GRADING PERMIT. THE OFF-SITE HAUL ROUTE FOR EXCESS DIRT OR CONSTRUCTION DEBRIS IS SUBJECT TO APPROVAL OF THE CITY ENGINEER.
26. [illegible]
27. [illegible]
28. [illegible]
29. STOCKPILED TOPSOIL SHALL BE UTILIZED FOR ON-SITE REVEGETATION ONLY. STOCKPILES OF SOIL, TOPSOIL, CONSTRUCTION DEBRIS, OR ANY OTHER MATERIAL WHICH MAY BE A POTENTIAL SOURCE OF WINDBLOWN PARTICULATES SHALL BE COVERED DURING SITE PREPARATION AND CONSTRUCTION ACTIVITIES AS NECESSARY OR AS DIRECTED BY THE CITY.
30. REPLACE ALL SIGNS AND POLES WITH NEW SIGNS AND POLES UNLESS SPECIFIED ON PLAN.
31. HE PROJECT APPLICANT SHALL SWEEP STREETS DAILY, OR AS NECESSARY, WITH WATER SWEEPERS IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS.
32. REPLACE ALL DAMAGED PAVEMENT MARKINGS CAUSED BY PROJECT. LEGENDS AND CROSSWALKS SHALL BE THERMOPLASTIC. USE CERAMIC BUTTONS ON LANE LINES.
33. A SEPARATE PERMIT IS REQUIRED FOR THE CONSTRUCTION OF RETAINING WALLS.
34. THE CONTRACTOR SHALL SUBMIT HIS ANNUAL O.S.H.A. PERMIT AT THE PRE-CONSTRUCTION MEETING.
35. ALL WORK SHALL BE IN CONFORMANCE WITH THE LATEST ADA STANDARDS. HANDICAP RAMPS SHALL HAVE TRUNCATED DOMES.

CITY OF CONCORD STD TRAFFIC CONTROL NOTES

1. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "TRAFFIC CONTROLS IN CONSTRUCTION AND MAINTENANCE WORK ZONES" BY THE U.S. DEPARTMENT OF TRANSPORTATION.
2. THE CONTRACTOR SHALL PROVIDE, AT ALL TIMES, LIGHTS, SIGNS, BARRICADES, CONES, FLAG MEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY AND TO MAINTAIN TRAFFIC CONTROLS.
3. THE CONTRACTOR SHALL LIMIT ANY LANE CLOSURES TO ONE LANE AT A TIME AND TO USE ONE SIDE OF THE ROADWAY ON ANY UNDIVIDED STREET UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY OF CONCORD ENGINEERING DEPARTMENT. LANE CLOSURES SHALL BE LIMITED TO WEEKDAYS (MONDAY THROUGH FRIDAY) EXCEPT CITY HOLIDAYS AND FROM 9:00 AM TO 3:30 PM.
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible] 24 HOURS.
9. AT THE PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL PROVIDE WRITTEN EVIDENCE (LETTER, COPY OF CONTRACT, ETC) THAT HE HAS A LICENSED TRAFFIC SIGNAL CONTRACTOR ENGAGED TO PROVIDE 24 HOUR EMERGENCY REPAIR SERVICES IF/AS NEEDED

CITY OF CONCORD SEWER/ UTILITY INSTALLATION NOTES

1. NO MORE TRENCH SHALL BE EXCAVATED THAN MAY BE BACKFILLED AND COMPACTED WITHIN THE CURRENT WORKING DAY. A STEEL PLATE TO FACILITATE THE START OF NEXT DAY'S WORK MAY COVER THE END OF THE TRENCH. THIS TRENCH PLATE SHALL NOT BE LEFT IN THE SAME LOCATION FOR MORE THAN ONE WORKING DAY. TRENCH PLATES LEFT FOR MORE THAN ONE DAY WILL BE REMOVED, BACKFILLED, COMPACTED, AND TEMPORARILY PAVED UNTIL WORK RESUMES.
2. ALL TRENCH BACKFILL, WHICH LIES WITHIN EITHER EXISTING, NEW OR NON ROADWAY AREAS, SHALL CONFORM TO THE BACKFILL SPECIFICATIONS OF THE CITY OF CONCORD STANDARD PLAN S-17.
3. ALL SANITARY SEWER INSTALLATIONS, PIPES AND STRUCTURES SHALL CONFORM TO CENTRAL CONTRA COSTA SANITARY DISTRICT AND CITY OF CONCORD REQUIREMENTS. SEWER MANHOLES SHALL HAVE PRECAST STEPS CONFORMING TO CITY OF CONCORD STANDARD PLAN S-3. SEWER MANHOLE COVERS SHALL BE MARKED "CITY OF CONCORD" AS SHOWN ON CITY OF CONCORD STANDARD.
4. ALL SEWER LATERALS SHALL HAVE CLEANOUTS 2'± BEHIND THE PUBLIC RIGHT-OF-WAY AND A BACKWATER OVERFLOW DEVICE AT THE BUILDING PER CCCSD SEC. 28-34.
5. CONNECTION OF NEW SEWER LATERALS TO EXISTING MANHOLES SHALL BE INSTALLED AT THE TOP OF THE CONCRETE SHELF AT THE BOTTOM OF THE MANHOLE.
6. STENCIL ALL CATCH BASINS AND INLETS WITH A "NO DUMPING, DRAINS TO BAY", WITH FISH SYMBOL THERMOPLASTIC DECAL.
7. ALL EXISTING AND PROPOSED STREET ELECTROLIERS ON WILLOW PASS ROAD SHALL BE PAINTED OR RE-PAINTED CONCORD POLE BLUE.

2400 WILLOW PASS

Argent Concord LLC
121 7th Avenue
Santa Cruz, CA 95062

\\...\13-1048-2400 WILLOW PASS\DWG\DESIGN REVIEW\...\SHEETS\C1.01-NOTES-1348.DWG 11/4/2016

PRELIMINARY
EXP. DATE 09-30-18

NOTES

CONCORD, CA

C1.01

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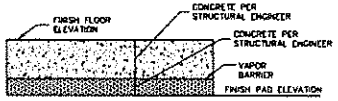
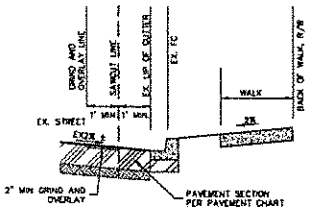


BUILDING SLAB SECTION
NOT TO SCALE



NOTES:

1) SAWCUT A CLEAN NEAT LINE

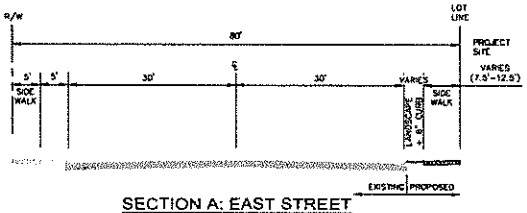
2) EXPOSE A FULL STRUCTRAL SECTION. WIDEN SAWCUT INTO STREET AS REQUIRED.

3) TACK COAT ALL VERTICAL SURFACES PRIOR TO ASPHALT CONCRETE INSTALLATION.

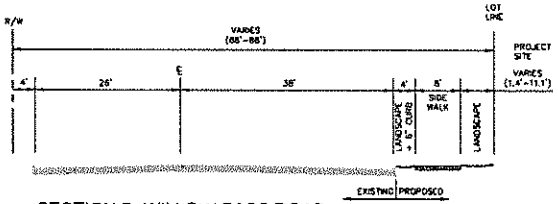
4) NEW SIDEWALK TO CONFORM TO BACK OF EXISTING CURB IN LOCATIONS WHERE CURB AND GUTTER ARE TO REMAIN. (WILLOW PASS) (SEE S-10 FOR DOWELING DETAIL)

5) PAVEMENT SECTION PER CITY OF CONCORD OR GEOTECHNICAL ENGINEER

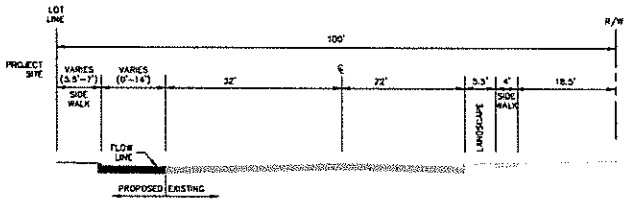
TYPICAL SAWCUT DETAIL
NOT TO SCALE



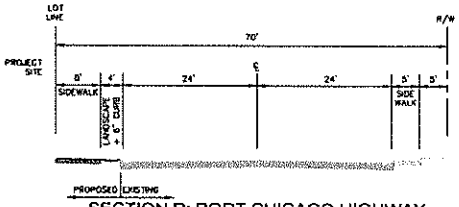
SECTION A: EAST STREET
NOT TO SCALE



SECTION B: WILLOW PASS ROAD
NOT TO SCALE



SECTION C: CONCORD BOULEVARD
NOT TO SCALE



SECTION D: PORT CHICAGO HIGHWAY
NOT TO SCALE

2400 WILLOW PASS

SECTIONS & DETAILS

C2.00

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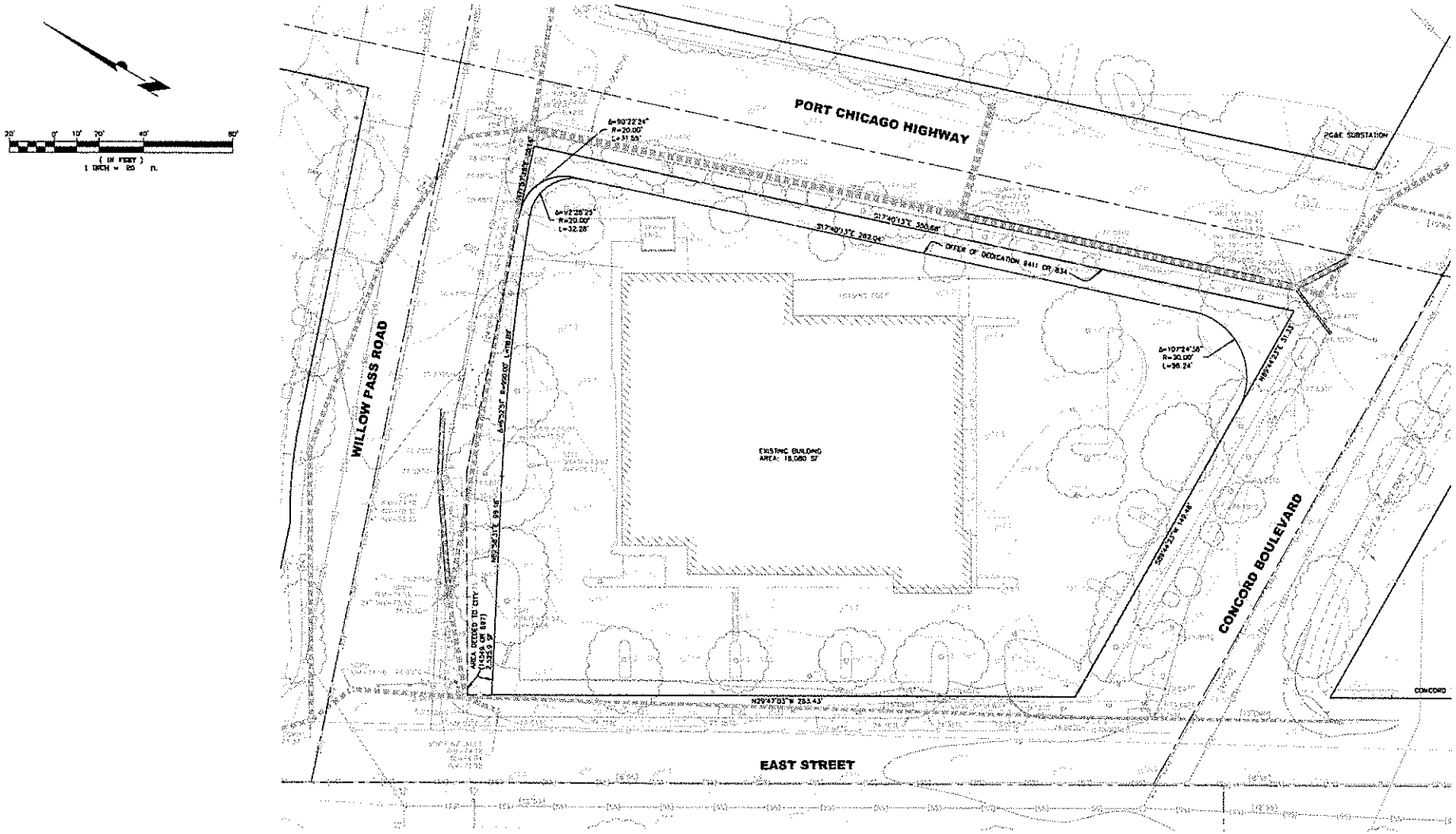

2400 WILLOW PASS

TOPOGRAPHIC SURVEY

C3.00

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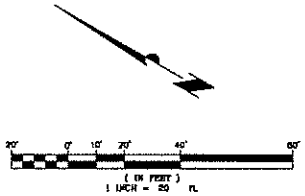
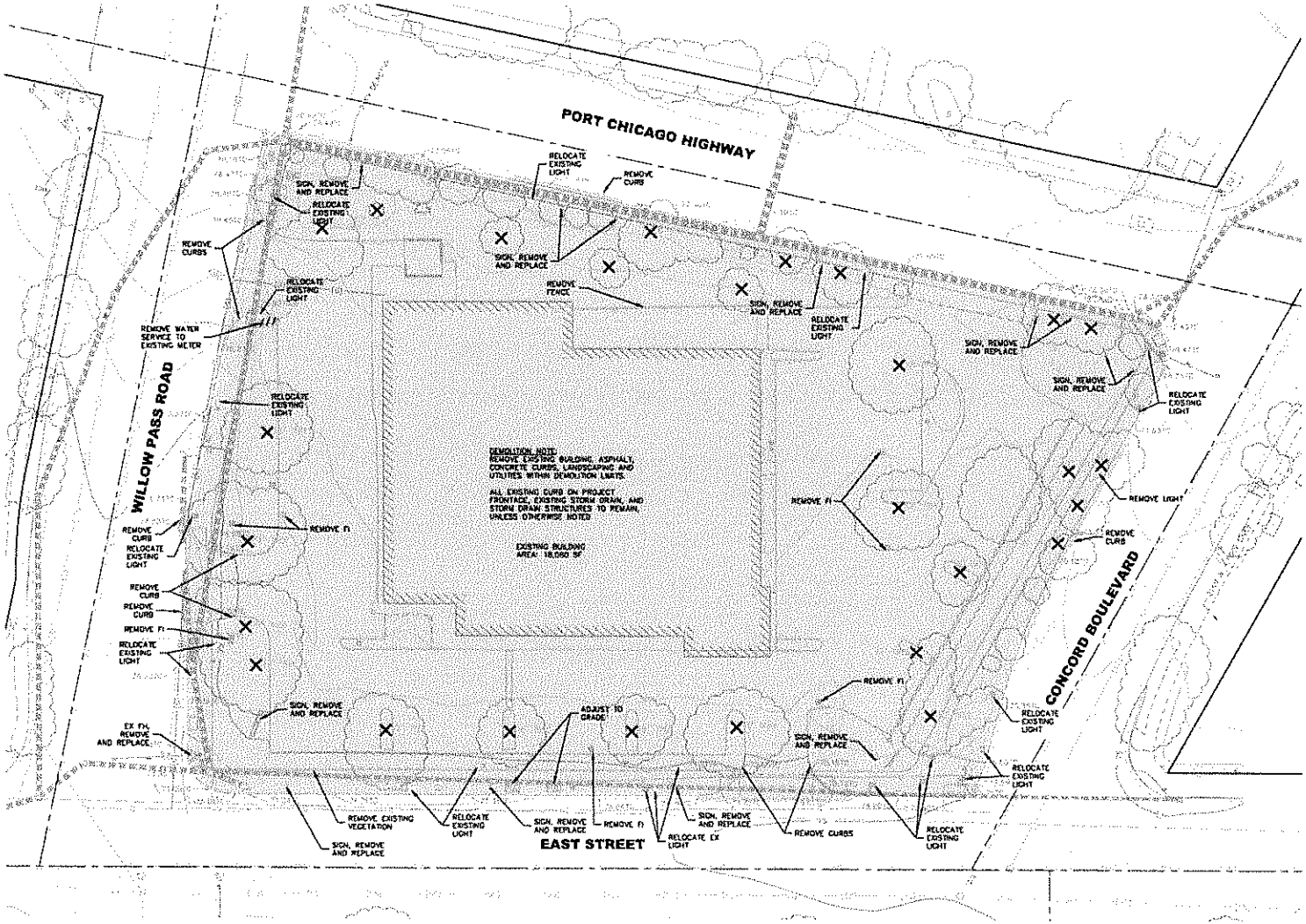


DEMOLITION NOTES

1. ALL UNDERGROUND UTILITIES SHALL REMAIN AND BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
2. TURN OFF ALL UTILITIES SERVING THE EXISTING BUILDING PRIOR TO DEMOLITION OF THE BUILDING.
3. DUST CONTROL MEASURES SHALL BE IMPLEMENTED DURING DEMOLITION.
4. SEE JOINT TRENCH PLAN FOR DRY UTILITY RELOCATION AND DRY UTILITY BOXES TO BE REMOVED, MOUNTED, OR ADJUSTED TO GRADE.
5. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BY CONTACTING USA AT 1-800-227-2600, OR 811.
6. TRAFFIC AND PEDESTRIAN CONTROL PLANS SHALL BE PREPARED PRIOR TO ANY SIDEWALK OR LANE CLOSURES.
7. ALL TREES SHALL BE IDENTIFIED AND TAGGED BY A CERTIFIED ARBORIST.
8. PRIOR TO ANY DEMOLITION, EXISTING TREES TO REMAIN SHALL BE PROTECTED AS REQUIRED BY PROJECT ARBORIST.

LEGEND

X	TREE TO BE REMOVED
———	BUILDING FOOTPRINT
·····	DEMOLITION LIMITS
////////	REMOVE UTILITY LINE



2400 WILLOW PASS

DEMOLITION PLAN

C4.00

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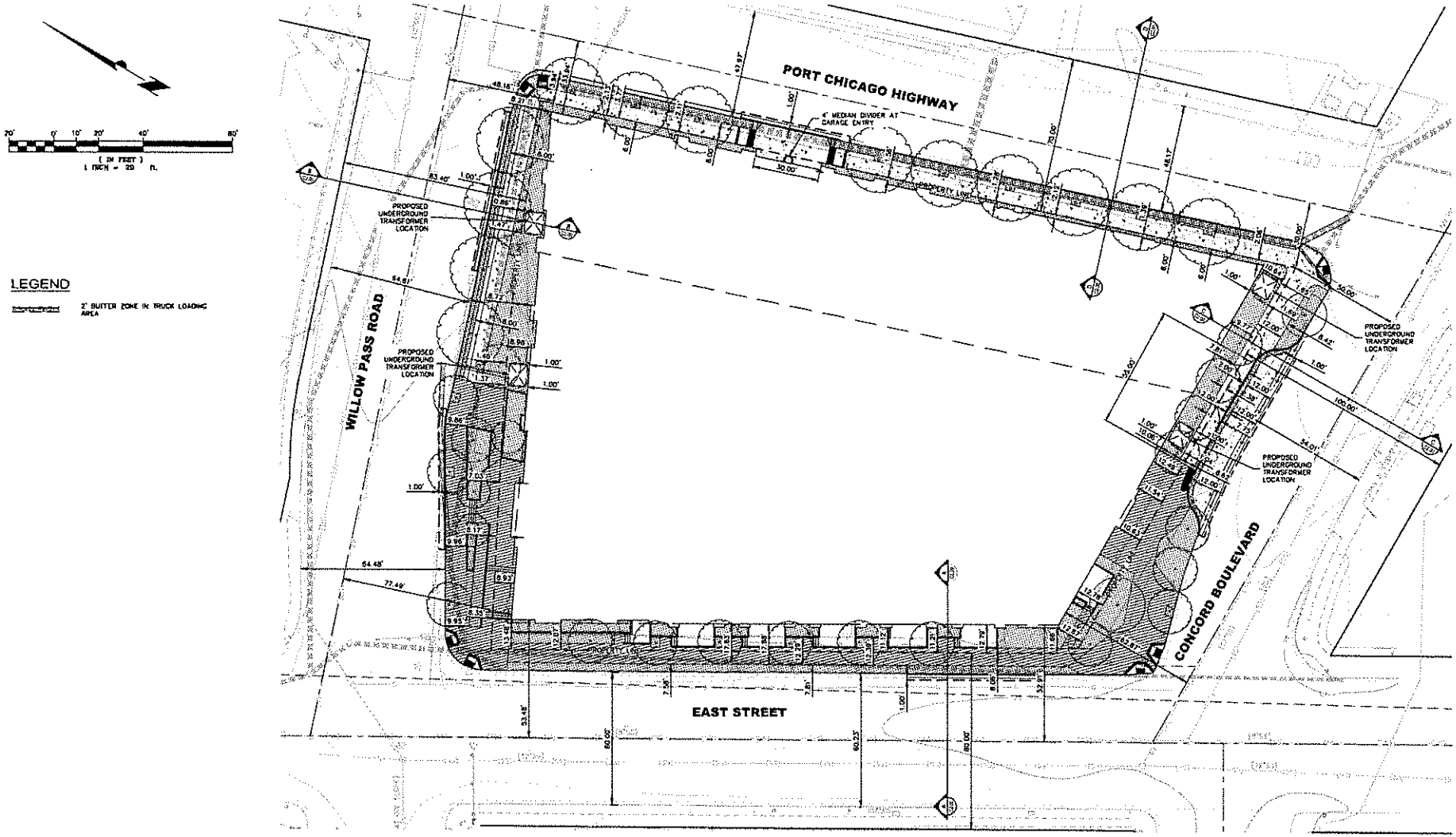

2400 WILLOW PASS

HORIZONTAL CONTROL PLAN

C5.00

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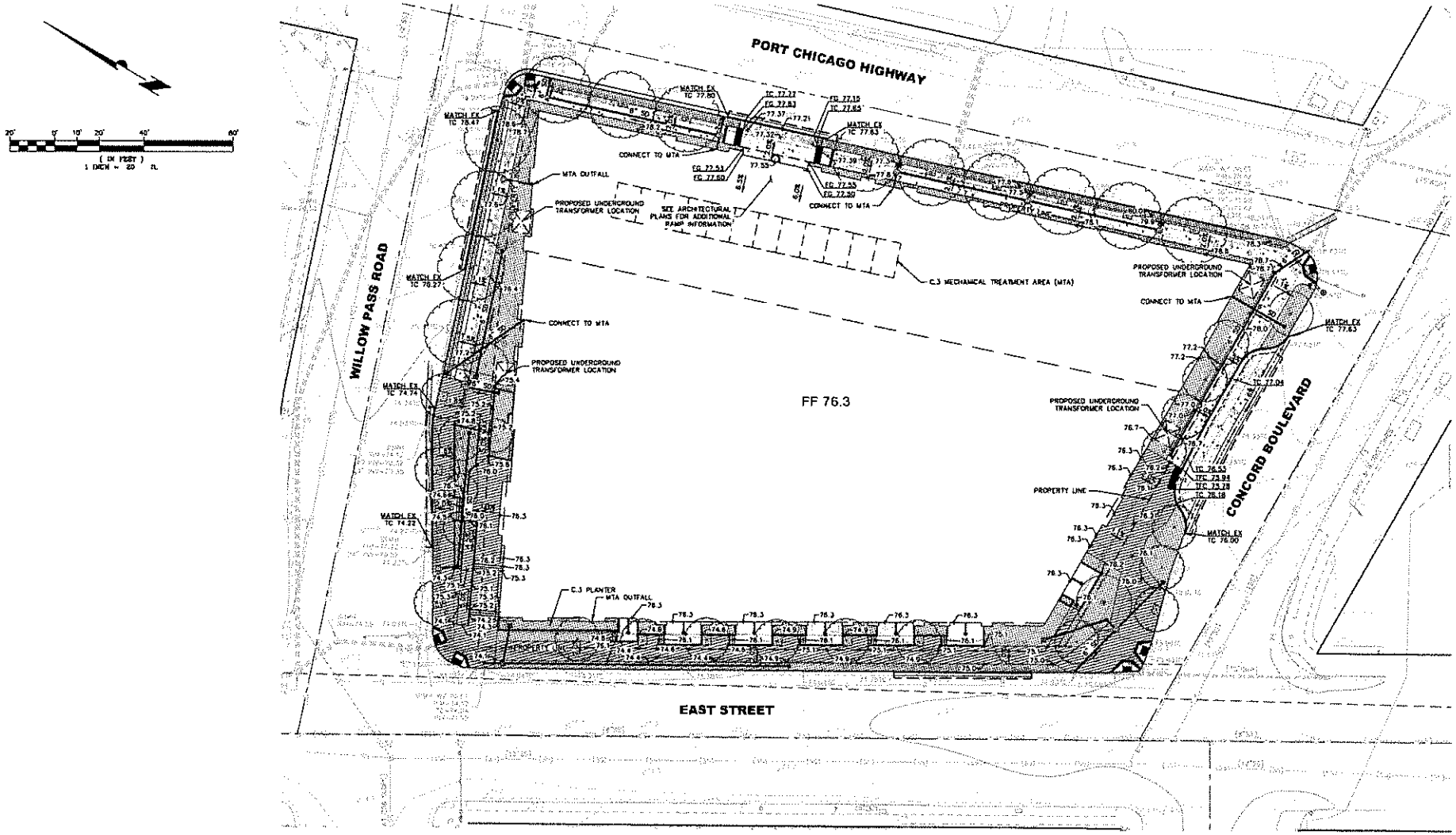

2400 WILLOW PASS

GRADING AND DRAINAGE PLAN

C6.00

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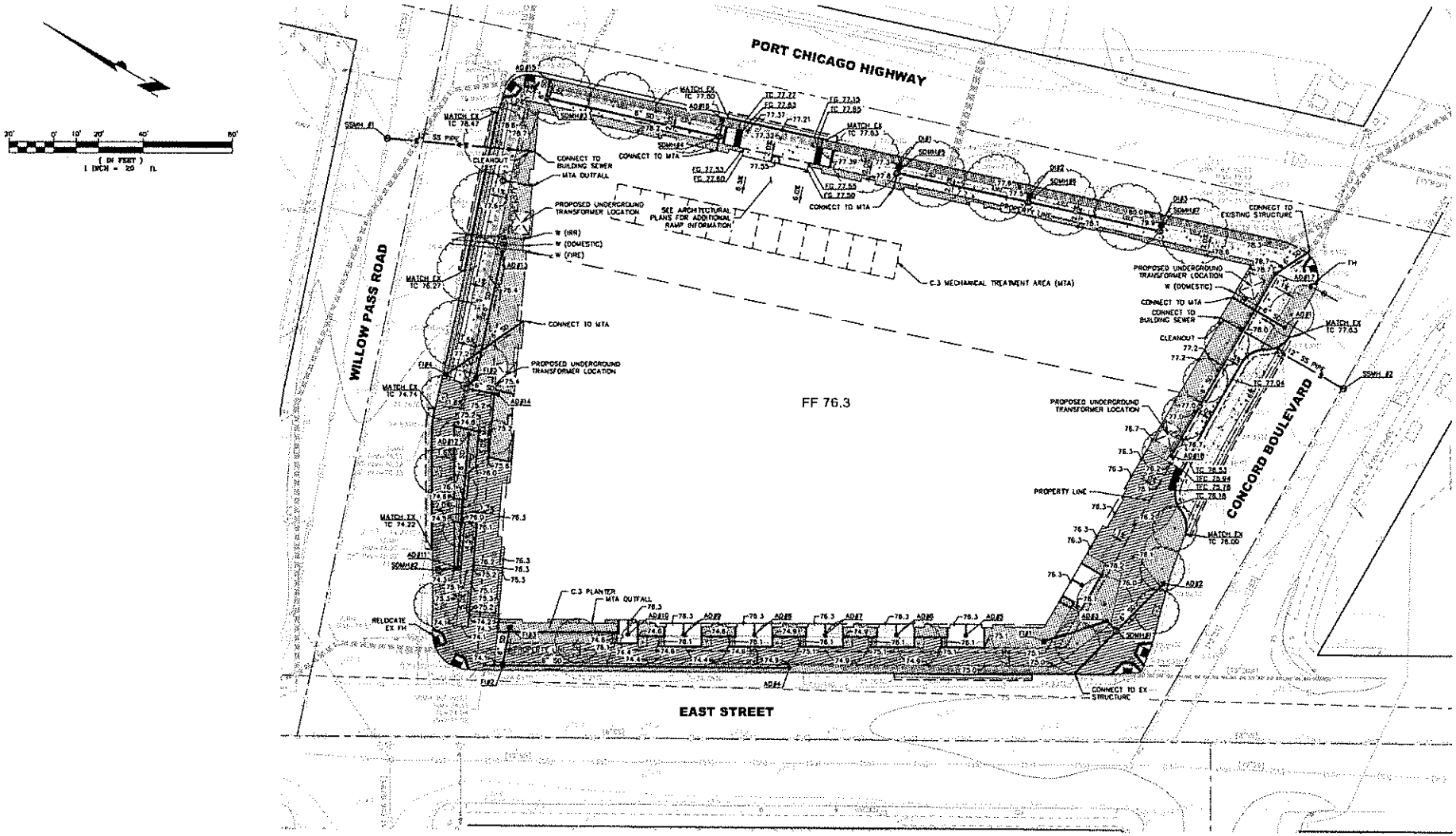

2400 WILLOW PASS

UTILITY PLAN

C7.00

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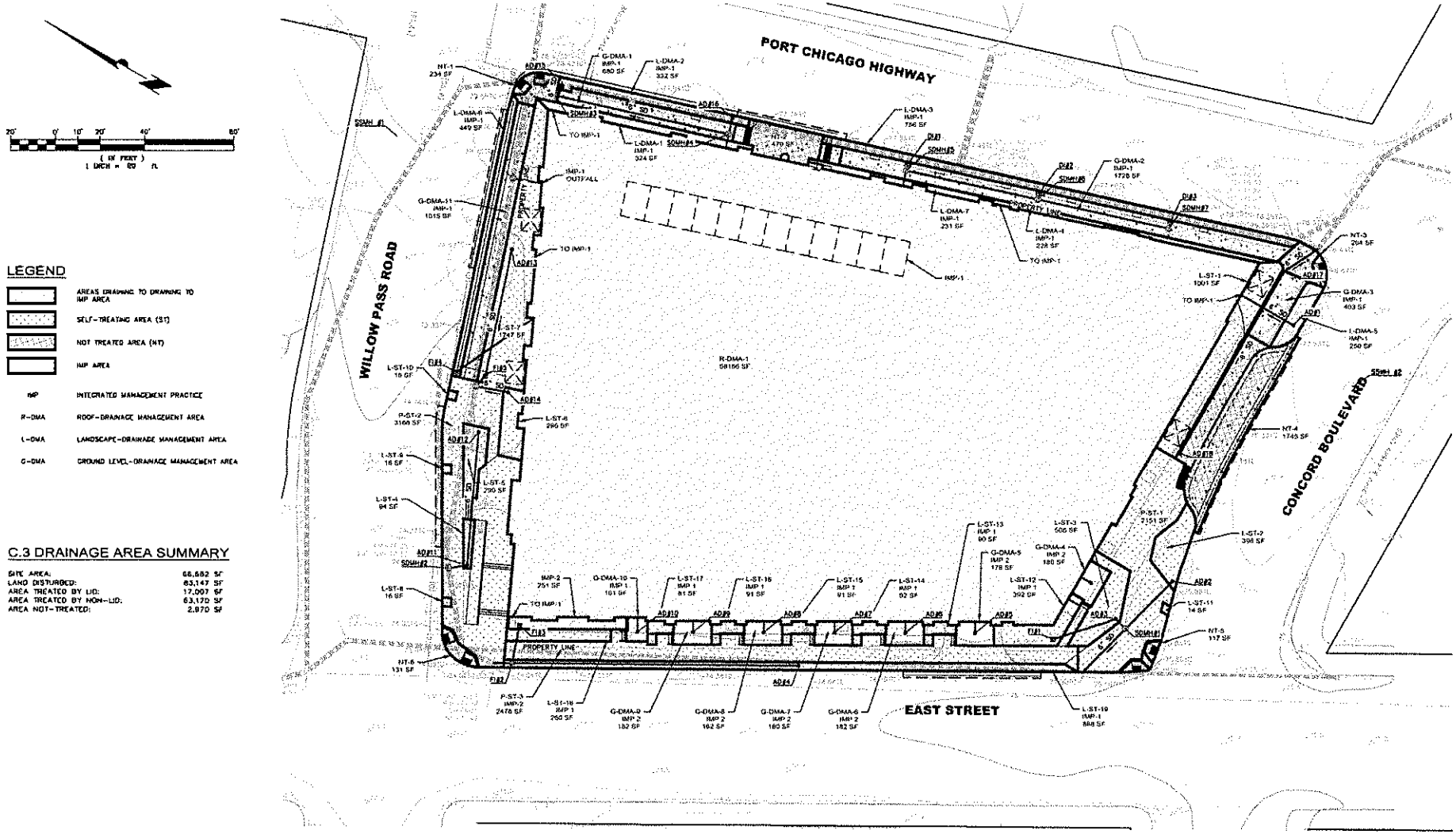

2400 WILLOW PASS

STORMWATER CONTROL PLAN

C8.00

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C.3 STORMWATER CONTROL NOTES

1. THIS PROJECT IS REGULATED BY THE MUNICIPAL REGIONAL STORMWATER NPDES PERMIT, ORDER NO. R2-2009-0074 DATED OCTOBER 14, 2009. CALCULATIONS ARE BASED ON THE CONTRA COSTA CLEAN WATER PROGRAM'S "STORMWATER C.3 GUIDEBOOK", 8TH EDITION, FEBRUARY 15, 2012 (GUIDEBOOK).
2. THE TOTAL PROJECT SITE IS 1.53 ACRES AND THE TOTAL AREA OF LAND DISTURBED IS 1.91 ACRES.
3. THE PROJECT PROPOSES TO CREATE 1,786 SQUARE FEET OF NEW IMPERVIOUS SURFACE AND WILL REPLACE 64,083 SQUARE FEET OF EXISTING IMPERVIOUS SURFACE AREA. THE TOTAL PRE-PROJECT IMPERVIOUS SURFACE AREA IS 64,083 SQUARE FEET. THE TOTAL POST-PROJECT IMPERVIOUS SURFACE AREA IS 63,881 SQUARE FEET.
4. HARVESTING AND USE DETERMINATION

USES AND USER UNITS (RESIDENTS/ DWELLING UNIT)	TOILET AND URINAL WATER USAGE (GAL/DAY)	WATER USE PER ACRE (GAL/DAY/ACRE)	REQUIRED DEMAND (GAL/DAY/ACRE)	IS PROJECT USE ≥ REQUIRED DEMAND?	CAN RUNOFF BE PIPED TO AN IRRIGATED AREA 2.5x THE IMPERVIOUS AREA?
2.8	1471	1100	5900	NO	NO

CONTIGUOUS ROOF AREAS GREATER THAN 10,000 SQUARE FEET MUST BE LISTED SEPARATELY.

5. PROVISION C.3 PROJECT REQUIREMENTS INCLUDE:
   C) NEW/REDEVELOPMENT AREA SUBJECT TO TREATMENT AND FLOW CONTROL.
6. COMPLIANCE WITH FLOW CONTROL REQUIREMENTS ARE MET THROUGH:
   C) OPTION 2: INTEGRATED MANAGEMENT PRACTICES PER THE GUIDEBOOK.
7. DESIGN CRITERIA
   A) MEAN ANNUAL PRECIPITATION = 18.5 INCHES PER CCCPWD MEAN SEASONAL ISOHYETS, FIGURE B-158
   B) SOIL GROUP "D"
   C) HYDRAULIC DESIGN CRITERIA: 0.2 INCHES PER HOUR RAINFALL INTENSITY
   D) BIORETENTION SOIL LOADING RATE: 5 INCHES PER HOUR
   E) BIORETENTION SOIL MIX PER APPENDIX B OF THE GUIDEBOOK
8. THE PROJECT SITE IS DELINEATED INTO 46 DRAINAGE MANAGEMENT AREAS (DMAS) AS SHOWN ON SHEET C8.00. DATA OUTPUT FROM THE CONTRA COSTA CLEAN WATER PROGRAM IMP SIZING CALCULATOR IS INCLUDED ON THIS SHEET.

PROJECT DATA

PROJECT NAME/NUMBER	2400 WILLOW PASS
APPLICATION SUBMITTAL DATE	SEPTEMBER 22, 2016 (DESIGN REVIEW SUBMITTAL DATE)
PROJECT LOCATION	CONCORD, CA
NAME OF DEVELOPER	ARGENT CONCORD LLC
PROJECT PHASE NO.	NA
PROJECT TYPE AND DESCRIPTION	RESIDENTIAL
PROJECT WATERSHED	PINE CREEK WATERSHED
TOTAL PROJECT SITE AREA (ACRES)	1.53
TOTAL AREA OF LAND DISTURBED (ACRES)	1.91
TOTAL NEW IMPERVIOUS SURFACE AREA	2,055
TOTAL REPLACED IMPERVIOUS AREA	64,083
TOTAL PRE-PROJECT IMPERVIOUS SURFACE AREA	64,083
TOTAL POST-PROJECT IMPERVIOUS AREA	66,140
50% RULE(*)	APPLIES
PROJECT DENSITY	111.8 DU
APPLICABLE SPECIAL PROJECT CATEGORIES	CATEGORY 8, 100% LID CREDIT
PERCENT LID AND NON-LID TREATMENT	LID: 18.8% NON-LID: 77.8% NOT-TREATED: 3.6%
IMP COMPLIANCE (**)	APPLIES
* 50% RULE APPLIES IF: TOTAL REPLACED IMPERVIOUS SURFACE AREA > 0.5 x PRE-PROJECT IMPERVIOUS SURFACE AREA	
** IMP APPLIES IF: TOTAL NEW IMPERVIOUS SURFACE AREA + TOTAL REPLACED IMPERVIOUS AREA ≥ 1 ACRE	

IMP CALCULATION SUMMARY - AREAS DRAINING TO IMPs

IMP NAME: IMP-1 IMP TYPE: MECHANICAL TREATMENT AREA SOIL TYPE: D

DMA NAME	DMA AREA (SF)	POST-PROJECT SURFACE TYPE	DMA RUN OFF FACTOR	DMA AREA x RUNOFF FACTOR
R-DMA-1	58,156	CONVENTIONAL ROOF	1.00	58,156
G-DMA-1	680	CONCRETE OR ASPHALT	1.00	680
G-DMA-2	1,726	CONCRETE OR ASPHALT	1.00	1,726
G-DMA-3	403	CONCRETE OR ASPHALT	1.00	403
G-DMA-11	1,015	CONCRETE OR ASPHALT	1.00	1,015
L-DMA-1	324	LANDSCAPE	0.70	227
L-DMA-2	332	LANDSCAPE	0.70	232
L-DMA-3	766	LANDSCAPE	0.70	536
L-DMA-4	228	LANDSCAPE	0.70	160
L-DMA-5	250	LANDSCAPE	0.70	175
L-DMA-6	449	LANDSCAPE	0.70	314
L-DMA-7	231	LANDSCAPE	0.70	162
TOTAL				63,786

IMP SIZING	IMP SIZING FACTOR	RAIN ADJUSTMENT FACTOR	MINIMUM AREA OR VOLUME	PROPOSED AREA OR VOLUME
AREA	0.040	1.000	2,552	2,556
VOLUME	0.064	1.163	4,747	4,755
MAXIMUM UNDERDRAIN FLOW (CFS)				0.09
ORIFICE DIAMETER (IN)				1.39

IMP NAME: IMP-2 IMP TYPE: FLOW-THROUGH PLANTER SOIL TYPE: D

DMA NAME	DMA AREA (SF)	POST-PROJECT SURFACE TYPE	DMA RUN OFF FACTOR	DMA AREA x RUNOFF FACTOR
G-DMA-4	186	CONCRETE OR ASPHALT	1.00	186
G-DMA-5	178	CONCRETE OR ASPHALT	1.00	178
G-DMA-6	182	CONCRETE OR ASPHALT	1.00	182
G-DMA-7	180	CONCRETE OR ASPHALT	1.00	180
G-DMA-8	182	CONCRETE OR ASPHALT	1.00	182
G-DMA-9	182	CONCRETE OR ASPHALT	1.00	182
G-DMA-10	98	CONCRETE OR ASPHALT	1.00	98
TOTAL				1,188

IMP SIZING	IMP SIZING FACTOR	RAIN ADJUSTMENT FACTOR	MINIMUM AREA OR VOLUME	PROPOSED AREA OR VOLUME
AREA	0.050	1.163	59	251
SURFACE VOLUME	0.042	1.163	58	126
SUBSURFACE VOLUME	0.055	1.163	76	77
MAXIMUM UNDERDRAIN FLOW (CFS)				0.00
ORIFICE DIAMETER (IN)				0.25

IMP CALCULATION SUMMARY - SELF-TREATING AREAS

DMA NAME	AREA (SF)
L-ST-1	1,001
L-ST-2	398
L-ST-3	505
L-ST-4	94
L-ST-5	290
L-ST-6	296
L-ST-7	1,747
L-ST-8	16
L-ST-9	16
L-ST-10	15
L-ST-11	14
L-ST-12	392
L-ST-13	90
L-ST-14	92
L-ST-15	91
L-ST-16	91
L-ST-17	81
L-ST-18	284
L-ST-19	886
P-ST-1	2,131
P-ST-2	3,168
P-ST-3	2,473
TOTAL	14,176

IMP CALCULATION SUMMARY - NOT TREATED AREAS

NOT-TREATED AREAS	
DMA NAME	AREA (SF)
NT-1	234
NT-2	479
NT-3	284
NT-4	1,745
NT-5	117
NT-6	131
TOTAL	2,970

2400 WILLOW PASS

STORMWATER CONTROL PLAN NOTES

C8.01

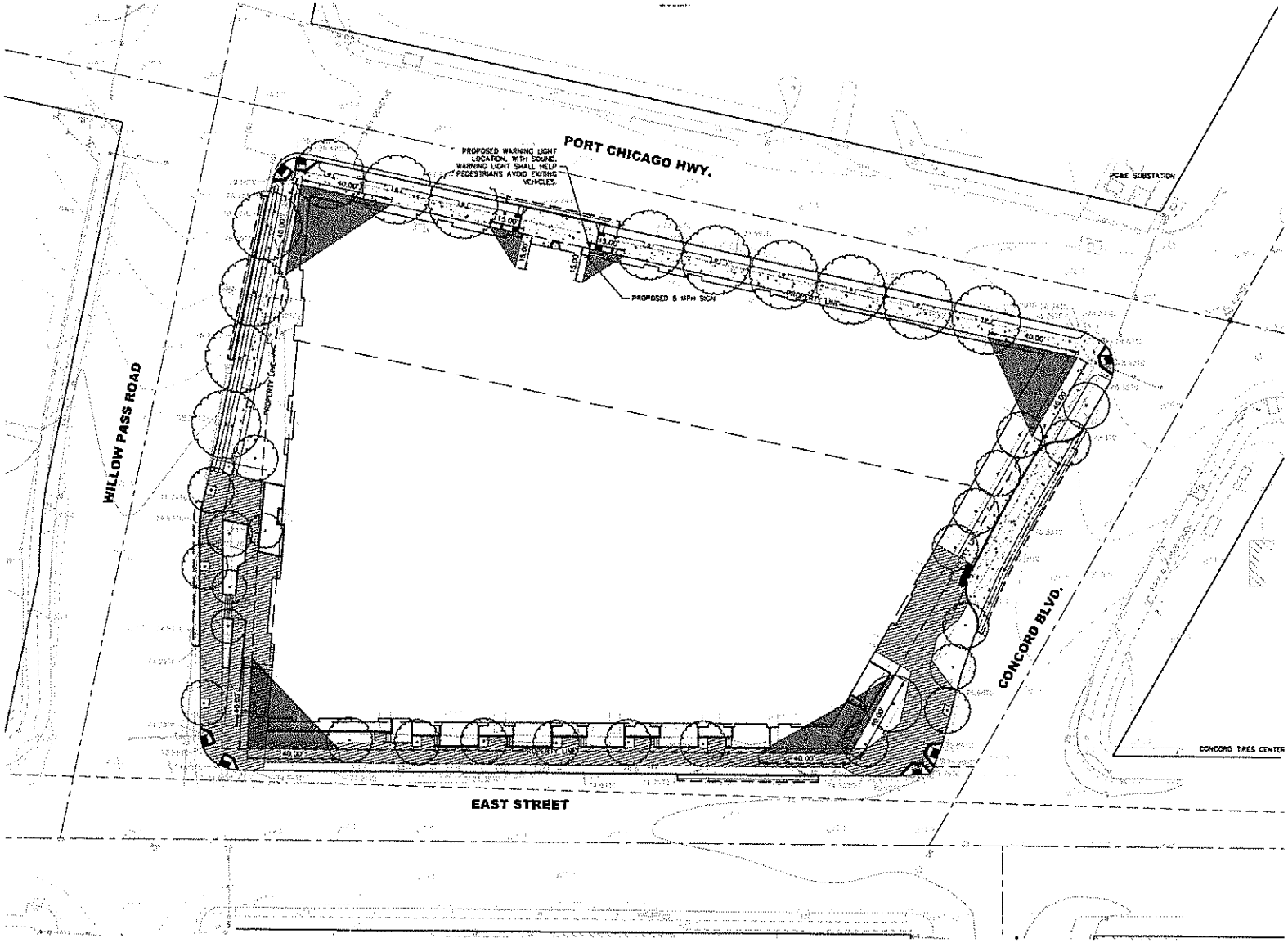
Argent Concord LLC
121 7th Avenue
Santa Cruz, CA 95062

PRELIMINARY
EXP. DATE 09-30-18

CONCORD, CA

dk Consulting
1931 San Miguel Rd.,
Suite 100
Walnut Creek, CA 94596
925.932.6868
dkassoc.com

CONSULTING PLANNING ENGINEERING CONSTRUCTION



20' 0' 10' 20' 40' 80'

(IN FEET)

1 INCH = 20 FT.

LEGEND

VISIBILITY TRIANGLE ZONE

EXEMPTION

CONCORD MUNICIPAL CODE, 18.150.170 TRAFFIC VISIBILITY AT INTERSECTIONS AND DRIVEWAYS.

SECTIONS C.: GENERAL REQUIREMENT AND EXCEPTION. NO FENCE, WALL, STRUCTURE, SIGN, OR VEGETATION/LANDSCAPING ELEMENT SHALL EXCEED THREE FEET IN HEIGHT WITHIN THE VISIBILITY TRIANGLE CREATED BY TWO INTERSECTING STREETS, OR THE INTERSECTION OF A DRIVEWAY WITH A PROPERTY LINE, EXCEPT AS MAY BE ALLOWED.

1. EXISTING PUBLIC UTILITY POLES, TRAFFIC SIGNS, AND SIGNALS
2. TREES WITH THEIR CANOPY TRIMMED TO A MINIMUM OF EIGHT FEET ABOVE GRADE;
3. CORNERS WHERE THE CONTOUR OF THE LAND ITSELF PREVENTS VISIBILITY; AND
4. DEVELOPMENT IN DMX AND OP DISTRICTS AND AT INTERSECTIONS WHERE PEDESTRIAN AND VEHICLE SAFETY IS ENHANCED BY TRAFFIC SIGNALS, STOP SIGNS, CROSSWALKS, SLOWER TRAFFIC SPEED, AND OTHER MITIGATING FACTORS AS APPROVED BY THE CITY ENGINEER.

2400 WILLOW PASS VISIBILITY TRIANGLE EXHIBIT

1" = 20'

NOVEMBER 1, 2016

CONSULTING
PLANNING · ENGINEERING · CONSTRUCTION

1931 SAN MIGUEL DRIVE, SUITE 100 WALNUT CREEK, CALIFORNIA 94596 (925) 932-6600

dk JOB# 15-1049-10

Concord

REPORT TO PLANNING COMMISSION

DATE: December 15, 2016

SUBJECT: Todos Santos Design Guidelines, Final Review, PL16048

Recommendation: Adopt Resolution *#16-31* PC, approving *Todos Santos Design Guidelines, PL16048.*

I. Introduction

A. Application Request

The application is the final draft Todos Santos Design Guidelines ("TSDG") for the Inner and Outer Core areas of the downtown. The Todos Santos Design Guidelines articulate an architectural and development vision for the Downtown as an implementation of the Concord Downtown Specific Plan ("DTSP") and provide guidance on the development review process. The Todos Santos Design Guidelines expand upon the Downtown Specific Plan strategies related to design guidelines with more specific direction for property owners, developers and architects. The Todos Santos Design Guidelines are a long-range policy document and offer a long-term vision for development and architecture in the downtown.

B. Environmental Review

For purposes of environmental review, the adoption of design guidelines does not constitute a "project" under the California Environmental Quality Act (CEQA) of 1970, as the activity does not commit the City to a definite course of action, constitute discretionary approval of a specific project, and will not result in a direct or reasonably foreseeable indirect physical change in the environment, pursuant to CEQA Guidelines Sections 15060(c), 15378 and Public Resources Code Section 21065. Moreover, any site-specific future projects would be subsequently analyzed to determine if the specific project would necessitate further environmental review.

In addition, when adopted in 2014, the Downtown Specific Plan contemplated that future design guidelines would be developed for the downtown. Concurrent with the approval of the Downtown Concord Specific Plan, as a General Amendment to the Concord 2030 General Plan, the City Council also adopted Resolution No. 14-1823.1 on June 24, 2014, approving the Addendum to the Final Supplemental Environmental Impact Report to the 2030 Concord General Plan EIR for the Concord Development Code Project and Adopting the Downtown Concord Specific Plan General Plan Amendment as Volume IV to the Concord 2030 General Plan.

The proposed updates through the Todos Santos Design Guidelines are minor in nature and are consistent with existing policy within the City's Downtown Specific Plan. The guidelines do not make substantial changes to the Downtown Specific Plan or make substantial changes which would require revisions to the Addendum due to new significant environmental effects

or a substantial increase in the severity of previously identified significant effects, and there is no new information that would require preparation of a subsequent or supplemental EIR or negative declaration under Public Resources Code Section 21166 or California Environmental Quality Act (CEQA) Guidelines Section 15162. Therefore, no further environmental review is required.

C. Location

The Todos Santos Design Guidelines are comprised on two areas – the Inner Core and Outer Core areas of the downtown. The Inner Core is identified in red, while the Outer Core is identified in green.

Legend

Priority Development Area | City Limit | BART Station

Todos Santos Review Districts

Inner Core | Outer Core | North Todos Santos

N

D. Applicant

Afshan Hamid, AICP
Senior Planner
Planning Division
City of Concord
1950 Parkside Drive
City of Concord, CA 94519

Owner(s)

City of Concord
Community & Economic Development Dept
City of Concord
1950 Parkside Drive
City of Concord, CA 94519

II. Background

The DTSP was adopted on June 6, 2014. Chapter 4 of the DTSP discusses design guidelines, which provide broad guidance on architectural character and building development for proposed projects. The focus is on how buildings relate to the public realm, parking and service areas, and establishing strong pedestrian character. During the review of certain discretionary projects the City Council found the guidelines were not as prescriptive as desired. The Mayor established an Early California Architectural Review Committee ("ECAR") in Fall 2015 to review projects proposed within the DTSP area. ECAR included Vice Mayor Ron Leone, Council member Tim Grayson, and Design Review Board member Kirk Shelby. The ECAR indicated to staff the need for a tool to more clearly represent the design vision for the downtown and to provide guidance to developers, architects, staff and commissions. Development of more specific design guidelines is an implementation strategy in the DTSP, D-1 A and B. Attached to this report are final draft Todos Santos Design Guidelines that include text and images that articulate the guidelines in the Inner and Outer Core areas.

ECAR met on November 16, 2015 to initiate the design guidelines and met several times over the last year to both (1) review proposed development projects in the Inner Core and Outer Core areas surrounding Todos Santos Plaza, and (2) to review and refine design guidelines that will be used to evaluate development and redevelopment projects in those downtown areas. The DTSP currently includes a chapter on Design Guidelines. The attached Todos Santos Design Guidelines expands upon the DTSP design guidelines with more specific direction for property owners, developers, and architects. The TSDG is consistent with other City adopted documents, the Downtown Corridors Plan, the Bicycle, Pedestrian & Safe Routes to Transit Plan, the DTSP, and the City of Concord Development Code.

ECAR provided direction, feedback and input on the design guidelines during several meetings; November 16, 2015, February 8, 2016, March 14, 2016, July 27, 2016 and November 16, 2016. Stakeholders were invited to each of these meetings to provide input. The Design Review Board also provided input and feedback on February 8, 2016, March 14, 2016, August 8, 2016 and December 1, 2016. The City Council also reviewed the TSDG at 30% completion on May 31, 2016 and provided feedback to continue working with ECAR on remaining chapters.

Prior to November 16, 2015, the Housing and Economic Development ("HED") Committee met to discuss the preparation of the Todos Santos Design Guidelines for the downtown. The Committee accepted the boundary delineation recommended by staff, which includes boundaries for an Inner Core centered on the Todos Santos Plaza where the architectural theme of Early California architecture should be emphasized (see page 17 and 18 of the TSDG) and an Outer Core where elements of the Early California theme should be incorporated, but possibly less directly.

On February 8, 2016, a joint meeting of ECAR and Design Review Board was held to clarify the definition of Early California Architecture. A range of historical architectural styles was presented for the Inner Core and the Outer Core. The Inner Core had representations from Monterey Colonial, Arts and Crafts, Spanish Colonial and Mission Style. The Outer Core presented projects that were higher density mixed-use using current construction methods which lend to a contemporary style of architecture.

At the February 8, 2016 meeting, ECAR indicated that the Inner Core guidelines should establish a narrower focus for architectural design of Spanish-style architecture, while the Outer Core could allow for more flexible and contemporary architectural styles, but it should incorporate high quality "Spanish-inspired" architecture or architectural elements. ECAR also directed that the guidelines should address the ground floor of buildings in the Inner Core and the Outer Core where style transitions occur.

At the same meeting, the Design Review Board ("DRB") members commented that projects should be evaluated on architectural principles, rather than prescribing one architectural style or a type of styles. The DRB members supported a more broad view of style and architectural variety. Stakeholders, consisting of developers, property owners, and architects, also commented that flexibility in architectural design supports the use of modern construction methods. Members of the development community mentioned that contemporary design is more successful from a market viability point of view, and that Early California Architecture may be cost prohibitive to build if the guidelines are too restrictive.

ECAR directed staff to identify properties within the Inner Core and Outer Core that have the most potential for redevelopment, historic buildings, and those that already have a Spanish-style architecture that warrants preservation.

On March 14, 2016, ECAR met to discuss the 30% complete draft of the TSDG. The direction from ECAR on the design of new development projects in the Inner Core area was to encourage/require "Early California Architecture" with a reference to a "Spanish style", including all the various derivative and Spanish revival architectural styles in that "family" of architectural themes. The ECAR direction on new development projects in the Outer Core area was less prescriptive, encouraged more flexibility and would accept a more contemporary expression of architecture. The committee also discussed that renovation projects in the Inner and Outer Core areas should be addressed as the design guidelines are refined and move toward completion.

On May 31, 2016, the 30% complete draft of the TSDG was presented to the City Council. The Council generally supported the TSDG with minor adjustments to the Outer Core and updates on map graphics.

On July 27, 2016, the 60% complete draft of the TSDG was presented to ECAR. Staff presented new chapters on Renovations & Remodels and Landscaping. ECAR generally supported the 60% complete draft and accepted the images, text, and chapters as presented. ECAR requested a minor adjustment to the Inner and Outer Core map.

On August 8, 2016, the 60% complete draft of the TSDG was presented to the DRB with the new chapters on Remodels & Renovations and Landscaping. The DRB was in support of the 60% completed draft of the TSDG and offered minor comments.

On November 16, 2016, the final draft Todos Santos Design Guidelines were presented to ECAR. Staff presented new chapters on Signage, Details, and Review & Procedures. ECAR also provided direction on a vision and policy statements to be incorporated in the Introduction.

On December 1, 2016, the final draft Todos Santos Design Guidelines were presented to the DRB. Staff presented new chapters on Signage, Details, and Review & Procedures. The DRB recommended forwarding to the Planning Commission for review.

III. General Information

A. General Plan

Downtown Pedestrian and Downtown Mixed-Use

B. Zoning

Downtown Pedestrian and Downtown Mixed-Use

C. Site Description

The Todos Santos Design Guidelines comprise the Inner Core and the Outer Core of the downtown; see attachment pages 17 and 18.

D. Surrounding Land Use

To the north is the North Todos Santos area, comprised primarily of single-family residential properties with a distinct character of older established homes and neighborhoods. To the south is the Downtown Mixed-Use District, with a range of multi-family residential and commercial properties. To the east are single-family residential districts and Commercial Mixed-Use, consisting mostly of single-family residences. To the west is High Density Residential and Downtown Mixed-Use, comprised of multi-family residential, commercial, and retail.

IV. Detailed Project Description

A. Site Planning/Circulation/Parking

The TSDG covers site planning and orientation in Chapter 2, Building Form. This chapter describes opportunities to create a sense of place with an informed site plan, where a building edge shapes the street character. The guidelines encourage parking in underground lots, within a parking garage, or towards the rear of the building. The guidelines encourage activity through storefronts with pedestrian-oriented uses along street frontages. Chapter 8, Details discusses integrating parking garages into the overall design of the project.

B. Description of Business

The TSDG would be applicable to new developments as well as most major renovation projects within the Inner and Outer Core of the downtown.

C. Building Architecture

Chapter 2, Building Form includes building scale in the downtown, zero lot lines, parking that is minimally visible, and articulation of the building form. Building mass should be articulated with architectural elements, such as bays, varying the building form, setbacks, and solids versus voids. The scale of the building should relate well at the pedestrian level to create an overall inviting character and street presence.

Chapter 3 is the Inner Core, the heart of the downtown, with the Todos Santos Plaza. The Inner Core has an established intimate scale of buildings. New construction, remodels, and renovation projects should continue to strengthen the existing context and provide cohesion.

Chapter 4 Outer Core, where architecture may be more responsive to current construction methods and allow for contemporary materials, while balancing market viability and fiscal feasibility through a less prescriptive approach. A contemporary design can still be a genuine Concord design in the larger context.

D. Landscaping/Walls/Fencing

Chapter 6, is a section on Landscape Design. The TSDG indicate that landscaping is a crucial component of aesthetics add to the long-term sustainability of a project, increase value to the project, and work as a soft engineering measure to collect and treat rainwater. Several examples are shared as case studies, such as courtyards, rooftop gardens, and tight urban constrained areas. The TSDG encourages use of drought tolerant plants with a native plant palette to reduce water usage and promote sustainable strategies for rainwater runoff.

E. Signs

Chapter 7, provides signage as an opportunity to brand and visually express an image, whether in a retail or restaurant space. Signage can enhance the architecture and call attention to the space. Signage should work with architectural features and enhance the exterior elements. Various types of signs and positive examples are shared, such as wall signs, edge signs, awning signage, blade signs, window signs, and window displays. Examples encourage a balanced sign program that is compatible with a downtown setting.

F. Development Regulations

Proposed future development projects will need to comply with current development regulations.

G. Cultural Resources

Chapter 5, is Remodels & Renovations. The TSDG do not impact any historic, archaeological or paleontological resources on the site. This section recognizes that downtown Concord has an authentic period architecture nascent from the late 1800s to the early 1900s. Revitalization efforts recognize one of the key tenants is to respect, wherever possible, the historic fiber of the downtown. Buildings with a historic feel should try to preserve as much of that early

period style by doing an authentic renovation. Buildings done in later periods, such as the 1930s to 1960s, also add to the rich urban fabric of the downtown. To the extent possible, a renovation may continue to keep the original style, with care, attention, and detail in the execution of the remodel.

V. Analysis

Staff has completed the design guidelines with feedback from ECAR. This report includes the final draft Todos Santos Design Guidelines for input and feedback by the Planning Commission. The document includes additional text and images to articulate the guidelines in the Inner and Outer Core as well as new sections on guidelines for Signage, Details, and Review & Procedures. Below is a summary of the chapters in the final draft TSDG:

Chapter 1 – Introduction: Includes the background, intent and purpose, policy statements, community outreach, an architectural overview, and a summary of the architectural influences in Concord. Map graphics have been updated on pages 15-18 to be consistent with private development areas in the Inner Core and the Outer Core. The updated maps will also coordinate with the Downtown Corridors Plan to reflect the improvements on Grant Street.

Chapter 2 – Building Form: This chapter articulates the appropriate scale, proportion, massing and site plans for a more walkable, pedestrian-friendly downtown. Photo examples these architectural styles were reviewed by ECAR and DRB and incorporated as part of the final draft.

Chapter 3 – Inner Core: This chapter's focus is on new development with Spanish-reflective architecture. The images and text demonstrate that the first floor of the building should be designed to engage with the public realm.

Chapter 4 – Outer Core: This section is an extension of the Inner Core and continues the design principles of urban design and pedestrian connectivity. It provides guidance to allow the architecture to be more responsive to current construction methods and allow for contemporary materials, while balancing market viability and fiscal feasibility through a less prescriptive approach.

Chapter 5 – Remodels & Renovations: This chapter addresses revitalization efforts and emphasizes that downtown Concord has an authentic period architecture. One of the key points is to maintain respect for the historic fiber of the downtown. Buildings with a historic feel should try to preserve as much of that early period style by doing an authentic renovation. Interior tenant improvements may be more expressive with branding and identity.

Chapter 6 – Landscape Design: This chapter discusses how the exterior project design and its landscaping should be treated as an integral part of development projects. Opportunities for landscape treatment can be evaluated at many areas of a project; rooftop, vertical gardens, internal courtyards, street and sidewalk areas, and setback areas.

Chapter 7 – Signage: This chapter discusses various types of signage in the downtown as part of a marketing and branding strategy. The focus of this chapter is a creative and high quality approach to developing a sign strategy.

Chapter 8 – Details: This chapter addresses functional areas of a development such as sidewalk areas, garage entrances, screening methods for utilities, and alley spaces. A development in the downtown is visible from all four sides, so care should be taken to integrate these elements into the design. Various strategies are discussed, including integrating Crime Prevention Through Environmental Design ("CPTED").

Chapter 9 – Review & Procedures: This chapter addresses types of reviews, procedures, thresholds for review and approximate review time required. Included in this chapter is an overview of a complex project and the steps required for entitlements. If a project, regardless of size or scope, is not substantially compliant with the TSDG, then the project may be denied, and the applicant may choose to redesign the project, withdraw, or appeal the decision to the Planning Commission and/or the City Council.

VI. Fiscal Impact

The project is being executed in house by staff with no consultants. The fiscal impact is limited to the expenditure of staff time.

VII. Public Contact

Notification has been published in the Contra Costa Times, as required by the Concord Municipal Code. This item has also been posted at the Civic Center and at the subject site at least 10 days prior to the public hearing.

VIII. Summary and Recommendations

Staff recommends the Planning Commission review and recommend to City Council adoption of the Final draft Todos Santos Design Guidelines. ECAR and the DRB have provided valuable input on each chapter of the guidelines, images, text, vision, and policy statements, resulting in a comprehensive document. The overall goal for the project is to provide design guidance for future development in the downtown in terms of architecture, built form, site planning, and the review process.

Staff requests a recommendation from the Planning Commission on the final draft Todos Santos Design Guidelines The final version as recommended by the Planning Commission will be presented to the full City Council in early 2017 for consideration of adoption.

IX. Motion

I, (Comm. _____), hereby move that the Planning Commission adopt Resolution 16-31 PC, recommending City Council approval of the Todos Santos Design Guidelines. (Seconded by Comm. _____.)

Prepared by:

Afshan Hamid, AICP
Senior Planner

Reviewed by:

Laura Simpson, AICP
Planning Manager

Exhibits:

A - PC Resolution, (Attachment A – Todos Santos Design Guidelines)
B - ECAR Minutes November 16, 2016
C - DRB Minutes December 1, 2016

16srpc.098

EXHIBIT A

BEFORE THE PLANNING COMMISSION
OF THE CITY OF CONCORD,
COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA

A RESOLUTION Recommending City Council Approval of Todos Santos Design Guidelines, (PL1600048)

Resolution No. 16-31PC

/

WHEREAS, the City of Concord adopted the Concord 2030 General Plan on October 2, 2007 ("General Plan"); and

WHEREAS, the City of Concord concurrently certified the Final Environmental Impact Report for the Concord 2030 General Plan on October 2, 2007 ("General Plan EIR"); and

WHEREAS, the City of Concord adopted Chapter 122 of the Concord Municipal Code ("Development Code") on July 24, 2012; and

WHEREAS, the City of Concord concurrently certified the Supplemental Environmental Impact Report to the 2030 Concord General Plan EIR for the Concord Development Code Project on July 24, 2012 ("SEIR"); and

WHEREAS, Government Code section 65358 et seq. provides for the amendment of all or part of an adopted general plan; and

WHEREAS, on June 24, 2014, the City adopted the Downtown Concord Specific Plan ("Specific Plan"), which articulated a vison for the downtown area and the policies and goals to implement this vision, including the development of design guidelines; and

WHEREAS, on June 25, 2014, the City Council approved the Addendum to the Final Supplemental Environmental Impact Report (SEIR) to the 2030 Concord General Plan EIR for the Concord Development Code Project, and adopted the Downtown Concord Specific Plan General Plan Amendment as Volume IV of the Concord 2030 General Plan; and

WHEREAS, on November 16, 2015, the City initiated the Todos Santos Design Guidelines, to implement recommendations from the Specific Plan with the purpose of preparing downtown design guidelines to strengthen and enhance the urban planning and architecture of private development as described in the Specific Plan. The areas are located in the Inner Core and the Outer Core of the downtown for existing private properties; and

WHEREAS, the Todos Santos Design Guidelines ("Design Guidelines"), attached hereto as

Attachment 1, is intended to provide design guidance on building architecture, façade improvement, renovations, landscape design and signage design for private development within the downtown with an emphasis on developing a cohesive urban fabric, placemaking, walkability, scale, proportion, architecture, creating good neighborhoods and inviting ground floor spaces; and

WHEREAS, the Todos Santos Design Guidelines implement goals and policies of the Specific Plan and will be used to provide design guidance to developers and architects, and serve as a tool for development; and

WHEREAS, on September 28, 2015; October 26, 2015; November 16, 2015; February 8, 2016; March 14, 2016; July 27, 2016; and November 16, 2016, the Early California Architectural Review Committee held public outreach meetings to present the Design Guidelines and to obtain public input; and

WHEREAS, on March 14, 2016; August 8, 2016; and December 1, 2016, the Design Review Board received staff reports on the status of the Design Guidelines and provided input along with the public for incorporation into the Design Guidelines; and

WHEREAS, on May 31, 2016; the City Council received a staff report on the status of the Design Guidelines and provided input along with the public for incorporation into the Design Guidelines; and

WHEREAS, the Planning Commission, after giving all public notices required by State law and the Concord Municipal Code, held a duly noticed public hearing on December 15, 2016 on the proposed Todos Santos Design Guidelines; and

WHEREAS, at such public hearing, the Planning Commission considered all oral and written information, plans, testimony, and comments received during the public review process, including information received at the public hearing, the oral report from City staff, the written report from City staff dated December 15, 2016, and all other information contained in the record of proceedings and the City's files relating to the Todos Santos Design Guidelines, which are maintained at the offices of the City of Concord Planning Division (collectively, "Project Information") in accordance with the applicable law, including the requirements of CEQA and the City of Concord Municipal Code; and

WHEREAS, after consideration of all the Project Information, the Planning Commission

declared their intent to recommend that the City Council approve the Todos Santos Design Guidelines.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

1. The Planning Commission hereby recommends that the City Council adopt the Todos Santos Design Guidelines, and further makes the following findings:

2. Recitals. The recitals above are true and correct and are incorporated herein by reference. The recitals constitute findings in this matter and, together with the Project Information, and serve as an adequate and appropriate evidentiary basis for the findings and actions set forth in this Resolution.

3. CEQA.

a. The adoption of design guidelines does not constitute a "project" under CEQA, as the activity does not commit the City to a definite course of action, constitute discretionary approval of a specific project, and will not result in a direct or reasonably foreseeable indirect physical change in the environment, pursuant to CEQA Guidelines Section 15060(c), 15378 and Public Resources Code Section 21065. Moreover, any site-specific future projects would be subsequently analyzed to determine if the specific project would necessitate further environmental review.

b. In addition, the Downtown Specific Plan contemplated that future design guidelines for the downtown would be implemented. Concurrent with its adoption of the Downtown Specific Plan, On June 24, 2014, the City Council approved the Addendum to the Final Supplemental Environmental Impact Report to the 2030 Concord General Plan EIR for the Concord Development Code Project and Adopting the Downtown Concord Specific Plan General Plan Amendment as Volume IV to the *Concord 2030 General Plan.*

c. The proposed updates through the Todos Santos Design Guidelines are minor in nature and are consistent with existing policy within the City's Downtown Specific Plan.

d. The Design Guidelines do not make substantial changes which would require revisions to the Addendum due to new significant environmental effects or a substantial increase in the severity of previously identified significant effects, and there is no new information that would require preparation of a subsequent or supplement EIR or negative declaration under Public Resources Code

Section 21166 or CEQA Guidelines Section 15162. There is also no substantial evidence in light of the whole record before the Planning Commission, that the Todos Santos Design Guidelines will have a significant effect on the environment. Therefore, no further environmental review is required.

e. The Planning Commission has reviewed, considered, and evaluated all of the Project Information prior to acting upon or approving the Todos Santos Design Guidelines.

f. The documents and other materials that constitute the record of proceedings upon which the Planning Commission has based its recommendations are located in and may be obtained from the City of Concord Planning Division, 1950 Parkside Drive MS/53, Concord, CA 94519.

4. Todos Santos Design Guidelines. The Planning Commission does hereby make the following findings:

a. The Todos Santos Design Guidelines is internally consistent, is consistent with the policies of the General Plan, the Downtown Concord Specific Plan, and is consistent with applicable law.

b. The Todos Santos Design Guidelines will not be detrimental to the public interest, health, safety, convenience, or welfare of the City in that the Design Guidelines is a policy document that proposes design strategies toward land use, economic vitality, architecture, façade improvements, renovations, landscape design, and signage design.

c. The Planning Commission recommends that the City Council determine that the Todos Santos Design Guidelines is internally consistent with the General Plan and the Downtown Concord Specific Plan, and is consistent with applicable law.

PASSED AND ADOPTED this December 15, 2016, by the following vote:

AYES: Commissioner -

NOES: Commissioner -

ABSTAIN: Commissioner -

ABSENT: Commissioner -

Laura Simpson, AICP
Secretary to the Planning Commission

Attachment 1: Draft Todos Santos Design Guidelines

cc: Afshan Hamid, Senior Planner
Margaret Kotzebue, City Attorney's Office

ATTACHMENT A

City of Concord, Ca

FINAL: Todos Santos Design Guidelines

December 15, 2016: Review by Planning Commission

Adopted : February XX, 2017 by the City of Concord City Council

Todos Santos Design Guidelines

Concord

Acknowledgments

City of Concord, California
First Edition, Adopted by the City Council on XXXX XX, 2017
Prepared by: Community & Economic Development Department

Mayor & City Council:
- Laura M. Hoffmeister, Mayor
- Ron Leone, Vice Mayor
- Edi E. Birsan, Councilmember
- Tim Grayson, Councilmember
- Daniel C. Helix, Councilmember

Early California Architectural Review Committee:
- Tim Grayson, Chairman
- Ron Leone, Vice Mayor
- Kirk Shelby, Design Review Board

Design Review Board:
- Jack Moore, Chairman
- Ross Wells, Board Member
- Kirk Shelby, Board Member
- David Litty, Board Member
- Jason Laub, Planning Commission Liaison

Planning Commission:
- Carlyn Obringer, Chairman
- Raymond Barbour, Board Member
- LaMar Anderson, Board Member
- Dominic Aliano, Board Member
- Jason Laub, Board Member

City of Concord Staff Members:
- Valerie Barone, City Manager
- Victoria Walker, Director, Community & Economic Development
- Laura Simpson, Planning Manager
- Afshan Hamid, Senior Planner / Project Manager

Special Acknowledgement:
Afshan Hamid, AICP, Senior Planner was the Project Manager and lead for the design, writing, images and layout of the Todos Santos Design Guidelines. Having internal staff with training in architecture allowed the City to provide a product that is customized for the City of Concord, and was developed without the necessity and cost of outside consulting services.

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References pages 97 - 98

01 Introduction

The City of Concord Todos Santos Design Guidelines articulate an architectural and development vision for the Downtown, one that draws ideas from a nascent past and a progressive future. The Downtown is located within walking distance of the BART station, cultural amenities, shopping, dining, and the Todos Santos Plaza. The heart of the downtown is the Todos Santos Plaza, which draws people to the center. The Design Guidelines strengthen this understanding and expand the placemaking and walkability through building design. The comprehensive vision draws ideas from City Council members, Design Review Board, staff, the development community, local architects, and business leaders who participated in the decsion making during the development of the Design Guidelines. The Todos Santos Design Guidelines envision Downtown Concord as a modern, vibrant place, one that is infused with its heritage and authenticity. The guidelines encourage building up on Concord's heritage in the urban fabric and especially the Inner Core area. The Todos Santos Design Guidelines continue and expand the Downtown Specific Plan section on the design guidelines with more specific direction for property owners, developers and architects. The maps, images, diagrams are an architectural understanding to update existing properties and future developments. The Design Guidelines are intended to work in concert with other City adopted documents, the Downtown Corridors Plan, the Bicycle and Pedestrian Plan, the Downtown Specific Plan, and the City of Concord Development Code. The Todos Santos Design Guidelines offer a long term vision for development and architecture in the City. The guidelines foster and create a dialogue for progress with a unique and vibrant downtown.

01 Background

The City Council unanimously adopted the Downtown Concord Specific Plan on June 25, 2014, which includes a chapter on Design Guidelines that focuses on urban form, massing and character, ground floor treatment, relating facades to the public realm, vehicular access and building design including parking, servicing and private open space. The guidelines state that the objective is to reflect early California architecture in the design of new buildings. The guidelines expand that into a major policy and state new development to provide consistency in character that enhances and reinforces the existing character of the Downtown. The Design Guidelines when describing Early California Architecture are general in nature and not overly prescriptive. The implementation action outline two measures;
A) hold study session with Design Review Board to explore Early California theme
B) Prepare Design Guidelines handout for Developers (excerpt from SP).

On September 28, 2015, the Housing and Economic Development Committee reviewed the background of the Downtown Specific Plan, a summary of the Plan's design guidelines, the purpose of the Plan's implementation strategy to further explore the Early California theme, and a presentation on a brief history of Early California architecture. In summary, Early California is a broad term that describes varied architectural styles and influences within California at the turn of the 20th century. These influences include, but are not limited to Spanish Revival, Arts & Crafts, Monterey Colonial, Victorian, Bungalow, Prairie Style, French, Eclectic, Mission Revival architectural styles, all of which have representations within Downtown Concord and the North Todos Santos District.

On October 26, 2015, the Housing & Economic Development Committee expressed a desire to expand the Downtown Concord Specific Plan section on design guidelines and to create new Todos Santos Design Guidelines which will be more architectural.

The Housing & Economic Development Committee described the downtown area as a jewel where they would like to see the past reflected. Developers, architects and property owner comments were generally supportive of the idea of new development incorporating an Early California theme. However, they also provided input stating their need for design flexibility, and a desire for variety to provide attractive curb appeal and address the needs and desires of their tenants in a more contemporary architectural language. The stakeholders emphasized the need for cost sensitivity, and stated they would like the City to provide incentives, and requested the need for a clear process for review of projects. It was suggested that new architectural requirements of Early California architectural themes be more focused in the central area, an inner core surrounding Todos Santos Plaza, with less prescriptive guidelines away from the central area, an outer core.

The map of the effective areas where the Todos Santos Design Guidelines would be applicable was developed and refined by the Housing & Economic Development Committee. The map is presented on pages 15 and 16. The Inner Core would establish architectural design standards that are more reflective of varied Early California Architecture, while the Outer Core on the map would allow for an architecture that is reflective of quality contemporary architecture.

Applicability:
The guidelines would apply to all private developments in the Inner and Outer Core of the downtown, refer to map pages 17 and 18. They do not apply to the public right-of-way. The guidelines are a set of design tools, and how they are applied will depend on each development proposal and how it responds to the context. The goals for each chapter are intentionally broad so that they can be accomplished in multiple ways. This provides flexibility in how the design tools are used and applied. The review authority will ultimatley determine substantial compliance with the Guidelines based on the location, scope and nature of the project. The photos herein are selected to illustrate broad concepts, not determine the actual outcome of each project.

The Housing & Economic Development Committee provided direction as follows:

1) The need to establish boundaries where Early California Architecture would be required, with the immediate area surrounding Todos Santos Plaza and its main street corridors as the central focus, including a hierarchy of guidelines for the inner vs. outer core;

2) The need for flexibility in implementation of design guidelines, respecting a variety of architectural styles, and clarifying the process for review;

3) The need to respect cost considerations, and seeking some type of incentive program;

4) The need for sketches as well as photos in the development of the design standards, to encourage design creativity; and

5) The desire to create a transit corridor between BART and Todos Santos Plaza to improve traffic connectivity, with a tram or similar facility.

01 Intent & Purpose

BACKGROUND: The Downtown Concord Specific Plan was adopted on June 6, 2014. Report section 4 of the Specific Plan relates to Design Guidelines. The general intent of the section is to provide a set of building development design guidelines to provide guidance to potential property owners, developers, and the City's design review / staff for determining the architectural character and building development for proposed project. This chapter describes building character, how buildings should relate to the public realm, and address parking and servicing to ensure the strong pedestrian character of the Downtown and area around Todos Santos Plaza is maintained. The Guidelines are general in nature and describe good practices such as Building Setback, Ground Floor Treatment, Residential Ground Floor, Blank Wall Treatment, Vehicular Access, Residential/Mixed Use Building Design, Commercial Building Design, Parking and Servicing, Private Open Space, Sustainable Practices as well as Landscaping. The guidelines illustrate through historic and contemporary examples across northern and southern California how cities promote a quality downtown environment. The examples are focused on achieving walkability, good scale and proportion, creating good neighborhoods and having inviting ground floor spaces.

PURPOSE: The purpose of these Todos Santos Design Guidelines (TSDG) is to expand the Specific Plan section on Design Guidelines as it relates to downtown Concord. The Downtown Specific Plan states that new buildings demonstrate their respect for the City's heritage through modern interpretations of early California architecture. Thoughtfully blending the old with the new, Downtown Concord is constantly evolving and growing in an organic and sustainable manner.

Purpose: To create guidelines that support authenticity & flexibility, yet respect Concord's historical context.

INTENT: The intent is that the TSDG guidelines would provide flexibility while at the same time provide further clarity as to the architectural character that resonates with Concord's historical context and guidance on new development. The Design Guidelines are intended to promote quality in design character so that buildings appear authentic. Similar to the Downtown Concord Specific Plan, sketches and photographs are meant only to relay particular concepts in the text or make reference to pertinent precedents and should not be considered exact models. Each development block and new development should be considered unique and evaluated on how well it relates to the overall downtown context. The guidelines will provide varied architectural styles, describe the desired overall aesthetic, and look for downtown Concord. The architectural design guidelines serve as a tool to assist developers and architects in the design of their projects to quickly navigate the

"New buildings demonstrate their respect for the City's heritage through modern interpretations of early California architecture. Thoughtfully blending the old with the new, Downtown Concord is constantly evolving and growing in an organic and sustainable manner."

Page 17, Downtown Concord Vision, Downtown Concord Specific Plan

design review process.

The Early California Review Committee and Stakeholders provided an architectural vision and policy for the downtown:

Vision Statement:

To promote architecture and development that maintains the scale, importance and reflection of the historic Todos Santos Plaza, its surrounding neighborhoods, and to guide future development with high quality architectural character that is authentic to Concord.

01 Policy Statements

Policy Statements:

1. *To create a sense of place for the downtown that is enjoyable by a diverse resident population.*
2. *New development projects in the Inner Core shall emphasize Spanish and Spanish inspired architecture as well as interpretations of that style to promote a coherent style of design in the downtown.*
3. *In the Outer Core, aspire to create a diversity of architectural styles, and ensure that the Inner and Outer Core have seamless transitions at the base of buildings to help stitch the urban fabric of the city together.*
4. *To foster a vibrant and pedestrian oriented downtown that is attractive for residents, businesses and tourists.*
5. *To encourage and support a downtown that is connected and ties the urban fabric of the Inner Core, Outer Core and broader downtown of Concord through architecture, landscape, signage, corridors, and development.*
6. *To encourage and facilitate a walkable downtown as a destination for cultural, retail, business and residential activities.*

At the Housing and Economic Development Committee meeting on September 28, 2015, the Committee requested input from the public, particularly developers in crafting guidelines or standards and invited their comments. Community outreach was conducted by inviting stakeholders as part of the public process. Members of the public provided input and emphasized need for flexibility, and the desire for variety to provide attractive curb appeal. The stakeholders stated:

The need for flexibilty in implementation of design guidelines,
Respecting a variety of styles,
Clarifying the process for review.

Developers, property owners and architects were invited to each of the meetings to help shape the overall development and architectural vision of Downtown Concord. However, they also provided input stating their need for design flexibility, and a desire for variety to provide attractive curb appeal. It was recommended to take a scaled gradient approach, where requirements are more substanital in the core downtown (inner core) around Todos Santos Plaza and reduced as you move away from the core (outer core).

At the meeting held on February 8, 2016, staff was directed to provide a family of architectural styles which consisted of Spanish for the Inner Core and Spanish Inspired for the Outer Core. In addition, the ECAR Committee requested two maps, a historical structures map and properties with re-development potential map as relates to both the Inner Core and the Outer Core areas of the downtown. The ECAR wanted staff to provide examples of renovation projects as well as first floor base with pedestrian oriented features.

At the March 14, 2015 meeting, members of the Design Review Board (DRB) and stakeholders consisting of property owners, developers, architects and the Downtown Business Association were present in the audience. Stakeholders as well as DRB members stated that due to constraints of current construction methods, parking requirements, fiscal feasibility, marketability of developments, as well as development regulations, a less prescriptive approach to architecture was favored, while still maintaining high quality developments. The ECAR Committee summarized that guidelines were sought for both the Inner Core and the Outer Core. In the Inner Core, a range of styles including Spanish and Spanish reflective could be incorporated. If a historic property was destroyed, then it would be encouraged to develop with current architectural practice. Otherwise a property could stay historic and make improvements to keep the historical character. In the Outer Core the standards would reflect diverse contemporary architectural styles with a focus on mixed-use development that incorporates pedestrian friendly features at the ground floor. The ECAR requested that 30% Design Guidelines be presented to the City Council.

On May 31, 2016 the City Council provided input and feedback. Overall, the project received support, however, some members of the Council wanted to see the Outer Core section refined further so that a more appropriate Concord vision was presented. Staff continued to work with the ECAR committee on resolution of remaining chapters, images, and specific language for the guidelines. On July 27, 2016, a refined version at 60% completion was presented to the ECAR committee. The ECAR committee made minor adjustments to the Inner and Outer Core maps. The ECAR committee recommended that staff present the document to the Design Review Board for input and feedback. On August 8, 2016, the Design Review Board reviewed the 60% design guidelines and provided feedback. Staff incorporated the modifications and developed the remaining chapters for inclusion into the final version. On November 16, 2016, the ECAR committee reviewed the final version of the guidelines and recommended approval. On December 1, 2016 the guidelines were reviewed by the Design Review Board (DRB) for final input. The DRB recommended approval to the Planning Commission. On December 15, 2016 the guidelines were reviewed by the Planning Commission (PC). The PC recommended approval to the City Council. On February 7, 2017 the Todos Santos Design Guidelines were presented to City Council for adoption.

The stakeholders were invited to meetings held on:

September 28, 2015	Housing & Economic Development Committee
October 26, 2015	Housing & Economic Development Committee
November 16, 2015	Housing & Economic Development Committee
February 8, 2016	Early California Architectural Review Committee/ Design Review Board, 30% review
March 14, 2016	Early California Architectural Review Committee/ Design Review Board, 30% review
May 31, 2016	City Council, 30% review
July 27, 2016	Early California Architectural Review Committee, 60% review
August 8, 2016	Design Review Board, 60% review
November 16, 2016	Early California Architectural Review Committee, final review
December 1, 2016	Design Review Board, final review
December 15, 2016	Planning Commission, final review
February 7, 2017	City Council, adoption of guidelines

By the early 1600's, the Spanish had claimed and partially settled eastern Florida, southern Texas, the Rio Grande Valley, Arizona (Tucson and Yuma), and southern California. The Spanish towns of the settlements were highly planned on a grid system, based on the Laws of the Indies which provided "ground rules" from Spain for colonial settlements far from home. Many towns and cities in the South and West still clearly reveal the street grid, central plaza, and local Spanish church of the original settlements. Spanish settlements and related architecture can be classified as three distinct types, or functions:

1) pueblos, or civic town settlements,
2) presidios, or fortified military bastions, and
3) missions, or regional churches designed to promote the Catholic faith to Native Americans.

Spanish Mission churches – and simpler local community churches — generally included features derived from the Baroque period in Europe, particularly of the Spanish variety during the 17th and 18th centuries. Baroque features could include rather elaborate facades with round arches, domes, and niches for statuary; prominent belfries or bell towers, curved parapets extending above the entryway, and typically symmetrical facades.

The late 1800s and early 1900s, prior to the Great Depression, saw a prolific movement in various architectural styles across the country, known as "period styles" or the "Eclectic Era". The Eclectic Era includes both revival and early modern styles that competed ideologically and appeared nearly simultaneously before the Great Depression.

The term "revival styles" was adapted widely across America for use in middle-class homes, wealthy country houses, commercial buildings, early skyscrapers, and civic buildings. Though overlapping with the more picturesque Victorian era, these styles largely gained popularity during the first two decades of the 20th century and heavily influenced residential and commercial landscapes. Most important, revival styles look to the past for inspiration. The trend toward revivalist architecture gained momentum from the 1893 Chicago World's Fair, the Columbian Exposition, where historical interpretations of European styles were encouraged. Simultaneous to the rise of revivalist architecture, the modern era saw its beginnings with architects who were instead looking to the future, not to the past, with more progressive, modernist styles. The Eclectic Movement of the early 20th century, consisted of a simultaneous and competing interest in both modern and historic architectural traditions. This variety, or eclecticism, provided for one of the most diverse and colorful periods for architecture and urban design in American history.

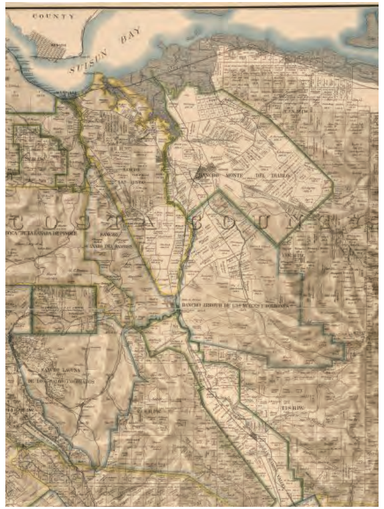
One revival style embraced principally in California and Florida, the Spanish Colonial Revival movement enjoyed its greatest popularity between 1915 and 1931. The Panama-California Exposition of 1915 in San Diego, highlighted the work of architect Bertram Goodhue and Carlton Winslow Sr., both who are credited with giving the Spanish Colonial Revival style national exposure. Other revival styles popular at this time along with Spanish Colonial Revival were; Mission Revival, Colonial, Monterey Colonial, Craftsman Style , Prairie Style and French Eclectic. Most of the arts organizations along Balboa Park's famous El Prado pedestrian walkway are housed in Spanish-Renaissance style buildings constructed for the 1915 Exposition. It was one of the first times that this highly ornamented, flamboyant architectural style had ever been used in the United States.

Goodhue and Winslow advocated a design that turned away from the more modest, indigenous, horizontally oriented Pueblo Revival and Mission Revival, towards a more ornate and urban Spanish Baroque. Contrasting with neo-classical Beaux-Arts style, rich Mexican and Spanish Churrigueresque decoration would be used, with influences from the Islamic and Persian styles in Moorish Revival architecture. For American world's fairs, this was a novelty. The design was intentionally in contrast to most previous Eastern U.S. and European expositions, which had been done in neoclassical and Beaux-Arts styles, with large formal buildings around large symmetric spaces. Even San Francisco's simultaneous Panama–Pacific International Exposition held in 1915 was largely in Beaux-Arts style.

After the culmination of the San Diego exposition, Carlton Winslow Sr. stayed and established himself in southern California. In 1925, with the widespread destruction of the earthquake, the City of Santa Barbara persuaded by Winslow, adopted the Spanish style to impart a unified character. Its County Courthouse built in 1925 is a prime example of the Spanish Renaissance style. On March 8, 1960 the City adopted the El Pueblo Viejo Ordinance, a design control district with set restrictions on the alteration or demolition of historic buildings.

References:
Esau, Erika. 1920s: Eucalyptus and Spanish Style Architecture, Chapter 6
City of Santa Barbara, Historic Resources Element Adopted 2009
City of Santa Barbara, El Pueblo Viejo Landmark District, Adopted May 12, 2009
Chalquist, Craig. Where did California's Spanish Architecture Come From?
Mexican California: The Heyday of the Ranchos

01 | Early California Structures



Historical Map courtesy Library of Congress, 1894
Alameda and Contra Costa Counties

San Francisco Presidio, 1816

Royal Presidio, Santa Barbara, built 1782

County Courthouse, Santa Barbara, 1925

Larkin Home, Monterey, built 1835

San Diego Panama-California Exposition quadrangle, 1915

California Tower at Balboa Park, 1915

Casa del Prado at Balboa Park, 1915

Gamble House, Pasadena, Ca, built 1905, Greene & Greene

Colby home, Berkeley, Ca built 1905 by J. Morgan

Shadelands Ranch home, Walnut Creek, Ca built 1902

"The Downtown is distinguished by its authenticity and historic assets, preserved and strengthened by the strategic infill of new high quality development that links the past with a vibrant future. The origins of Concord, beginning in 1834 as Rancho Monte del Diablo, are evident throughout Downtown. The central plaza, which retains the City's original name of Todos Santos, is a rare example of the 16th Century Law of the Indies which once dictated the planning and design of Spanish colonial cities.

Page 17, Downtown Concord Vision, Downtown Concord Specific Plan

01 | Architectural Influences in Concord

The lands of Contra Costa were assigned in the Mexican land grants of the 1820s and 1830s. During these years, valuable land grants were conferred upon influential men, soldiers and politicians. Soldiers and politicians who had given years of dedicated service to Mexico made up the bulk of those who received these lands. Such people of Spanish descent but born in California, were known as Los Californios. The lands were claimed by a formal petition, called a diseno, submitted to the Territorial Deputation Council. A total of 18 grants became the Contra Costa County *(History of Concord, Its Progress and Promise)*. The extensive grant of Monte del Diablo included the area that is now Concord. The owner of this land was Don Salvio Pacheco, who petitioned for the grant of four leagues (17,921 acres) in 1834. Salvio Pacheco and his family settled on this vast dominion. He built his adobe near the present center of downtown Concord *(History of Concord, Its Progress and Promise).*

The area of Concord was settled by the founding and settling of Rancho Monte del Diablo by the Pacheco family. Three men are credited for the founding of present day Concord; Salvio Pacheco, his son Fernando, and his son-in-law Francisco Galindo. They hired Alameda County surveyor Luis Castro to survey 20 acres for the new town. Nineteen blocks were plotted around a central plaza. Don Salvio Pacheco dedicated the plaza to the people of his new town to use as a park. Salvio Pacheco offered the merchants of Pacheco Town land around the plaza in Todos Santos for one dollar if they would move their stores to Todos Santos.

The reticular or grid pattern is the constant element in the founding of Hispano-American cities where a vision of a uniformed colonial city of the Spanish crown was achieved. The grid pattern of the checker box offered possibilities for controlled expansion, which allowed it easily to become part of the city. The variations of the reticular pattern could be produced by the alignment of the roads or through the arrangement and the dimensions of the blocks.

In 1840s, Salvio Pacheco built the Pacheco Adobe, a two-story home with twelve rooms and a balcony, beside the artesian springs. It was sited to views of Mt. Diablo *(Images of America, Concord)*. It is a California State Landmark designated in 1954, and is located at 1870 Adobe Street, at the corner of Salvio and Adobe Streets.

Salvio Pacheco gave his son Fernando Pacheco 1,000 acres on the north side of the rancho. In 1856, Fernando built his own home, the Fernando Pacheco Adobe, on Grant Street *(Images of America, Concord)*. The Fernando Pacheco home was entered into the National Register of Historic Places on May 20, 1998 *(Images of America, Concord)*.

The settlement patterns of Concord closely follow those of California. Early structures in Concord were influenced by architects and craftsman from the East Coast who used their already learned trade and skill to build architecture that was familiar. Early influence was also shaped by an abundance of local materials and popular revival styles brought a vernacular architectural language into new settlement areas. Middle class income residents could choose from one of a dozen or more styles for their home.

Around Todos Santos Plaza many examples of the early revival styles are still evident. Early Concord residential homes and commercial buildings carry the signatures of the Eclectic Era, with a wide variety of architectural styles introduced around Todos Santos Plaza. The Galindo House was built in 1856 at 1721 Amador Avenue near Clayton Road, and serves as an example of a Victorian ranch style home. The Neustaedter House, built in 1906 for the owner of Concord's first pioneer store, is a Tudor style home. The Bibber House on Grant Street was built in 1912-1913 is an example of a four square home with French Eclectic details. In 1912-1913 a prairie style home was built for Herbert Elworthy, then Mayor of Concord. The Bolla house was constructed for a local farming family, built in 1924 and is a raised bungalow style home with craftsman details. In keeping with the Law of the Indies, the urban plan encouraged the location of civic buildings around Todos Santos Plaza. The County Fire House built during 1938-39 is a white adobe structure with clay tile roofs, and is still used today by the Contra Costa County Consolidated Fire District. In 1911 Foskett and Elworthy First National Bank was commissioned on the corner of Salvio Street and Concord Boulevard, and is an example of a modern Italianate style building. The references to early Concord buildings can be found on the Concord Historical Society webpage at concordhistorical.org. Images of early Concord residential and commercial structures can be found on the next two pages of these Design Guidelines.

References:
Harris, Joel A., Images of America, Concord. Charleston, South Carolina: Arcadia Publishing, 2009, Print

Andrews, Edna May, History of Concord Its Progress and Promise. Concord, California: Concord Historical Society, 1986, Print

National Park Service, National Register of Historic Places in Contra Costa County, California

The Pachecos hired Alameda County surveyor Luis Castro to survey 20 acres for the new town. Nineteen blocks were plotted around a central plaza. Don Salvio Pacheco dedicated the plaza to the people of his new town to use as a park. Salvio Pacheco offered the merchants of Pacheco Town land around the plaza in Todos Santos for $1 if they would move their stores to Todos Santos. Some merchants accepted the offer, as well as the Pacheco Odd Fellow's Hall, which was moved to Todos Santos. The first merchant to accept Don Salvio's offer was Samuel S. Bacon, who moved his building from Pacheco to a lot near the new plaza. Bacon built his home next door.

Map of Todos Santos, 1874, by Luis Castro

Salvio Pacheco Adobe, built 1840s

Fernando Pacheco Adobe, built 1856

Bolla Home, built 1924, Bungalow style

Alves Home, built 1906, Colonial style

Galindo Home, built 1856, Victorian style

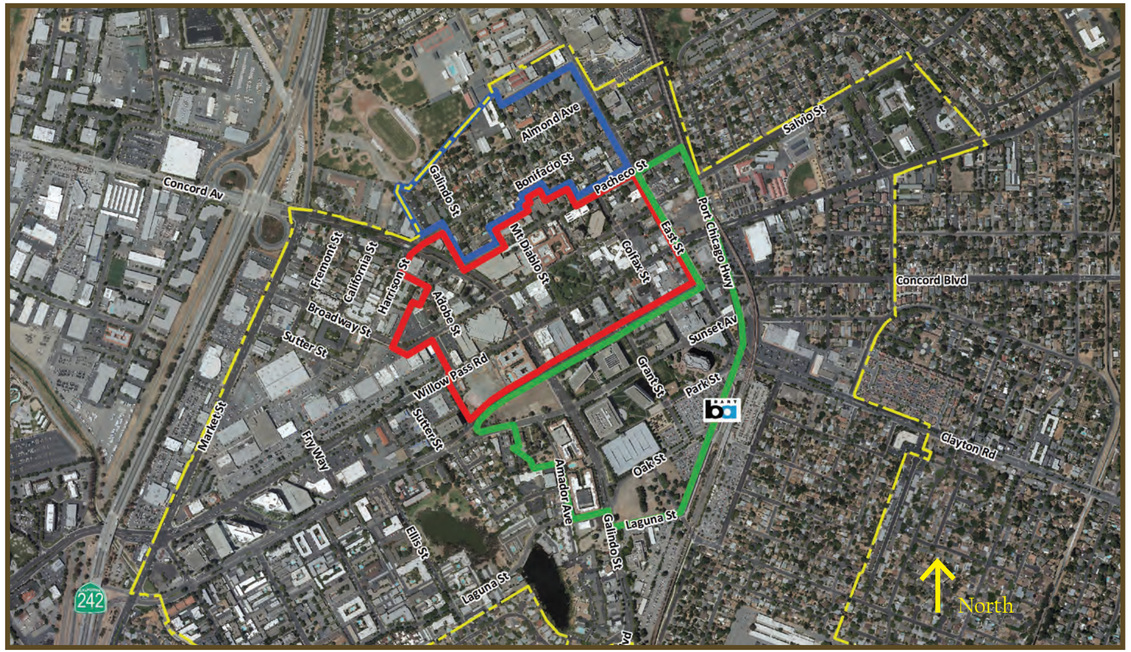
Neustaedter Home, built 1906, Colonial style

Bibber Home, built 1912-1913, Four Square French Eclectic

Elworthy home, built 1912-13, Prairie style home

Foskett/Elworthy building, built 1911, Modern Italianate style

Rosal Apartments, built 1936, Spanish Colonial style



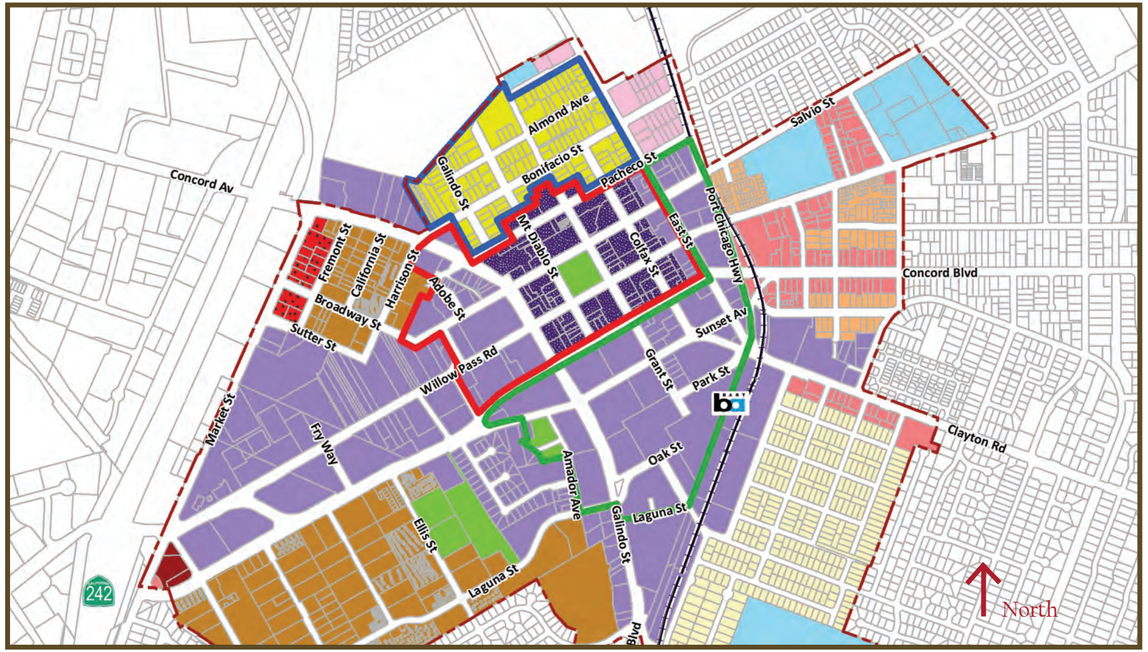
Aerial Map not to scale

Legend

Priority Development Area | City Limit | BART Station

Todos Santos Review Districts

Inner Core | Outer Core | North Todos Santos



Enlarged Map, not to scale

Legend

Priority Development Area
City Limit
BART Station

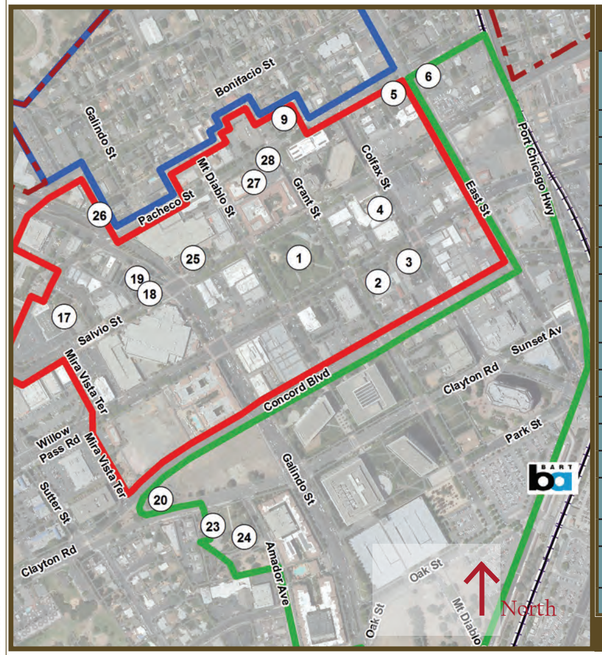
Todos Santos Review Districts

Inner Core
Outer Core
North Todos Santos

General Plan 2030 Land Use

Low Density Residential (LDR)
Medium Denstiy Residential (MDR)
High Density Residential (HDR)
North Todos Santos (NTS)
Community Office (CO)
Commercial Mixed Use (CMU)
Regional Commerical (RC)
Service Commerical (SC)
Downtown Pedestrian (DTPD)
Downtown Mixed Use (DTMU)
Public/Quasi-Public (PQP)
Parks and Recreation (P)

01 Historic Structures : Inner & Outer Core



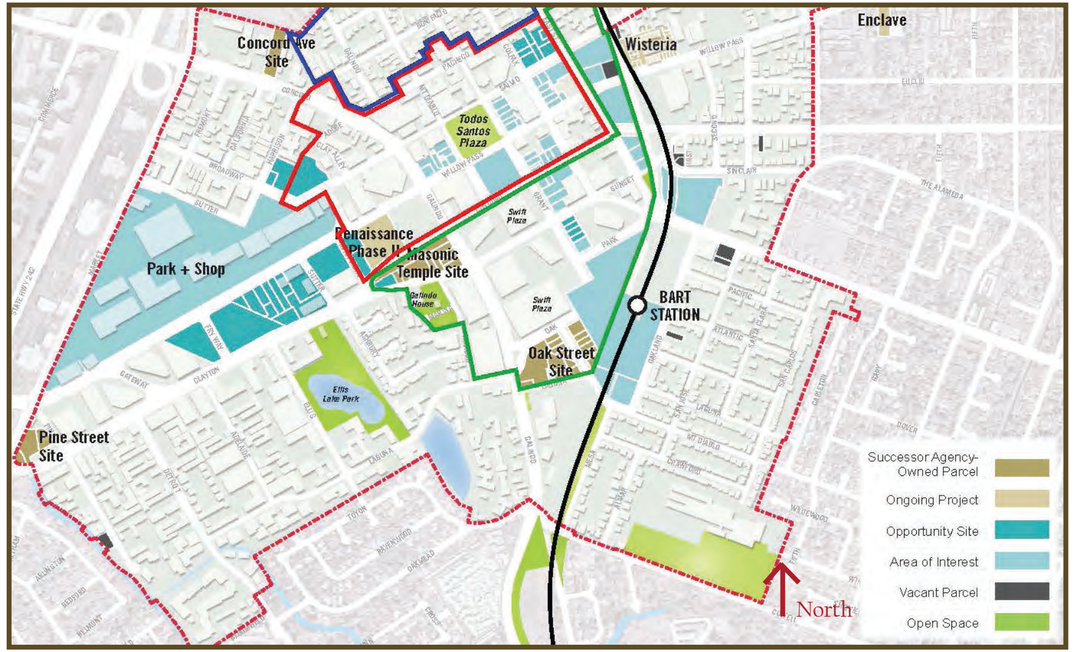
No	Name of Property	Address	Type of Structure	Inner Core	Outer Core
1	Todos Santos Plaza	Willow Pass Rd./ Grant St./Salvio St./ Mt. Diablo St.	Open Plaza	●	
2	County Fire House	2210 Willow Pass Rd.	Institutional	●	
3	Veterans Memorial	2290 Willow Pass Rd.	Institutional	●	
4	Dave Brubeck Memorial	Colfax St.	Plaque	●	
5	Maltby-McKinnon House	2350 Pacheco St.	Residential	●	
6	Barnett House	2080 East St.	Residential		●
9	Bibber House	2108 Grant St.	Residential	●	
17	Salvio-Pacheco Adobe	1870 Adobe St.	Residential	●	
18	Perry House	1990 Concord Ave.	Residential	●	
19	First Fire House	1982 Concord Ave.	Residential	●	
20	Ivey House	1849 Clayton Rd.	Residential		●
23	Masonic Hall	1928 Clayton Rd.	Institutional		●
24	Galindo Home	1721 Amador Ave.	Residential		●
25	Foskett & Elworthy Building	2001 Salvio St.	Commercial	●	
26	Beebe House	1921 Concord Ave.	Residential	●	
27	Elworthy-Keller House	2156 Pacheco St.	Residential	●	
28	Rosal Apartments	2178 Pacheco St.	Residential	●	

Aerial Map not to scale

Priority Development Area | BART Station | Inner Core | Outer Core | North Todos Santos

The properties are identified by Concord Historical Society, reference concordhistorical.org

01 Properties with Re-development Potential



Enlarged Map, not to scale

Legend

- Priority Development Area
- City Limit
- BART Station

Todos Santos Review Districts

- Inner Core
- Outer Core
- North Todos Santos

General Plan 2030 Land Use

- Low Density Residential (LDR)
- Medium Denstiy Residential (MDR)
- High Density Residential (HDR)
- North Todos Santos (NTS)
- Community Office (CO)
- Commercial Mixed Use (CMU)
- Regional Commerical (RC)
- Service Commerical (SC)
- Downtown Pedestrian (DTPD)
- Downtown Mixed Use (DTMU)
- Public/Quasi-Public (PQP)
- Parks and Recreation (P)

Reference: Downtown Specific Plan Map

02 Building Form

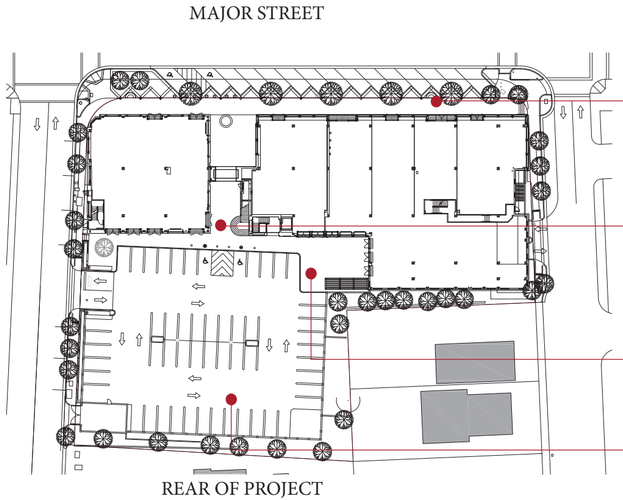
"New buildings shall be designed to be compatible with existing adjacent buildings."

Downtown Concord Urban Design, March 1987

The goal of these Design Guidelines is to ensure that new development will fit and make a positive contribution to a sense of place. Building form is a basic principle that guides the shape and form of future development. Building form is established in the Concord Municipal Code by density, floor area ratio, setbacks, lot coverage and height restrictions. In essence, it is the building envelope that is allowed on the parcel by the zoning code. In terms of these design guidelines, building form is comprised of various architectural elements including; mass, proportion and scale. In principle, both the Inner Core and Outer Core will adhere to the overall vision for Downtown Concord and the Downtown Specific Plan through the Urban Design Guidelines and these Architectural Design Guidelines. In the context of Downtown Concord, the overall building form should be informed by adjacent buildings, the character of public spaces such as Todos Santos Plaza, and an enhanced pedestrian environment. A neighborhood scale with buildings set close to the sidewalk on a pedestrian friendly street is the desired effect. Development proposals which create a strong building edge with the public right of way are encouraged in the downtown. Facades that create continuity along the street and extend the full length of the street help reinforce a strong building form. A potentially large building form need not be uniform and static; it can be broken into a series of smaller masses that gives variety and visual energy. A range of building shapes, types and styles is encouraged. The Inner Core building form will be of a more traditional mass and scale; while the Outer Core building form will have more flexibility, variety and contemporary expression.

02 | Building Form

Opportunities to create a sense of place begin with an informed site plan. In a small downtown setting, care should be taken to develop a building site plan that respects the street with a strong activated first floor. Development blocks in the Downtown should have buildings with zero lot lines, parking that is minimally visible and articulation of the building line. Building mass should be articulated with architectural elements, such as bays, varying the building form, setbacks, and solids versus voids. The scale of the building should be human scale in that it relates at the pedestrian level to create an overall inviting character and street presence. The proportions of the building should account for adjacent development and be in keeping with the scale of the street. The overall effect of urban design should create a regional architectural identity with design flexibility for the City of Concord. In this section, urban design is a quality that applies to both the Inner Core and the Outer Core. In the City of Concord, an established node is the Todos Santos Plaza, the heart of the city where activity is created. Buildings and the aesthetic should respect the plaza through facades that open towards the plaza. In other areas of the downtown, respecting view corridors or aligning balconies to face Mt. Diablo could become the urban design gesture. The Inner Core and the Outer Core should have seamless transitions at the base of the building to help stitch the urban fabric of the city together.



Site Plan with courtyard style parking

Site Planning & Orientation:

Inner & Outer Core Principles:

- The building has a zero lot line, however it still has movement on the first floor.
- The front building line creates a strong street wall condition to help frame a vital retail corridor.
- The mid-block courtyard space with a fountain helps to relieve a large bulky building, and creates a nice pedestrian space.
- The mid-block courtyard connects the surface parking area and back of house retail to the street.
- Generous sidewalk space and an outdoor eating area enliven the back of house retail spaces and allow street activity to continue to the back spaces.

18.105.040 D 3: *Off street parking shall be located either underground in a parking structure with active storefronts and uses along the street frontages or in surface lots at the rear of buildings that can be accessed from the rear of the property. Off-street parking shall not be located between a building and a pedestrian route to the BART station.*

Buildings with strong design will have a pedestrian designed base, intermediary floors that have rhythm, and a top floor that relates to the sky with good roof form.

Massing:

Inner & Outer Core Principles:

- Buildings should have a clearly expressed base, middle, and top.
- The upper floors are set back eight to ten feet, creating an inviting and usable outdoor balcony and giving a stronger presence to the first floor.
- The massing of one potentially large building is broken into two smaller masses, acting as two small buildings.
- Changes in plane of 4 to 8 feet within a large mass helps to avoid a monolithic appearance.
- The use of at least two distinct materials and or colors creates a dynamic appearance and shape.
- The back of house retail and restaurants are treated like front of house with the same care and detail so they have a main street presence.

Strong building massing with a proportioned roof pitch

Building Form as it relates to the public sidewalk

Scale and proportion in context of an urban downtown

Scale & Proportion:

Inner & Outer Core Principles:

- The scale of the building should be harmonious to the overall context and surrounding environment.
- Desirable relationships between the dimensions and parts of a building help establish the building form.
- Good proportions provide an aesthetic rationale for the dimensions of a building. Architectural design can unify the multiplicity of elements by having all the parts belong to the same family of proportions.
- Good proportions give a sense of order in the facades and spaces of architectural design.
- A more traditional building facade may have classical proportions and an even rhythm for solids and voids.
- A 3 to 4 story building works well on smaller, more intimate downtown streets.

First Floor:

Inner & Outer Core Principles:

- The first floor is taller, allowing for a better connection to the sidewalk. The increased height allows for more visibility.
- The first floor is designed with warm materials such as wood and fabric awnings; materials that lend themselves to being touched.
- Ample fenestration allows passerbys to gaze into shops.
- Retailers take advantage of the window space for unique and artistic window displays.
- Care and detail are given to the first floor with craftsmanship of materials.
- Recessed entrances with double doors help invite pedestrians in.
- The first floor of the building should be articulated with entrances and a pedestrian friendly first floor.
- Human scale helps establish good proportion at the base of a building.

Strong building massing and first floor articulation

Warm quality materials used on the first floor

03 Inner Core

"The building form and fabric around Todos Santos Plaza and the adjacent area helps define the pedestrian character of the downtown."

Downtown Concord Specific Plan, June 6, 2014

The Inner Core is the heart of downtown Concord. The Inner Core is defined by the Todos Santos Plaza and the surrounding historical grid pattern. The Inner Core is shaped by existing buildings, where some have a historic Spanish architecture, such as the Fire Station, while others came at a later time, such as the mid-century style building on the southeast corner of Grant Street and Salvio Street. Within the Inner Core, the Downtown Specific Plan recognizes an opportunity site and area of interest for future development. The Inner Core is the most pedestrian intensive and walkable area in the City. The Inner Core is most suited to mixed use development, with active retail on the first floor and office or residential above. The key to retaining walkable destinations is to incorporate a mix of active uses, such as restaurants and retail stores, on the first floor. Architecturally, the first floor base of a building needs to create a dialogue with the plaza, the street, open spaces, vistas and view corridors. The connection of buildings to the public realm should be open and transparent so that activity is encouraged. Development needs to recognize and preserve pedestrian connections, through wider sidewalks, setbacks for plazas and planting areas. The first floor of a building needs to engage with the public realm by having taller storefronts, care and craftsmanship of materials and respite areas for sitting and looking. Oftentimes, a building's accessories; decorative lighting, signage and potted planters, can strengthen a theme and become the jewelry of a project. An engaged and active first floor can contribute to the public realm and placemaking.

03 | Inner Core

The Inner Core has an established intimate scale of buildings. New and renovation projects should continue to strengthen the existing context and provide cohesion. The scale of buildings in the Inner Core needs to convey the area as special, through heightened details at the base, private spaces relating to public spaces and enhancement of features. New buildings in this area can be Spanish and Spanish inspired, however they can also be interpretations of that style. If a renovation is proposed on a historic building, then the historic character should be kept. If a building was built in a later period, such as in a mid-century or art deco style, for example, then the renovation should respect that style. A minor renovation can continue the period style of the building by making improvements and enhancements to the existing facade. The strategy to improvements should be an engaged development that builds upon the existing character of the downtown. There should be care and quality of craftsmanship in the details and an overall human scale and individuality to the project. There should be a continuity of design in the adjacent streetside and public spaces, this may include paving, lighting, landscaping, materials and other features. The Inner Core is the pulse of the downtown, where new and renovation projects should create sensitive transitions to neighboring uses, existing buildings, historical structures and public plazas.

Salvio Pacheco development exemplifies a building with a historic feel.

Inner Core Context:

The Inner Core is marked by a number of historic buildings, some buildings impart a historic feel, while other buildings were constructed at a later period of time. Regardless of the style, the pedestrian scale of the Inner Core establishes the character. This intimate character produces walkability, passive activities, and active uses. Strategies to keep this area cohesive should focus around:

- Breaking up single large block buildings into a series of buildings/variation in the facades to create a finer grain fabric.
- Providing important roofline articulations/stepping back the top floors of buildings.
- Ensuring the ground floor of buildings relate and enhance the public realm/streetscape.
- Providing deep reveals for window treatments.
- Incorporating balconies with permeable railings.
- Use of a common materials palette.
- Use of arcades along specific streets.

Extracted from the Downtown Specific Plan, pg. 80

Massing:

- A corner tower element secures the mission style with minimalist windows and symmetry.
- Traditional appearing materials and finishes are used to convey a Spanish theme.
- Balcony projections with wood like material help break up the mass and give a theme to the Spanish revival style.
- The project relates to Todos Santos plaza across the way by having active first floor uses. The outdoor dining creates continuous activity where people can gaze.
- Recessed windows and doors give the impression of heavy masonry walls.
- Multiple arched openings connects to the interior private courtyard and allows the indoor and outdoor to relate.

Strong building massing with a proportioned roof pitch

Building Form as it relates to the public sidewalk

Example of second floor with articulation.

Example of indoor dining that extends out.

Inner Core Mixed Use:

- Strong massing that hugs the ground gives this two story structure a traditional appeal.
- A wide band above the first floor retail helps distinguish between the more public first floor versus private second floor units.
- Custom design curvilinear metal balconies add individuality to the project.
- The door is inset within the entry frame and finished with wood and cast iron.
- The windows have added grids to five more richness to the Mediterranean look.
- The material palette and warm colors help to give this development a rich, traditional appeal.

Successful Strategies:

- A base height of 16 to 24 feet helps relate to the street and sidewalk.
- Large storefront windows with landscaping and overhangs create an inviting sidewalk area.
- The angled corner visually carries the eye where two streets meet.
- Awnings are set at the transom line to give better human scale.
- The first floor has durable materials, such as stone at the base.

Inner Core Mixed Use:

- The overall composition on a large development block is broken into a series of smaller facades that are complimentary to each other.
- The corner entrance projects out to allow a setback for the second story.
- The cornice is detailed to give a heavier and more traditional expression.
- The focus is on the facade and how it is detailed to carry a traditional architectural language.
- The base and top of the columns are delineated.
- Window arrangements are symmetrical and aligned.

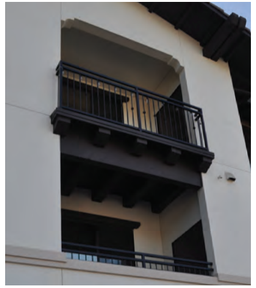
Details:

- The arches are finished with tiles above the storefront.
- The columns have a leaf motif imprinted at the capital.
- The projecting columns help establish the bays for the storefront.
- The exterior insulation and finishing system (EIFS) is scored to give the material depth.
- The first three feet of the development are finished in durable material, brick with a soldier course.

Example of classical style expression with detailed columns.

Example of corner entry element with a single column announcing the entry.

Example of Spanish Colonial Revival as a current style.

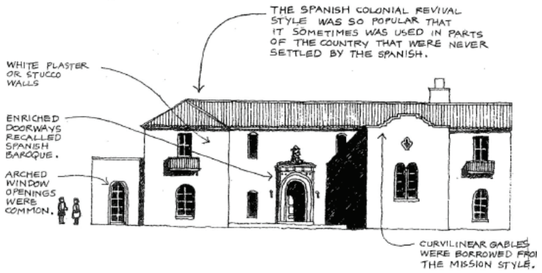


Example of Spanish Revival style materials and details.

Spanish Colonial Revival Use:

The Spanish Colonial style was developed as a result of the Mission Style. The style became popular after the 1915 San Diego Exposition, where the style was showcased. Some common features of this style include:

Stucco surfaces
Low pitched tile roofs
Limited number of openings
Openings with deep recesses
Relation to the outdoors through terraces
Use of decorative ironwork



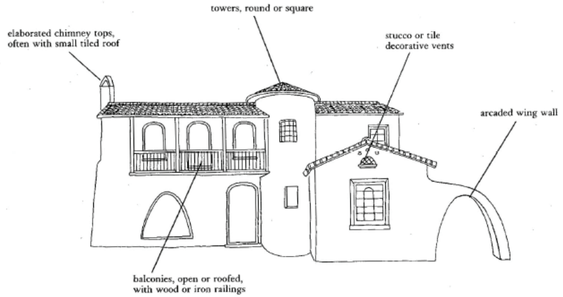
Current Spanish Style Details:

- Metal frames and ironwork are used at entrances. Doors may be typically carved wood or other ornate type door.
- Colors are typically painted white, with a second trim color. A third color may be introduced on window frames.
- The appearance of stucco or plaster walls.
- Balconies are introduced on multi-story buildings.

Mediterranean Revival Use:

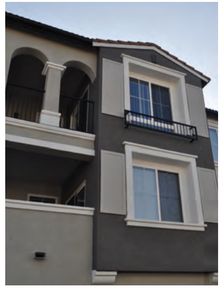
This style is a mix of various elements and influences. It incorporates features from Spanish Colonial and Moorish architecture in Spain, Portugal, Italian as well as California Missions. Some common features of this style include:

Ornate low relief carvings, arches and columns
Curvilinear gables
Red tile hipped roofs
Stucco or plaster walls
Arched or straight windows with ironwork
Stylized chimneys and vents



Current Mediterranean Style Details:

- The facade is finished in a variety of earth tone materials, finishes and colors.
- The chimney base is fluted and the top has decorative vents.
- The low pitched roof is finished with red tile.
- A curvilinear gable is introduced at the corner.



Example of arched details and bays.

Example of Mission Revival as a current style.

Example of Arts & Crafts style expression.

Example of Arts & Crafts materials and details.

Inner Core Residential Use:

- Strong massing that hugs the ground gives this three story structure a humble appeal.
- Eaves with deep overhangs shelter the ample balconies.
- Semi-enclosed balconies under a roof help to break up the corner.
- Simple design, sparse detail and natural material add the characteristic features of the Arts & Crafts style.
- Tapered columns give the details for an Arts & Crafts style.
- Window arrangement is grouped in threes.
- Vertical batten board material is contrasted against horizontal lap siding to add variation.
- Combination of low slope roofs and gables add articulation to the roof.

Arts & Crafts Details:

- Columns are crafted with a stone base to define an entrance, and lend a human scale.
- Projecting bays are set within the larger gable form to break up the mass.
- The bay is differentiated from the gable form by varying the siding material.
- Triangular knee brace on the gables gives a distinct quality of Arts & Crafts style.
- Trim is finished in a simple flat wood.

Inner Core Residential Use:

- The overall composition is harmonious and symmetrical.
- Mass that is definitive with projecting and receding bays gives more articulation to the facade.
- Framing around windows and lintels enhances the project details.
- The roofline is varied and helps to articulate the project.
- The base of the building is taller and relates better to the street.
- Roof profile adds a strong statement to the project.
- Window arrangements are symmetrical and aligned.

Italianate Details:

- The facade is finished in a variety of earth tone materials, finishes and colors.
- The project has strong expression at the base with tall arches.
- The eave overhang and depth along with exposed rafters give a traditional expression to the roof.
- Balconies are boxed and framed by wood details.

Example of Italianate style expression.

Example of strong base expression.

Example of a renovation in the downtown.

Example of first floor base materials on a historic facade.

Inner Core First Floor Base:

- Design a taller first floor, between 16 to 24 feet, as an essential tool for retail and pedestrian success.
- Taller first floor allows for increased ceiling height and makes for a gracious space allowing plenty of light.
- A building can be set back from the property line to allow outdoor dining space. The setback, along with the sidewalk depth creates more space for people to walk, sit, and enjoy.
- Greater detail on the first floor, such as wood finishes, doors and windows setback.
- Signage: various levels of signage can be added, such as well crafted blade signs, awning signage and banners placed perpendicular to the building face.
- Overhangs: Different shapes and sizes of overhangs contribute interest; roof overhang, fabric awnings, and even the finished underside of balconies creates a pedestrian scale that is relatable.

Successful Strategies:

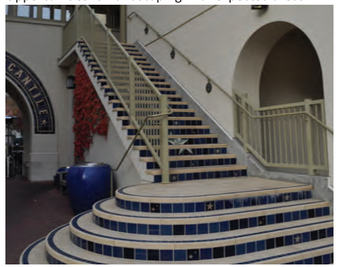
- Use site furnishings to add to the theme of the place, carefully match the furnishings to the style of the storefront.
- Use of colorful fabric awnings is a simple way to individualize the retail or restaurant facade.
- Design blade signs so that craftsmanship is added, and locate close to the entrance.
- Paver pattern and color set the retail area apart.

Decorative lighting acts as jewelry for finishing touches.

Opportunities for landscaping in unexpected areas.

Arcades provide a covered walkway.

Fountains in courtyard create resting areas.

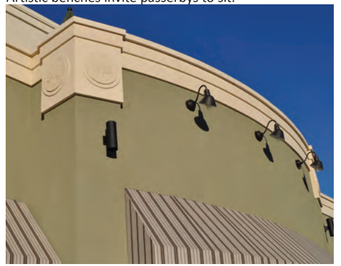


Stairways extend out & thematically connect two levels.

Artistic benches invite passerbys to sit.

Strong corner entrance makes a statement.

Outdoor dining is a pleasant gathering space.



The projects theme is designed into the capital.

Architectural Element	
Building Form	Heavier mass, formal arrangement of shapes and forms
Building Plan	Symmetrical shape with cross gables and side wings
	Formal plan
Height	Predominantly lower height, one to four stories
Roof Form	Pitched roofs, either low or steep with pronounced parapet or cornice
	Articulated saddles, gables, hip and valleys, dormers and shed roofs
Base of Building	Porticoes, pediments & colonnades, roman semi-circular or squared arches, arcades
	Heavy base rooted to the ground
Upper Floors	Traditional porches and balconies
	Projecting bays
Materials	Warm materials such as stucco, wood, stone, canvas awning, clay tiles
	Glass is a complimentary material
	Earth tone colors
Detail	Terracotta or cast concrete ornamentation
	Cast Iron
	Craftsmanship in details
Fenestration	Wood casement or tall, double hung windows
	Fenestration set within the mass
Amenities	Interior or exterior courtyards, balconies

Spanish Colonial Style Mixed Use

Spanish Colonial Revival Style Residential

Mediterranean Revival Style Multi-family Residential

Arts & Crafts Style Residential

Italianate Style Residential

Traditional Style Mixed Use

Traditional Style Mixed Use Retail

Colonial Style Mixed Use Retail

"The character of the building's ground floor determines the overall quality of the street level pedestrian experience."

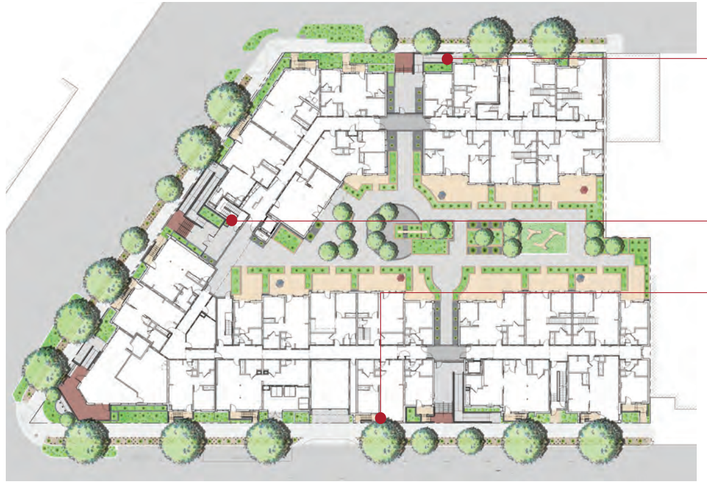
Downtown Specific Plan, June 2014

04 | Outer Core

The Outer Core is an extension of the Inner Core and should continue the urban design principles, pedestrian connectivity and respect of the building form. The Outer Core is essential to establishing linkages and transitions between the Inner Core and the rest of the City. The Outer Core architecture may be more responsive to current construction methods, market viability, contemporary materials and fiscal feasibility, with less prescriptive architecture. However, the Outer Core will need to respond with high quality development. The Outer Core can reflect a diversity of contemporary architectural styles with a focus on high density development that incorporates pedestrian friendly features on the ground floor. Development in the Outer Core will need to employ durable materials, especially at the base. Architecture can respond in a meaningful way to its context by orienting a site plan towards vistas and plazas. For example, a rooftop garden may be oriented towards views of Mt. Diablo or Todos Santos Plaza, providing a vertical view connection. Four-sided architecture needs to be implemented so that all four elevations have a front facade. The use of warm materials with good detailing at the base will provide an authentic architecture for Concord. The Outer Core can be more reflective contextually so that development is mindful of Concord's downtown. A contemporary design can still be a genuine Concord design with nods to a bigger context. The Outer Core can relate and extend the important qualities of good materials, pedestrian connections, walkability and good urban design. The Outer Core will more importantly serve to knit together the Inner Core with the rest of Concord so that there are seamless transitions and high quality development.

04 | Outer Core

Opportunities to create a sense of place begin with an informed site plan. In a small downtown setting, care should be taken to develop a building site plan that respects the street with a strong activated first floor. Development blocks in the Downtown should have buildings with zero lot lines, parking that is minimally visible and articulation of the building line. Building mass should be articulated with architectural elements, such as bays, varying the building form, setbacks, and solids versus voids. The scale of the building should be a human scale that relates at the pedestrian level so as to create an overall inviting character and street presence. The proportions of the building should account for adjacent development and be in keeping with the scale of the street. The overall effect of urban design should create a regional architectural identity with design flexibility for the City of Concord. In this section, urban design is a quality that applies to both the inner core and the outer core. In the City of Concord, an established node is the Todos Santos Plaza, the heart of the city where activity is created. Buildings and the aesthetic should respect the plaza through facades that open towards the plaza. In other areas of the downtown, respecting view corridors or aligning balconies to face Mt. Diablo could become the urban design gesture. The inner core and the outer core should have seamless transitions at the base of the building to help stitch the urban fabric of the city together.



Residential Site Plan with interior courtyard.

Outer Core Context:

All new developments on primary streets should build to zero front lot line with exceptions for any usable, publicly-accessible, at grade open space such as small plaza, pocket park, or a pedestrian alley. Buildings with minimal setbacks have a special relationship with the sidewalk and street. In these cases, buildings frame the street and forms a well defined street edge. Building setbacks should be landscaped to ensure privacy in case of residential ground floor use. In residential neighborhoods with low scale buildings, the front setback shall be landscaped to enhance the street character and complement the neighborhood identity.

Extract from Downtown Specific Plan, page 83

18.105.040 D 3: *Off street parking shall be located either underground in a parking structure with active storefronts and uses along the street frontages or in surface lots at the rear of buildings that can be accessed from the rear of the property. Off-street parking shall not be located between a building and a pedestrian route to the BART station.*

Street elevation of a residential project.

Outer Core Principles:

- Buildings downtown should maintain a tight and varied rhythm of facades compatible with the existing character. In particular, they should relate to the typical 50 foot wide parcel width through building vertical modulation and facade articulation to avoid flat, long walls along the street frontage. Such techniques could include the use of change in facade rhythm, facade recesses, or change in materials or color.
- Buildings should be sensitive to the scale and character of adjacent buildings on rear property lines.
- Steps, stoops, porches, patios, and terraces should be allowed in the building setback zone, particularly on residential buildings where ground floor activity is important.

Extract from Downtown Specific Plan, page 83

Modulated facade with change in material and color.

Building Form as it relates to the public sidewalk.

Active uses engage pedestrians.

Strong building entrance and first floor articulation.

Mixed Use Design:

- The first floor of a mixed use project should have active edges with commercial presence.
- Active edges create a well-defined street-wall to provide continuous retail synergy on the street and sidewalk.
- Mixed use active edge projects should engage a stable amount of pedestrian traffic throughout the day and evening.
- The majority of street frontage should be designed for active uses.
- Design the first floor space with height and depth to support retail spaces, service spaces, educational or cultural spaces.

Successful Strategies:

- Design a minimum of 50 to 60 foot depth for a workable leasable ground floor space.
- Plan a height of 16 to 24 feet floor to floor on new commercial development, to allow for a range of use; cafes, restaurants and retail.

Mixed Use Design:

- The outer core follows the same urban design principles as the inner core, with zero lot line, parking below grade, and active retail edges.
- The architectural form maintains a contemporary language through the expression of materials, bays, and volumes. In the contemporary language, elements such as entrances, corners, stairs are more defined.
- The roofline is flat, however there is step backs in the upper story volume to create an interesting skyline.
- A contrast in materials, texture and color adds appeal to the facade.
- Details are done in a rational manner so reveals, edges, and grids line up in a deliberate way.
- Lighting along the columns adds a human scale.

18.105.040 C 1: *Continuity of building facades along the street with no interruptions in the progression of building and uses except for pedestrian access.*

Vertical movement in the upper story setback adds dimension and relief to the building volume.

Architecture is expressed through material, bays, and volumes.

Retail is an active use that encourages more pedestrian activity.

Strong building entrance and first floor articulation.

Mixed Use Design:

- A zero lot line condition is proposed, however there is movement in the site plan and through the cantilevered bays.
- Active retail edges with large amounts of transparent glazing is engaged with the street.
- The bays project above the flat roofline so as to create movement above the parapet line.
- Hierarchy is created through the fenestration, where public spaces on the first floor have more glazing and the residential spaces have a different glazing pattern.
- Garage entrances are part of the overall architecture and treated with the same level of detail as the rest of the project.

Successful Strategies:

- Entrances to retail are framed by breaks in the landscaping.
- Drought tolerant landscaping, such as kangaroo paws, add color and work as a sustainable strategy.
- Landscaping at the base makes the first floor less prone to maintenance over the long run.

Mixed Use Design:

- The architecture is a four sided design with details, colors and materials carried out on all facades of the project, as well as the inner courtyard.
- Contemporary detailing is expressed through materials that wrap around the corners.
- Interest is added with various materials throughout the project; glass, metal, stucco, wood paneling.
- The bold color palette contrasts and plays well to lend an overall excitement to the facade.
- Ribbed glass is used as an expressive material on the corner, on balconies, and as a vertical delineating material.
- The EIFS is scored so it has breaks and has more substance as a material.
- Metal canopies are added throughout the project which adds a horizontal plane, while glass is used in places as a vertical plane.

18.105.040 C 3: *Pedestrian friendly street level building design amenities such as highly articulated facades with a variety of high quality materials and architectural detailing, visibility into buildings, awnings, paseos, or arcades, and signage oriented and scaled to the pedestrian, located directly behind the sidewalk.*

Interest is added in layers with storefront, raised planter bed, landscape, sidewalk and continuous landscaping along the curb.

Various materials, textures, and colors are detailed even on the underside where it is visible to the passerby.

Strong corner element helps to visually identify the intersection and make a distinct entry feature.

Upper story setbacks separate the top floor from the base and the middle sections.

Residential Design:

- The first floor is raised three feet, however the residential balconies open to the sidewalk and create a semi-public engagement.
- The top floor of the project is clearly delineated through the cornice line, strong eave expression, and bold use of color.
- The first floor base of the project uses a durable brick or cast stone material.
- The brick material adds soldier coursing at the balcony levels for detail.
- Stairs run parallel to the sidewalk to engage the first floor.

Successful Strategies:

- A rounded tower entry creates a prominent entrance the intersection of two streets.
- Shifts in the site plan are at a minimum depth of four feet so that considerable depth is created.
- Decorative street lighting throughout the project compliments and adds a street rhythm.

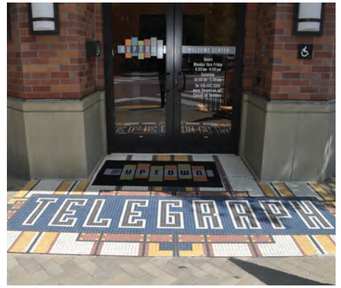
Residential Design:

- The project is developed with four separate buildings, yet each building has its own personality and is respectful to its adjacent neighbor.
- The base is treated with care and substance of material, such as stone or brick. The raised first floor walls are treated with landscaping to add green and make the project more human.
- Each building entrance has tile details in a playful palette of color and pattern.
- A contrast in materials, texture and color adds appeal to the facade.
- The overall mass hugs the street to give a human scale to the street.
- The street is lined with pavers and makes the development more cohesive.

Successful Strategies:

- Podium style building introduces pedestrian elements at the base through integration of landscaping, well designed knee wall and balconies.
- Paving patterns are introduced at the entry areas to make it special.
- Each building has its own custom designed balcony railing, lighting, and entry feature so that each building is cohesive to the development yet individual.

Pavers in the street bring cohesion and tie the development together.



Tile details at the entry threshold add whimsy and playfulness to the entrance.

An angled corner entrance helps the building visually move around the corner.

The main residential entrance also serves as artwork done by a local artist.

Mixed Use Design:

- Strong massing that hugs the ground gives this five story structure a humble appeal.
- A wide band above the first floor retail helps distinguish between the more public first floor versus private residential units.
- The top floor is set apart by color, balconies and slight setback.
- There is movement within the residential bays so that the mass is articulated.
- Window arrangement is grouped in threes and helps to add rhythm to the facade.
- The material palette and warm colors help to give this development a rich, traditional appeal.

Design Details:

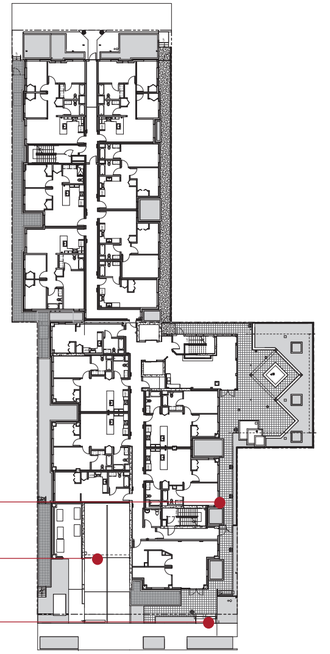
- A taller base height of 16 to 24 feet helps relate to the street and sidewalk.
- Large storefront windows with landscaping at the edge create an inviting sidewalk area.
- The rounded corner visually carries the eye where two streets meet.
- Awnings are set below the transom line to give a better human scale.
- The first floor has durable materials, such as tile at the base and EIFS is used as an accent only.

Residential Design:

- The project height is similar to neighboring projects, so the building blends in.
- The bays are treated with a finished wood, to give a special appearance.
- A horizontal datum above the entrance helps to establish the pedestrian first floor.
- Balconies are cantilevered to express the structure.
- Metal base of the balcony carries over into the bays and gives continuity.
- The main entrance is setback in a landscaped courtyard.

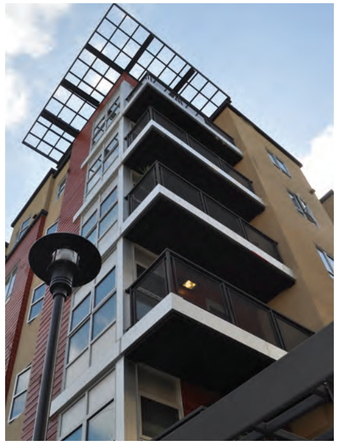
Successful Strategies:

- A line of columns in plan help to carry a visitor back to the fountain and seating area.
- The garage entrance is set further back from the residential entrance to give it distinction.
- Paving patterns are introduced at the entry to make the residential area more special and inviting.



STREET

The front facade is narrow, however through materials, landscaping and bold architectural gestures, the building has a street presence.



A horizontal metal canopy helps to establish a pedestrian connection.

Example of higher quality materials at the columns, storefront, overhangs.

Quality and level of detail make the contemporary base an inviting and warm place to sit and relax.

Outer Core First Floor Base:

- Apply the same principles for increased height at first floor base for retail and pedestrian success.
- Depth of a storefront should be between 50 to 60 feet or more to allow for ample retail space and storage area.
- Quality materials, such as masonry, wood, decorative lighting and ground to ceiling storefront design gives a good pedestrian experience.
- A zero lot line building has various levels for setbacks; one for the column, a second for the storefront, a third for the entrance.
- Well placed blade signs and gooseneck lighting attract pedestrians.
- Wood is a durable material, and in this example it is finished with craftsman like details, and give more quality to the first floor base.

Design Details:

- Benches placed between columns serve to give a resting area.
- Overhangs are designed with metal slats allowing light to filter through.
- Bollards are placed at the street entrance to provide safety.
- Pavers are defined through pattern and color to give variation.

Warm rustic materials make a contemporary base inviting.

Sheltered areas for seating with shade provide respite.

Tile details at the entrance provide craftsmanship.

Entrance off the main street is a gateway artpiece.

Well detailed piers, lights and fence.

Outdoor seating is enlivened by thematic site furnishings.

Corner entrance with fountain and columns.

Linear landscaping makes outdoor area special.

Good entrance detail make for a rich invitation.

Architectural Element	
Building Form	Geometric forms, planar elements and asymmetrical volumes
Building Plan	Functional elements such as stairs, entrances, chimneys have individual expression
	Open floor plan with exposed structural elements
Height	Four to eight stories
Roof Form	Predominantly flat, sloped lines or angular with clean parapet
	Multiple roof lines at various levels with squared edges
Base of Building	Planes and walls define entrances
	Columns and suspended overhangs
Upper Floors	Porches and balconies that are cantilevered or suspended
	Projecting or recessed bays
Materials	Masonry, glass, metal, concrete, tensile structures, large spans of fenestration
	Roof may be metal
	Earth tone colors
Detail	Reveals, edges and grids line up in a rational way
	Expressed through variation and contrast in material
Fenestration	Large spans of window walls act as a feature
	Floor to ceiling, frame-less or minimal framing
Amenities	Interior or exterior courtyards
	Rooftop gardens

Mixed use development near BART.

Restaurant and retail development.

Residential development near BART.

Mixed use development with residential near BART.

Mixed use development with residential near BART.

Mixed use with restaurant and retail uses.

Vertical mixed use with retail, office and residential.

Residential development with a full block proposal.

05 Re-models & Renovations

"When you strip away the rhetoric, preservation is simply having the good sense to hold on to things that are well designed, that link us with our past in a meaningful way, and that have plenty of good use left in them."

Richard Moe,
National Trust for Historic Preservation

The existing downtown has construction from the late 1800s, early 1900s, mid-century and some recent development as well. The Inner Core of the downtown is largely shaped by a historic character and the grid plan of development blocks, which together create the urban fabric. Revitalization recognizes that downtown Concord has an authentic period architecture nascent from the late 1800s to the early 1900s. Revitalization efforts also recognize one of the key tenants is to respect wherever possible the historic fiber of the downtown. Buildings with a historic feel should try to preserve as much of that early period style by doing an authentic renovation. Interior tenant build outs may still be more expressive with branding and identity. Buildings done in the later periods, 1930s to 1960s add to the rich urban fabric of our downtown as well. To the extent possible, a renovation may continue to keep that original mid-century style with care, attention and detail in the execution of the re-model. The aggregate of various styles should contribute to a sense of place that is local and authentic to downtown Concord. The intent of this section is to encourage a coherent architectural style and site design standards that complement the historic character of the downtown without being imitative. This section encourages on-going repair, maintenance and stabilization of an existing building, regardless of time period or style. Older structures can contribute to the established urban fabric by maintaining, restoration and or careful adaptive re-use of the historic buildings. Newer developments can cohesively tie in and add a unifying flavor to the downtown.

05 | Re-models & Renovations

Building renovations and construction in the Inner Core should enhance the existing architecture or historically significant building. A well done re-model will recognize good proportions and scale while striping away excessive or unnecessary work to reveal an authentic style. At times, details can also be added that contribute to the period style that may not have been there originally. The Inner Core has a finer grain fabric with the intimate scale of the streets, the Todos Santos Plaza, and the lower scale of buildings. Renovations are encouraged that respect the urban fabric, open towards the plaza and create an engaging facade with the street. An existing building should keep the original period style by on-going maintenance and repair, whether it is a Spanish Colonial, Italianate, Prairie, mid-century, or art deco. A re-model or renovation should add back the authentic character. If a building is demolished or destroyed, then the new building can have a more traditional architectural expression, see the Inner Core Chapter 3. The key is to maintain a fine grain fabric and respect the existing scale. Improvements should add softer elements; such as landscaping in unexpected places, incorporating playful artwork, or a well done seating area to create a sense of place and strengthen the urban fabric.

After image of renovations.

The project showcased on these two pages was built in 1925. Over the years re-models were done that were not in keeping with the authentic style. A recent renovation restored much of the original architecture and opened the storefront to a more pedestrian oriented character.

Successful Strategies:

- Varying the facade material, parapet, colors and patterns creates a economical yet effective solution.
- Doors are recessed and the transition areas are angled to welcome passerbys in.
- The window glazing has been maximized to open towards the street and sidewalk.
- The arrangement of the fenestration gives the building rhythm.
- Design a continuous band of retail and restaurant spaces help to energize the street level. Offices and service uses are kept off the main streets.
- Create a ground floor flush with and accessible from the sidewalk.

Re-models & Renovations:

- Although the existing building is just over one acre, and comprised of several parcels, it was strategically broken into a small series of retail shops to give a small downtown appeal.
- On the re-model of Peet's Coffee, care was taken to keep details such as the dentil crown molding on the parapet and add new copper gooseneck lighting.
- A series of windows spaced between the new pilasters, helps the Peet's Coffee store sets up a vertical rhythm along the sidewalk.
- A unique presence is created by having painted art panels aligned above each storefront window. The awnings act as a horizontal band that ties the art panels with the storefront windows.
- Each retail store ties in with neighbors, yet still has an individual branding and look. There is a richness in the variety of facades.
- The existing rooftop cupola was modified to give better vertical proportions and add corner presence.

18.105.040 E: *Exterior building walls facing any street frontage shall include windows, doors, or other openings for at least 50 percent of the building wall area located between two and one-half and seven feet above the level of the sidewalk. No wall shall run in a continuous plane for more than 20 feet without an opening. Openings fulfilling this requirement shall have transparent glazing and provide views into work areas, display areas, sales areas, lobbies, or similar active spaces.*

Before image of renovations.

The project featured here was part of a re-development plan for an existing larger shopping center in downtown Lafayette. The existing building was a series of older buildings that were re-modeled. A conscious decision was made to maintain the look of the individual buildings. The intent was to provide clustered retail shopping and entice pedestrians, enhance the creekside setting, and introduce pedestrian amenities. Existing facades were kept where possible with upgrades. The facade upgrades relate well with newer buildings and with the existing buildings. The forms were broken up to lessen the building mass. As part of re-development efforts, owners coordinated to provide interconnected parking.

Generous amount of fenestration and recessed doors make for an inviting retail space.

Tiled murals create a colorful landscape on blank walls.

Successful Strategies:

- Interest is created in the storefronts by varying the pattern of tile.
- Fenestration is encased by a two foot base at grade.
- The window glazing is framed on all four sides so that it is contained and acts to enclose the storefront.
- Human scale elements are introduced at the top of the storefronts by solid fabric awnings. The awnings also serve to provide shelter from inclement weather.
- Entrances are set back from the building line.
- Public art is encouraged as a tiled mural.
- The building height is kept consistent, and interest is added through varying materials, different color awnings and handcrafted details.

Urban Design Improvements:

- The overall facade improvement is reminiscent of a traditional downtown.
- The downtown main street effect introduces more concentrated, easily accessible retail shopping.
- Physical closeness of different uses within close proximity are encouraged.
- The facade improvement establishes a downtown core on either side of the main street.
- A mix of uses is encouraged; retail, restaurants, office, commercial and residential.
- The one story scale of the storefront was kept to better relate to a human scale.

> "And third, the sidewalk must have users on it fairly continuously, both to add to the number of effective eyes on the street and to induce the people in buildings along the street to watch the sidewalks in sufficient numbers."
>
> *Jane Jacobs, author*
> *The Death and Life of Great American Cities*

Top image is After renovation and bottom image is Before renovations.

Generous amount of fenestration and recessed doors make for an inviting retail space.

Color and change of material engage this retail space with the sidewalk.

Facade Improvements:

- New windows were added, with pilasters and horizontal mullions to give a more human scale and historic feel to the project.
- The existing canopy over the storefront was kept and painted, with new horizontal beam and brackets added to the underside of the canopy.
- A new cornice line was added to the parapet along with finial elements on the ends.
- A multi-paint color scheme was used in historic period hues and tones to add authenticity to the facade upgrade.
- Lighting, benches, potted plants and signage were designed to be consistent with the overall facade theme.
- The facade relates to the Todos Santos Plaza by opening up the facade towards the plaza.
- The interior renovation keeps the branding and the theme of the restaurant, while the exterior relates to the historic downtown.
- A new entrance feature for signage and doors was added to break up the large horizontal parapet and to give a central focal feature.

Preservation:

When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alteration, Preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for Preservation should be developed.

For more go to www.nps.gov, The Secretary of the Interior's Standards for the Treatment of Historic Properties

Preservation Process:

The Schenone Building was originally built in 1914 as a theatre. In 2002, a re-model allowed for new uses on the ground floor, and offices on the second floor.

- Many historic buildings can be adapted for new uses without seriously damaging the historic character.
- The form and detailing of architectural materials and features were important in defining the building's historic character and were maintained.
- Careful study and review of the building's exterior materials; masonry, wood, metal, windows were kept as part of the preservation.
- The preservation strives to retain existing materials and features while employing as little new material as possible.
- During preservation, repairing masonry as well as wood and architectural metal features included patching, splicing, and reinforcing using recognized preservation methods.

Authentic materials such as brick and wood were kept during the preservation process in 2002.

Period details were added back in such as lighting and paint to maintain the historic character.

06 Landscape Design

"Conservation means the wise use of the earth and its resources for the lasting good of men."

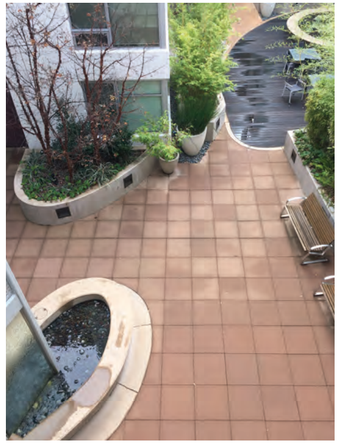
Gifford Pinchot,
Conservationist and First Chief of the United States Forest Service

Landscaping is part of the architecture and the design of the city. When considering enhancing an existing building or a new development, an integrated approach should be considered to the external environment. Good landscaping is not only part of good aesthetics, but will add to the long term sustainability of a project, add value to the project and also work as a soft engineering measure to collect and treat rainwater. Landscaping should be integrated into the external environment with opportunities in the early review of the design phase of a project. Opportunities for landscaping can be evaluated at many areas of a project; rooftop, vertical gardens, internal courtyards, street and sidewalk areas, and setback areas. A landscape proposal should consider existing features of Concord, such as the Todos Santos Plaza and views of Mount Diablo, and how to connect and preserve through view corridors, as well as horizontal and vertical placement of landscaping. Urban landscaping should be guided by a sustainable planning and management vision that promotes interconnected green space with other developments and streets. Landscaping can also work at a basic level to enhance the downtown and add to the pedestrian experience. Incorporating landscaping at the foundation of a building is one step, a more enlivened experience will have setbacks with landscaped courtyards, generous amount of landscape buffer between the street and the sidewalk. The use of drought tolerant plant and native plant material helps to reduce water usage. Capturing rainwater runoff and using it in the landscape helps to promote a more sustainable strategy. The use of a cool roofs along with other landscaping strategies reduces the heat island effect and makes for a better overall environment.

06 | Landscape Design

Landscaping offers benefits that are both social and economic. Developments with landscaped amenities such as roof top gardens interior and exterior courtyards add to the value of a project. The design of the landscape in conjunction with the overall site planning and architectural design can create a place where people want to spend time, socialize, or work. Trees, shrubs, and ground cover along with outdoor plazas can become spaces for organized events, casual meetings or simply taking a break. Seating areas can also provide spaces, which can give the visitor or user a respite from the built environment and encourage a sense of community. Landscaping can reduce the operational costs of a building by reducing the heat island effect of a site. Strategically placing trees along with sun louvers on the south side of a building can reduce the demand on mechanical and electrical systems. Properly placed and selected plantings can filter stormwater runoff, stabilize soils, and mitigate noise. Landscaping should go beyond the minimum code requirements and be thought of as a business attraction and retention tool. While landscaping works to enhance and complement a space, it can also provide real benefits that affect the profitability, health, productivity, and overall sense of well being.

An internal courtyard provides relief and serves as an amenity feature for residents of this development.



A two story water fountain becomes a focal feature and connects an internal courtyard internally.

This recent residential development incorporates an internal courtyard with balconies and windows opening to the interior so residents can enjoy the view. The development also provides a rooftop garden with seating areas, B-B-Q, and fireplace amenities for the enjoyment of residents.

Successful Strategies:

- Break up the courtyard into a small series of spaces or rooms.
- Vary the paver materials, patterns and colors to give modulation at the ground level.
- Add a water feature to diminish outside noise, and to create a visual draw.
- Plantings occur in potted plants, raised beds and in the ground to break up the courtyard space.
- Benches and seating areas are placed near focal points.

Landscape Enhancements:

- Tenants can accommodate landscaping in tight urban spaces by introducing and maintaining potted plants in front of storefronts.
- Where sidewalk space is tight, a series of hanging baskets under the roof overhang introduces color.
- Pavers in sidewalk areas help to soften a space and add interest in front of a tenant space.
- Respecting significant views, such as Mount Diablo, helps to make a roof top terrace more interesting and a unique amenity.
- Introducing both passive areas and active areas with Bocce Ball, B-B-Q, swimming pools enriches the amenity space for residents.
- A relaxed seating area is created with comfortable seating, a fireplace, and alignment with a significant view.
- Street furniture can act both as seating and serve as public art

18.105.040 C 4: *Pedestrian amenities, including wide sidewalks, weather protection through building design, landscaping, fountains, public seating or other street furniture, public art, additional lighting, or other pedestrian amenities.*

Landscaping can occur at many levels, from potted plants in front of a tenant space, to pavers in the sidewalk, to preserving views of Mount Diablo.

Green infrastructure is placed adjacent to a landscaped buffer giving the appearance of a larger green space.

Raised planter beds designed as part of the landscaped feature, capture stormwater and act as a filter prior to discharge into the stormdrain system.

Stormwater Improvements:

Green Infrastructure is encouraged in new development proposals. It is a cost-effective, resilient approach to managing wet weather impacts that provides many community benefits. Green infrastructure is designed to move urban stormwater away from the built environment. Green infrastructure reduces and & treats stormwater at its source while delivering environmental, social, and economic benefits. Green infrastructure allows stormwater to disconnect runoff from streets and filter prior to draining into the stormdrain system. A development may use this approach to either infiltrate or bio-treat prior to reaching a stormdrain system.

For more go to www.epa.gov/green-infrastructure

Successful Strategies:

- Incorporate rain gardens or bioretention areas in an unpaved space.
- Downspout disconnection is a simple practice that reroutes rooftop drainage into rain barrels, cisterns, landscaped or permeable areas.
- Employ planter boxes in dense urban areas as a streetscape element.
- Bioswales offer vegetated, mulched or xeriscaped channels for treatment and retention of stormwater.
- Use permeable pavers to infiltrate, treat and store rainwater where it falls.

Urban Landscape Improvements:

Landscaping approaches can go beyond parks, courtyards and green roofs. An urban environment should consider streets, sidewalks, utility corridors and parking lots as green opportunity areas. A street and sidewalk are part of the daily experience. An urban area should be landscaped, designed and engineered to be a more human and connected experience. Consider a landscape approach that accounts for everything outside of the building. Incorporating pavers in the street or at crosswalks enhances a development block. Treating the sidewalk and garage entrances around the development amplifies the connectivity of the project to the city as a whole to make it a total spatial experience.

Successful Strategies:

- Add layers of landscaping; plants along the foundation of the building, street trees as well as landscaped buffer along the street curb.
- Add bulb outs with landscaping at street intersections.
- Enhance the entrance of the building with a generous amount of landscaping.
- Employ various pervious and impervious materials such as pavers, stone, crushed gravel and concrete along with pattern and color to add richness.
- Select pavers that are manufactured nearby, or consider a stone that is quarried regionally as a sustainable measure.

Landscaping on both sides of the sidewalk enhances the development.

The use of bulbouts with landscaping acts as a calming measure for the street and enhances the pedestrian experience.

A generous uninterrupted strip of trees and grasses provides a continuous green buffer between the street and the development.

Incorporating bioretention areas with native and drought tolerant into impervious areas is a sustainable strategy.

Water Conservation:

Water is one of the many limited natural resources heavily impacted by the built environment. Increasing costs, quality concerns, aging infrastructure, supply shortages, water and energy interrelationships are a few of the factors that are driving cities to work with private development on sustainable measures. The employment and investment of tools early in the development process will deliver long term benefits and add cost savings to a project.

For more go to www.ccwater.com
www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf

Sustainable Strategies:

- Grey water is untreated waste water from clothes washers, showers, bathtubs, bathroom sinks, and laundry tubs used for outdoor watering. About half of the water used indoors-- or about 30 gallons per person per day can be used for landscape irrigation.
- Use drip emitters right at the edge of the rootball of new plants.
- Change spray sprinklers to low-flow bubbler or drip systems, this is ideal for shrubs and trees because water is applied directly to the root zones.
- Excessive misting from sprinklers wastes water. Reduce the high water pressure by adding a pressure regulator, or pressure-regulating sprinkler heads or pressure-compensating nozzles.
- Check for slow, constant leaks in the irrigation system. The usual location for leaks is the irrigation valves caused by worn out diaphragms in the valve assembly.
- Reduce water use by 20-50% by regularly checking the soil before watering.

Drought Tolerant Plants:

The Bay Area has a Mediterranean climate with cool, wet winters and summer droughts. It is important to have landscaping that uses drought tolerant plants, efficient irrigation, and employs water saving methods. Employing sustainable strategies in landscaping utilizes 50% less water than a comparable lawn. A well designed drought tolerant native landscape can look attractive year round as well as offer color in the landscape. Drought tolerant plants provide the added benefit of being disease and pest resistant while needing little to no fertilizer.

For more go to www.ccwater.com

Sustainable Strategies:

- Employ the use of California native plants in the design of the landscape; blue sage, blue wildryes, bearberry, carmel creeper, climbing penstemon, june grass, california fescue, bush anemone are just to name a few.
- Long, narrow strips of bare ground can be planted with colorful, low-maintenance, water-thrifty perennials.
- Water high water-use plants separately from low water-use plants by designing hydrazones.
- Incorporate compost six inches into the soil to retain water, reduce compaction, feed earthworms, and provide valuable nutrients to plants.
- Maintain two to four inch layer of mulch on the soil surface to reduce weeds, infiltrate rain water and to conserve soil.
- Move turf away from sidewalks and pavement. Instead plant shrubs, groundcover, and trees next to pavement with low flow drip or bubbler system.

07 Signage & Image

"Design is the organization of materials and processes in the most productive way, in a harmonious balance of all elements necessary for a certain function."

Lazlo Moholy-Nagy,
Typographer,
Bauhaus School of Design

Signage in the downtown area is an opportunity to brand and visually express an image, whether it is a retail or restaurant space. Signage can work on many levels, above a storefront bulkhead, perpendicular to the sidewalk, at the window level. Signage can serve to be an element of retail expression, and a tool to give street presence. Signage can enhance the architecture and call attention to the space. An arched entryway can be complimented by lettering that follows the radius of the arch. Signage should be proportionate to the retail storefront, and balanced to carry the eye around the entire retail space. By placing signs at different locations, over the bulkhead, at the window level, aligned perpendicular to view, signs can be part of an attractive and visually appealing storefront design. Signage should work with architectural features and enhance the exterior elements. Different types of signage can work together for a storefront, for example, an awning and blade sign together may be enough for a one story boutique in a pedestrian area, while a taller two story commercial space may benefit from individually illuminated channel letters. On unique brands, signage can build around a theme, being artistically designed and carefully crafted. Corporate identities can work with downtown settings, so that signage is scaled to fit a downtown neighborhood. In downtown settings, windows are opportunities to identify, personalize and entice passerbys. Window signage and window displays play a powerful role in attracting customers and inviting them into a space. Signage is best when part of a cohesive package of branding strategy. Signage can be the signature statement that lends expression and conveys identity to a retail or restaurant space.

07 | Signage & Image

The way a sign is designed can have a significant influence on a tenant's ability to acquire and attract new customers. Signage should tie together a company's brand, the logo, and creative image. Signage is one of the primary ways to communicate through a mix of interior and exterior signage to convey a message. Color can play an important role in conveying a brand's identity. Color should used in a complimentary way and not oversaturate the main message. Create a message that is brief, concise and comprehensible so that the focus is on the main product. A message should readily be understood to a range of customers. Keep a sign simple by listing key services or products. This allows to quickly catch passing individuals eyes and better deliver a message. Typography plays an important role in conveying the personality of the brand. Typography can give priorities and weight to certain parts of the message. Typestyle selection is critical to the effectiveness of a sign and readability. A font will render personality and creativity to a brand and highlight its individual expression. Use of blank space or white space is a good graphic tool. There should be balance in negative space versus positive space that has images and words. An effective sign uses a palette of tools to brand an image. In some developments with six tenant spaces or more, a master sign program can tie the develpment together and give a cohesive statement to the retail spaces.

The blade sign is perpendicular to the sidewalk and captures the pedestrian viewing angle.

The simple contrast of three colors is an effective way to brand an image.

The clothing boutique uses effective messaging to convey the personality of the chic brand. The red awning sets the stage for good typography and background contrast. The font was carefully selected to render elegance and good taste.

Successful Strategies:

- The tenant uses awning, window signage and blade signage to capture passerbys on Main Street.
- The tenant painted the window frame to reflect the image of the store.
- The blade sign is captivating and gives a sense of excitement.
- Potted plants are added along the base of the storefront and changed seasonally.
- Window graphics play a key role in creating a brand image and conveying a personality.

Signage Enhancements:

- This tenant on a downtown street utilizes a blade and awning sign for presence.
- Merchandise is displayed in the windows in an organized and attractive manner. The merchandise acts as a secondary form of signage.
- The blade sign uses the contrast of color against a dark background for effective messaging.
- The awning takes advantage of the existing architecture, with a street and courtyard presence.
- The awning stripes and colors work with the color and materials of the building.
- In this example, the merchandise takes the main stage, so that it is clearly viewed from the outside.
- Window displays are changed out on a regular basis to give excitement and freshness.

18.180.060 C: *Consideration shall be given to the purpose of the signs, the sign locations relative to traffic movement and access points, site features, structures and sign orientation relative to viewing distances and viewing angles.*

Integrating the sign with the architecture, materials and details of a building adds to a downtown context. In this example, signage is focused on capturing pedestrian audience on a main street downtown setting.

Edge Signage:

Edge signs can be placed lower than a wall sign, so that it is visible below a tree canopy. Edge signs can sit above, below or on the face of a horizontal canopy. Edge signs are placed closer to a street or sidewalk, and play up architectural elements. Edge signs can be illuminated with spot lights, halo illumination or internally lit.

A canopy becomes an eye catching element.

An inviting outdoor space is created with landscape, signage and lighting.

Successful Strategies:

- This quaint restaurant on a busy thoroughfare uses many design tools to highlight the restaurant space.
- The use of strong wall color with artistically painted graphics on the wall draws attention to the corner.
- The canopy is made of materials that give the appearance of reclaimed wood, with the restaurant name in hand painted letters.
- An edge sign on the corner further helps to bring the eye around the corner.
- A soft edge is created between the street and the building wall through the use of raised planter beds.

Awning Signage:

Awnings are an added architectural and signage element. Awnings offer temporary shelter during inclement weather and also invite a passerby into a storefront space. Awnings are an effective tool to draw attention to a storefront. For example, a patterned awning with stripes or dots can be a graphic element that sets the retail space apart. Awnings can be mounted to help frame a storefront window, or even above a door to punctuate an entrance.

Successful Strategies:

- Awnings create an instant recognizable brand through color, shape, size and pattern.
- Awnings can work with the shape of a storefront window to further accentuate the window shape or the architecture.
- Awnings can be illuminated from above with gooseneck lighting.
- Awnings create a horizontal datum of color, and can be used to distinguish one or a series of storefronts.
- Awnings signs may be hand painted, silk screened or appliquéd onto the fabric.

The awning shape and size helps to define the storefront window.

The use of a single color on the awnings distinguishes this restaurant on a busy thoroughfare.

Blade Signage:

Blade signs are designed to catch the pedestrian attention at the sidewalk level. Blade signs work well when placed at a pedestrian viewing angle perpendicular to the storefront. Blade signs should work with other types of signage, such as wall signs or window signs to give an effective amount of presence to a storefront.

A whimsical blade sign becomes a memorable symbol on a downtown street. The hardware is part of the design.

A corporate brand can fit in a downtown setting by using a blade sign that is more pedestrian scaled.

Design Details:

- Blade sign placement is best when viewed from the sidewalk level.
- Blade signs may be internally illuminated or externally illuminated such as from gooseneck lighting.
- Design the mounting hardward of the blade sign so it becomes part of the overall design.
- Limit the text of the blade sign to the logo, brand name or the name of the retail.

Wall Signage:

Wall signage is typically placed above a storefront transom or bulkhead. Wall signs should be designed to be proportionate to the bulkhead space, with space above and below the top and bottom of the sign. Wall signs can take different forms; pin mounted, halo lit, externally illuminated channel letters. Wall signs should express the identity of the brand inside. In developments with six or more tenant spaces, a master sign program can help define types and sizes of signs that work with the overall building.

Successful Strategies:

- Use different design tools along with signage to highlight a brand.
- In a downtown setting, proportion the signage so it is pedestrian scaled.
- Signage in a downtown is a combination of wall signage, blade signage, awnings, window displays.
- Scale the wall signs so there is ample space above and below for the eye to appreciate it.
- Plan visibility for wall signs so they are viewed both during the day and night time.

Corporate branding and logo scaled to fit a downtown setting.

A charming wall sign is created to fit above the storefront and below the transom.

Window Signage:

Transparent windows have an added opportunity for communication to a customer. For example, a restaurant often places tables and chairs next to windows to attract more customers. Graphics on windows can emphasize a brand and image. A window sign is a teaser to an event, merchandise or activity taking place inside. Window signs when done in a tasteful manner should accent the brand. In the downtown, a business may use individual letters, logos, or symbols applied to , stenciled on, or etched into the glass surface.

In the image above, individual gold leaf stenciled letters add prominence to this window.

In the top example, the black background and white letters become part of the window frame design.

Successful Strategies:

- Cohesively tie in the window graphics as part of an overall sign strategy.
- The right type of signage can attract a pedestrian into a storefront.
- Limit signage on the window so that it works with the display and merchandising.
- Window signs can be unique and distinct to play off the storefront or restaurant brand.

Window Display:

Window display is one of the most powerful tools to stand out from the competition and draw in foot traffic. Window displays are an additional strategy employed for marketing. A thoughtfully put together window display can rotate new products and seasonally refresh the display. A window display can add additional appeal and strengthen the brand approach. Window displays are a bonus since they do not require a permit and are not considered signage. A window display by itself creates interest and appeal for pedestrians in a downtown setting.

Successful Strategies:

- Organize the display of products around a single theme.
- A display can tell a story about the product or merchandise.
- Keep the theme playful and unexpected, so it draws in pedestrians.
- Limit the amount of product in the display, so a passerby can look through to the rest of the store.
- Employ color to attract the eye.

Tastefully done window signs are a boost to existing types of signs allowed in the downtown. These examples use a thematic approach and build interest around the brand.

08 Details

"Building art is a synthesis of life in materialized form. We should try to bring in under the same hat not a splintered way of thinking, but all in harmony together."

Alvar Aalto,
Architect

Projects in the downtown will often have four front elevations as they are often viewed from four streets or four sides. These projects should consider a four sided architecture, where all facades are viewed from various angles in the downtown. Details such as garage entrances, sidewalks areas, art, blank walls, screening method for utilities, balcony railings, the underside of buildings, and materials are part of the pedestrian-scape in a downtown. The careful placement and selection of these functions and how they are detailed are part of the architectural language. The intimacy and scale of downtown streets lends to more scrutiny and visibility of these details. For example a storefront opening with a carefully designed threshold can be a subtle visual cue to a pedestrian of the importance of the store. Additionally, how a ceiling above the storefront entry is treated will also signal the user about the quality and care of the space inside. In the downtown, the selection of materials should be weighed with quality craftsmanship and be inviting to the human touch. It is at the ground level where a pedestrian first encounters the personality of the building. Materials have an inherent quality that can become part of the architectural expression. For example a restaurant may consider a brick with iron ore, which imparts a texture and color throughout the material, or a fine wood grain with beading for the exterior of a hardware store. Art can add expression to a building and to the downtown. It can be a playful part of a project and add to its uniqueness. Inevitably all buildings have functional areas, such as vent rooms, trash rooms, garage entrys. In a downtown setting, it is critical to have details designed as part of the context and integrated so that the architecture is allowed to be the main expression.

08 | Details

Detailing of a building in a downtown setting where all facades are equally visible, can be a design opportunity. Naturally, some facades will have more hierarchy than others, such as those facades on a main thoroughfares versus facades on a single or two lane road. Servicing the buildings, providing areas for ingress egress, loading and unloading should be designed as a cohesive solution to a downtown context. Service areas should be screened and still act as part of the pedestrian pathway. Green screens or other well designed screening methods can be part of the architectural design. Utilities that serve the development should be planned in a location so they are less visible or designed with landscaping around. Garage entrys can be well designed with good access, change of material, signage, landscaping and lighting. Less prominent pathways along a building can be inviting with pavers, murals, and artwork so it becomes an unexpected part of the urban landscape. Artwork can play a pivotal role in celebrating a city with the correct placement, selection of artwork, and incorporation of art throughout a downtown. Artwork can create a distinct memory of a space, make conversations or elicit humor and emotion. Good detailing of a project helps make the building more habitable and approachable at a human scale, where we want to linger and enjoy a space. Good detailing imparts a special quality that sets a building apart. Good public spaces also have designed crime prevention strategies to encourage eyes on the street.

Several styles of brick are employed to express the inherent quality of the material.

The corner has a transition at the top to allow the column radius to become a 90 degree corner.

Materials can beautifully express their inherent qualities, whether they are traditional or contemporary. In this traditional brick example on the left, rowlock style expresses the arch. The brick material itself has iron ore that lends the varying degrees of color. A header style brick is used to express the radius of the column. A darker expression of brick is used to express the base.

Materials:

- The brick material is allowed to express the structure in the arch.
- Brick is employed in various styles, from stretcher, to rowlock to header in order to express the different forms of the building.
- There is a sense of warmth in the texture of the material.
- The window is trimmed in brick, with the wythe being visible.

Art:

Art can take various expressions of media, and transform a building wall or space. If a collection of art is encouraged throughout the city, art can have a positive and transformative impact on the city. For example, if the work of several local artists is incorporated in a close downtown setting, this can be combined with an art and wine stroll. Art can create captivating conversations and new avenues for civic engagement.

Successful Strategies:

- Look for opportunities to incorporate art early in the review and development of the project.
- Set aside a budget for artwork so it becomes part of the project early on.
- Art can convey the past or the future vision of a city.
- Art can be playful and engaging, such as a fountain.
- Commission a local artist to design a piece for the site.
- Select a site for art that is visible to the public.

18.105.040 G: *Improvements Between Buildings and the Street. The land between a building or exterior improvement and a street shall be landscaped with planters and /or hardscaped for use by pedestrians. If hardscaped, the area shall contain at least two pedestrian amenities such as benches, drinking fountains, and/or other design elements (public art, planters, kiosks).*

Art from local artist works well to give an added dimension to a development project. In the above examples, the artwork is used to mark and delineate entrances and blank walls.

Blank Wall Treatment:

Blank walls are opportunities to enhance functional spaces. For example, a tiled or painted mural adds civic pride to a downtown. A mural can express the past history of the area and its settlement. A mural is a story-telling device and can convey the culture of the town and its progress. Blank walls can be elaborate or simple with treatment of tile or paint. Blank walls can also be treated with landscaping, trellis, varied in materials or seating areas.

Ghosted brick material adds character to the blank wall. The base of the blank wall has a change of brick color.

The alley space between two buildings becomes a pedestrian space with potted plants, benches and a gateway arch.

Successful Strategies:

- A blank wall along an alley or pathway can be an inviting place to stroll through and connect to another development block.
- An arched ironwork or landscaped entry gives a visual cue to enter a pathway.
- Use decorative pavers to encourage the use of the area.
- Add decorative lighting or seating to encourage activity and use of the area.

Additional Areas:

Functional and necessary areas such as; utility areas, stand pipes, electrical and mechanical rooms, air conditioning units, backflow devices, railings, rooftop mechanical units and bearing walls should be designed in the least visible manner or with a screening method so that the functional areas are incorporated into the project. Plan the location of functional areas early into the project, so they are less visible and not in a prominent location on the site. Landscape walls can be designed to pick up the theme and details of the project. Rooftop mechanical systems should be screened with an architectural method that is designed as part of the project and adds to the project. For utility areas, select a screen that is substantial and becomes a decorative element.

Successful Strategies:

- Work with utility companies early on in the project to plan the size and placement of utility areas.
- Explore screening methods that integrate utilities and mechanical units into the design of the building.
- If utilities are exposed and need access, then evaluate landscape to help screen.
- Standpipes can be designed into a project so they are accessible and cohesively integrated.
- Railings on a project can become a design element especially if they are repeated on a facade.
- Access gates, doors to utility rooms, fire escape doors should be designed as part of the project .

The landscape wall is finished in the same materials as the overall project, with metal leafs added as a decorative element.

The standpipes and backflow devices are designed behind a landscaped wall, well hidden from view.

Parking Garages:

Parking garage entrances should employ good design principles so that they enhance the overall quality of the project. Entrances may be less hierarchical than the main facade, but still use the same architectural language, design and materials. The entry can be a feature that is part of the commercial or residential design language. Consider adding soft architectural elements to the entry, such as decorative lighting, landscaped walls and signage. At the entrance, use a change of materials to caution pedestrians of incoming and outgoing motor vehicles.

Successful Strategies:

- Garages although functional, can also be a positive feature of the project.
- Garage entrances are mainly for residential users, so it can be tucked into the project.
- Garages should be integrated into the design of the overall project.

18.105.040 C2: *Structured or underground parking with ground floor commercial uses that incorporate pedestrian friendly building design and amenities along the street frontages.*

This entry features columns on either side of the entry to demarcate the garage entrance and exit.

This contemporary project tucks the garage entrance under the residential bays so that it is integrated into the facade.

Loading & Unloading Areas:

It is desirable for trash rooms, mechanical rooms, electrical rooms to be integrated into the project with the first preference for an internal location, such as a courtyard or in a garage. If that is not feasible, consider locating functional areas on the least visible facade, out of the public right-of-way, by employing screening methods. Loading and unloading areas are opportunities to continue a pedestrian landscape. Employ colored or stamped concrete in the loading/unloading zone, use bollards to mark the zone and use landscaping to screen functional areas.

Best Practices:

- Provide ample width, length and height clearance for trucks to enter and leave.
- Use a trash management program to regulate number of times, days of the week and location where trash will be collected.
- Use trash bins that do not leave grease marks and odor on the sidewalk area.
- Provide a clean up and maintenance program for sidewalk and loading/unloading areas.

To minimize disruption to primary pedestrian-oriented streets, garage entrances should be generally located in alleys or side streets. Garage entrances adjacent to sidewalks should be screened with landscaping techniques or should be treated as an opportunity for public art.

Extracted from Downtown Specific Plan, page 87

The examples above utilize a dedicated courtyard for loading and unloading, separate from the garage entry.

Trash areas should be internal to a building with compactor devices and separation of types of trash.

Consider the sidewalk area as part of the development site, and offer opportunities to enhance the pedestrian hardscape area with special paving and landscape.

Public-Private Realm:

- A sidewalk treated with special materials, such as pavers, can tie in with the design of the development and highlight the project area.
- The pedestrian experience is intensified with pavers and landscape buffer along the street edge.
- The sidewalk area may be considered an opportunity for area to enhance with pavers and landscaping.
- Pedestrian hardscape can consist of pavers, stamped concrete, stone, brick, and designed concrete.
- Landscaping between the street curb and property line can serve to beautify and filter stormwater.
- Vary the paver pattern and color for added effect.
- Incorporate site furnishings and decorative lighting from the Downtown Corridors Plan.

18.105.040 C4: *Pedestrian amenities, including wide sidewalks, weather protection through building design, landscaping, fountains, public seating or other street furniture, public art, additional lighting or other pedestrian amenities.*

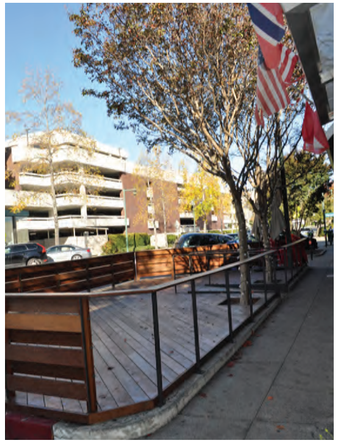
Public-Private Realm:

Outdoor areas are opportunities to expand the boundaries of public and private realm. A wide sidewalk is a place to consider seating areas, landscape buffer zones and parklets. Sidewalks are areas where pedestrians are encouraged to linger, stay and have conversations and ultimately create eyes on the street. The quality of public spaces as well as the surrounding environment determine how people use them. If spaces are accessible, attractive, and safe, they can inspire a range of uses and activities. This characteristic lends an extra quality of safety and creates an informal surveillance when people are encouraged to inhabit a space. Public spaces are connected to a collective identity, everyday life, and the ways that we interact and meet one another. Design spaces with Crime Prevention Through Environmental Design (CPTED).

For more go to www.safe-growth.blogspot.com and www.safegrowth.org and www.cpted.net

CPTED Strategies:

- Design ample sidewalks as spaces where a range of possible activities can take place.
- Sidewalks can be viewed as three zones: service zone, free zone and transition zone.
- Make a strong connection between the inside of a space and the outside realm.
- Quality spaces that are well designed become safer places.
- Efficient lighting throughout the day and night ensures that public spaces are consistently safe.
- Avoid designing spaces that are isolated, dark and hidden from view.



A secure and safe environment is related to the quality of a sidewalk and neighborhood. Ample spaces can lend to a people centered urban infrastructure, such as parklets, areas to sit and have coffee or meet friends.

09 Review & Procedures

During the early development of the design guidelines, developers indicated they would like to see the entitlement review process in measurable steps. Developers wanted straight forward regulations, policy and guidelines. They also wanted to know what projects would quality for a full review versus an administrative review. Developers were also seeking an early review process to get preliminary comments and feedback. Developers requested a policy be considered for an expedited review process. The Early California Architectural Review committee (ECAR) desired to clarify the review process for the Design Review Board, staff and the development community. An understanding developed early on that the there may be levels of review when considering a project in the Inner Core and the Outer Core. The Inner Core implied more pedestrian oriented buildings with mostly facade improvements. Whereas the Outer Core would have more flexibility and would generate new developments. The ECAR committee sought to provide clarity and distinction in various levels of review. The ECAR committee looked for examples that added vibrancy and high quality development. In essence the ECAR committee was encouraged to develop a design and policy framework that would guide the progression of the downtown and build upon the existing language. The ECAR committee responded to the development community with a clear understanding of review of development and architecture while maintaining a distinctly Concord form and architecture. There was an inherent quality to Concord in terms of placemaking, urban design and architecture that should be nurtured, evolved and expanded.

09 Review

A review policy consistent with the current City of Concord development code is established to clarify types of projects and levels of review that may be pursued. In some cases a streamlined approach may be taken, while a more complex project will require full entitlements and design review. The chart below clarifies the types of review and procedures for various levels of projects in the downtown.

Type of Project	Typical Review Body	Approximate Review Time Required
* Minor Maintenance: Painting, Repair, Patching	Staff Review	Same day
Interior Tenant Buildout	Building Permit	15 days or less
Major Facade Renovation	Design Review Board	30 to 60 days
Historic Building Facade	Design Review Board	30 to 60 days
New Building or Re-development	Design Review Board and Planning Commission (see next page)	3 to 6 months

* Project with a valuation of 20,000 or more shall be reviewed on a case by case basis to determine if a full design review is required.

The above timeline does not reflect the applicants response time.

09 Procedures

The outline below is to provide an overview of a complex project that requires full entitlements. With more complex projects, an environmental review, traffic study and or parking demand study may be required. It is good practice to meet with the City staff early to map out a review path.

01 | Step : Introduction

Meet with Planning and Economic Development staff to understand the zoning, history of the site, and review procedures.

02 | Step : Concept

Develop concepts and submit for a pre-application.
A planner will be assigned to manage the project. Development Advisory Committee (DAC) will provide technical comments within 30 days. The project will be routed to outside agencies for comment and review.

03 | Step : Concept

As an option, appear before the Design Review Board (DRB) for a conceptual and get feedback.
It is required to work with staff planner to schedule a neighborhood meeting.

04 | Step : Preliminary

Submit a full application with technical revisions addressed. DAC will review and provide comments within 30 days. Appear before the DRB for a preliminary review. Appear before the Planning Commission for a Study Session. Work with the project planner and staff to address any outstanding issues and concerns.

05 | Step : Final Review

Revise plans and drawings based on comments received. Appear before the Design Review Board for a final approval. Appear before the Planning Commission for a final approval.

10 References

01 City of Concord Resources

Downtown Corridors Plan Design Guideline, Adopted September 13, 2016

Downtown Concord Specific Plan, Adopted June 6, 2014

Downtown Concord Urban Design, Concord, Ca, March 1987

City of Concord 2012 Development Code, Adopted July 24, 2012

North Todos Santos District Design Guidelines

Bicycle, Pedestrian & Safe Routes to Transit Plan, Adopted September 27, 2016

www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf

02 Additional Resources

El Pueblo Viejo Landmark District Santa Barbara, California

East Ojai Avenue Design Guidelines, City of Ojai, January 2001

Balboas Park Central Mesa Precise Plan, City of San Diego, California

National Park Service, A National Register of Historic Places Contra Costa County

Concord Historical Society

EXHIBIT B

COMMITTEE MEMBERS
Tim Grayson, Chair
Ron Leone, Committee Member
Kirk Shelby, Committee Member

Civic Center
1950 Parkside Drive
Concord, CA 94519
www.cityofconcord.org

ANNOTATED AGENDA
Meeting of the Early California Architecture Committee

Wednesday, November 16, 2016

10:30 a.m.

Permit Center Conference Room
1950 Parkside Drive

AGENDIZED ITEMS – The public is entitled to address the City Council on items appearing on the agenda before or during the City Council's consideration of that item. Each speaker will be limited to approximately three minutes.

1. ROLL CALL – Chair Tim Grayson was absent.

STAFF PRESENT: Victoria Walker, Director of Community & Economic Development; Laura Simpson, Planning Manager; Afshan Hamid, Senior Planner; Michael Cass, Principal Planner; Justin Ezell, Director of Public Works

2. PUBLIC COMMENT PERIOD – none

3. REPORTS

DISCUSSION - Todos Santos Design Guidelines Final Draft. Report by Afshan Hamid, Associate Planner.

ACTION:
After staff's presentation, there was discussion about policies 2, 3 and 5. Two developers spoke at the meeting. Scott Broher indicated that flexibility in the outer core in design was very important. David Jones indicated that streamlining the Design Review process and reducing the number of required meetings would facilitate

development. A letter was received from Paragon, developer of a block adjacent to Todos Santos Plaza, who indicated that it was important for the Design Guidelines to not be prescriptive but provide guidance.

The Committee affirmed the vision statement and policies but revised policies 2, 3 and 5. They strengthened the language in policy 2 to say the Inner Core shall emphasize Spanish or Spanish-reflective architectural styles. They removed the word "contemporary" and amended the language to ensure that a "reflection" of the Inner Core was stated in policy 3. They added language in policy 5 to indicate that there should be a seamless transition from Inner Core to Outer Core at the base of the buildings.

The Committee agreed that Step 3 of the procedures (page 96 of the Design Guidelines) should include language stating that the step is optional.

The Committee directed staff to include Renaissance Phase I and II in the Inner Core on the map, and to include Galindo House and the Masonic Temple in the Outer Core on the map.

Overall, the Committee was pleased with the final design guidelines and recommended that they be taken forward to the Design Review Board, Planning Commission and City Council for approval and adoption.

3. **ADJOURNMENT at 11:55 am.**

ADA NOTICE AND HEARING IMPAIRED PROVISIONS

In accordance with the Americans with Disabilities Act and California Law, it is the policy of the City of Concord to offer its public programs, services and meetings in a manner that is readily accessible to everyone, including those with disabilities. If you are disabled and require a copy of a public hearing notice, or an agenda and/or agenda packet in an appropriate alternative format; or if you require other accommodation, please contact the ADA Coordinator at (925) 671-3021, at least five days in advance of the hearing. Advance notification within this guideline will enable the City to make reasonable arrangements to ensure accessibility.

Distribution: City Council
Valerie Barone, City Manager
Susanne Brown, City Attorney
Victoria Walker, Community & Economic Development Director
Laura Simpson, Planning Manager
Afshan Hamid, Senior Planner
Justin Ezell, Director of Public Works
Joelle Fockler, City Clerk

EXHIBIT C

Concord

SPECIAL MEETING OF THE CITY OF CONCORD DESIGN REVIEW BOARD

Thursday, December 1, 2016 – 5:30 p.m.
Permit Center Conference Room
1950 Parkside Drive

Board Members Present:	**J. Moore, K. Shelby, J. Laub, D. Litty, R. Wells**
Board Members Absent:	**None**
Staff Present:	**R. Lenhardt, A. Hamid, J. Ryan**
Audience Attendance:	**5 people**

DRAFT SUMMARY MINUTES/ANNOTATED AGENDA

PUBLIC COMMENT PERIOD: *None*

ADDITIONS/CONTINUANCES/WITHDRAWALS: *None*

CONSENT CALENDAR

A. 10/27/16 Meeting Minutes

ACTION: *Approved, 4-0-1. (Wells motioned, Shelby seconded, Litty abstained)*

STAFF REPORTS

1. Pine Street Town Houses (DR 11 – 010) – Project Planner: Ryan Lenhardt @ (925) 671-3162

ACTION: The Board provided staff with the following comments: 1) label flashing to read "painted to match adjacent surface", 2) be aware of potential maintenance issue where flashing terminates at stucco and collects dirt/pollen, and 3) balcony detail shall illustrate that it connects securely to the building.

2. 1950 Concord Avenue (PL16266 – DR) – Project Planner: Joan Ryan @ (925) 671-3370

ACTION: The Board provided staff with the following comments: 1) Refine parking dimensions and drive aisle width to maximize space near building on adjacent parcel; and 2) Reexamine window sizes on the tower elements.

HEARINGS

1. **Burger King Restaurant (PL16098 – DR)** – Design Review for façade improvements to an existing 3,152 sq. ft. Burger King restaurant with drive-thru on a 3.33-acre site located at 5450 Ygnacio Valley Road. The General Plan designation is Neighborhood Commercial; Zoning classification is NC (Neighborhood Commercial); APN 120-270-066. **Project Planner: Joan Ryan @ (925) 671-3370**

   ACTION: ***Recommended for approval 5-0 with the following comment (Shelby motioned, Litty seconded): 1) Provide detail of the green screen on landscape plans, specifying manufacturer and finish, at the time of building permit submittal.***

2. **Todos Santos Design Guidelines (PL16048 – DR)** – Design Review of the Todos Santos Design Guidelines for Downtown Concord. **Project Planner: Afshan Hamid @ (925) 671-3281**

   ACTION: ***Recommended for approval 5-0 with the following comments (Wells motioned, Shelby seconded):): 1) The Board was in support of the document in it's entirety and accepted the chapters, layout, language, style and images. 2) Minor revisions on page 24 to include changes in plane 3) Minor revision on page 37 to re-state "A building can be set back from 4) DRB requested references of where images are from 5) Minor revision on page 95 to re-order the chart 6) Minor revision on page 96 to add "review" in Step 3 6) Broaden the title of Chapter 7 to Signage & Image or similar 7) Overall the Board was complimentary of staff for preparing the Todos Santos Design Guidelines, they acknowledged the amount of effort that staff and others contributed to the document, and noted it will be an asset that guides future development in the Downtown.***

BOARD CONSIDERATIONS/ANNOUNCEMENTS: ***Vice Chair Shelby informed the Board the block bounded by Mt. Diablo Street, Salvio Street, Concord Avenue, and Willow Pass Road was recently purchased and there are plans to redevelop the site with mixed uses and that the project may be in front of the Board at some point in the future.***

STAFF ANNOUNCEMENTS: ***Staff noted the 12/8 DRB meeting will be the last meeting of the year and the 12/22 DRB meeting will be canceled. Staff also introduced Michael Cass, Principal Planner and Sarah Yuwiler, Assistant Planner as the newest members of the Planning Division.***

ADJOURNMENT: ***7:54 p.m. (5-0, Litty motioned, Shelby seconded)***

NEXT DESIGN REVIEW BOARD MEETINGS:

December 8, 2016
December 22, 2016