3333 CALIFORNIA STREET MIXED-USE PROJECT

RESPONSES TO COMMENTS ON DRAFT EIR VOLUME 2 (ATTACHMENTS A-E, PART 2)

CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT: CASE NO. 2015-014028ENV
STATE CLEARINGHOUSE NO. 2017092053

DRAFT EIR PUBLICATION DATE: NOVEMBER 7, 2018
DRAFT EIR PUBLIC HEARING DATE: DECEMBER 13, 2018
DRAFT EIR PUBLIC COMMENT PERIOD: NOVEMBER 8, 2018 - JANUARY 8, 2019
FINAL EIR CERTIFICATION HEARING: SEPTEMBER 5, 2019

SAN FRANCISCO
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DEPARTMENT

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EXHIBIT K

II. Neighborhood Character

DESIGN PRINCIPLE: Design buildings to be responsive to the overall neighborhood context, in order to preserve the existing visual character.

Most residents live in areas that are distinct neighborhoods. Many neighborhoods have defining characteristics such as street trees, buildings with common scales and architectural elements, and residential and commercial uses that make the neighborhood identifiable and an enriching place to be. The neighborhood is generally considered as that area around a home that can easily be traversed by foot. Neighborhoods may also be defined by natural or man-made elements such as parks, streets and hilltops.

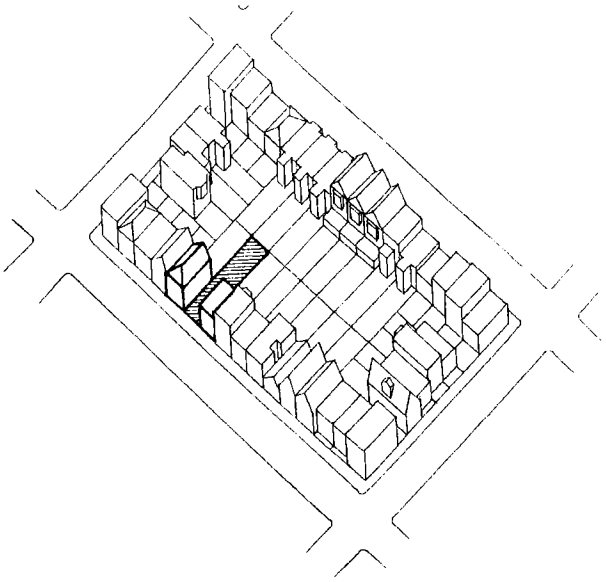
NEIGHBORHOOD CONTEXT

Though each building will have its own unique features, proposed projects must be responsive to the overall neighborhood context. A sudden change in the building pattern can be visually disruptive. Development must build on the common rhythms and elements of architectural expression found in a neighborhood. In evaluating a project's compatibility with neighborhood character, the buildings on the same block face are analyzed. However, depending on the issues relevant to a particular project, it may be appropriate to consider a larger context.

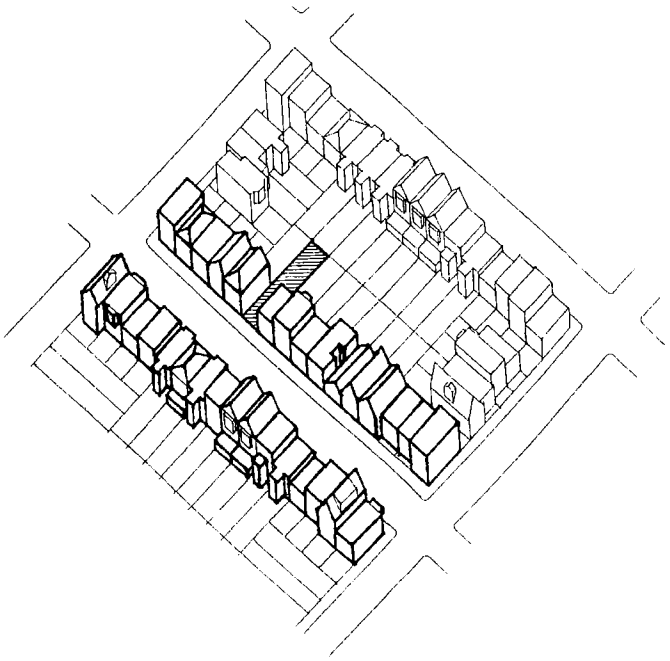
Neighborhood patterns that are important to the character of the neighborhood include:

- The **block pattern**: Most buildings are one piece of a larger block where buildings define the main streets, leaving the center of the block open for rear yards and open space. Some blocks are bisected by mid-block alleys where service functions that detract from the public pedestrian environment, such as garage entries, trash collection, and utilities, are located.

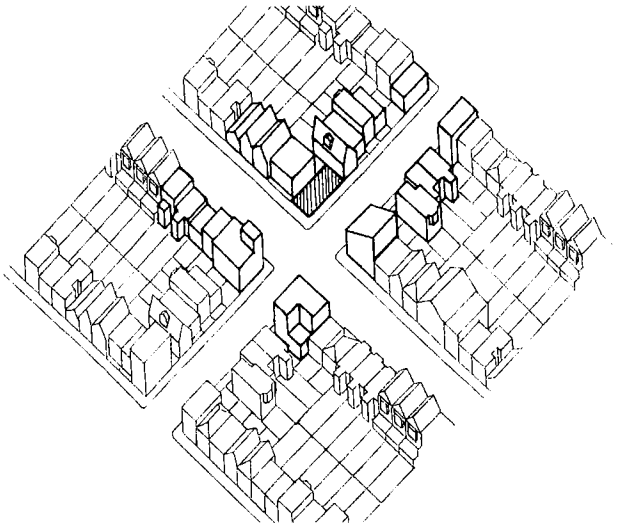
- The **lot pattern**: Residential blocks are typically made up of narrow and deep lots (25' x 100'), creating uniform building pattern, with a pedestrian scale.



Immediate Context: When considering the immediate context of a project, the concern is how the proposed project relates to the adjacent buildings.



Broader Neighborhood Context: When considering the broader context of a project, the concern is how the proposed project relates to the visual character and scale created by other buildings in the general vicinity.



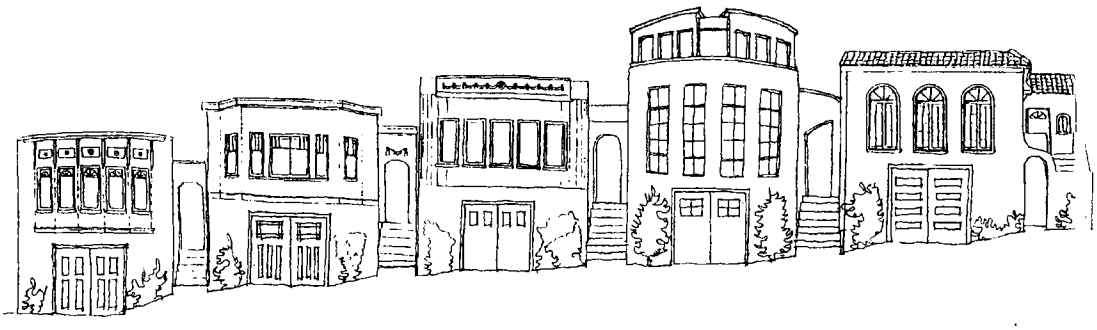
Corner Lot Context: When considering the context of a corner lot, the concern is how the proposed project relates to buildings on both streets near the intersection.

WHAT IS THE CHARACTER OF THE NEIGHBORHOOD?

Defined Visual Character

GUIDELINE: In areas with a defined visual character, design buildings to be compatible with the patterns and architectural features of surrounding buildings.

On some block faces, there is a strong visual character defined by buildings with compatible siting, form, proportions, texture and architectural details. On other blocks, building forms and architectural character are more varied, yet the buildings still have a unified character. In these situations, buildings must be designed to be compatible with the scale, patterns and architectural features of surrounding buildings, drawing from elements that are common to the block.



This block face has a strong visual character because of the uniform width and height of the buildings on the block, compatible building details, and consistent placement of features such as entries and bays.

The buildings on this block have a variety of building forms and details, however the overall building scale is uniform, helping to define the block's visual character.

Mixed Visual Character

GUIDELINE: In areas with a mixed visual character, design buildings to help define, unify and contribute positively to the existing visual context.

Some block faces do not have an apparent overriding visual character, or the character may be mixed or changing. When no clear pattern is evident on a block face, a designer has a greater opportunity and responsibility to help define, unify, and contribute positively to the existing visual context. Designs should draw on the best features of surrounding buildings. Existing incompatible or poorly designed buildings on the block face do not free the designer from the obligation to enhance the area through sensitive development.

With a variety of building scales, forms and details, this block has a mixed visual character.

III. Site Design

DESIGN PRINCIPLE: Place the building on its site so it responds to the topography of the site, its position on the block, and to the placement of surrounding buildings.

Site design relates to how a building is placed on the site. It establishes how the building addresses the street and surrounding buildings. In designing the building on a site, the topography of the site and its location on the block must be considered. A property on a sloping site will have a different form than one on a flat site, as will a building on a corner rather than in the middle of the block. Other factors in site design include the site's relationship to adjacent properties and the location of front, side and rear yards.

TOPOGRAPHY

Guideline: Respect the topography of the site and the surrounding area.

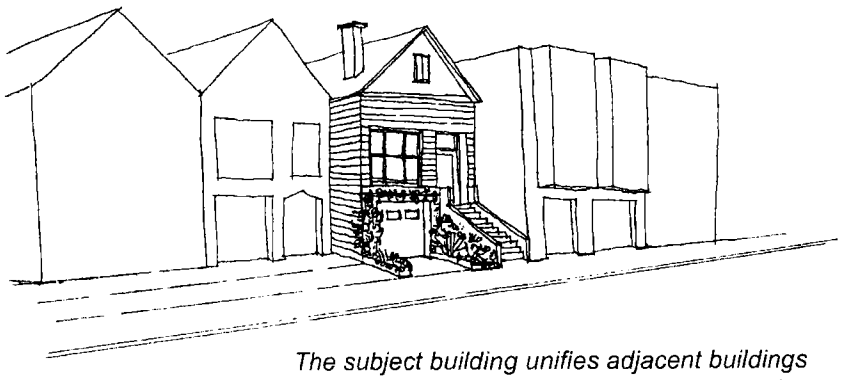
New buildings and additions to existing buildings cannot disregard or significantly alter the existing topography of a site. The surrounding context guides the manner in which new structures fit into the streetscape, particularly along slopes and hills. This can be achieved by designing the building so it follows the topography in a manner similar to surrounding buildings.

These buildings respect the topography of the surrounding area by stepping down to the street. This is reinforced by garages at the street edge, elevated building entrances and setbacks to the mass of the buildings.

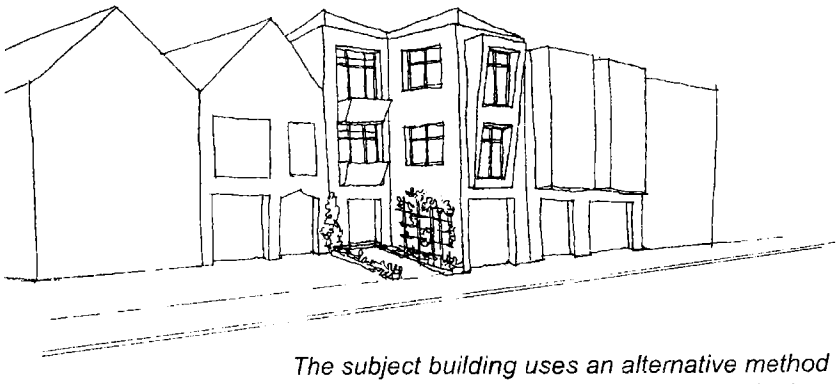
the overall rhythm of the streetscape. In designing the front setback, consider the following measures; other measures may also be appropriate depending on the circumstances of a particular project:

- Articulate the facade with well-defined building entrances and projecting and recessed facade features that will establish a rhythm and add visual interest to the block face.
- Articulate the front facade in "steps" to create a transition between adjacent buildings.
- Avoid creating blank walls at the front setback that detract from the street composition.

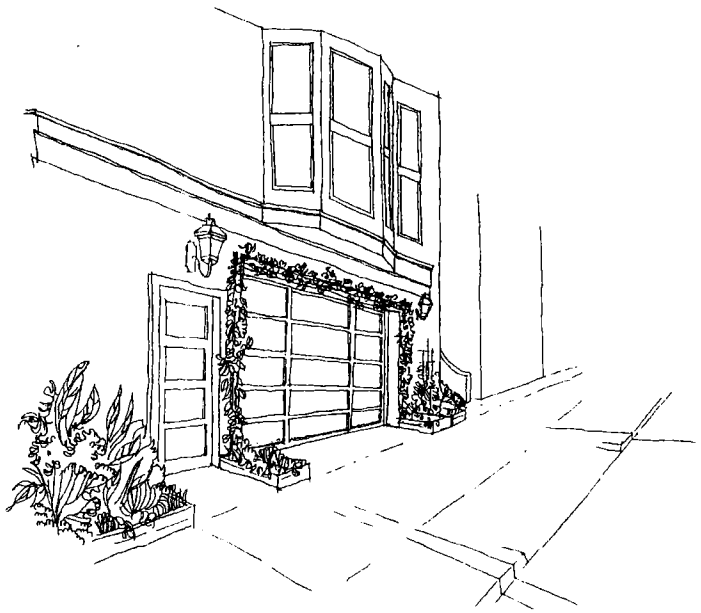
Similarly, a proposed project may be located next to a historic or architecturally significant building that is set back from the street or is on a wider lot with front and side gardens. The front setback of the proposed project must respect the historic building's setbacks and open space. Additionally, the front setback must serve to protect historic features of the adjacent historic building.



The subject building unifies adjacent buildings with an appropriate front setback, landscaping and finished building materials.



The subject building uses an alternative method of averaging the front setback (Planning Code Section 132(b)) to unify the streetscape.



With an encroachment permit from the Department of Public Works, planting can be provided in front of a building without a setback

Planning Code Section 132(g) requires that 20% of the required front setback area be unpaved and devoted to plant material.

On properties where there is no front setback, landscaping is still encouraged. Planting opportunities include the following:

- Provide street trees.
- At the ground level, incorporate planters into porches, stairways and recessed building entrances.
- At the upper levels, incorporate planters on decks and balconies.
- Install trellises on the front facade.

The use of native vegetation or climate appropriate plantings is encouraged. Consider irrigation and maintenance issues in selecting plant materials. When outdoor lighting is incorporated in the front setback, provide lighting that is energy efficient and is shielded to avoid excess glare.

SIDE SPACING BETWEEN BUILDINGS

Planning Code Section 133 requires setbacks in RH-1(D) Districts only. Planning Code Section 136 limits projections into the side yard to three feet or 1/6 of the required side yard, whichever is less.

GUIDELINE: Respect the existing pattern of side spacing.

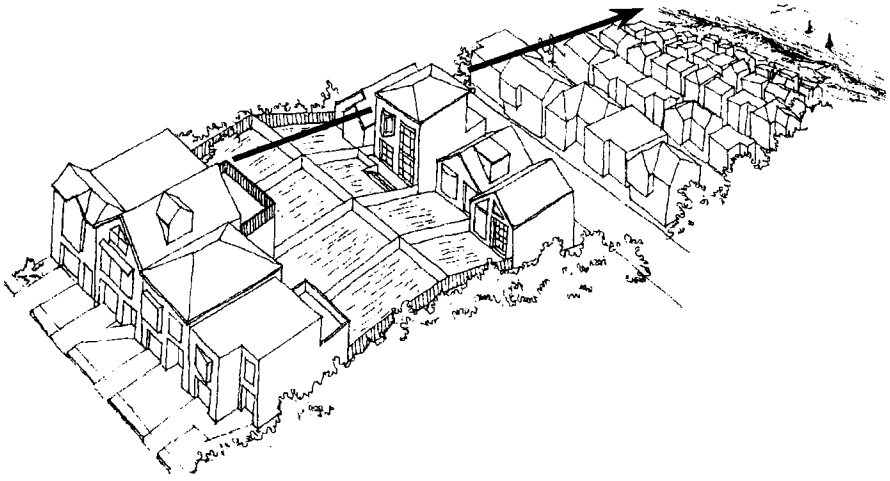
Side spacing is the distance between adjacent buildings. In many cases, only a portion of the building is set back from the side. Side spacing helps establish the individual character of each building while creating a rhythm to the composition of a proposed project. Projects must respect the existing pattern of side spacing.

VIEWS

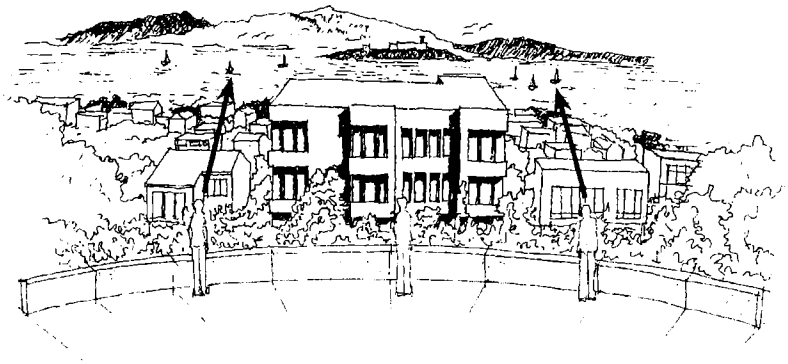
GUIDELINE: Protect major public views from public spaces.

The Urban Design Element of the General Plan calls for the protection of major public views in the City, with particular attention to those of open space and water. Protect major views of the City as seen from public spaces such as streets and parks by adjusting the massing of proposed development projects to reduce or eliminate adverse impacts on public view sheds. The General Plan, Planning Code and these Guidelines do not provide for protecting views from private property.

The Urban Design Element identifies streets that are important for their quality of views (page I.5.16) and identifies outstanding and unique areas that contribute to San Francisco's visual form and character (page I.5.25).



Views from this private building and deck are not protected.



Views from public areas, such as parks, are protected. The massing of this building impacts the view from the public park.

IV. Building Scale And Form

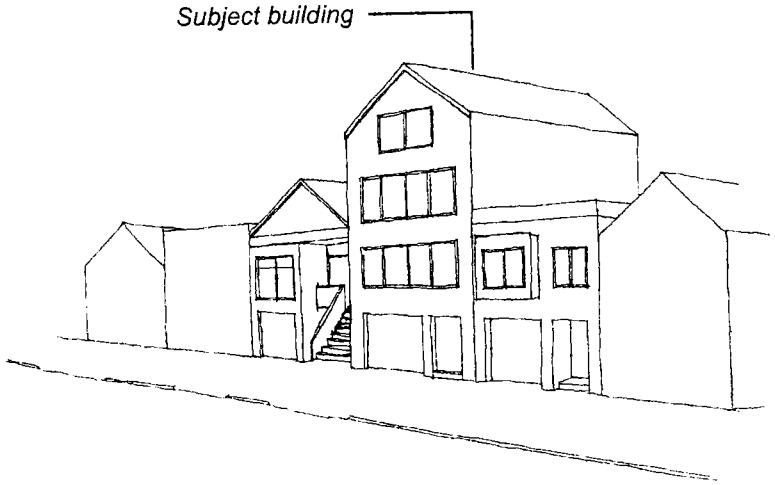
DESIGN PRINCIPLE: Design the building's scale and form to be compatible with that of surrounding buildings, in order to preserve neighborhood character.

BUILDING SCALE

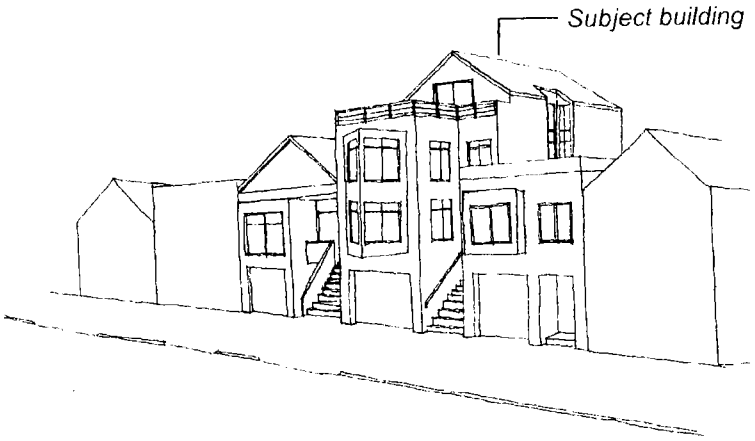
GUIDELINE: Design the scale of the building to be compatible with the height and depth of surrounding buildings.

The building scale is established primarily by its height and depth. It is essential for a building's scale to be compatible with that of surrounding buildings, in order to preserve the neighborhood character. Poorly scaled buildings will seem incompatible (too large or small) and inharmonious with their surroundings.

A building that is larger than its neighbors can still be in scale and be compatible with the smaller buildings in the area. It can often be made to look smaller by facade articulations and through setbacks to upper floors. In other cases, it may be necessary to reduce the height or depth of the building.



This building is out of scale with surrounding buildings because it is not articulated to make it more compatible with the scale of surrounding two-story homes.



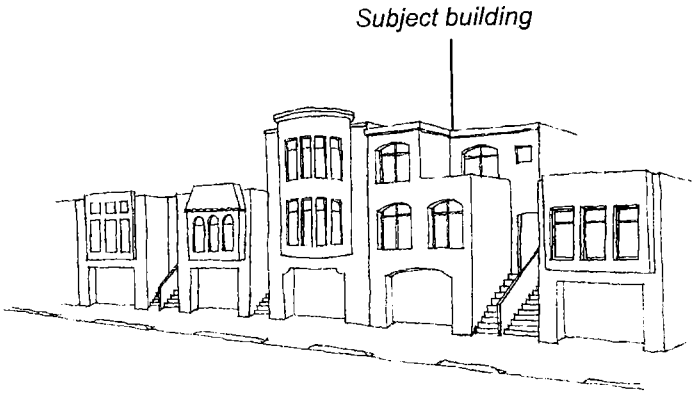
A fourth story setback and facade articulations make the building more compatible with the scale of surrounding buildings.

Building Scale at the Street

GUIDELINE: Design the height and depth of the building to be compatible with the existing building scale at the street.

If a proposed building is taller than surrounding buildings, or a new floor is being added to an existing building, it may be necessary to modify the building height or depth to maintain the existing scale at the street. By making these modifications, the visibility of the upper floor is limited from the street, and the upper floor appears subordinate to the primary facade. The key is to design a building that complements other buildings on the block and does not stand out, even while displaying an individual design.

Refer to Planning Code Section 130, 136 and 250 for setbacks, permitted obstructions and height limits.

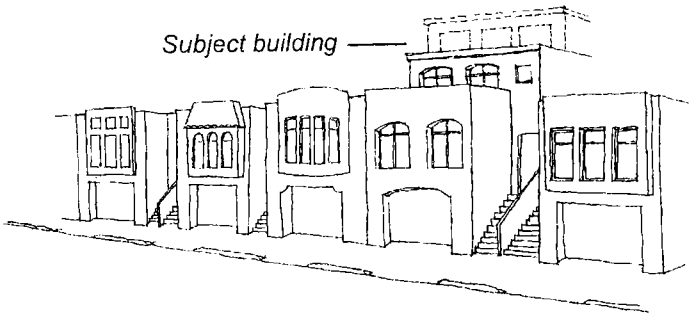


A partial third-story setback provides a transitional height to the adjacent two-story building and maintains the scale of the buildings at the street level.

In modifying the height and depth of the building, consider the following measures; other measures may also be appropriate depending on the circumstances of a particular project:

- Set back the upper story. The recommended setback for additions is 15 feet from the front building wall.
- Eliminate the building parapet by using a fire-rated roof with a 6-inch curb.
- Provide a sloping roofline whenever appropriate.
- Eliminate the upper story.

On this block face of two-story buildings, it is possible to preserve the building scale at the street by setting back the third floor. However, an additional setback for a proposed fourth floor is not sufficient. The fourth floor must be eliminated to respect the neighborhood scale.



The three-story scale of the block face is maintained by setting the fourth floor back so it is subordinate the to the primary facade.

Building Scale at the Mid-Block Open Space

GUIDELINE: Design the height and depth of the building to be compatible with the existing building scale at the mid-block open space.

Rear yards provide open space for the residences to which they are attached, and they collectively contribute to the mid-block open space that is visible to most residents of the block. This visual open space can be a significant community amenity.

BUILDING FORM

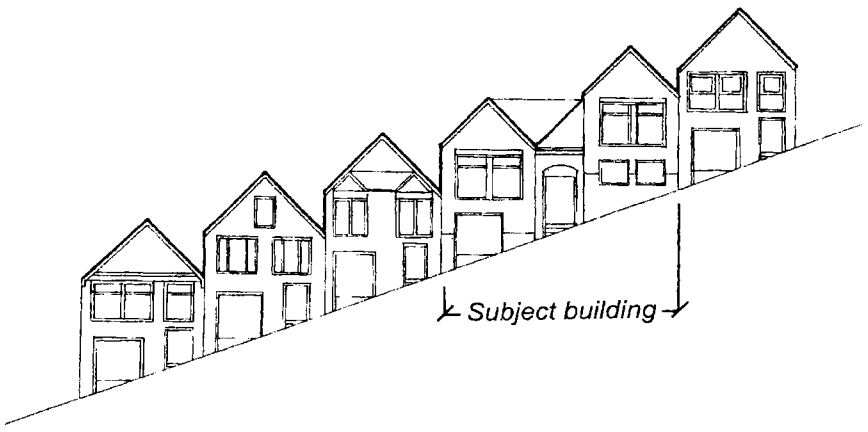
GUIDELINE: Design the building's form to be compatible with that of surrounding buildings.

Building form is the three-dimensional shape of the building. The elements of building form include the width and proportions of the facade and the shape of the roofline. Though the Planning Code establishes the maximum building envelope by dictating setbacks and heights, the building must also be compatible with the form of surrounding buildings.

Facade Width

GUIDELINE: Design the building's facade width to be compatible with those found on surrounding buildings.

Most building widths are related to the lot width, typically 25 feet. This uniform building width contributes to the overall character of the neighborhood and the scale of buildings within the area. Therefore, it is very important to respect the facade widths typically found in the neighborhood. If a project is located on a site that is wider than usual, articulate the facade to respect traditional facade widths. For example, a facade may be broken into separate forms that match the widths of surrounding buildings. Design this articulation to be substantive, not merely be a surface treatment.

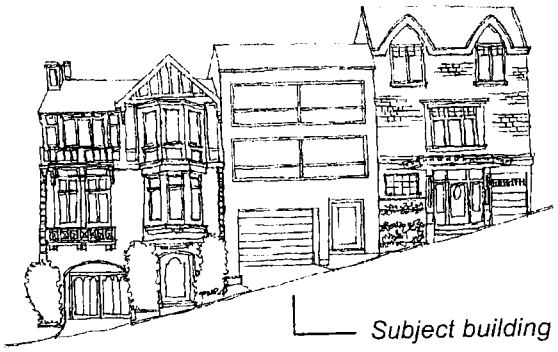


Although this building is twice the width of surrounding buildings, it has been designed to have two gabled forms, similar in width to other buildings.

Proportions

GUIDELINE: Design the building's proportions to be compatible with those found on surrounding buildings.

Proportions are the dimensional relationships among the building's features, and typically involve the relationship between the height and width of building features. A building's proportions are evident in the floor-to-floor heights of a building, the size and placement of windows and doors, and the scale of features such as porches, cornices and bay windows. Building features must be proportional not only to other features on the building, but also to the features found on surrounding buildings.



The horizontal emphasis of this building's windows and the lack of facade articulation results in a building that disrupts the character of the street and is inconsistent with the proportions of surrounding buildings.

Through the use of vertical oriented windows, the proposed building has proportions similar to surrounding buildings.

V. Architectural Features

DESIGN PRINCIPLE: Design the building's architectural features to enhance the visual and architectural character of the neighborhood.

Architectural features add visual interest to a building, and provide relief by breaking up a building's mass. Architectural features include building projections such as bay windows, porches, garage structures, rooftop forms, and building entrances. They are a significant component of the architectural character for both the building and the neighborhood.

In designing architectural features, it is important to consider the type, placement and size of architectural features on surrounding buildings, and to use features that enhance the visual and architectural character of the neighborhood. Architectural features that are not compatible with those commonly found in the neighborhood are discouraged. Many architectural features are permitted as obstructions in the front or rear yard under Planning Code Section 136; however many architectural features may also be located within the buildable area of the lot.

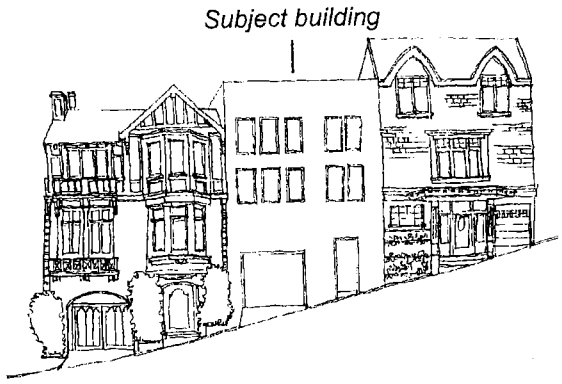
BUILDING ENTRANCES

GUIDELINE: Design building entrances to enhance the connection between the public realm of the street and sidewalk and the private realm of the building.

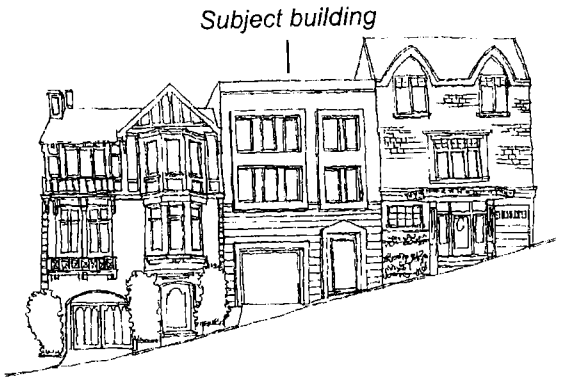
Building entrances are an important building feature, providing the connection between the public realm of the street and sidewalk, and the private realm of the building. A well-designed building entrance will appear welcoming and inviting to the pedestrian, making the neighborhood a pleasant place to live. In addition to the doorway itself, the entry may be comprised of stairways, landings, porches, and other elements.

character of the neighborhood. The use of decorative brackets, eaves, dentils, cornices, columns and capitals, for example, should come from an awareness of the evolution of such building elements and of their original structural function: columns hold up buildings, brackets support overhangs, etc. Do not use detail that makes the building stand out as excessively plain or overly decorated, or that results in building facades designed as replicas of historic buildings. Ornament that has been carelessly tacked on to the facade of a building can cause architectural disorder, and will appear superficial and cluttered.

A relatively flat facade with little articulation and detail will be inconsistent in an area that has a high degree of facade ornamentation. Likewise, if the detailing on buildings in the neighborhood is simple and restrained, adding a great deal of ornament is discouraged.



A building with no detail looks out of place on a block face with rich detailing.



This building has added details around the windows and building entries, making it more compatible with other buildings on the block face.

WINDOWS

GUIDELINE: Use windows that contribute to the architectural character of the building and the neighborhood.

Windows are one of the most important decorative features, establishing the architectural character of the building and the neighborhood. Windows provide human scale and emphasize the proportions of a building. They are also a link between the inside private space and the outdoor public space. The proportions, features and materials of a building's windows articulate the architectural rhythm along the block-face and contribute to the building's sense of mass.

Planning Code Section 136(c)(2) requires that the glass area on a projecting bay window be equal to at least 50 percent of the vertical surfaces on the bay.

EXTERIOR MATERIALS

GUIDELINE: The type, finish, and quality of a building's materials must be compatible with those used in the surrounding area.

When choosing building materials, look at the types of materials that are used in the neighborhood, and how those materials are applied and detailed. Ensure that the type and finish of these materials complement those used in the surrounding area, and that the quality is comparable to that of surrounding buildings. In neighborhoods with uniform materials, it is best to utilize the same materials. For example, a shingled house would not fit in with a row of stucco houses.

For more information about green building design and construction, see the "Green Building Guidelines" at www.sfenvironment.org.

Use material finishes that are compatible with those of surrounding buildings. If the materials are predominantly painted wood siding or shingles, a stained finish may not be compatible. Masonry (brick and stone) that is not painted should be left unpainted.

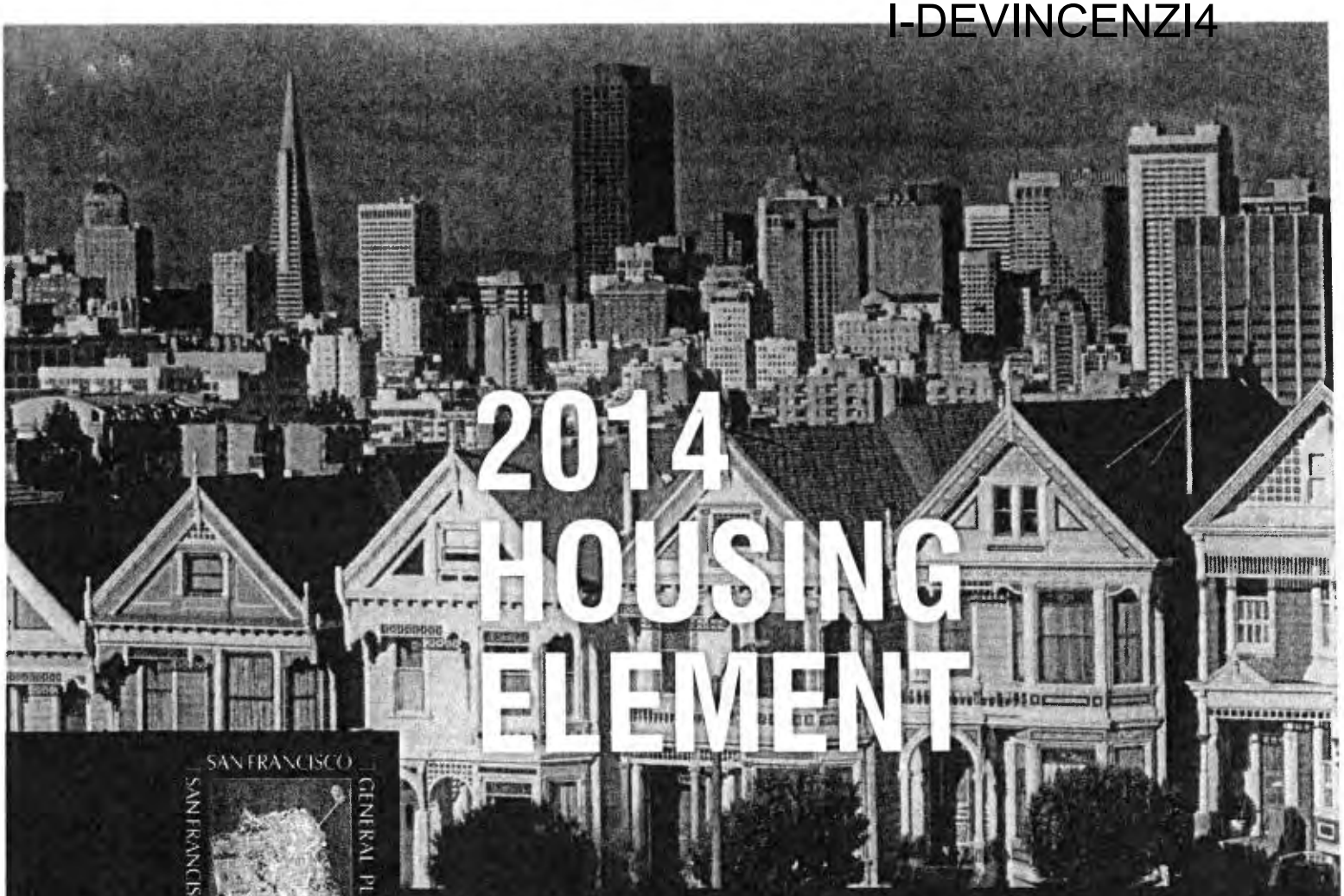
For information on sustainable materials and the reuse of building materials as part of new construction, contact the San Francisco Department of the Environment at 355-3700 or www.sfenvironment.org.

Also consider the visual qualities of a material, such as a smooth or rough texture. For example, in choosing masonry, the color and size of the bricks or stone may be a factor. Wood siding is available in a variety of widths and styles. Stucco may be smooth or rough, or scored to look like stone. Choosing among the varieties of a specific material is as important as choosing among the materials themselves.

This unpainted shingled building is not compatible with the painted stucco of surrounding buildings.

EXHIBIT L

I-DEVINCENZI4

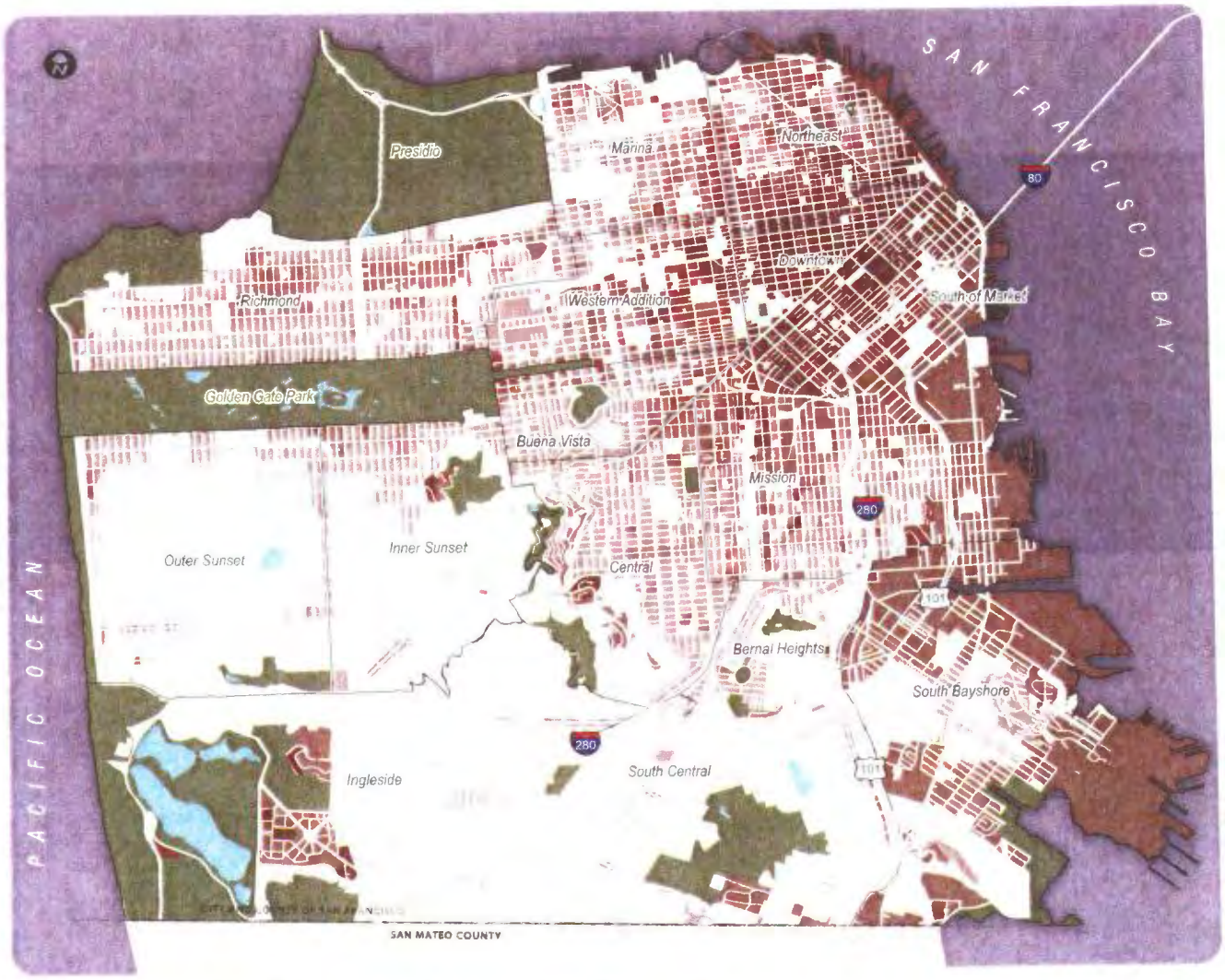


2014 HOUSING ELEMENT

SAN FRANCISCO GENERAL PLAN

PART I: DATA AND NEEDS ANALYSIS

JANUARY 2015 | PENDING ADOPTION BY PLANNING COMMISSION



Generalized Permitted Housing Densities by Zoning Districts, San Francisco, 2013

Density (Average Units per Acre)

- Low (14)
- Moderately Low (36)
- Medium (54)
- Moderately High (91)
- High (283)

0 Miles 1

MAP 06

that involve several blocks should always be made as part of a community based planning process.

Any new community based planning processes should be initiated in partnership with the neighborhood, and involve the full range of City stakeholders. The process should be initiated by the Board of Supervisors, with the support of the District Supervisor, through their adoption of the Planning Department's or other overseeing agency's work program; and the scope of the process should be approved by the Planning Commission. To assure that the Planning Department, and other agencies involved in land use approvals conduct adequate community outreach, any changes to land use policies and controls that result from the community planning process may be proposed only after an open and publicly noticed process, after review of a draft plan and environmental review, and with comprehensive opportunity for community input. Proposed changes must be approved by the Planning Commission and Board of Supervisors at a duly noticed public hearing. Additionally, the Department's Work Program allows citizens to know what areas are proposed for community planning. The Planning Department should use the Work Program as a vehicle to inform the public about all of its activities, and should publish and post the Work Program to its webpage, and make it available for review at the Department.

POLICY 1.5

Consider secondary units in community planning processes where there is neighborhood support and when other neighborhood goals can be achieved, especially if that housing is made permanently affordable to lower-income households.

Secondary units (in-law" or "granny units") are smaller dwelling units within a structure containing another much larger unit(s), frequently in basements, using space that is surplus to the primary dwelling. Secondary units represent a simple and cost-effective method of expanding the housing supply. Such units could be developed to meet the needs of seniors, people with disabilities and others who, because of modest incomes or lifestyles, prefer or need small units at relatively low rents.

Within a community planning process, the City may explore where secondary units can occur without adversely affecting the exterior appearance of the building, or in the case of new construction, where they can be accommodated within the permitted building envelope. The process may also examine further enhancing the existing amnesty program where existing secondary units can be legalized. ~~for example through an amnesty program that requires~~ Such enhancements would allow building owners to increase ~~their~~ safety and habitability of their units. Secondary units should be limited in size to control their impact.

POLICY 1.6

Consider greater flexibility in number and size of units within established building envelopes in community based planning processes, especially if it can increase the number of affordable units in multi-family structures.

In San Francisco, housing density standards have traditionally been set in terms of numbers of dwelling units in proportion to the size of the building lot. For example, in an RM-1 district, one dwelling unit is permitted for each 800 square feet of lot area. This limitation generally applies regardless of the size of the unit and the number of people likely to occupy it. Thus a small studio and a large four-bedroom apartment both count as a single unit. Setting density standards encourages larger units and is particularly tailored for lower density neighborhoods consisting primarily of one- or two-family dwellings. However, in some areas which consist mostly of taller apartments and which are well served by transit, the volume of the building rather than number of units might more appropriately control the density.

Within a community based planning process, the City may consider using the building envelope, as established by height, bulk, set back, parking and other Code requirements, to regulate the maximum residential square footage, rather than density controls that are not consistent with existing patterns. In setting allowable residential densities in established neighborhoods, consideration should be given to the prevailing building type in the surrounding area so that new development does not detract from existing character. In some areas, such as RH-1 and RH-2, existing height and bulk patterns should be maintained to protect neighborhood character.

open space purposes by providing major tax deductions; a similar program could be developed for charitable contribution of land for housing purposes.

POLICY 7.5

Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval processes.

Public processing time, staffing, and fees related to City approval make up a considerable portion of affordable housing development costs. The City should expedite the review process and procedures as appropriate; to reduce overall development costs and increase the performance of public investment in affordable housing.

Local planning, zoning, and building codes should be applied to all new development, however when quality of life and life safety standards can be maintained zoning accommodations should be made for permanently affordable housing. For example exceptions to specific requirements including open space requirements, exposure requirements, or density limits, where they do not affect neighborhood quality and meet with applicable design standards, including neighborhood specific design guideline, can facilitate the development of affordable housing. Current City policy allows affordable housing developers to pursue these zoning accommodations through rezoning and application of a Special Use District (SUD).

City review and approval of affordable housing projects should be improved to reduce costly delays. Affordable housing projects already receive Priority Application Processing through coordination with the Planning Department, Department of Building Inspection, and Department of Public Works. This process could be further enhanced by designating a planner(s) to coordinate governmental activities related to affordable housing.

POLICY 7.6

Acquire and rehabilitate existing housing to maximize effective use of affordable housing resources.

The city's existing housing stock provides a resource which can be used to fulfill a number of affordable housing needs. The City should pursue and facilitate programs that enable households to better access existing housing stock. By acquiring and rehabilitating such units, the City can use affordable housing funds in a cost-effective way that provides stability in existing low-income neighborhoods, where units may be at risk of poor safety or conversion. Such housing acquisition and rehabilitation should happen only on a voluntary basis, and must not displace occupants.

San Francisco should also explore opportunities to take advantage of projects that are delayed, abandoned or are on the market. Having a readily accessible pool of funding available for purchase of such projects would enable affordable housing developers to take over the land and entitlements of such projects. The City should explore a number of options to assist in securing these opportunities for permanently affordable housing, co-ops or land-trust housing, including subsidies, affordable housing programs, new tax incentives or government intervention.

POLICY 7.7

Support housing for middle income households, especially through programs that do not require a direct public subsidy.

Market rate housing in ~~the City of~~ San Francisco is generally ~~available~~ affordable to households making ~~at or above~~ 180% of median income or above. Affordable housing programs, including City subsidized affordable housing and inclusionary housing, are provided to households ~~at or below~~ making 120% of median income or below. This leaves a gap of housing options for households in between those two categories, referred to as "middle income" households and defined for the purposes of this Housing Element as ~~housing affordable to~~ households making between 120 and 150% of median income. Unfulfilled demand for middle income housing impacts the supply and pressure on housing stock for lower income households.

San Francisco prioritizes fedetal, state, and local subsidies for lower income households; therefore the City should support innovative market-based programs and practices that enable middle income housing opportunities. Creating smaller and less expensive unit types that are "affordable by design" can assist in providing units to households falling in this gap. Development strategies that reduce construction costs, such as pre-fabricated housing and other low cost construction types can decrease overall housing costs,

Planning Department review of projects and development of guidelines should build on adopted local controls, including recently adopted Area Plans, neighborhood specific design guidelines, and historic preservation district documents. Planning staff should be aware of, and be a resource for, on-going individual community efforts that support good planning principles, such as neighborhood-specific Covenants, Conditions, and Restrictions (CC&R's) and design guidelines. New development and alterations or additions to existing structures in these neighborhoods should refer to these controls in concert with the citywide Residential Design Guidelines, although only those guiding documents approved by the Planning Commission may be legally enforced by Planning staff. Also projects in historic preservation districts should refer to related design documents.

POLICY 11.3

Ensure growth is accommodated without substantially and adversely impacting existing residential neighborhood character.

Accommodation of growth should be achieved without damaging existing residential neighborhood character. In community plan areas, this means development projects should adhere to adopted policies, design guidelines and community review procedures. In existing residential neighborhoods, this means development projects should defer to the prevailing height and bulk of the area.

To ensure character is not impacted, the City should continue to use community planning processes to direct growth and change according to a community-based vision. The Planning Department should utilize residential design guidelines, neighborhood specific design guidelines, and other documents describing a specific neighborhoods character as guideposts to determine compatibility of proposed projects with existing neighborhood character.

The Department should support the adoption of neighborhood-specific design standards in order to enhance or conserve neighborhood character, provided those guidelines are consistent with overall good-planning principles and help foster a more predictable, more timely, and less costly pre-development process. To this end, the Department should develop official procedures for submittal of neighborhood-initiated design guidelines, for review by Department staff, and for adoption or endorsement.

POLICY 11.4

Continue to utilize zoning districts which conform to a generalized residential land use and density plan and the General Plan.

Current zoning districts result in land use and density patterns shown on the accompanying Generalized Permitted Housing Densities by Zoning District, Map 6; and the accompanying table illustrating those densities, Table I-64, in Part 1 of the Housing Element. The parameters contained in the Planning Code under each zoning districts can help ensure that new housing does not overcrowd or adversely affect the prevailing character of existing neighborhoods. The City's current zoning districts conform to this map and provide clarity on land use and density throughout the city. When proposed zoning map amendments are considered as part of the Department's community planning efforts, they should conform generally to these this map, although minor variations consistent with the general land use and density policies may be appropriate. They should also conform to the other objectives and policies of the General Plan.

POLICY 11.5

Ensure densities in established residential areas promote compatibility with prevailing neighborhood character.

Residential density controls should reflect prevailing building types in established residential neighborhoods. Particularly in RH-1 and RH-2 areas, prevailing height and bulk patterns should be maintained to protect neighborhood character. Other strategies to maintain and protect neighborhood character should also be explored, including "neighborhood livability initiatives" that could examine guidelines and principles to preserve what is beloved about the area. Such an initiative could result in strategies to improve the appearance and accessibility of neighborhood commercial districts, or neighborhood specific design guidelines for specific RH-1 and RH-2neighborhoods.

EXHIBIT M

SAN FRANCISCO
PLANNING DEPARTMENT

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San Francisco,
CA 94103-2479

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Preliminary Project Assessment

Date:	Thursday, July 14, 2016
Case No.:	**2015-014028PPA**
Project Address:	3333 California Street
Block/Lot:	1032/003
Zoning:	RM-1 (Residential, Low-Density) 40-X
Project Sponsor:	Don Bragg c/o Prado Group 150 Post Street, Suite 320 San Francisco, CA 94108 415-857-9324
Staff Contact:	Brittany Bendix – 415-575-9114 Brittany.bendix@sfgov.org

DISCLAIMERS:

This Preliminary Project Assessment (PPA) letter provides feedback to the project sponsor from the Planning Department regarding the proposed project described in the PPA application submitted on March 29, 2016, as summarized below. This PPA letter identifies Planning Department review requirements for the proposed project, including those related to environmental review, approvals, neighborhood notification and public outreach, the Planning Code, project design, and other general issues of concern for the project. Please be advised that the PPA application does not constitute an application for development with the Planning Department. The PPA letter also does not represent a complete review of the proposed project, does not grant a project approval of any kind, and does not in any way supersede any required Planning Department approvals listed below.

The Planning Department may provide additional comments regarding the proposed project once the required applications listed below are submitted. While some approvals are granted by the Planning Department, some are at the discretion of other bodies, such as the Planning Commission or Historic Preservation Commission. Additionally, it is likely that the project will require approvals from other City agencies such as the Department of Building Inspection, Public Works, the Municipal Transportation Agency, Department of Public Health, San Francisco Public Utilities Commission, and others. The information included herein is based on the PPA application and plans, the Planning Code, General Plan, Planning Department policies, and local/state/federal regulations as of the date of this document, all of which are subject to change.

filed by the developer of any "major project." A major project is a real estate development project located in the City and County of San Francisco with estimated construction costs exceeding $1,000,000 where either: (1) The Planning Commission or any other local lead agency certifies an EIR for the project; or (2) The project relies on a program EIR and the Planning Department, Planning Commission, or any other local lead agency adopts any final environmental determination under CEQA. A final environmental determination includes: the issuance of a Community Plan Exemption (CPE); certification of a CPE/EIR; adoption of a CPE/Final Mitigated Negative Declaration; or a project approval by the Planning Commission that adopts CEQA Findings. (In instances where more than one of the preceding determinations occur, the filing requirement shall be triggered by the earliest such determination.) A major project does not include a residential development project with four or fewer dwelling units. The first (or initial) report must be filed within 30 days of the date the Planning Commission (or any other local lead agency) certifies the EIR for that project or, for a major project relying on a program EIR, within 30 days of the date that the Planning Department, Planning Commission, or any other local lead agency adopts a final environmental determination under CEQA. Please submit a Disclosure Report for Developers of Major City Projects to the San Francisco Ethics Commission. This form can be found at the Planning Department or online at http://www.sfethics.org.

PLANNING DEPARTMENT APPROVALS:

The project requires the following Planning Department approvals. These approvals may be reviewed in conjunction with the required environmental review, but may not be granted until after the required environmental review is completed.

1. **Rezoning**. As indicated in the 'Preliminary Project Comments' below, various aspects of the project conflict with both the current RM-1 Zoning of the site, as well as City Planning Commission Resolution No. 4109. The Preliminary Project Assessment application indicates the intent of the property owner to pursue a rezoning, potentially to an NC District. Additionally, as noted in the comments below, a Special Use District overlay to the current RM-1 District may also be a potential path for rezoning. In either case, rezoning of the property requires approval by the Board of Supervisors.

2. **Height District Reclassification.** As indicated in the 'Preliminary Project Comments' below, various components of the project exceed the current 40 foot height limit. Accordingly, a height district reclassification of the property must be sought. This also requires approval by the Board of Supervisors.

3. **Conditional Use**. Because the project may seek a rezoning to an NC District, the Code analysis below takes into consideration requirements related to the current RM-1 District, in addition to NC-1, NC-2, NC-3 and NC-S Districts. Depending on the applicable zoning, the following elements of the project may require Conditional Use Authorization by the Planning Commission: development of a building

more than 50 feet tall in an RM-1 District, establishment of an 'Other Entertainment Use' in an NC-1 District; establishment of an 'Administrative Service Use in an NC-3 or NC-S District; establishment of an 'Automobile Parking' use in NC-1, NC-2, and NC-3 Districts; and, the Development of Large Lots in NC-1, NC-2, or NC-3 Districts. Additionally, through the Conditional Use Authorization process, the project may seek modifications to the front setback, rear yard, open space, and street frontage requirements of the Planning Code, as a Planned Unit Development pursuant to Section 304.

4. An **Office Allocation** from the Planning Commission is required per Planning Code Section 321 et seq. to establish more than 25,000 gross square feet of new office space.

5. A **Shadow Analysis** is required under Planning Code Section 295 as the project proposes building heights in excess of 40 feet, as measured by the Planning Code. A shadow analysis, attached, indicates that the project may cast new shadow on Laurel Hill Playground, which is under the jurisdiction of the Recreation and Parks Department. As a result the project requires that a shadow analysis must be performed per Planning Code Section 295. Please note that this preliminary analysis reflects the maximum building height (plus mechanical features) as applied to the entire lot.

6. A **General Plan Referral** application is required for the lot line adjustment of the Masonic Avenue property line.

7. A **Building Permit Application** is required for the proposed demolition of the existing structure(s) on the subject property.

8. A **Building Permit Application** is required for the proposed alteration of the existing structure(s) on the subject property.

9. A **Building Permit Application** is required for the proposed new construction on the subject property.

Conditional Use Authorization, Office Allocation, Shadow Analysis and General Plan Referral applications are available in the Planning Department lobby at 1650 Mission Street, Suite 400, at the Planning Information Center at 1660 Mission Street, and online at www.sfplanning.org. Building Permit applications are available at the Department of Building Inspection at 1660 Mission Street.

NEIGHBORHOOD NOTIFICATIONS AND PUBLIC OUTREACH:

Project Sponsors are encouraged, and in some cases required, to conduct public outreach with the surrounding community and neighborhood groups early in the development process. Additionally, many approvals require a public hearing with an associated neighborhood notification. Differing levels of neighborhood notification are mandatory for some or all of the reviews and approvals listed above.

In addition to neighborhood notification as required per Planning Code Section 311 (or 312), this project is required to conduct a **Pre-Application** meeting with surrounding neighbors and registered neighborhood groups before a development application may be filed with the Planning Department. The Pre-Application packet, which includes instructions and template forms, is available at www.sfplanning.org under the "Permits & Zoning" tab. All registered neighborhood group mailing lists are available online at www.sfplanning.org under the "Resource Center" tab.

Notification of a Project Receiving Environmental Review. Notice may be required to be sent to occupants of the project site and properties adjacent to the project site, as well as to owners and, to the extent feasible, occupants of properties within 300 feet of the project site at the initiation of the environmental review process. Please be prepared to provide mailing addresses on a CD upon request during the environmental review process.

PRELIMINARY PROJECT COMMENTS:

The following comments address specific Planning Code and other general issues that may substantially impact the proposed project.

1. **RM-1, NC and Special Use Districts.** The project proposes a combination of residential, office, commercial parking, retail and entertainment uses. Of these proposed land use categories, only residential uses are currently permitted in the existing RM-1 District. Accordingly, pursuing the project as proposed would require a rezoning of the subject property. The project description provided in the Preliminary Project Assessment application indicates the owner's interest in pursuing a rezoning of the property to an NC (Neighborhood Commercial) District, but does not specify which type of NC District. The four general NC Districts in Article 7 of the Planning Code are as follows: NC-1 (Neighborhood Commercial Cluster) District, NC-2 (Small-Scale Neighborhood Commercial) District, NC-3 (Moderate-Scale Neighborhood Commercial) District, and NC-S (Neighborhood Commercial Shopping Center District). The applicable land use controls for each proposed use are noted below and will be discussed, as relevant, in each forthcoming Planning Code requirement. The Project Sponsor is encouraged to match the proposal to the most appropriate district; however, a Special Use District overlay on RM or NC Zoning may be a preferred approach. For example, the California Street and Presidio Avenue – Community Center Special Use District, directly north of the subject property, is a hybrid of the RM-1 District and Sacramento Street Neighborhood Commercial District zoning controls. Ultimately, any such rezoning effort must be reviewed and approved by the Board of Supervisors. The Department strongly encourages the continued collaboration with the neighboring communities, as well as the District Supervisor, to determine the most appropriate zoning district.

    a. **Residential Uses.** The project proposes residential uses throughout the property. All four general NC Districts principally permit residential uses subject to other requirements noted

in Articles 1.2, 1.5 and 2 of the Planning Code such as density, open space, parking, unit exposure, and buildable area constraints.

b. **Retail Uses.** The project proposes retail uses throughout the property. 'Other Retail Sales and Service' uses, as defined in Planning Code Section 790.102 are generally principally permitted in every NC District at the 1st story. In NC-1 Districts, such uses are also subject to the more restrictive controls of any other (named) NC District or Restricted Use Subdistrict within a ¼-mile. In NC-2 and NC-S Districts such uses are principally permitted up to the second story, and at every story in NC-3 Districts. Please note that additional controls may apply to other types of retail uses such as Bars, Limited-Restaurants, and Restaurants.

c. **Other Entertainment.** The project proposes retaining an existing 12,455 square foot auditorium space, which is currently accessory to the existing office use. The existing auditorium is an accessory use to the UCSF offices, and retaining the auditorium as part of the project would convert it to a principle use, such as 'Other Entertainment,' defined in Planning Code Section 790.38. Establishing an 'Other Entertainment' use in an NC-1 District requires Conditional Use authorization by the Planning Commission. All other general NC Districts principally permit 'Other Entertainment' uses at the 1st story; and at the 2nd story in NC-3 and NC-S Districts.

d. **Office.** The demolition of existing structures or conversion of floor area dedicated to the site's 363,218 square feet of existing nonconforming office use is an abandonment of that nonconforming use per Planning Code Section 183. Therefore, to re-establish office uses in the proposed new structures, the uses must comply with any applicable zoning controls. NC Districts allow two types of commercial office uses: 'Business and Professional Service' as defined in Planning Code Section 790.108, and 'Administrative Service' as defined in Planning Code Section 790.106. Business and Professional Service uses are principally permitted only on the 1st story in an NC-1 District, only up to the 2nd story in NC-2 and NC-S Districts, and at all levels in NC-3 Districts. Administrative Service uses are only allowed through Conditional Use authorization by the Planning Commission at the 1st and 2nd stories of NC-S Districts and at all levels in the NC-3 Districts. Further, the current proposal of 49,999 gross square feet of office space requires an Office Allocation from the Planning Commission per Planning Code Section 321 et seq. if establishing more than 25,000 gross square feet.

e. **Commercial Parking.** The project includes 60 off-street parking spaces as part of a 'Public Parking Garage' defined in Planning Code Section 102. The existing RM-1 District does not permit public parking garages and, at this time, it is unclear if the described 60 "paid public parking spaces for community use" are legally noncomplying with regard to the Planning Code. Additional information is needed regarding the existing and proposed location of

these spaces and the date of their establishment to make that determination. Details relative to the existing and proposed depth of excavation for garages is also needed. Please note that if the spaces are determined to be legally noncomplying, but are otherwise removed or relocated through the elimination of existing surface parking lots or the reconstruction of an existing parking garage, the spaces will then be abandoned pursuant to Planning Code Section 183 and their re-establishment will need to conform to any applicable zoning controls. In NC Districts 'Automobile Parking' as a commercial use is defined in Planning Code Section 790.8 and is principally permitted in NC-S Districts, but requires Conditional Use authorization in NC-1, NC-2, and NC-3 Districts. Please note that any Conditional Use applications for parking exceeding accessory amounts must meet the additional criteria set forth in Planning Code Section 157. Given the Planning Department's concerns regarding the amount of proposed off-street parking referenced in both the 'Environmental Review' and 'Preliminary Design Comments' sections of this letter, you are strongly encouraged to substantially reduce or eliminate any proposed non-accessory commercial parking.

10. **City Planning Commission Resolution 4109.** In 1952, the City Planning Commission adopted Resolution 4109 which approved a rezoning of the subject property to a First Residential District and included additional stipulations subject to future development of the site. The site has subsequently undergone additional rezoning, as it is now within an RM-1 District. However, the stipulations of future development as outlined in Resolution 4109 continue to apply, absent modification by the Board of Supervisors per Planning Code Section 174. As expected, given that there have been more than 60 years of changes to the Planning Code there are some distinctions between the current RM-1 District controls and the stipulations outlined in Resolution 4109. In the project comments that follow, when there is an inconsistency, the more restrictive is noted as the guiding control. As indicated in the Preliminary Project Assessment application, the project may result in the rezoning of the property which requires review and approval by the Board of Supervisors. Amending Resolution 4109 would also require review and approval by the Board of Supervisors.

    a. **Residential Uses.** In general, the RM-1 District controls are more restrictive than the Stipulations of Resolution 4109. However, the stipulations are more restrictive when defining the density and buildable area requirements as applicable to a portion of the subject property fronting on Laurel and Euclid Avenues. At present, the project does not comply with these restrictions and would require amending the Resolution.

11. **Residential Density.** The subject property is within an RM-1 District which permits a residential density of up to one unit per 800 square feet of lot area. However, as a Planned Unit Development the proposal may seek approval for a density equal to one less unit than what is permitted by the district with the next greater density (RM-2). In consideration of rezoning the property, please note the following maximum residential densities for each zoning district: NC-1, NC-2 and NC-S Districts, generally, up to one unit per 800 square feet of lot area; and, in NC-3 Districts, generally up to one

unit per 600 square feet of lot area. While additional information is necessary to calculate the exact maximum density for the area subject to Resolution 4109, initial calculations estimate approximately 508 units are allowed pursuant to the current RM-1 District zoning and Resolution and upon seeking the additional density allowed as a Planned Unit Development, the estimated maximum is 660 dwelling units. If the Resolution did not apply, these respective amounts become 558 and 743.

Ultimately, the proposal entails significantly fewer dwelling units than would be permitted under the site's current zoning. Given the City's need for housing and the tremendous opportunity presented by this unique 10-acre site, the Department strongly suggests that the project pursue residential densities approximating those which are currently allowed. As discussed in the comments that follow, any exceptions to the scale and massing provisions of the Planning Code that may ultimately be sought typically warrant a proportional increase in density. Should additional height and/or mass be necessary to achieve such density, it would seem most fitting along the California, Masonic and Presidio block faces, and generally in the northwest portion of the site.

12. **Height Requirement.** The subject property is within a 40-X Height and Bulk District, restricting the maximum height of buildings to 40 feet above grade, as measured generally from curb at the center of each existing and proposed building. The upper measurement of the height limit changes depending on the grade at that location per Planning Code Section 260(a)(1). Additionally, the upper measurement of the height of a building varies based on the roof form per Planning Code Section 260(a)(2). While in general the proposal accurately applies these methodologies, curbs along the Walnut Street extension may not be used as the base of measurements because the Walnut Street extension is not a public right-of-way. Additionally, to confirm the accuracy of measurements for the existing office building please provide a section through the center of the structure that includes the location of existing grade at that location. Because the building has frontage on two or more streets, the owner may choose the street or streets from which the measurement of height is to be taken. The additional stories proposed for the altered structures will require that the project seek a Height District reclassification, which is reviewed and approved by the Board of Supervisors.

13. **Proposed Buildings and Structures Exceeding 50 Feet in RM Districts.** Planning Code Section 253 requires Conditional Use authorization by the Planning Commission for any proposed building more than 50 feet in height. The existing office building is 66.5 feet tall from existing grade to the finished roof. The project proposes converting existing mechanical equipment above the roof to an additional two stories. This will require a Height District reclassification, as well as the required Conditional Use authorization from the Planning Commission if the property's zoning remains as an RM-1 District.

14. **Special Height Exceptions for Active Ground Floor Uses.** The Preliminary Project Assessment application indicates an interest in rezoning the subject property to an NC District so that the buildings fronting on California Street may receive an additional 5 foot height increase if they provide active uses on the ground floor. Please note that Planning Code Section 263.20 does not

currently apply this special height exception to general NC Districts. The districts that can apply this increase are specifically identified in Section 263.20. Accordingly, to achieve a five foot height increase on California Street the project would need to reclassify the applicable Height District, integrate this exception into a proposed Special Use District, or pursue a text amendment to Section 263.20. Each of these options requires review and approval by the Board of Supervisors.

15. **Lot Line Adjustment.** The project proposes a lot line adjustment that would extend the property's Masonic Avenue boundary into the public right-of-way. This adjustment requires a General Plan Referral because it includes the vacation of a public way and transportation route owned by the City and County. This adjustment will also require review by the Department of Public Works as a partial street vacation request.

16. **Development of Large Lots.** Planning Code Section 121.1 requires Conditional Use authorization to develop on lots that are equal to, or greater than, 5,000 square feet in an NC-1 District, or 10,000 square feet in NC-2 and NC-3 Districts. This requirement is not applicable to lots of any size in RM-1 or NC-S Districts.

17. **Floor Area Ratio.** Planning Code Sections 124 (NCs) and 209.2 (RM-1) limit the Floor Area Ratio of non-residential uses to the following maximums: 1.8 in RM-1, NC-1, and NC-S Districts; 2.5 in NC-2 Districts and 3.6 in NC-3 Districts. The Floor Area Ratio calculation includes all non-residential uses, accessory parking located above grade, and any non-accessory parking. Assuming the proposed non-accessory off-street parking occupies 93,023 square feet of gross floor area; the total non-residential uses result in a Floor Area Ratio less than 1.8 and would comply with the current RM-1 District requirement.

18. **Front Setback.** Planning Code Section 132 requires that new developments in RM-1 Districts provide front setbacks. If situated on a corner lot, the owner may elect which street or alley to designate as the front of the property. The Preliminary Project Assessment application does not indicate this designation. If the Project Sponsor elects either the property's California Street or Presidio Avenue/Masonic Avenue frontages, the required front setback is equal to half of the adjacent neighbor's front setback. Alternatively, the Project Sponsor could choose the Laurel Street or Euclid Avenue frontages and adhere to the setback noted in Resolution 4109 for the portion of the property to which it applies, and then apply Section 132 to any remaining frontage. The project can seek a modification to the requirements of Section 132 through a Planned Unit Development. Note that NC Districts do not have front setback requirements.

19. **Rear Yard.** The required rear yard for properties in RM-1 Districts is 45 percent of the lot depth. The project does not currently provide a code-complying rear yard. Therefore, the project must seek a modification to the requirements of Planning Code Section 134 as a Planned Unit Development. If the property is re-zoned to an NC District, Planning Code Section 134 requires a rear yard of 25 percent

of the lot depth at the lowest level containing a dwelling unit. However, the required rear yard for corner lots in NC Districts may be further modified by the Zoning Administrator per Section 134(e)(2). In general, this alternative requires that the project provide compensating open areas on the lot equal to 25 percent of the lot area, with minimum horizontal dimensions of 15 feet. Alternatively, under NC District zoning, the project could also seek a modification as a Planned Unit Development.

20. **Open Space.** Planning Code Section 135 requires each dwelling unit in an RM-1 District to have access to a minimum of 133 square feet of open space, if private, or 100 square feet of open space if common. In NC Districts the range of open space required per unit, depending on the specific district, is 100 to 133 square feet, if private, or 80 to 100 square feet, if common. Additional information is needed to determine how the project complies with this requirement for each individual unit and to confirm that the spaces comply with the dimensional requirements for either private or common spaces. If necessary, the project can pursue a modification as a Planned Unit Development. However, when evaluating a Planned Unit Development, per Section 304(d)(3), the Planning Commission must consider whether the project provides open space usable by the occupants and, where appropriate, by the general public, at least equal to the open spaces required by the Code.

21. **Streetscape Plan.** The project proposes new construction on a property greater than half an acre, and as such, requires the submittal of a Streetscape Plan to the Planning Department to ensure that the new streetscape and pedestrian elements are in conformance with the Department's Better Street Plan. This Streetscape Plan shall be submitted to the Planning Department no later than 60 days prior to any Planning Commission action, and shall be considered for approval at the time of other project approval actions. The streetscape plan should show the location, design, and dimensions of all existing and proposed streetscape elements in the public right-of-way directly adjacent to the fronting property, including street trees, sidewalk landscaping, street lighting, site furnishings, utilities, driveways, and curb lines, and the relation of such elements to proposed new construction and site work on the property. Please see the Department's Better Streets Plan and Section 138.1(c)(2)(ii) for the additional elements that may be required as part of the project's streetscape plan. Additional comments from the Streetscape Design Advisory Team (SDAT) are provided in the 'Preliminary Design Comments' section below.

22. **Dwelling Unit Exposure.** Section 140 requires that each dwelling unit have at least one room that meets the 120 square foot minimum superficial floor area requirement of Section 503 of the Housing Code, and that it faces directly onto a street right-of-way, code-complying rear yard, or an appropriately sized courtyard. It's unclear if units in the inner northeast corner of Plaza B and the inner northwest corner of the Walnut Building comply with this section because of the proposed notching in the building. Please consider these units when revising the plans. While the project may pursue a modification as a Planned Unit Development, the Department generally encourages projects to minimize the number of units needing an exposure exception.

I-DEVINCENZI4

3333 California Street, Mixed-Use Project
Initial Study: Case No. 2015-014028ENV

PART 3, Exhibits N-V

EXHIBIT N

B40126

BOOK 6071 PAGE 539

Stipulation as to Character of Improvements on That portion of Lot 1A, Block 1032 Affected by Zoning Proposal Z-52.62.2

Official

The San Francisco Unified School District, being the owner of the above property described, and the applicant in Proposal No. Z-52.62.2 for reclassification thereof from a Second Residential District to a Commercial District, set for hearing before the City Planning Commission of the City and County of San Francisco on October 23, 1952, hereby agrees that the said property shall be developed only as set forth in the following stipulations, which if accepted by the said City Planning Commission shall be observed by the applicant and by its successors in interest for as long as the property remains in the zone classification presently sought. The owner further agrees that no improvements shall be constructed on said property in violation of the conditions hereinafter set forth, and recognizes that the reclassification of the property to a Commercial District is by the Commission's action made contingent, and will remain contingent unless further reclassified, upon adherence to these stipulations.

Stipulations

1. The character of the improvement for commercial purposes of the subject property, or any portion thereof, shall be limited to a building or buildings designed as professional, institutional or office buildings, including service buildings which are normally accessory thereto.

2. The aggregate gross floor area of all such buildings, calculated exclusive of cellars, of basement areas used only for storage or services incidental to the operation and maintenance of a building, and of indoor or other covered automobile parking space, shall not exceed the total area of the property allotted to such use.

3. For each five hundred square feet of gross floor area in such buildings, calculated as in stipulation 2, above, there shall be reserved and kept available on the property or the portion thereof allotted to such use, one off-street automobile parking space, or equivalent open space suitable for the ultimate provision of such parking space as needed for the accommodation of users of the premises.

4. No such building, other than a minor accessory building having a floor area of not more than 400 square feet, shall occupy any portion of the property which is within 100 feet of the line of the Euclid Avenue boundary thereof, or which is within 100 feet of the easterly line of Laurel Street and south of the northerly line of Mayfair Drive extended.

1-8-53 9:40 a.

5. If the subject property, or any portion thereof, is developed as a site for residential buildings, such buildings shall be limited as follows:

a. No residential building other than a one-family dwelling or a two-family dwelling shall occupy any portion of the property which is within 100 feet of the Euclid Avenue boundary line thereof, or which is within 100 feet of the easterly line of Laurel Street and south of the northerly line of Mayfair Drive extended.

b. No dwelling within the said described portion of the subject area shall occupy a parcel of land having an area of less than thirty three hundred (3300) square feet, nor shall any such dwelling cover more than fifty percent (50%) of the area of such parcel or be less than twelve (12) feet from any other such dwelling, or be set back less than ten (10) feet from any presently existing or future public street, or have a height in excess of forty (40) feet, measured and regulated as set forth in pertinent section of the Building Code of the City and County of San Francisco.

c. No residential building in other portions of the subject property shall have a ground coverage in excess of fifty percent (50%) of the area allotted to such building.

6. Development of the subject property, or of any separate portion thereof, for commercial use as stipulated herein, shall include provisions for appropriate and reasonable landscaping of the required open spaces, and prior to the issuance of a permit for any building or buildings there shall be submitted to the City Planning Commission, for approval as to conformity with these stipulations, a site plan showing the character and location of the proposed building or buildings, and related parking spaces and landscaped areas upon the property, or upon such separate portion thereof as is allotted to such building or buildings. It shall be understood that approval of any such plan shall not preclude subsequent approval by the Commission of a revised or alternative plan which conforms to these stipulations.

SAN FRANCISCO UNIFIED SCHOOL DISTRICT,
a public corporation

By [signature]
Eugene J. Riordan
Director of Property of the City and County of San Francisco

Subscribed and sworn to before me this 13th day of November, 1952

[signature]
County Clerk in and for the City and County of San Francisco, State of California.

CITY PLANNING COMMISSION

RESOLUTION NO. 4109

RESOLVED, That Proposal No. Z-52.62.2, an application to change the Use District Classification of the hereinafter described parcel of land from a First Residential District to a Commercial District, be, and the same is hereby APPROVED; subject to the stipulations submitted by the applicant and set forth herein:

Commencing at a point on the S/L of California Street distant thereon 187 feet west of the W/L of Presidio Avenue (produced), thence westerly on said line 707.375 feet to a curve to the left having a radius of 15 feet, thence 23.562 feet measured on the arc of the curve to the left to the E/L of Laurel Street, thence southerly on the E/L of Laurel Street 127.227 feet to the curve to the left having a radius of 60 feet, thence 77.113 feet measured on the arc of the curve to the left to a curve to the right having a radius of 120 feet, thence 149.153 feet measured on the arc of the curve to the right to a curve to the right having a radius of 4033 feet, thence 388.710 feet measured on the arc of the curve to the right to a curve to the left having a radius of 20 feet, thence 35.186 feet measured on the arc of the curve to the left to the northwest line of Euclid Avenue, thence N 73° 12' E on the northwest line of Euclid Avenue 312.934 feet to a curve to the left having a radius of 65 feet, thence 42.316 feet, measured on the arc of the curve to the left to the northwesterly line of Masonic Avenue (proposed extension), thence N 35° 54' E, 380.066 feet to the arc of a curve to the left having a radius of 425 feet, thence 254.176 feet measured on the arc of the curve to the left, thence N 52° 36' 29.74" W, 252.860 feet to the point of commencement. Being the major portion of Lot 1A, Block 1032, containing 10.2717 acres, more or less.

RESOLVED, FURTHER, That this change shall be and at all times remain contingent upon observance by the owner or owners and by his or their successors in interest of the conditions contained in the following stipulations as to the use of the land affected.

1. The character of the improvement for commercial purposes of the subject property, or any portion thereof, shall be limited to a building or buildings designed as professional, institutional or office buildings, including service buildings which are normally accessory thereto.

2. The aggregate gross floor area of all such buildings, calculated exclusive of cellars, of basement areas used only for storage or services incidental to the operation and maintenance of a building, and of indoor or other covered automobile parking space, shall not exceed the total area of the property allotted to such use.

3. For each five hundred square feet of gross floor area in such buildings, calculated as in stipulation 2, above, there shall be reserved and kept available on the property or the portion thereof allotted to such use, one off-street automobile parking space, or equivalent open space suitable for the ultimate provision of such parking space as needed for the accommodation of users of the premises.

4. No such building, other than a minor accessory building having a floor area of not more than 400 square feet, shall occupy any portion of the property which is within 100 feet of the line of the Euclid Avenue boundary thereof, or which is within 100 feet of the easterly line of Laurel Street and south of the northerly line of Mayfair Drive extended.

5. If the subject property, or any portion thereof, is developed as a site for residential buildings, such buildings shall be limited as follows:

a. No residential building other than a one-family dwelling or a two-family dwelling shall occupy any portion of the property which is within 100 feet of the Euclid Avenue boundary line thereof, or which is within 100 feet of the easterly line of Laurel Street and south of the northerly line of Mayfair Drive extended.

b. No dwelling within the said described portion of the subject area shall occupy a parcel of land having an area of less than thirty three hundred (3300) square feet, nor shall any such dwelling cover more than fifty percent (50%) of the area of such parcel or be less than twelve (12) feet from any other such dwelling, or be set back less than ten (10) feet from any presently existing or future public street, or have a height in excess of forty (40) feet, measured and regulated as set forth in pertinent section of the Building Code of the City and County of San Francisco.

c. No residential building in other portions of the subject property shall have a ground coverage in excess of fifty percent (50%) of the area allotted to such building.

6. Development of the subject property, or of any separate portion thereof, for commercial use as stipulated herein, shall include provisions for appropriate and reasonable landscaping of the required open spaces, and prior to the issuance of a permit for any building or buildings there shall be submitted to the City Planning Commission, for approval as to conformity with these stipulations, a site plan showing the character and location of the proposed

building or buildings, and related parking spaces and landscaped areas upon the property, or upon such separate portion thereof as is allotted to such building or buildings. It shall be understood that approval of any such plan shall not preclude subsequent approval by the Commission of a revised or alternative plan which conforms to these stipulations.

I hereby certify that the foregoing resolution was adopted by the City Planning Commission at its special meeting on November 13, 1952, and I further certify that the stipulations set forth in the said resolution were submitted in a written statement placed on file.

Joseph Mignola, Jr.
Secretary

Ayes : Commissioners Kilduff, Towle, Devine, Williams
Noes : None
Absent: Commissioners Brooks, Lopez, Prince
Passed: November 13, 1952

EXHIBIT O

Zoning Density Analysis for 3333 California
April 26, 2016

Background:

Site Zoning:	RM-1 (1 unit per 800 SF of lot area)
Site Zoning with PUD:	RM-2 minus one unit (1 unit per 600 SF of lot area)

Area (SF) of Property identified in Resolution 4109:	83,085 SF
Remaining Area (SF) of Property:	363,383 SF
Total Area (SF) of Property:	446,468 SF

Density Calculations:

RM-2, PUD, No Resolution 4109:	(446,468/600) -1 =	743
		743
RM-2, PUD, with Resolution 4109*:	(363,383/600) -1 =	605
	(83,085/3,300) x 2 =	50
	605 + 50 =	**655**
RM-1, no PUD, No Resolution 4109:	(446,468/800) -1 =	558
		558
RM-1, no PUD, with Resolution 4109*:	363,383/800 =	454
	(83,085/3,300) x 2 =	50
	454 + 50 =	**504**

* If Resolution 4109 is applicable

EXHIBIT P

Initial Study
1629 Market Street Project
Planning Department Case No. 2015-005848ENV

A. Project Description

[Note: A full project description is not provided with this Initial Study because a detailed project description is located in Chapter H, *Project Description*, of the EIR to which this Initial Study is attached.]

The project site occupies approximately 97,617 square feet, or 2.2 acres, on the block bounded by Market, 12th, Otis, and Brady Streets located within the boundaries of San Francisco's Market & Octavia Area Plan, an area plan of the *San Francisco General Plan* (*General Plan*). Most of the site is located within the NCT-3 (Moderate-Scale Neighborhood Commercial Transit) Zoning District, while the southwestern portion of the site, occupying approximately 20,119 square feet is in a P (Public) Zoning District. The portions of the project site north of Stevenson Street and east of Colusa Place are located within an 85-X height and bulk district, while the portion of the project site south of Colton Street is in a 40-X height and bulk district.[1] The project site is currently occupied by four surface parking lots containing 242 parking spaces, an approximately 15-foot-tall Bay Area Rapid Transit (BART) ventilation structure for the below-grade BART tunnel, as well as three buildings: the Civic Center Hotel, the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry (UA) Local 38 building, and the Lesser Brothers Building.

The proposed project would demolish the existing UA Local 38 building, located at 1621 Market Street, demolish the majority of the Lesser Brothers Building, located at 1629–1637 Market Street, rehabilitate the Civic Center Hotel, located at 1601 Market Street, and demolish the 242-space surface parking lots on the project site. The proposed development would construct a total of five new buildings on the project site, including a new four-story, 58-foot-tall, 27,300-square-foot UA Local 38 building adjacent to the Civic Center Hotel, as well as a 10-story, 85-foot-tall, 187,100-square-foot addition to the Lesser Brothers Building at the corner of Brady and Market Streets containing 198 residential units and 6,600 square feet of ground-floor retail/restaurant space ("Building A"). A 10-story, 85-foot-tall, 118,300-square-foot building containing 136 residential units and 2,500 square feet of ground-floor retail/restaurant space ("Building B") would be constructed on Market Street between the new UA Local 38 building and Building A. A nine-story, 85-foot-tall, 74,700-square-foot building containing 78 residential units would be constructed south of Stevenson Street and north of Colton Street ("Building D"). The five-story, 55-foot-tall Civic Center Hotel would be rehabilitated to contain 65 residential units and 4,000 square feet of ground-floor retail/restaurant space (also referred to as "Building C"), and a new six-story, 68-foot-tall, 50,900-square-foot Colton Street Affordable Housing building containing up to 107 affordable units would be constructed south of Colton Street as part of the proposed project. The proposed project would construct the new 18,300-square-foot Brady Open Space at the northeast corner of Brady and Colton Streets. In addition, the proposed project would include construction of a two-level, below-grade garage with up to 316 parking spaces (some of which may include the use of stackers) accessible from Brady and Stevenson Streets. Overall, the proposed project would include construction of 498,100 square feet of residential use that would contain up to 477 residential units and up to 107 affordable units in the Colton Street Affordable

[1] Following San Francisco convention, Market Street and streets parallel to it are considered to run east/west, while 12th Street and streets parallel to it are considered to run north/south.

San Francisco Law School are located north of the project site near Market Street, and the City College of San Francisco has an auditorium and administrative offices along Gough Street, west of the project site. The project site is immediately surrounded by a mix of two- to nine-story commercial, residential, community facility, and light industrial buildings. Vegetation in the area is generally limited to street trees. Nearby public parks and open spaces within approximately 0.50 mile of the project site include Patricia's Green, Page & Laguna Mini Park, Koshland Park, Hayes Valley Playground, and Civic Center Plaza.

C. Compatibility with Existing Zoning and Plans

	Applicable	Not Applicable
Discuss any variances, special authorizations, or changes proposed to the *Planning Code* or Zoning Map, if applicable.	☒	☐
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	☒	☐
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.	☒	☐

See Chapter III, *Plans and Policies*, in this Draft Environmental Impact Report (DEIR) for a detailed discussion of land use plans applicable to the 1629 Market Street Mixed-Use Project and identification of the proposed project's potential to conflict with those plans or policies.

D. Summary of Environmental Effects

The proposed project could potentially affect the environmental factor(s) checked below, for which mitigation measures would be required to reduce potentially significant impacts to less than significant. The following pages present a more detailed checklist and discussion of each environmental factor.

☐ Land Use	☐ Greenhouse Gas Emissions	☒ Geology and Soils
☐ Population and Housing	☐ Wind and Shadow	☐ Hydrology and Water Quality
☒ Cultural Resources	☐ Recreation	☐ Hazards/Hazardous Materials
☒ Transportation and Circulation	☐ Utilities and Service Systems	☐ Mineral/Energy Resources
☒ Noise	☐ Public Services	☐ Agricultural/Forest Resources
☒ Air Quality	☐ Biological Resources	☒ Mandatory Findings of Significance

This Initial Study evaluates the proposed 1629 Market Street Mixed-Use Project to determine whether it would result in significant environmental impacts. The designation of topics as "Potentially Significant" in the Initial Study means that the EIR will consider the topic in greater depth and determine whether the impact would be significant. On the basis of this Initial Study, topics for which there are project-specific effects that have been determined to be potentially significant are:

- Cultural Resources (historical architectural resources only); and
- Transportation and Circulation (all topics).

The Cultural Resources (historic architectural resources only) and the Transportation and Circulation topics are evaluated in the DEIR prepared for the proposed project. The project has the potential to result in a significant, cumulative transportation-related construction impact; therefore, for ease of reference all Transportation and Circulation topics will be included together in the DEIR.

The proposed project would cast net new shadow on nearby sidewalks including those along Market Street, Brady Street, Stevenson Street, and around the confluence of Mission Street and South Van Ness Avenue at certain times of day throughout the year. Most of the sidewalks in this area are already shadowed by existing buildings and, given that sidewalks are typically used by pedestrians traveling between destinations and not as a recreational resource, the additional project-related shadow would not substantially affect the use of the sidewalks. Therefore, the shadow impact on the surrounding sidewalks as a result of the proposed project would be less than significant.

For the above reasons, the proposed project's net new shadow would not be anticipated to substantially affect the use of any publicly-accessible areas, including nearby streets and sidewalks. Given the foregoing, the proposed project would result in a ***less-than-significant*** impact with respect to shadow.

The proposed project would develop a new privately-owned, publicly-accessible open space (POPOS), referred to herein as the Brady Open Space. The Brady Open Space would be publicly-accessible, but would not be under the jurisdiction of the Recreation and Park Commission and would not be subject to Section 295. CEQA analysis covers impacts of a project on existing conditions, and not on elements of the project itself. Therefore, there is no shadow impact to this open space, which does not exist under current conditions. For informational purposes, the shadow diagrams prepared depict project shadow on the planned Brady Open Space, and those effects are discussed below for informational purposes only.

The shadow diagrams in **Figure 2 through Figure 4** reveal that the proposed project would add net new shadow to portions of the planned Brady Open Space primarily in the morning before 11:00 a.m. and afternoon after 3:00 p.m. throughout the year but allow relatively open sunshine during the middle of the day. The planned Brady Open Space would receive shadow from the proposed project on the north side of the park beginning at 6:46 a.m. on June 21, a time when much of the open space would already be in shadow from existing structures. By 8:00 a.m., existing shadow would be largely gone, and shadow from the proposed project would increase on the open space until 11:00 a.m. when it would be mostly gone. Shadow from the proposed project would begin to encroach again on the north side of the open space by 2:00 p.m. and would cover a majority of the open space by shortly after 4:00 p.m. Even by 6:00 p.m., the southwest corner of the open space would remain in sunshine. By 7:00 p.m., the entire open space would be in shade from a combination of the proposed project and existing structures.

On the morning of the fall equinox the Brady Open Space would be nearly entirely in shadow from the project and surrounding existing structures at 8:00 a.m. Sunlight would then begin to increase, and the open space would be nearly entirely in sunshine from 12:00 noon to 2:00 p.m. After 2:00 p.m., shade from the project would increase through the afternoon, covering the majority of the open space by 4:00 p.m. but leaving the southwestern corner in sun until after 6:00 p.m.

On the winter solstice, the Brady Open Space would be mostly in shade in the morning from the project and existing structures until 10:00 a.m., at which time the western half of the open space would be in sunlight. Between about 1:00 p.m. and 2:30 p.m., nearly all of the park would be in sunlight. Shadow from the project would encroach onto the northern portion of the open space by 3:00 p.m., and shadow from existing buildings to the west would begin to cover the western portion of the open space shortly thereafter, although, even by just before 4:00 p.m. there would still be a good portion of the open space on the southeast side in sunlight.

SAN FRANCISCO
PLANNING DEPARTMENT

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meeting

Date:	February 8, 2017
Case No.:	**2015-005848ENV**
Project Title:	**1629 Market Street Mixed-Use Project**
Zoning:	NCT-3 (Moderate Scale Neighborhood Commercial Transit District) and P (Public) Zoning Districts 40-X & 85-X Height and Bulk Districts
Block/Lot:	3505/001, 007, 008, 027, 028, 029, 031, 031A, 032, 032A, 033, 033A, 034, 035
Lot Size:	97,617 square feet (2.2 acres)
Project Sponsor:	Strada Brady, LLC William Goodman, 314.276.0707
Lead Agency:	San Francisco Planning Department
Staff Contact:	Debra Dwyer – 415.575.9031 debra.dwyer@sfgov.org

INTRODUCTION

This notice provides a summary description of the proposed project; identifies environmental issues anticipated to be analyzed in the Initial Study (IS) and Environmental Impact Report (EIR); and provides the time, date, and location of the public scoping meeting (see page 21 for information on the public scoping meeting). The comments received during the public scoping process will be considered during the preparation of the IS and EIR for this project.

PROJECT SUMMARY

The project sponsor, Strada Brady, LLC, proposes a mixed-use project fronting on Market Street between Brady and 12th Streets. The proposed project would demolish the existing United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry (UA) Local 38 building, located at 1621 Market Street, demolish the majority of the Lesser Brothers Building, located at 1629–1637 Market Street, rehabilitate the Civic Center Hotel, located at 1601 Market Street, for residential and retail/restaurant uses, and demolish the 242-space surface parking lots on the project site. The proposed project would construct a new four-story, 58-foot-tall, 27,300-square-foot UA Local 38 building, as well as a 10-story, 85-foot-tall, 187,100-square-foot addition to the Lesser Brothers Building at the corner of Brady and Market Streets containing 198 residential units and 6,600 square feet of ground-floor retail/restaurant space.[1,2] A 10-story, 85-foot-tall, 118,300-square-

[1] Square footages presented for the proposed project are approximate.
[2] Building heights for the existing buildings and the proposed project do not include rooftop mechanical penthouses. In accordance with *Planning Code* Section 260(b)(1)(B), elevator, stair, and mechanical penthouses would be a maximum of 16 feet in height above the roof line.

Air Quality

The topic of Air Quality will include analysis of consistency of the proposed project with applicable air quality plans and standards, the potential for the proposed project to result in emissions of criteria air pollutants and other toxic air contaminants (TACs) that may affect sensitive populations, as well as the potential for the proposed project to result in sources of odor. The air quality analysis will include quantification of both construction-related and operational air pollutant emissions. The analysis will also summarize the results of a health risk assessment prepared to evaluate potential long-term health effects of emissions from both project construction and operation.

Greenhouse Gas Emissions

The topic of Greenhouse Gas Emissions will include an analysis of the proposed project's consistency with the City's Greenhouse Gas Reduction Strategy and the degree to which the proposed project's greenhouse gas emissions could result in a significant effect on the environment.

Wind and Shadow

The topic of Wind will evaluate the potential to alter wind in a manner that substantially affects public areas. Based on a preliminary shadow fan analysis prepared by the Planning Department, no City parks or other publicly-accessible open space exists within the potential shadow area of the proposed project, and therefore no parks or open spaces would be affected by project shadow. The topic of Shadow will include an evaluation of the potential for the proposed project to result in shadow impacts on nearby sidewalks. In addition, for informational purposes the Shadow section will describe the potential for the proposed project to result in shadow on the project site itself, including the proposed Brady Open Space.

Recreation

The topic of Recreation will include an analysis of whether the proposed project could adversely affect existing parks and open spaces.

Utilities and Service Systems

The topic of Utilities and Service Systems will include analysis of potable water and wastewater treatment capacity, and will discuss disposal of solid waste that may be generated by the proposed project. This topic will also include an assessment of whether the proposed project would require the construction of new water supply, wastewater treatment, and/or stormwater drainage facilities, and if so, whether that construction could result in adverse environmental effects.

Public Services

The topic of Public Services will include analysis of whether existing public services (e.g., schools, police and fire protection, etc.) would be adversely affected by the proposed project so as to require new or physically altered facilities, the construction of which could cause significant impacts.

EXHIBIT Q

SAN FRANCISCO
PLANNING DEPARTMENT

MEMO

1650 Mission St.
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San Francisco
CA 94103-2479

Reception:
415.558.6378

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415.558.6409

Planning
Information:
415.558.6377

DATE: July 2014

TO: Planning Department Staff, Shadow Analysis Consultants

FROM: Rachel Schuett, Kevin Guy, SF Planning Department

RE: Shadow Analysis Procedures and Scope Requirements

In the City and County of San Francisco, there are two circumstances which could trigger the need for a shadow analysis:

(1) If the proposed project would be over 40 feet tall, and could potentially cast new shadow on a property under the jurisdiction of the Recreation and Park Department, per *San Francisco Planning Code Section 295*; and/or
(2) If the proposed project is subject to review under the California Environmental Quality Act (CEQA) and would potentially cast new shadow on a park or open space such that the use or enjoyment of that park or open space could be adversely affected.

This memorandum documents the Planning Department's standard procedures for conducting a shadow analysis both for the purposes of CEQA review and for the purposes of *Section 295* review. A complete Shadow Analysis has three main components: (1) Shadow Diagrams, (2) Shadow Calculations, and (3) a Technical Memorandum. In some cases, survey information may also be required.

A shadow analysis should be completed in five sequential steps:

Step 1. Preliminary Shadow Fan
Step 2. Project Initiation
Step 3. Shadow Diagrams
Step 4. Shadow Calculations
Step 5. Technical Memorandum

Each of these steps is described, in detail, below.

Step 1. Preliminary Shadow Fan

The Planning Department typically prepares a preliminary shadow fan as part of the Preliminary Project Assessment (PPA) process for projects which exceed 40 feet in height. If the preliminary shadow fan indicates that the proposed project has the potential to cast new shadow on a park or open space which is protected by Section 295 of the *Planning Code*, a shadow analysis will be required for the purposes of Section 295 review.

Typically, this information is included in the PPA Letter. For projects not subject to the PPA process, and/or if the project is over 40 feet in height and has potential to cast new shadow on a park or open space that is not protected by Section 295 of the *Planning Code*, or if the project is less than 40 feet in height and could cast new shadow on any park or open space a shadow analysis may also be required for the purposes of CEQA review. This would be determined on a case-by-case basis as part of the scoping process for the environmental review. A preliminary shadow fan would be prepared by Planning Department staff at that time.

Step 5. Technical Memorandum

The shadow diagrams, shadow calculations, and any other supporting materials should be accompanied by a technical memorandum which includes (at a minimum) the following information:

- Project Description. Include the location of the project site (neighborhood, address, Assessor's Block/Lot, nearby landmarks), general topography, and project boundaries. Describe existing building(s) and land use(s) on and around the project site, including building height(s). Include proximity to parks, open spaces, and community gardens. Describe the proposed project including demolition and new construction. Describe the physical characteristics of the proposed building(s) as well as the proposed use(s). Include and refer to building elevations.

- Modeling Assumptions. The shadow graphics and calculations should be accompanied by clear documentation of the assumptions for the modeling including:
  - The height assumed for each of the buildings (or building envelopes).
    Please note: Please contact the Planning Department for specific direction in how to model intervening shadow cast from buildings between the proposed project site and the affected park or open space.
  - The allowance for penthouses and parapets (which should be determined in consultation with Planning Department staff).
    Please note: the Planning Department typically requires that final building designs be modeled rather than building envelopes, or hypothetical building forms based on existing or proposed zoning. However, building envelopes may be substituted in some circumstances as directed by Planning Department staff.
  - Building sections and elevations (for the proposed project).
  - If the project site is steep and/or has varied topography the documentation should identify where the height of the envelope of the building was measured from.

- Potentially Affected Properties. Potentially affected properties including: parks, publicly-accessible open spaces, and community gardens identified in the graphical depictions should be listed and described. The description of these properties should include the physical features and uses of the affected property, including but not limited to: topography, vegetation, structures, activities, and programming. Each identified use should be characterized as 'active' or 'passive.' Aerial photographs should be included, along with other supporting photos or graphics. The programming for each property should be verified with the overseeing entity, such as the Port of San Francisco, the Recreation and Parks Department, etc. Any planned improvements should also be noted.

- Shadow Methodology and Results. Describe how the analysis was conducted, what assumptions were made? Describe the "solar year", the "solar day" and define any other terms, as needed. Refer to shadow diagrams and describe results.

- Quantitative Analysis (for properties subject to Section 295, and as required by the Planning Department). The Technical Memorandum should include a narrative summary of the quantitative shadow effects that would result from the project, and discuss how these effects relate to the quantitative criteria set forth in the "Proposition K – Implementation Memo" as jointly adopted by the Planning and Recreation and Park Commissions in 1989.

EXHIBIT R

Same as Exhibit F in OLHIA1

Margaret Fitzgerald
30 Wood Street, San Francisco, CA 94118

Date: February 28, 2016

Ms. Mary Woods
Planner - North West Quadrant
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103-2414

RE: 3333 California St. Development

Dear Ms. Woods:

I am writing regarding the development of the 3333 California Street development, currently the UCSF Laurel Heights Campus (the "Site"). It is my understanding that the San Francisco Planning Department is working with the developer of the Site regarding the initial project plans for the proposed development. The owner of the fee interest and the developer of the Site are limited in their joint ability to develop the Site because the owner of the Site does not have free and clear title; rather the general public holds a permanent recreational interest in all of the open space at the Site. Therefore, any development plans at the Site may not impinge upon this open space.

The general public holds a ***permanent*** right of recreational use on all of the open space at 3333 California and such rights were obtained by implied dedication. Dedication is a common law principle that enables a private landowner to donate his land for public use. Implied dedication is also a common law principle and is established when the public uses private land for a long period of time, which period of time is five (5) years in California. In 1972, the California legislature enacted Civil Code Section 1009 to modify the common law doctrine of implied dedication and to limit the ability of the public to secure ***permanent*** adverse rights in private property. Here, however, the existing open space at the Site was well established and well used as a park by the general public long before the completion of the construction of the full footprint of the improvements at the Site in 1966. Therefore, the general public has permanent recreational rights to the open space at the Site; the rights were obtained by implied dedication prior to the enactment of Cal. Civil Code Sec. 1009 in 1972.

Even if the general public had not secured permanent rights to recreational use through implied dedication prior to 1972, the public and countless individuals have acquired a prescriptive easement over the recreational open space. The recreational use has been continuous, uninterrupted for decades, open and notorious and hostile (in this context, hostile means without permission). Every day, individuals and their dogs use the green space along Laurel, Euclid and along the back of the Site at Presidio. Individuals ignore the brick wall along Laurel and regularly use the green space behind the wall as a park for people and for their dogs. The use of the Site has not been permissive. For example, the owner of the Site has not posted permission to pass signs in accordance with Cal. Civil Code Sec. 1008. If such signs ever were posted, they have not been reposted at least once per year. Although it is counterintuitive, an owner typically posts such signs to protect against the public securing adverse rights. One might assume the owner of the Site has not posted such signs, as the owner is aware of the pre-existing and permanent recreational rights the general public has secured to the open space. Because the

Same as Exhibit F in OLHIA1

public's rights to the open space were secured decades ago through implied dedication, it is not necessary for the general public to rely upon its prescriptive easement rights outlined in this paragraph; rather it is another means to the same end.

It is important that the Planning Department understand these legal issues as any project plan (or any future project description in an Environmental Impact Report ("EIR") for the Site) cannot include development of the open land over which the public has a secured permanent rights of recreational use. It would not be a concession by the owner/developer to leave the open space undeveloped and allow public recreational use as the general public holds permanent recreational rights to this space. It is important to note that even the open space behind the walls that has been used as park space is also included in this dedication to the public. According to well-established case law, a wall or fence is not effective in preventing the development of adverse property rights if individuals go around the wall, as is the case here.

In sum, the open space at the Site cannot be developed as the public secured such rights through implied dedication prior to 1972 (or, alternatively, by prescriptive easement). In reviewing the development plans for the Site, the City cannot decide to allow development of any of the open space as the recreational rights to the space are held by the public at large. Any project description in the future EIR for the Site that contemplates development of any of the open space would be an inadequate project description and would eviscerate any lower impact alternative presented in the EIR. One only need to look to the seminal land use case decided by the California Supreme Court regarding this very Site[1] to see that an EIR will not be upheld if the project alternatives are legally inadequate. It would be misleading to the public to suggest that a lesser impact alternative is one that allows the public to use the space to which it already has permanent recreational use rights.

In sum, please be advised of the public's permanent recreational rights to all of the existing open space at the Site and please ensure that a copy of this letter is placed in the project file.

Sincerely,

Meg Fitzgerald

Margaret N. Fitzgerald

With copies to:
Mark Farrell, Supervisor
Dan Safir, Prado Group
Kathy DiVicenzi, Laurel Heights Improvement Association
Robert Charles Friese, Esq.

[1] Laurel Heights Improvement Association of San Francisco, Inc. v. The Regents of the University of California, 47 Cal. 3rd 376 (1988).

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that urban decay effects might result, and the court upheld the city's determination that changing the site plan for the shopping center to allow a supercenter did not result in any new significant effects that would require revisions to an EIR that it had previously certified for the project. 183 CA4th at 52.

The difficulty of formulating effective mitigation measures for urban decay effects is illustrated by the decision in *California Clean Energy Comm. v City of Woodland* (2014) 225 CA4th 173. The court upheld a measure requiring that specific project uses consist primarily of regional retail uses that would not compete with stores in the city's downtown area. The court rejected several other measures, however, that called for submission of future market studies and development of plans for retail and other uses in areas likely to be affected by the new development, finding no basis for concluding they might be effective.

§13.65 H. Hazardous Waste and Release Sites

When preparing an EIR, the lead agency must consult the "Cortese" list of hazardous waste sites (compiled under Govt C §65962.5) to determine whether the project or any project alternatives are located on a listed site. Pub Res C §21092.6(a). Any information derived from consultation of the Cortese list must be included in the notice of preparation and the draft EIR. Pub Res C §21092.6(a).

An EIR for a project that involves the purchase of a school site or construction of a new elementary or secondary school by a school district must include sufficient information to determine whether the site is a former hazardous or solid waste disposal site, an identified hazardous substance release site, or a site containing certain types of pipelines. Pub Res C §21151.8(a); 14 Cal Code Regs §15186.

On CEQA and hazardous waste disposal and release sites, see §§20.49–20.52.

§13.66 I. Greenhouse Gas Emissions and Climate Change

Following enactment of the California Global Warming Solutions Act of 2006 (Health & S C §§38500–38599), the legislature directed that CEQA Guidelines be adopted addressing the mitigation of greenhouse gas (GHG) emissions. Pub Res C §21083.5. Following that directive, a number of new and amended Guidelines provisions were adopted in 2010; see,

an EIR, depending on the specific issues presented by a particular project. A California Climate Change Adaptation Strategy was prepared by a multi-agency task force headed by the Natural Resources Agency and finalized in 2009. The December 2009 strategy document summarizes information about the impacts of climate change in various sectors as well as efforts to manage against the threats posed by climate change. These documents generally can be found on the websites of the particular state agencies or on the California Climate Change Portal website.

Guidance from local air districts. Some local air districts have adopted or published guidance documents with recommended thresholds of significance for GHG emissions of projects. These include interim thresholds for stationary sources within the South Coast Air Quality Management District and significance thresholds adopted by the San Joaquin Valley Air Pollution Control District and the Bay Area Air Quality Management District. On use of regulatory agency guidance documents generally, see §§6.55, 13.13–13.14.

In December 2008, the South Coast Air Quality Management District adopted an interim GHG threshold for stationary sources of 10,000 metric tons of CO2 equivalents per year (MT/yr), which applies when the district is the lead agency. See South Coast Air Quality Management District, A Resolution of the Governing Board of the South Coast Air Quality Management District Approving the Interim Greenhouse Gas Significance Threshold to Be Used by the SCAQMD for Industrial Source Projects, Rules and Plans When It Is the Lead Agency for Projects Subject to the California Environmental Quality Act (CEQA).

In December 2009, the San Joaquin Valley Air Pollution Control District adopted a threshold for all types of development projects. The district's approach is derived from AB 32's goal of reducing GHG emissions to 1990 levels by 2020, which generally would require statewide emissions to be reduced by approximately 29 percent below CARB's 2020 "business as usual" projections for California. See CARB Climate Change Scoping Plan (Dec. 2008) at ES-1. Generally, the recommended threshold bases the determination of significance on whether the analysis for a proposed project demonstrates that the project can achieve a comparable reduction against "business as usual" emissions.

In June 2010, the Bay Area Air Quality Management District adopted recommended thresholds with two alternatives for determining significance for most nonindustrial development projects. One is a bright-line threshold of 1100 MT/yr of carbon dioxide equivalent emissions. The other recommended threshold is a per capita threshold of 4.6 MT/yr of

CO2-equivalent emissions, based on the service population of the project. For industrial projects, the threshold is emissions greater than 10,000 MT/yr of CO2 equivalents.

NOTE➤ On the basis of the pendency of *California Bldg. Indus. Ass'n v Bay Area Air Quality Mgmt. Dist.* (2015) 62 C4th 369, the Bay Area Air Quality Management District had not been recommending that agencies use these thresholds as a general measure of a project's impacts, stating that agencies should make significance determinations on the basis of substantial evidence. See http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx. This case has been remanded to the trial court for issuance of an order partially granting the petition for writ of mandate. *California Bldg. Indus. Ass'n v Bay Area Air Quality Mgmt. Dist.* (2016) 2 CA5th 1067, 1091. In *Center for Biological Diversity,* 62 C4th at 230 n7, however, the court noted that the validity of the District's GHG thresholds was not before the court in that case. Also, the 2015 court of appeal decision in *California Bldg. Indus. Ass'n v Bay Area Air Quality Mgmt. Dist., supra,* did not discuss the District's GHG thresholds. Practitioners should check the District's website for updates to this guidance.

Local or regional plan policies on GHGs. An increasing number of cities and counties have adopted GHG emission reduction goals in their general plans; some jurisdictions are preparing or adopting formalized GHG reduction plans or climate action plans. In appropriate circumstances, such general plan policies can be used as a possible basis for determining the significance of emissions impacts. See generally §§6.56, 13.11. In *Center for Biological Diversity,* 62 C4th at 223, the court suggested that in appropriate circumstances local agencies could evaluate compliance with such plans to streamline the review of GHG emissions impacts. In *North Coast Rivers Alliance v Marin Mun. Water Dist.* (2013) 216 CA4th 614, 653, the court upheld an EIR that relied on a county policy of reducing GHG emissions by a specified percentage to reach AB 32 goals. Under CEQA's existing provisions for streamlining review for projects consistent with a plan (see chap 10), and under the CEQA Guidelines on tiering from adopted GHG reduction plans, the more formalized GHG reduction plans may be used in appropriate circumstances to streamline the review of consistent projects.

Other technical reports; reports by private organizations. Many preparers of CEQA documents rely on references to technical papers to

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CALIFORNIA NATURAL RESOURCES AGENCY

FINAL STATEMENT OF REASONS FOR REGULATORY ACTION

Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97

December 2009

SECTION 15064.4. DETERMINING THE SIGNIFICANCE OF IMPACTS FROM GREENHOUSE GAS EMISSIONS

Specific Purposes of the Amendment

A key component of environmental analysis under CEQA is the determination of significance. (Pub. Resources Code § 21002; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1106-07.) Guidelines on the analysis of GHG emissions must, therefore, include provisions on the determination of significance of those emissions.

New section 15064.4, on the determination of significance of GHG emissions, reflects the existing CEQA principle that there is no iron-clad definition of "significance." (State CEQA Guidelines, § 15064(b); *Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm.* (2001) 91 Cal.App.4th 1344, 1380-81 ("*Berkeley Jets*").) Accordingly, lead agencies must use their best efforts to investigate and disclose all that they reasonably can regarding a project's potential adverse impacts. (*Ibid*; *see also* State CEQA Guidelines, § 15144.) Section 15064.4 is designed to assist lead agencies in performing that required investigation. In particular, it provides that lead agencies should quantify GHG emissions where quantification is possible and will assist in the determination of significance, or perform a qualitative analysis, or both as appropriate in the context of the particular project, in order to determine the amount, types and sources of GHG emissions resulting from the project. Regardless of the type of analysis performed, the analysis must be based "to the extent possible on scientific and factual data." In addition, lead agencies should also consider several factors. The specific provisions of section 15064.4 are discussed below.

Quantitative Analysis

Subdivision (a) of section 15064.4 states that lead agencies should calculate or estimate the GHG emissions resulting from the proposed project. This directive reflects the holding in the *Berkeley Jets* case, which required a Port Commission to quantify emissions of toxic air contaminants even in the absence of a universally accepted methodology for doing so. (*Berkeley Jets*, *supra*, 91 Cal.App.4th at p. 1370 ("The fact that a single methodology does not currently exist that would provide the Port with a precise, or 'universally accepted,' quantification of the human health risk from TAC exposure does not excuse the preparation of any health risk assessment--it requires the Port to do the necessary work to educate itself about the different methodologies that are available") (emphasis in original).) That case also required quantitative analysis of single-event noise, even though the applicable thresholds were expressed as cumulative noise levels. (*Id.* at 1382.) Quantification was required in that context in order to identify existing noise levels, the number of additional flights, the frequency of those flights, the degree to which the increased flights would cause increased noise levels at a given location, and ultimately, the community's reaction to that noise. (*Ibid.*) In other words, quantification would assist the lead agency in determining whether the increased noise would be potentially significant. (*Ibid.* ("CEQA requires that the Port

and the inquiring public obtain the technical information needed to assess whether the ADP will merely inconvenience the Airport's nearby residents or damn them to a somnambulate-like existence"); see also *Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1109 ("in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect").)

With the foregoing principles in mind, the quantification called for in proposed section 15064.4(a)(1) is reasonably necessary to ensure an adequate analysis of GHG emissions using available data and tools, in accordance with Public Resources Code Section 21083.05. Even where a lead agency finds that no numeric threshold of significance applies to a proposed project, the holdings in the *Berkeley Jets* and *Protect the Historic Amador Waterways* cases, described above, require quantification of emissions if such quantification will assist in determining the significance of those emissions. OPR and the Resources Agency find that quantification will, in many cases, assist in the determination of significance, as explained below. (State CEQA Guidelines, § 15142 ("An EIR shall be prepared using an interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the consideration of qualitative as well as quantitative factors").)

First, quantification of GHG emissions is possible for a wide range of projects using currently available tools. Modeling capabilities have improved to allow quantification of emissions from various sources and at various geographic scales. (Office of Planning and Research, *CEQA and Climate Change: Addressing Climate Change Through the California Environmental Quality Act Review*, Attachment 2: Technical Resources/Modeling Tools to Estimate GHG Emissions (June 2008); CAPCOA White Paper, at pp. 59-78.) Moreover, one of the models that can be used in a GHG analysis, URBEMIS, is already widely used in CEQA air quality analyses. (CAPCOA White Paper, at p. 59.) Second, quantification informs the qualitative factors listed in proposed section 15064.4(b). Third, quantification indicates to the lead agency, and the public, whether emissions reductions are possible, and if so, from which sources. Thus, if quantification reveals that a substantial portion of a project's emissions result from energy use, a lead agency may consider whether design changes could reduce the project's energy demand.

Proposed section 15064.4(a)(1) also reflects existing case law that reserves for lead agencies the precise methodology to be used in a CEQA analysis. (*See, e.g.*, *Eureka Citizens for Responsible Gov't v. City of Eureka* (2007) 147 Cal.App.4th 357, 371-373.) As indicated above, a wide variety of models exist that could be used in a GHG analysis. (CAPCOA White Paper, at pp. 59-78.) Further, not every model will be appropriate for every project. For example, URBEMIS may be an appropriate tool to analyze a typical residential subdivision or commercial use project, but some public utilities projects, such as waste-water treatment plants, may require more specialized models to accurately estimate emissions. (*Id.* at pp. 60-65.) The requirement to

disclose any limitations in the model or methodology chosen also reflects the standard for adequacy of EIRs in existing State CEQA Guidelines section 15151.

Qualitative and Performance Standard Based Analysis

As explained in greater detail below in the Thematic Responses, CEQA does not require quantification of emissions in every instance. If the lead agency determines that quantification is not possible, would not yield information that would assist in analyzing the project's impacts and determining the significance of the GHG emissions, or is not appropriate in the context of the particular project, section 15064.4(a) would allow the lead agency to consider qualitative factors or performance standards. Consideration of qualitative factors is appropriate for several reasons. First, CEQA directs lead agencies to consider qualitative factors. (Pub. Resources Code, § 21001(g) (CEQA's purpose includes to: "require governmental agencies at all levels to consider qualitative factors as well as economic and technical factors and long-term benefits and costs, in addition to short-term benefits and costs and to consider alternatives to proposed actions affecting the environment").) Second, existing section 15064.7 of the State CEQA Guidelines indicate that thresholds of significance may be qualitative, which implies that a determination of significance without a threshold could also evaluate qualitative factors. Third, the existing CEQA Guidelines state that the determination of significance requires a lead agency to use its judgment based on *all* relevant information. (State CEQA Guidelines, § 15064(b); see also *id.* at §§ 15064.7 (thresholds may be qualitative), 15142 (analysis should be interdisciplinary and both qualitative and quantitative).)

Subdivision (a) would also allow a lead agency to rely on performance-based standards to assist in the determination of significance. Just as with quantification, the purpose of engaging in a qualitative or performance standard based analysis is to develop information relevant to a significance determination. Several examples exist of the types of performance standards that might appropriately be used in determining the significance of greenhouse gas emissions. Proposed section 15183.5(b)(1)(D), for example, contemplates that a plan for the reduction of greenhouse gas emissions may contain performance based standards. Where such standards are developed as part of such a plan, a lead agency would have evidence indicating that compliance with such standards would indicate that the impact of greenhouse gas emissions would be less than significant. Further, in adopting SB375, the Legislature acknowledged that regional transportation plans, and the environmental impact reports prepared to analyze those plans, may contain performance standards that would apply to transit priority projects. (See, e.g., Public Resources Code, § 21155.2.) Other potential examples include the Bay Area Air Quality Management District's proposed Best Management Practices for Construction Greenhouse Gas Emissions (calling for use of alternative fuels, local building materials and recycling), and the California Public Utilities Commission's Performance Standard for Power Plans (requiring emissions no greater than a combined cycle gas turbine plant). Compliance with such standards may be relevant to the significance determination, when considered in conjunction with the

project's total projected emissions. Section 15064.4(a) was revised in response to comments to clarify that lead agencies may rely on quantitative or qualitative analyses, or both, in part to emphasize that qualitative analyses and performance standards may be useful supplements to a quantitative analysis.

Similar to use of a significance threshold, a lead agency must exercise care to ensure that performance standards do not replace a full analysis of all potential emissions. (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1109 ("in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect").) For example, while a Platinum LEED® rating could assist a lead agency in determining whether emissions related to a building's energy use may be significant, that performance standard may not reveal sufficient information to evaluate transportation-related emissions associated with that proposed project.

As indicated above, even a qualitative analysis must be based to the extent possible on scientific and factual data. Further, the type of analysis that is required will depend on the context of a particular project. Given the multitude of different project types and sizes, and different agencies subject to CEQA, the CEQA Guidelines, which are general by necessity, cannot specify precisely when a quantitative analysis may be required or a qualitative analysis may be appropriate. The following hypothetical examples may illustrate, however, how section 15064.4(a) could operate:

> **Project 1**: a small habitat restoration project is proposed in a remote part of California. Workers would drive to the site where they would camp for the duration of the project. Some gas-powered tools and machinery may be required. Cleared brush would either be burned or would decay naturally.
>
> **Project 2**: a large commercial development is proposed in an suburban context. Heavy-duty machinery would be required in various construction phases spanning many months. Following construction, the development would rely on electricity, water and wastewater services from the local utilities. Natural gas burners would be used on site. The development would employ several hundred workers and attract thousands of customers daily. A traffic study has been prepared for the project. The local air quality management district's guidance document recommends that projects of similar size and character should use of URBEMIS, or another similar model, to estimate the air quality impacts of the development.

In the context of Project 2 a quantitative analysis would likely be appropriate. The URBEMIS model, which would likely be used to analyze other emissions, could also be used to estimate emissions from both project-related transportation and on-site indirect emissions (landscaping, hot-water heaters, etc.) Modeling is typically done for projects of like size and character. Other models are readily available to estimate emissions associated with utility use. In the context of Project 2, a lead agency may

find it difficult to demonstrate a good faith effort through a purely qualitative analysis. (See, e.g., *Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm.* (2001) 91 Cal.App.4th 1344, 1370.)

In the context of Project 1, however, a qualitative analysis would likely be appropriate. Project 1's emissions are not easily modeled, and the Project is small in scale. While it may be technically possible, quantification of the emissions may not reveal any additional information that indicates the significance of those emissions or how they may be reduced that could not be provided in a qualitative assessment of emissions sources. (See, e.g., Public Resources Code, § 21003(f) ("public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment").)

Factors Potentially Indicating Significance

The qualitative factors listed in the proposed section 15064.4(b) are intended to assist lead agencies in collecting and considering information relevant to a project's incremental contribution of GHG emissions and the overall context of such emissions. Notably, while subdivision (b) provides a list of factors that should be considered by public agencies in determining the significance of a project's GHG emissions, other factors can and should be considered as appropriate.

Determine Whether Emissions Will Increase or Decrease

The first factor in subdivision (b), for example, asks lead agencies to consider whether the project will result in an increase or decrease in different types of GHG emissions relative to the existing environmental setting. All project components, including construction and operation, equipment and energy use, and development phases must be considered in this analysis. (State CEQA Guidelines, § 15378 (project includes "the whole of the action").) For example, a mass transit project may involve GHG emissions during its construction phase, but substantial evidence may also indicate that it will cause existing commuters to switch from single-occupant vehicles to mass transit use. Operation of such a project may ultimately result in a decrease in GHG emissions. Such analysis, provided that it is supported with substantial evidence and fully accounts for all project emissions, may support a lead agency's determination that GHG emissions associated with a project are not cumulatively considerable.

This section's reference to the "existing environmental setting" reflects existing law requiring that impacts be compared to the environment as it currently exists. (State CEQA Guidelines, § 15125.) This clarification is necessary to avoid a comparison of the project against a "business as usual" scenario as defined by ARB in the Scoping Plan. Such an approach would confuse "business as usual" projections used in ARB's Scoping Plan with CEQA's separate requirement of analyzing project effects in

comparison to the environmental baseline. (*Compare* Scoping Plan, at p. 9 ("The foundation of the Proposed Scoping Plan's strategy is a set of measures that will cut greenhouse gas emissions by nearly 30 percent by the year 2020 as compared to business as usual") *with Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1278 (existing environmental conditions normally constitute the baseline for environmental analysis); see also *Center for Bio. Diversity v. City of Desert Hot Springs*, Riverside Sup. Ct. Case No. RIC464585 (August 6, 2008) (rejecting argument that a large subdivision project would have a "beneficial impact on CO2 emissions" because the homes would be more energy efficient and located near relatively uncongested freeways).) Business as usual may be relevant, however, in the discussion of the "no project alternative" in an EIR. (State CEQA Guidelines, § 15126.6(e)(2) (no project alternative should describe what would reasonably be expected to occur in the future in the absence of the project).)

Notably, section 15064.4(b)(1) is not intended to imply a zero net emissions threshold of significance. As case law makes clear, there is no "one molecule rule" in CEQA. (CBE, *supra*, 103 Cal.App.4th at 120.)

Thresholds of Significance

The second factor in subdivision (b) asks whether a project exceeds a threshold of significance for GHG emissions. Section 21000(d) of the Public Resources Code expressly directs public agencies to identify whether there are any critical thresholds for health and safety to identify those areas where the capacity of the environment is limited. A threshold is an "identifiable quantitative, qualitative or performance level" at which impacts are normally less than significant. (State CEQA Guidelines, § 15064.7(a); *see also Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1107.) Lead agencies may rely on thresholds developed by other agencies that have particular expertise in the subject matter under consideration. (*See, e.g.*, State CEQA Guidelines, Appendix G, Sample Question III ("[w]here available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make" a significance determination).) For example, a lead agency may look to standards included in a Basin Plan to assist in the determination of whether water quality impacts are significant. (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1107 ("[s]uch thresholds can be drawn from existing environmental standards, such as other statutes or regulations").)

Several agencies have developed, or are in the process of developing, thresholds of significance for GHG emissions.[3] For example, thresholds are currently being developed, or have already been adopted by the Bay Area Air Quality Management District for operations and construction,[4] the City of Davis for residential

[3] Reference to these thresholds and proposed thresholds does not reflect an endorsement of those thresholds; rather, they are cited solely for the purpose of demonstrating that agencies are developing such thresholds.

[4] BAAQMD CEQA Guidelines Update: work in progress - http://www.baaqmd.gov/pln/ ceqa/index.htm.

developments,[5] and the South Coast Air Quality Management District for industrial projects.[6] Regardless of the threshold chosen, however, this section does not alter the pre-existing rule under CEQA that if substantial evidence supports a fair argument that a project may result in significant impacts, despite compliance with a threshold, an EIR must be prepared. (*Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 342.) Further, "in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect." (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1109.)

Consistent with the above, if relying on a threshold developed by another agency, lead agencies must exercise caution in selecting a threshold to ensure that the threshold is appropriately applied. For CEQA purposes, a threshold identifies a level below which an environmental impact will normally be less than significant. (State CEQA Guidelines, § 15064.7(a).) Some agencies have adopted "thresholds" pursuant to other laws that may not be applicable in the CEQA context. ARB has adopted several thresholds pursuant to AB32, for example, to address specific purposes that are unrelated to CEQA. For example, the *de minimis* threshold governs the level at which emissions will be regulated by ARB's AB32 regulations. (Health & Safety Code, § 38561(e); Scoping Plan, at pp. 96-97.) CEQA does not permit use of a *de minimis* threshold, however. (*CBE*, *supra*, 103 Cal.App.4th at p. 121.) Additionally, the Reporting Threshold is the level at which emissions from large industrial sources are required to be reported. (Scoping Plan, at pp. 108-109; *see also* CARB Board Resolution 07-54 (2007).) Again, this reporting threshold reflects a policy decision regarding regulation by the ARB, but does not address the level at which environmental harm may occur, and does not satisfy a lead agency's duties under CEQA related to review of projects which may result in significant adverse environmental impacts.

Consistency with a Plan or Regulation

Finally, the third factor in subdivision (b) directs consideration of the extent to which a project complies with a plan or regulation to reduce GHG emissions. That section further states, however, that to be used for the purpose of determining significance, a plan must contain specific requirements that result in reductions of GHG emissions to a less than significant level. This clarification is necessary because of the wide variety of climate action plans and GHG reduction plans that are currently being adopted by public agencies. ARB, for example, recently adopted its statewide Scoping Plan. That plan may not be appropriate for use in determining the significance of individual projects, however, because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping

[5] City of Davis (2009) Greenhouse Gas Emission Threshold and Standards for New Residential Development; Accessed 5/27/09, http://cityofdavis.org/pgs/sustainability/pdfs/15_4.21.09_GHG%20Standards.pdf

[6] SCAQMD (2008) Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, Accessed 5/27/09 http://www.aqmd.gov/hb/2008/December/081231a.htm.

Plan. (Scoping Plan, at p. 9.) Regulations that will require actual reductions of GHG emissions may not be adopted until 2012. (*Ibid.*) Once those regulations are adopted and being implemented, they may, if appropriate, be used to assist in the determination of significance, similar to the current use of air quality, water quality and other similar environmental regulations. (*CBE, supra*, 103 Cal. App. 4th at 111 ("a lead agency's use of existing environmental standards in determining the significance of a project's environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and regulation").)

In addition to the regulations that will be developed to implement the Scoping Plan, this factor would also allow lead agencies to consider plans that are developed to reduce GHG emissions on a regional or local level. (Scoping Plan, at p. 26.) The proposed section 15064.4(b)(3) is intended to be read in conjunction with the section 15064(h)(3), as proposed to be amended, and proposed section 15183.5. Those sections each indicate that local and regional plans may be developed to reduce GHG emissions. If such plans reduce community-wide emissions to a level that is less than significant, a later project that complies with the requirements in such a plan may be found to have a less than significant impact.

Notably, CEQA does not provide a specific definition of "comply" in the context of determining a project's consistency with a particular plan. Some guidance may be gleaned, however, from case law interpreting the requirement that a local government's activities be consistent with its General Plan. In that context, a "zoning ordinance [for example] is consistent with the city's general plan where, considering all of its aspects, the ordinance furthers the objectives and policies of the general plan and does not obstruct their attainment." (*City of Irvine v. Irvine Citizens Against Overdevelopment* (1994) 25 Cal. App. 4th 868, 879.) Reading section 15064.4 together with 15064(h)(3), however, to demonstrate consistency with an existing GHG reduction plan, a lead agency would have to show that the plan actually addresses the emissions that would result from the project. Thus, for example, a subdivision project could not demonstrate "consistency" with the ARB's Early Action Measures because those measures do not address emissions resulting from a typical housing subdivision. (ARB, Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration, October 2007; see also State CEQA Guidelines, §§ 15063(d)(3) (initial study must be supported with information to support conclusions), 15128 (determination in an EIR that an impact is less than significant must be briefly explained).)

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) A key component of environmental analysis under CEQA is the determination of significance. (*Id.* at § 21002; *Protect the Historic Amador Waterways, supra,* 116 Cal.App.4th at

SECTION 15064.7. THRESHOLDS OF SIGNIFICANCE

Specific Purposes of the Amendment

Proposed subdivision (c) of section 15064.7 would allow a lead agency to adopt a threshold developed by another agency, or recommended by experts, provided that such threshold is supported with substantial evidence. This proposed regulation is reasonably necessary because many lead agencies perform general governmental functions, and may lack the specific expertise necessary to develop their own thresholds of significance for GHG emissions. Such agencies may rely on thresholds developed by other agencies with specialized expertise (such as an air quality management district) in conducting their CEQA analyses. (OPR, Thresholds of Significance: Criteria for Defining Environmental Significance, September 1994, at p. 7.) In fact, Appendix G of the State CEQA Guidelines expressly encourages lead agencies to rely on thresholds established by local air quality management districts. (State CEQA Guidelines, Appendix G, Question III.)

Several local and regional air districts are in the process of developing thresholds for GHG emissions. As noted above, for example, thresholds are currently being developed, or have already been adopted by the Bay Area Air Quality Management District for operations and construction, the City of Davis for residential developments, and the South Coast Air Quality Management District for industrial projects. Lead agencies within the jurisdiction of an air district, or other agency, that adopts a GHG emissions threshold may adopt such a threshold as its own. In adopting any threshold of significance, including one developed by an expert or agency with specialized expertise, the lead agency must support the threshold with substantial evidence in the administrative record. (State CEQA Guidelines, § 15064.7(b).)

Independent experts may also develop such thresholds for use by public agencies. For example, the California Air Pollution Control Officers Association has published a White Paper on developing thresholds of significance for GHG emissions. (CAPCOA White Paper, at pp. 31-58.) A lead agency could potentially use CAPCOA's suggestions in developing its own thresholds. Because any threshold must be supported with substantial evidence, and must be adopted through a public process, any threshold recommended by an expert that is ultimately adopted will undergo sufficient scrutiny to ensure its legitimacy. (State CEQA Guidelines, § 15064.7(b).)

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) Defining "significance" is a critical step in the lead agency's impact analysis and therefore needs to be addressed as part of the Proposed Action. Section 21000(d) of the Public Resources Code encourages the development of thresholds. These sections together

SECTION 15126.4. CONSIDERATION AND DISCUSSION OF MITIGATION MEASURES PROPOSED TO MINIMIZE SIGNIFICANT EFFECTS.

Specific Purposes of the Amendment

Section 21083.05 of the Public Resources Code expressly requires OPR and the Resources Agency to develop regulations on the "mitigation of greenhouse gas emissions." The goals of this legislative mandate are to (1) reduce GHG emissions and (2) to provide consistency in the development of GHG emissions reduction measures. There is no indication, however, that the Legislature intended to alter any existing laws governing mitigation under CEQA. The Amendments, therefore, interpret and make specific existing CEQA law and regulations for mitigation of significant impacts resulting from GHG emissions.

Existing section 15126.4 provides guidance on CEQA's general mitigation requirements. To emphasize that mitigation of GHG emissions is subject to those existing CEQA requirements, OPR and the Natural Resources Agency added a new subdivision (c) to the existing section 15126.4. The Amendments identify five general methods of mitigation that may be tailored to the specific circumstances surrounding a specific project. In response to public comments, the Natural Resources Agency provided additional guidance, described below, in the lead-in sentences introducing those five broad categories of mitigation.

Mitigation of Greenhouse Gas Emissions

Comments submitted on the Amendments indicated general concerns that mitigation for GHG emissions may not be effective or reliable. To further clarify the existing mitigation requirements that would apply to measures to reduce greenhouse gas emissions, the Natural Resources Agency revised the lead-in sentences in subdivision (c). Specifically, the Natural Resources Agency added that all mitigation must be supported with substantial evidence and be capable of monitoring or reporting. This addition reflects the requirement in Public Resources Code that a lead agency's findings on mitigation be supported with substantial evidence and that it must adopt a mitigation monitoring and reporting program along with the project if mitigation measures are required. (Public Resources Code, §§ 21081(a)(1), 21081.6.)

In response to comments, the Natural Resources Agency had originally also proposed to add a sentence indicating that only emissions reductions that were not required by some other law or contract could qualify as mitigation. In response to comments on that proposed revision, that sentence is no longer proposed to be added to the lead-in section; rather, subdivision (c)(3) will be clarified, as described below.

Mitigation Identified in an Existing Plan

The first type of mitigation of GHG emissions that may be considered includes measures identified in an existing plan. As indicated above, many agencies are

Forestry Greenhouse Gas Protocols for Voluntary Purposes (October 17, 2007), at pp. 6-7.) ARB has adopted Forest Protocols for large forestry projects. (ARB, Resolution 07-44 (adopting California Climate Action Registry Forestry Sector Protocol (September 2007), Forest Project Protocol (September 2007) and Forest Verification Protocol (May 2007).) ARB has also adopted Urban Forest Protocols for urban forestry projects. (California Climate Action Registry, Urban Forest Project Reporting Protocol and Verification Protocol (August 2008) (ARB adopted on September 25, 2008).) Such projects could be located on the project site or off-site. (Urban Forest Project Reporting Protocol, at pp. 4-5.) The protocols include methods of measuring the ability of various forestry projects to store capture and store carbon.

Consistent with section 15126.4(a), a lead agency must support its choice of, and its determination of the effectiveness of, any reduction measures with substantial evidence. Substantial evidence in the record must demonstrate that any mitigation program or measure is will result in actual emissions reductions. As a practical matter, where a mitigation program or measure is consistent with protocols adopted or approved by an agency with regulatory authority to develop such a program, a lead agency will more easily be able to demonstrate that off-site mitigation will actually result in emissions reductions. Examples of such protocols include the forestry protocols described above. Where a mitigation proposal cannot be verified with an existing protocol, a greater evidentiary showing may be required.

Measures to be Implemented on a Project-by-Project Basis

Finally, the fifth type of measure that could reduce GHG emissions at a planning level is the development of binding measures to be implemented on a project-specific basis. As explained in greater detail in the discussion of proposed section 15183.5, below, ARB's Scoping Plan strongly encourages local agencies to develop plans to reduce GHG emissions throughout the community. In addition, the CEC's Power Plant Siting Committee is assessing the impacts of GHG emission from proposed new power plants and how they can be mitigated. Comments received during the CEC's informational proceedings warranted a lengthy discussion on the practical application of a programmatic approach to mitigating GHG emissions from new power plants. (CEC, *Committee Guidance on Fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts in Power Plant Siting Applications* (2009) at p. 26 to 28.) Existing State CEQA Guidelines sections 15168(b)(4) and 15168(c)(3) recognize that programmatic documents provide an opportunity to develop mitigation plans that will apply on a project-specific basis. Proposed subdivision (c)(5) recognizes that, for a planning level decision, appropriate mitigation of GHG emissions may include the development of a program to be implemented on a project-by-project basis. (State CEQA Guidelines, § 15126.4(a)(2) ("[i]n the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation or project design").)

This type of mitigation is subject to the limits of existing law, however. Thus, proposed subdivision (c)(5) should not be interpreted to allow deferral of mitigation.

Rather, it is subject to the rule in existing section 15126.4(a)(1)(B) that such measures "may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way." (*See also San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal. App. 4th 645, 670-71.)

Suggestions Rejected

During its public involvement process, OPR received comments on its preliminary draft of the proposed amendments related to mitigation. Some comments suggested provisions that were not included in these Proposed Amendments. Several comments, for example, suggested that the Guidelines provide a specific "hierarchy" of mitigation requiring lead agencies to mitigate GHG emissions on-site where possible, and to allow consideration and use of off-site mitigation only if on-site mitigation is impossible or insufficient. OPR and the Resources Agency recognize that there may be circumstances in which requiring on-site mitigation may result in various co-benefits for the project and local community, and that monitoring the implementation of such measures may be easier. However, CEQA leaves the determination of the precise method of mitigation to the discretion of lead agencies. (State CEQA Guidelines, § 15126.4(a)(1)(B); *see also San Franciscans Upholding the Downtown Plan v. City & Co. of San Francisco* (2002) 102 Cal. App. 4th 656, 697.)

Several comments also suggested that mitigation for GHG emissions must be "real, permanent, quantifiable, verifiable, and enforceable." The Proposed Amendments do not include such standards, however, for several reasons. The proposed standard appears to have been derived from section 38562(d) of the Health and Safety Code, which prescribes requirements for regulations to be promulgated to implement AB32. AB32 is a separate statutory scheme, and, as noted above, there is no indication that the legislature intended to alter standards for mitigation under CEQA. Similarly, standards for mitigation under CEQA already exist and are set out in section 15126.4(a). Specifically, mitigation must be fully enforceable, which implies that the measure is also real and verifiable. Additionally, substantial evidence in the record must support an agency's conclusion that mitigation will be effective, and in the context of an EIR, courts will defer to an agency's determination of a measure's effectiveness. (*Environmental Council of Sacramento v. City of Sacramento* (2006) 147 Cal.App.4th 1018, 1041 (mitigation ratio is supportable even at less than 1:1 given the project's circumstances); *Ass'n of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1398 (lead agency has discretion to resolve dispute regarding the effectiveness of an EIR's mitigation measures).) No existing law requires CEQA mitigation to be quantifiable. Rather, mitigation need only be "roughly proportional" to the impact being mitigated. (State CEQA Guidelines, § 15126.4(a)(4)(B); see also id. at § 15142.)

Necessity

SECTION 15130. DISCUSSION OF CUMULATIVE IMPACTS

Specific Purposes of the Amendment

The Proposed Amendments include two revisions to the existing section 15130 of the State CEQA Guidelines. The two proposed amendments are described below.

Section 15130(b)(1)(B)

Section 21083(b) of the Public Resources Code requires that an EIR be prepared if the "possible effects of a project are individually limited but cumulatively considerable." That section further defines "cumulatively considerable" to mean that "the incremental effects of an individual 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."

In determining whether a project may have significant cumulative impacts, a lead agency must engage in a two-step process. First, it must determine the extent of the cumulative problem. To do so, a lead agency must examine the "effects of past projects, the effects of other current projects, and the effects of probable future projects." Once it does so, the lead agency then determines whether the project's incremental contribution to that problem is cumulatively considerable. Section 21100(e) further provides that "[p]reviously approved land use documents, including but not limited to, general plans, specific plans, and local coastal plans, may be used in a cumulative impact analysis."

The existing Guideline section 15130(b) addresses the first step of the process. It offers two options for estimating the effects resulting from past, present and reasonably foreseeable projects. A lead agency may either rely on a list of such projects, or a summary of projections to estimate cumulative impacts. Existing section 15130(b)(1)(B) allows a lead agency to rely on projections in a land use document or certified environmental document that addresses the cumulative impact under consideration.

The proposed amendments would clarify that plans providing such projections need not be limited to land use plans, so long as the plan evaluates the relevant cumulative effect. The proposed amendments would also allow a lead agency to rely on information provided in regional modeling programs. The best projections of the cumulative effect of GHG emissions may be available in up-to-date models such as the International Council for Local Environmental Initiative's Local Government GHG Protocol[8] and the California Climate Action Reserve's Registry general,[9] industry[10] and

[8] ICLEI (2008) Local Government Operations Protocol; Accessed 6/08/09, http://www.icleiusa.org/action-center/tools/lgo-protocol-1

[9] California Climate Action Registry (2009) General Reporting Protocol: Accessed 6/08/09, http://www.climateregistry.org/resources/docs/protocols/grp/GRP_3.1_January2009.pdf

project type protocols.[11] Such projections may also be supplied in plans that are not strictly "land use" plans. For example, regional transportation plans in certain areas will ultimately include sustainable community strategies which will include projections a region's GHG emissions and related cumulative effects. (Gov Code, § 65080(b)(2).) Finally, some agencies are beginning to develop GHG reduction plans or climate action plans that may also include such projections. (ARB, Scoping Plan, Appendix C, at p. C-49; OPR, Book of Lists, at pp. 92-100.)

The proposed amendments are consistent with section 21083 of the Public Resources Code and CEQA case law. Section 21083 requires consideration of "the effects of past projects, the effects of other current projects, and the effects of probable future projects." Projections in the listed types of plans and models may include inventories of existing emissions and projected future emissions. Section 21100 of the Public Resources Code provides that land use plans "may" be used in a cumulative impacts analysis, but that section does not purport to limit the types of plans that can be used in a cumulative impacts analysis to land use plans. Finally, case law has supported reliance on projections provided by industry, for example, to satisfy the requirement for a discussion of impacts caused by closely related projects. (*Ass'n of Irritated Residents*, *supra*, 107 Cal. App. 4th at 1404.)

While models may provide the most up to date information, lead agencies should still look first to information provided in adopted or certified environmental documents. First, such information has already gone through a public and agency review process. Second, to the extent the model provides information that is not provided in the prior environmental document, the relationship of the model and applicable plans must be explained, along with any changes in circumstances.

Section 15130(d)

The Office of Planning and Research had originally proposed the addition of certain plans to section 15130(d). That section states that previously approved land use plans may be used in a cumulative impacts analysis. Those additions were inadvertently excluded from the proposed amendments that were made available for public review on July 3, 2009. Therefore, the revisions were added to revisions that were made publicly available on October 23, 2009.

The added plans include regional transportation plans and plans for the reduction of greenhouse gas emissions. This change is sufficiently related to the proposal that was originally published. Those plans were proposed for addition to other sections of the proposed amendments, for example, and comments were submitted regarding the use of such plans in cumulative impacts analysis. Plans for the reduction of greenhouse gas emissions were described under section 15064(h)(3), above. Regional

[10] California Climate Action Registry (2005) Industry Specific Protocols: Accessed 06/08/09, http://www.climateregistry.org/tools/protocols/industry-specific-protocols.html
[11] California Climate Action Registry (2007) Project Protocols: Accessed 06/08/09, http://www.climateregistry.org/tools/protocols/project-protocols.html

SECTION 15364.5. GREENHOUSE GAS

Specific Purposes of the Amendment

The Legislature has not included a definition of "greenhouse gases" in CEQA, though it did include a definition in AB32. (Health & Saf. Code, § 38505(g).) Thus, new section 15364.5 adds a definition of greenhouse gases. The specified gases are consistent with existing law as they are defined to include those identified by the Legislature in section 38505(g) of the Health and Safety Code.

Notably, the definition in AB32 states that GHG "includes all of the following...." In so stating, the Legislature implies that other gases may also be considered GHGs. The ARB's Scoping Plan also acknowledges that other gases contribute to climate change. (Scoping Plan, at p. 11.) In fact, the EPA's Endangerment Finding explained that several other gases share attributes with GHGs but would not be appropriate for regulation under the Clean Air Act at this time. (EPA Endangerment Finding, at pp. 18896-98.) Therefore, similar to the statutory definition of GHGs in AB32, the definition in the Amendments is not exclusive to the six primary GHGs. The purpose of a more expansive definition is to ensure that lead agencies do not exclude from consideration GHGs that are not listed, so long as substantial evidence indicates that such non-listed gases may result in significant adverse effects. This approach is consistent with the Supreme Court's directive that CEQA be interpreted to provide the fullest possible protection to the environment. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 390.)

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) Section 15364.5 is necessary to make specific the instruction to analyze GHG emissions because it states which gases are considered to be "greenhouse gases" and should be included in the analysis.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Natural Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Natural Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Natural Resources Agency rejected the no action

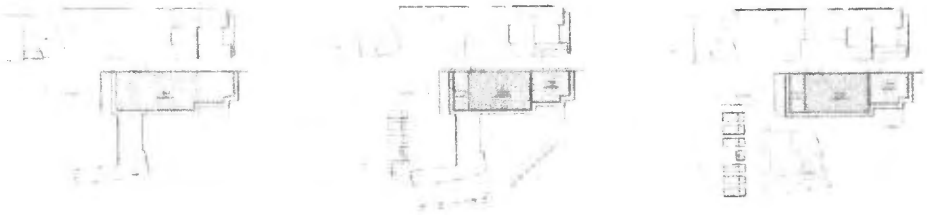
EXHIBIT U

I-DEVINCENZI4

3333 CALIFORNIA STREET
PRESERVATION ALTERNATIVES REPORT

PAGE & TURNBULL

REVISED
07/24/2013



	FULL PRESERVATION ALT Existing building as office; Infill buildings as residential with retail on California St	PARTIAL PRESERVATION ALT (1) Existing building as office; Infill buildings as residential with retail on California St	PARTIAL PRESERVATION ALT (2) Existing building as office; Infill buildings as residential with retail on California St
GROSS SF			
RESIDENTIAL (GSF)	335,361	424,462	571,022
OFFICE (GSF)	367,802	394,302	329,935
RETAIL (GSF)	44,306	44,306	44,306
CHILDCARE (GSF)	14,650	14,650	14,650
PARKING (GSF)	452,900	480,200	478,450
TOTAL GSF	**1,215,019**	**1,357,920**	**1,438,363**
UNIT COUNT			
JR 1-BR	27	27	27
1 -BR	242	242	292
2-BR	55	57	110
3-BR	20	22	52
4-BR	-	21	12
DWELLING UNITS	**344**	**369**	**493**
PARKING COUNT			
RESIDENTIAL	344	369	493
OFFICE	736	789	660
RETAIL	115	115	115
CHILDCARE	29	29	29
COMMERCIAL	60	60	60
CAR SHARE	10	10	10
TOTAL PARKING	**1,294**	**1,372**	**1,367**
OTHER			
BUILDING HEIGHT	45'-67'	45'-80'	45'-80'
STORIES	4-5	2-6	2-6
EXISTING GSF RETAINED	349,998	349,998	285,631
NEW BUILDINGS	4	16	12

Parking Assumptions

Residential	Required 1.0/1.0 DU
Office	Required 2/1000 SF
Retail	4/1000 (F&B), 2/1000 (General)
Childcare	Required 1/25 children = 8; 29 provided
Commercial	60 provided
Car Share	10 required

*Plaza A & B retail parked at 3/1000 (50% General, 50% F&B)
*Walnut retail parked at 4/1000 (general retail)
*Parking GSF Calculation Assumed 350SF/space

Laurel Heights Partners LLC and the Planning Department conducted studies to determine areas on the site that could be developed with minimum impact to the existing on-site view corridors. All new construction proposed in the preservation alternatives has been designed to the greatest extent that is technically feasible to be comparable in square footage to the proposed Project or Project Variant.

EXHIBIT V

SAN FRANCISCO
GENERAL PLAN

Go to...

Urban Design Element

View table of contents: URBAN DESIGN

INTRODUCTION

Nature and Purpose

The Urban Design Element concerns the physical character and order of the city, and the relationship between people and their environment.

San Francisco's environment is magnificent, and the city is a great city, but the unique relationships of natural setting and man's past creations are extremely fragile. There are constant pressures for change, some for growth, some for decay.

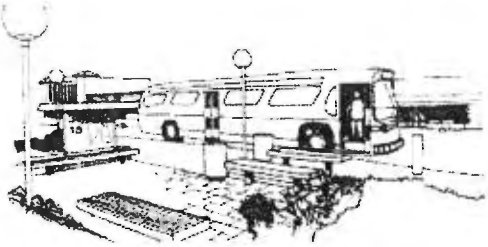


Image and Character

POLICY 1.1
Recognize and protect major views in the city, with particular attention to those of open space and water.

Views contribute immeasurably to the quality of the city and to the lives of its residents. Protection should be given to major views whenever it is feasible, with special attention to the characteristic views of open space and water that reflect the natural setting of the city and give a colorful and refreshing contrast to man's development.

Overlooks and other viewpoints for appreciation of the city and its environs should be protected and supplemented, by limitation of buildings and other obstructions where necessary and by establishment of new viewpoints at key locations.

Visibility of open spaces, especially those on hilltops, should be maintained and improved, in order to enhance the overall form of the city, contribute to the distinctiveness of districts and permit easy identification of recreational resources. The landscaping at such locations also provides a pleasant focus for views along streets.

POLICY 1.2
Recognize, protect and reinforce the existing street pattern, especially as it is related to topography.

Streets are a stable and unifying component of the city pattern. Changes in the street system that would significantly alter this pattern should be made only after due consideration for their effects upon the environment. Such changes should not counteract the established rhythm of the streets with respect to topography, or break the grid system without compensating advantages.

The width of streets should be considered in determining the type and size of building development, so as to provide enclosing street facades and complement the nature of the street. Streets and development bordering open spaces are especially important with respect to the strength and order in their design. Where setbacks establish facade lines that form an

The stakes are high for both the developers and the future of the city, with a resulting tendency toward controversy and frustration, and unfortunate divisive effects in the community. For these reasons, the larger sites require separate and more intensive consideration in policies relating to building form.

OBJECTIVE 3

MODERATION OF MAJOR NEW DEVELOPMENT TO COMPLEMENT THE CITY PATTERN, THE RESOURCES TO BE CONSERVED, AND THE NEIGHBORHOOD ENVIRONMENT.

As San Francisco grows and changes, new development can and must be fitted in with established city and neighborhood patterns in a complementary fashion. Harmony with existing development requires careful consideration of the character of the surroundings at each construction site. The scale of each new building must be related to the prevailing height and bulk in the area, and to the wider effects upon the skyline, views and topographic form. Designs for buildings on large sites have the most widespread effects and require the greatest attention.

Fundamental Principles for Major New Development

These fundamental principles and their illustrations reflect the needs and characteristics with which this Plan is concerned, and describe measurable and critical urban design relationships in major new development.

1. The relationship of a building's size and shape to its visibility in the cityscape, to important natural features and to existing development determines whether it will have a pleasing or a disruptive effect on the image and character of the city.

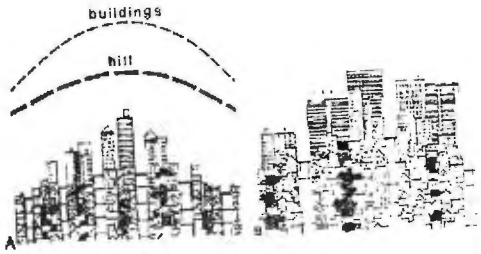
A. Tall, slender buildings near the crown on a hill emphasize the form of the hill and preserve views.

B. Extremely massive buildings on or near hills can overwhelm the natural land forms, block views, and generally disrupt the character of the city.

C. Low, smaller-scale buildings on the slopes of hills, at their base and in the valleys between complement topographic forms and permit uninterrupted views.

D. Low buildings along the waterfront contribute to the gradual tapering of height from hilltops to water that is characteristic of San Francisco and allows views of the Ocean and the Bay. Larger buildings with civic importance, as evidenced by a vote of the people, providing places of public assembly and recreation may be appropriate along the waterfront at important locations.

E. Larger, taller buildings can blend pleasantly with small-scaled areas if the change in scale is not excessive and if their



POLICY 3.3
Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations.

Certain buildings will achieve prominence, whatever their design, because of their exposed locations. Among such locations are those at tops of hills; those fronting on permanent open space such as the Bay, parks, plazas and areas with height limits; those facing wide streets or closing the vista at the end of a street; and those affording a silhouette against the sky, a muted background or a formal order such as in the Civic Center.

At locations of such prominence, the quality of building design is of special significance, and special efforts should be made to promote the best architectural solutions in both public and private buildings. In such solutions, the positive potentials of the site should be emphasized.

Height and Bulk

POLICY 3.4
Promote building forms that will respect and improve the integrity of open spaces and other public areas.

New buildings should not block significant views of public open spaces, especially large parks and the Bay. Buildings near these open spaces should permit visual access, and in some cases physical access, to them.

Buildings to the south, east and west of parks and plazas should be limited in height or effectively oriented so as not to prevent the penetration of sunlight to such parks and plazas. Larger squares and plazas will benefit, in addition, from uniform facade lines and cornice heights around them which will visually contain the open space.

Large buildings and developments should, where feasible, provide ground level open space on their sites, well situated for public access and for sunlight penetration. The location and dimensions of such open space should be carefully considered with respect to the placement of other buildings and open spaces in the area, and with respect to the siting and functioning of the building with which it is provided. Where separation of pedestrian and vehicular circulation levels is possible in provision of such open space, such separation should be considered.

POLICY 3.5
Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.

The height of new buildings should take into account the guidelines expressed in this Plan. These guidelines are intended to promote the objectives, principles and policies of the Plan, and especially to complement the established city pattern. They weigh and apply many factors

buildings. For any given location, urban design considerations indicate the appropriateness of a height coming within the range indicated. The guidelines are not height limits, and do not have the direct effect of regulating construction in the city.

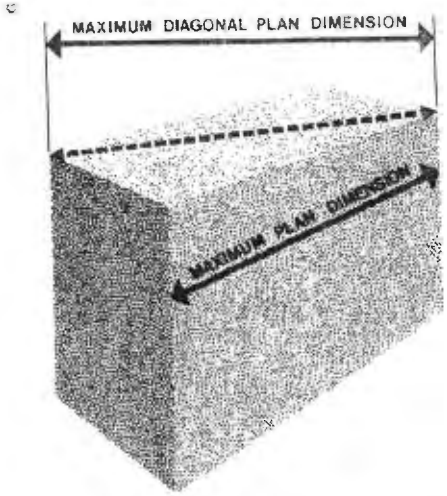
POLICY 3.6
Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.

When buildings reach extreme bulk, by exceeding the prevailing height and prevailing horizontal dimensions of existing buildings in the area, especially at prominent and exposed locations, they can overwhelm other buildings, open spaces and the natural land forms, block views and disrupt the city's character. Such extremes in bulk should be avoided by establishment of maximum horizontal dimensions for new construction above the prevailing height of development in each area of the city.

map 5 - *Urban Design Guidelines for Bulk of Buildings*

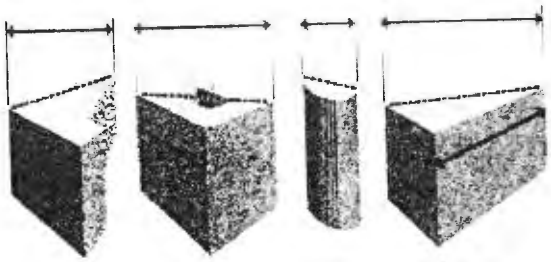
The guidelines for building bulk expressed in this Plan are intended to form an urban design basis for such regulation. These guidelines favor relatively slender construction above prevailing heights, but would not limit the horizontal dimensions of buildings below those heights. Generally speaking, the guidelines would not limit the total floor space that could be built, but would help to shape it to avoid negative external effects. If two or more towers are to be built on a single property, their total effect should be considered and a significant separation should be required between them. The precise form of the building or buildings would in large measure be left to the individual developer and his architects under these guidelines.

The guidelines of this Plan for building bulk are only minimum guidelines, and they are not intended to reduce the necessity for other expressed policies pertaining to height, visual harmony or other factors. Even with building bulk kept within these guidelines, efforts should be made to articulate and soften building surfaces to reduce the massiveness of appearance to a great degree.



METHOD OF MEASURING BULK

MAXIMUM PLAN DIMENSION: The greatest horizontal dimension along any wall of the building, measured at a height corresponding to the prevailing height of other development in the area.



BULK MEASUREMENTS APPLIED TO OTHER BUILDING FORMS

MAXIMUM DIAGONAL PLAN DIMENSION: The horizontal dimension between the two most separated points on the exterior of a building, measured at a height corresponding to the prevailing height of other development in the area.

Large Land Areas

POLICY 3.7
Recognize the special urban design problems posed in development of large properties.

The larger a potential site for development, the greater are apt to be the size and variety of the urban design questions raised. Larger sites may mean greater visual prominence of development and greater impact upon the city pattern. As more land area is included in a single project, the possibilities are increased that the public resources in natural areas, historic buildings and street space will be affected. Larger developments also have substantial requirements for public services, including transportation.

Under normal land use controls, most large development is governed by a "floor area ratio", which permits floor space to be built in each project in proportion to the amount of land area available. The floor area ratio limit tends to be geared to development of sites of small and moderate size, but not to take account of the impact of occasional developments that take up one or more whole blocks of land. Such developments, under this type of formula, may have a single building of truly massive proportions, or a series of building forms constructed in one or more phases.

These differences in nature and impact require that large sites be given close consideration in urban design planning.

POLICY 3.8
Discourage accumulation and development of large properties, unless such development is carefully designed with respect to its impact upon the surrounding area and upon the city.

The height and bulk guidelines of this Plan will help to some extent in reducing the negative effects of development on large sites. They will not, however, deal with all the special problems raised or guarantee good quality of design.

Other measures are available and may be necessary. In some cases, ordinary zoning restrictions might be tightened, or rezoning to permit a large development might be deferred in the absence of adequate assurances of compatible development. New standards might be added to require open space in large projects, and floor area ratios might be reduced or made less advantageous for larger sites.

Because government involvement often occurs as larger sites are developed, through marketing of the site itself, through redevelopment powers, through vacation of streets or in some other manner, the government role might be made more restrictive in such involvement.

There is no substitute, however, for early and frequent communication as to the merits and design of a proposed project between the developer and his architects on the one hand and public urban design professionals and interested citizens on the other. Such communication will give an early and more reasoned assessment of the positive and negative effects of the project upon the city and the surrounding area, and will reduce the chances of later delays and controversies. Processes toward these ends should be employed for all major projects in the city.

POLICY 3.9
Encourage a continuing awareness of the long-term effects of growth upon the physical form of the city.

directly to the waterfront and provide a sense of contact with the water

Health and Safety

POLICY 4.1
Protect residential areas from the noise, pollution and physical danger of excessive traffic.

In order to reduce the hazards and discomfort of traffic in residential neighborhoods, a plan for protected residential areas should be put into effect. Such a plan is intended to prevent or discourage heavy, fast and through traffic from using residential streets, and to put such traffic on arterial streets where the impact upon residential areas will be less disruptive. Although development of further traffic-carrying capacity on some arterials may be warranted, the local streets should remain as they are or have their capacity reduced.

The speed and volume of traffic on protected streets should be limited by all practical means. Such means include making streets discontinuous to divert traffic from a straight path, narrowing streets and intersections, creating the appearance of narrowness through landscaping and other improvements, and prohibiting access from arterial streets by signs and barriers. Such changes in streets should be so designed that they will not limit the access of vehicles for police and fire protection and other emergency purposes in the protected areas. The total effect of these changes in residential streets should be to give the dominant position to residential qualities and pedestrians rather than to vehicles.

Land uses throughout the city should be regulated in such a way that heavy traffic will not be drawn through protected streets by large commercial, industrial and institutional traffic generators. Traffic for these generators should be channeled as much as possible on arterial streets. High traffic speeds should be discouraged on non-residential streets where the traffic on those streets is destined for protected residential streets.

POLICY 4.2
Provide buffering for residential properties when heavy traffic cannot be avoided.

From: Jon Dishotsky
To: richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); Zushi, Kei (CPC); Stefani, Catherine (BOS)
Cc: Jon Dishotsky
Subject: 3333 California Street - Letter of Support
Date: Monday, December 10, 2018 3:57:21 PM

Greetings hard-working, respected and gracious - Planning Commissioners, Planner Zushi and Supervisor Stefani,

As a neighbor and resident who has lived in the city for twelve years, and in Laurel Village for 5 years, I am writing to express my support for the proposed development at 3333 California Street. I am a developer of affordable and market-rate housing in San Francisco, however, for the purposes of this letter, I will take off my business hat, and write you as a neighbor, a husband, a father, and a concerned citizen. 1 (ME-1)

As many of you know, the city of San Francisco is grappling with a housing affordability crisis. The Planning Department recently published a report (2017) titled the “Family Friendly Briefing” that noted with the building boom in the city, which for the most part has introduced more studios and one-bedroom apartments, was unlikely to bring in more families. California, which has one of the world’s 10 largest economies, recently released data showing the lowest birth rate since the Great Depression. Most of these stats, from my generation, are due to the higher cost of living for families.

By creating units designed for two or more bedrooms, the project will be a great place to house families, and a great amenity for existing residents and neighbors. Our growing family is most excited about the 5 acres of open space where our daughter (and future kids) can play. It will help create a family-friendly community environment. The pedestrian walkways through the site will create a beautiful thoroughfare so that neighbors can connect and enjoy views of all of the city.

I urge you to approve this project so that families like ours can continue to thrive in San Francisco. We have benefited so much from the wonderful opportunity in this great city – we hope future families can as well.

Warmly,

Jon Dishotsky
CEO & co-founder
Starcity
415-519-2973
jon@starcity.com

Subject: 3333 California St DEIR
Date: Monday, January 7, 2019 at 2:31:05 PM Pacific Standard Time
From: Jane Drake
To: Zushi, Kei (CPC)
CC: Stefani, Catherine (BOS), laurelheights2016@gmail.com, frfbeagle@gmail.com

As a homeowner and neighborhood resident for more than 20 years, I fully support projects that provide additional housing, but in a way that maintains the character of the neighborhood. The real need is for housing, not for additional retail, as proposed by the developer. There are long-time small businesses in Laurel Village, Sacramento Street, and a few blocks away at Geary and Masonic that fill this purpose. 1 (ME-1)

I fully support the Community Full Preservation Residential Alternative for 3333 2 (AL-2)

It preserves the Historic Characteristics of this wonderful site.
It provides 558 (or 744 in the Variant) housing units.
It builds them in three years.
It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.
It does not create 8,000 retail auto trips per day.
It does not generate approx. 15,000 tons of greenhouse gases.
It preserves both the present childcare center and the existing café.
It is compatible with the surrounding neighborhoods for character, style, scale and bulk.

I strongly oppose the Developers Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it poses threats to pedestrian safety; it contributes to climate change. 3 (ME-1)

Thank you,

Jane Drake

93 Iris Ave

San Francisco, CA 94118

Subject: DEIR to 3333 California St.
Date: Saturday, January 5, 2019 at 2:10:01 PM Pacific Standard Time
From: SHARON ESKER
To: Zushi, Kei (CPC)
CC: planning@rodneyfong.com, Moore, Kathrin (CPC), CatherineStefani@sfgov.org, frfbeagle@gmail.com

To all concerned,

I have lived on Presidio Ave. between Ca. and Pine St. for 34 years. This is my home and neighborhood and I would like to voice my concerns regarding this development which will affect myself, the neighborhood, and future generations. 1 (GC-1)

I fully support the Community Full Preservation Alternative: 2 (AL-2)
- It preserves the historic character of the site
- It provides 558 housing units built in 3 years
- It does not include retail or office space, it does not generate increased auto traffic for retail
- It preserves the present childcare center and dining cafe
- It matches the surrounding neighborhoods for character and style
- It will preserve the existing small businesses in the neighborhood (Laurel shopping and Sacramento St.)

I strongly oppose the Developer's Destructive Proposal: 3 (ME-1)
- It will bring excessive, unnecessary, and destructive noise, pollution, traffic and congestion to the area.
- It will affect the quality of life, threaten safety of pedestrians, and contribute to increased climate change

The traffic and congestion are already huge problems on Presidio Ave. The intersections are already crowded with pedestrians, bicyclists, buses, vans, and delivery trucks. I am opposed to the increased delivery traffic on Presidio ave. The soot on my building and steps is terrible, and it is difficult at rush hour getting out of my garage. I am concerned about the air pollution which will affect our health and the increased height which will cut out sunlight. The landscaping and green areas are our only relief and I think as much as possible should be preserved. 4 (TR-14) 5 (TR-10) 6 (AQ-4) 7 (TR-7) 8 (AQ-2) 9 (WS-2) 10 (PD-3)

Thank you for your time and study of this proposal.
Sharon Esker

I-FARDIS

From: Zhubin Fardis
To: Zushi, Kei (CPC); Stefani, Catherine (BOS)
Subject: 3333 California Draft EIR comments
Date: Tuesday, January 08, 2019 1:53:44 PM

My wife and I live in the Laurel Heights neighborhood, on the block that would be across from the 3333 California development. I have very strong concerns about the impacts to the neighborhood mentioned in the the draft EIR. 1 (GC-1)

The huge increase in traffic, the impact on parking, the ridiculous length of time to complete this project, and environmental/pollution impact are all MAJOR concerns. The influx of hundreds of new residents and the proposed retail will greatly reduce the amount of street parking in the neighborhood (which hurts people such as us who have no garage) and create horrible traffic. Speaking of the proposed retail, there are already empty retail shops in the Laurel Village shopping center and on Sacramento street (not to mention throughout the city). It seems like adding a large retail space would hurt the existing businesses and be hard to fill up (not to mention adding a ton of time, traffic, and pollution to this project). 2 (TR-11) 3 (ME-1)

The developer's request for 15 years to complete the project is a **ludicrously** long time. It seems like something in the 3-5 year range would be more reasonable and would limit the construction impact of traffic, noise and pollution on the neighborhood. Considering that there are already several other large developments happening in the same neighborhood (e.g.3700 California, Lucky Penny) there will already be a lot of ongoing construction. The environmental report is very concerning. This has been for the most part a quite, residential neighborhood with a lot of families. Pollution, traffic, noise, etc....all have huge, negative impacts on our community. 4 (PD-1) 5 (GC-1)

As an alternative to the proposed development, I would like to support the Community Full Preservation Residential Alternative for 3333 (to be built in 3 years). Please take our concerns seriously. 6 (AL-2)

Thank you,

Zhubin Fardis

From: Arlene <arlenefilippi@yahoo.com>
Sent: Thursday, December 13, 2018 9:38 AM
To: richhillissf@gmail.com; Melgar, Myrna (CPC) <Myrna.Melgar@sfgov.org>; planning@rodneyfong.com; Johnson, Milicent (CPC) <Milicent.Johnson@sfgov.org>; Koppel, Joel (CPC) <Joel.Koppel@sfgov.org>; Moore, Kathrin (CPC) <kathrin.moore@sfgov.org>; Richards, Dennis (CPC) <dennis.richards@sfgov.org>; CPC-Commissions Secretary <commissions.secretary@sfgov.org>; laurelheights2016@gmail.com
Subject: 3333 California Street, Planning Commission Meeting Today

Good Morning Commissioners,

I am very much disappointed that I am not able to attend today's meeting regarding 3333 California Street. For your information, I am thoroughly familiar with the Developer's Proposal (which I find to be intrusive to say the least) but **strongly support the Community Full Preservation Alternative**.
The Alternative is of great importance to my fellow neighbors, to my family and to our family business (also located near the proposed project). 1 (AL-2)

I ask that you please listen to those neighbors that will appear before you; regretfully, the Developers have had no interest in listening to our concerns.

I strongly urge the Planning Commission to grant a 15 day extension of the due date for comments on this DEIR. Without a doubt, it is a lengthy and complex document and Christmas Eve is surely not a reasonable date for the DEIR Comments to be due. Time is needed. 2 (GC-3)

I would appreciate your consideration and I thank you for your attention.

Arlene Filippi
42 Wood Street
San Francisco, CA 94118

From: Arlene
To: richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); CPC-Commissions Secretary; Stefani, Catherine (BOS); laurelheights2016@gmail.com; Richard Frisbie
Subject: DEIR 3333 California Street
Date: Monday, January 07, 2019 8:52:52 PM

Commissoners,

I am a long time resident of the Laurel Heights area and have attended many meetings regarding the development of the 3333 California Street property. Like so many of my neighbors, I am in opposition to the Developer's Proposal and I state this for the following reasons: 1 (ME-1)

The Developer's proposed 100,000 square feet of Retail/Office/Commercial space is unneeded. We are currently surrounded by numerous small businesses (many of them family owned). They have long provided for our needs and are greatly appreciated.

The Developer's Proposal destroys the historical characteristics of the site. Sadly, under the Developer's Proposal, much of Laurel Hill will be gone as will most of the mature trees and the very welcoming green space. 2 (CR-2)

The requested fifteen years to construct the project is unreasonable. Why should neighbors be subjected to fifteen years of demolition, excavation, noise and pollution? 3 (PD-1)

While I am very much against the Developer's Proposal, I am in favor of the Community Full Preservation Alternative. Unlike the Developer's Proposal, the Alternative does not include the massive Retail/Office/Commercial Complex. It retains the character of the neighborhood and provides 558 housing units to be built in three years and not fifteen. 4 (AL-2)

I would appreciate your consideration.

Arlene Filippi
42 Wood Street
San Francisco, CA 94118

I-FONG

From: Shannon Fong
To: Zushi, Kei (CPC); Stefani, Catherine (BOS)
Subject: 3333 California Draft EIR comments
Date: Tuesday, January 08, 2019 1:32:49 PM

My husband and I live in the Laurel Heights neighborhood, on the block that would be across from the 3333 California development. I have strong concerns about the impacts to the neighborhood mentioned in the the draft EIR. 1 (GC-1)

One of our main concerns is the increase of traffic and the impact on parking and the length of time that the project will take. Since we don't have a parking spot, we rely on being able to park on the street. The influx of hundreds of new residents and the proposed retail will greatly reduce the amount of street parking in the neighborhood. 2 (TR-11) Speaking of the proposed retail, there are already empty retail shops in the Laurel Village shopping center and on Sacramento (not to mention throughout the city) it seems like adding a large retail space would hurt the existing businesses and be hard to fill up. 3 (ME-1)

The developer's request for 15 years to construct the project seems like a ludicrously long time to construct a project. It seems like something into the 3-5 year range would be more reasonable and would limit the construction impact of traffic, noise and pollution on the neighborhood. Considering that there are already several other large developments happening in the same neighborhood (e.g.3700 California, Lucky Penny) there will already be a lot of ongoing construction.. 4 (PD-1)

As an alternative to the proposed development, I would like to support the Community Full Preservation Residential Alternative for 3333 (to be built in 3 years). 5 (AL-2)

Thank you,
Shannon Fong

From: Jane Fridlyand
To: Zushi, Kei (CPC); richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); CPC-Commissions Secretary
Cc: Stefani, Catherine (BOS); Richard Frisbie; laurelheights2016@gmail.com
Subject: Comments on 3333 California project
Date: Monday, January 07, 2019 9:30:01 PM

Dear Mr. Zushi and Commissioners,

I am writing to express my deep concerns over the current proposal for 3333 California, and to express support for the Community Alternative. 1 (GC-1) 2 (AL-2)

I have lived in Pacific Heights for 7 years, initially next to Lafayette park and for the past three years next to Alta Plaza park, with my kindergarten age daughter and my husband. We live on Jackson between Baker and Broderick, about six blocks from the corner of California and Presidio, one of the major intersections that would be affected by the project.

We use the JCC frequently, and are constantly using both California, Presidio, Masonic and other streets around the site to get to our destinations, both by car and bus (1, 3 and 43). We also shop at Laurel Village, Trader Joe's and other local destinations.

We are concerned that the proposed project would affect us in numerous ways, the most important of which I outline below: 3 (GC-1)

- The proposed 7-15 year time frame for the project is mind-boggling. It will disrupt the very fabric of the neighborhood as its very important areas will become unusable for entire childhood of kids of our daughters age. 4 (PD-1)
- The long timeframe makes it more likely that in the case of an economic downturn, such as in 2008, the project could halt indefinitely.
- The truck traffic and other construction traffic is a threat to pedestrian safety. The congestion will force cars onto nearby side streets, affecting the whole area. 5 (TR-6)
- The size and scope of the project will have major environmental impact in terms of the amount of GHG released. 6 (GHG-3)

Instead, I strongly support the Community Alternative, which will produce the same amount of much-needed housing. It will increase the density of housing in the area, but will not have the excessive and unneeded retail, office and commercial space. It also can be completed in a reasonable timeframe, thus balancing the needs of the neighborhood and the city as a whole. 7 (AL-2)

I understand that the city needs more housing, but letting developers proposal can not possibly be the right way to go. I urge the commission to work with the developer to be responsive to community concerns by scaling down the proposal. 8 (ME-1)

Thank you very much for your consideration.

Sincerely,

Jane Fridlyand
2947 Jackson Street
San Francisco, CA 94115
415-652-1920

From: Janet Frisbie <jan_wenn@hotmail.com>
Sent: Wednesday, December 12, 2018 3:51 PM
To: richhillis@gmail.com; Melgar, Myrna (CPC) <Myrna.Melgar@sfgov.org>; planning@rodneyfong.com; Johnson, Milicent (CPC) <Milicent.Johnson@sfgov.org>; Koppel, Joel (CPC) <Joel.Koppel@sfgov.org>; Moore, Kathrin (CPC) <kathrin.moore@sfgov.org>; Richards, Dennis (CPC) <dennis.richards@sfgov.org>; CPC- Commissions Secretary <commissions.secretary@sfgov.org>
Cc: LaurelHeights2016@gmail.com
Subject: 3333 California Street
development

Planning Commissioners,

Please grant a 15-day extension of the 45-day comment period on the Draft EIR from December 24 to January 8, 2019. The project construction would last for 7-15 years and there is substantial community opposition to the developers concept. Sixty (60) days are allowed by law and have been granted for complex or controversial projects. Last week the SF Historic Preservation Commission expressed support for a full preservation alternative. 1 (PD-1) 2 (AL-2)

Our Community Full Preservation Residential Alternative which I totally support preserves this historic site plus offers the same amount of housing units (558 with a 744 variant) as the developers. Our Alternative plan does not destroy the award winning building and landscaping with trees dating back to the days of the Laurel Hill Cemetery. This plan is expected to be completed in approximately 3 years. It is a thoughtful, balanced and timely use of this property.

PSKS has not considered the historical significance of this property nor the consequences of dragging this construction out for up to 15 years. This length of construction would be intolerable for the surrounding neighborhoods. In addition, I find it shocking that the developers would be allowed up to 15 years to complete this project when there is a very real housing crisis in The City. 3 (CR-2) 4 (PD-1)

The amount of excavation the developers propose is of great concern. It totally destroys this beautiful and historic site. The amount of dirt, dust, noise and congestion is unimaginable. Also, there is serpentine rock on this site which, if disturbed, can release asbestos dust, clearly a documented health hazard. 5 (CR-3) 6 (GC-1) 7 (HZ-1)

Therefore, for these reasons I fully support the Community Full Preservation Residential Alternative for 3333 California Street and strongly oppose the PSKS plan. 8 (AL-2)

Very truly yours,
Janet Frisbie
525 Laurel st, 94118

Sent from my iPad

From: Janet Frisbie
To: Zushi, Kei (CPC)
Subject: Fwd: 3333 California Street
Date: Monday, January 07, 2019 5:39:45 PM

My apologies for not having you on the list.

Sent from my iPad

Begin forwarded message:

From: Janet Frisbie <jan_wenn@hotmail.com>
Date: January 7, 2019 at 4:37:02 PM PST
To: "richhillis@gmail.com" <richhillis@gmail.com>, "myrna.melgar@sfgov.org" <myrna.melgar@sfgov.org>, "planning@rodneyfong.com" <planning@rodneyfong.com>, "milicent.johnson@sfgov.org" <milicent.johnson@sfgov.org>, "joel.koppel@sfgov.org" <joel.koppel@sfgov.org>, "kathrin.moore@sfgov.org" <kathrin.moore@sfgov.org>, "dennis.richards@sfgov.org" <dennis.richards@sfgov.org>, "commissions.secretary@sfgov.org" <commissions.secretary@sfgov.org>
Cc: Catherine Stefani <catherine.stefani@sfgov.org>, "LaurelHeights2016@gmail.com" <LaurelHeights2016@gmail.com>, Richard Frisbie <frfbeagle@gmail.com>
Subject: 3333 California Street

I completely support the Community Full Preservation Residential Alternative plan for 3333 California Street. The reasons are many including the fact that it preserves the historical characteristics of this site by keeping the existing award winning building plus the original landscape and hardscape. This Community Alternative plan provides the same number of housing units as the developers plan, that is 558 or 744 in the variant, without generating massive amounts of greenhouse gases. There will not be unnecessary excavation as in the developers plan thereby lessening the dirt, dust, noise and other pollutants. There is serpentine rock under the site that, if disturbed, can release asbestos dust, a well known health hazard. The Community Full Preservation Residential Alternative plan is expected to be completed in about 3 years. This bears repeating. The Community Full Preservation Residential Alternative plan is expected to be completed in about 3 years.

1 (AL-2)

I strongly oppose the Developers proposal with its unnecessary retail and resulting congestion, its destructive excavation and ruination of a California State Historical Site and the alarming construction time schedule. I find it shocking that the Developers would propose to need up to 15 years to complete this project.

2 (ME-1)

3 (PD-1)

Again, up to 15 years to complete this project! That makes a mockery of The City's very real and current housing crisis and shows zero concern for the residents in the surrounding neighborhoods. Fifteen years of construction would make this area unlivable for these neighborhoods. I fully expect that my husband and I will have to move out for at least part of this intolerable construction period. Not a pleasant experience to look foreword to for a couple in their 70's.

3 (PD-1) cont'd

These desirable neighborhoods surrounding the 3333 California Street property deserve a thoughtful, balanced and relevant use of this beautiful 10+ acre parcel. The Community Full Preservation Residential Alternative plan will give them the best of the historical characteristics and a 21st century prospective that will continue the tradition for what has always been a very special area of The City. Show the 800+ signers of the petition that you understand the importance and magnitude of this decision.

4 (AL-2)

Very truly yours,

Janet Wennergren Frisbie
525 Laurel Street, 94118

Sent from my iPad

From: Richard Frisbie
To: Zushi, Kei (CPC); Stefani, Catherine (BOS); Richards, Dennis (CPC); Koppel, Joel (CPC); CPC-Commissions Secretary; Moore, Kathrin (CPC); Milicent A. Johnson - Commissioner; Melgar, Myrna (CPC); Rich Hillis - Commission President; Rodney Fong - Commissioner
Subject: Discrepancies and Comments with 3333 California St. DEIR
Date: Monday, January 07, 2019 12:31:48 PM
Attachments: COMMUNITY COMMENTS, CHALLENGES, DEFICIENCIES FOR THE DEIR Rev.docx

Find attached my general comments concerning the Project and Variant proposed in the DEIR and the supporting information. In general the DEIR is rife with inaccuracies, incorrectness and incompleteness.
I will submit more detailed and referenced comments prior to 5 pm January 8, 2018.
Richard Frisbie

1
(GC-1)

I-FRISBIER1

SUMMARY of DEFICIENCIES/INACCURACIES for the 3333 California DEIR

"Incorrect, Incomplete, Inaccurate"

The developer's request for 15 years to construct the project is suspect. This looks like a plan to sell a new entitlement on an up-zoned property. Developers all over town are selling new entitlements rather than build housing. Alternatives analyzed in the Draft EIR would be built in 3 to 5 years. The Community Preservation Alternative would be built within three years.

2 (PD-1)

I fully support the Community Full Preservation Residential Alternative for 3333

3 (AL-2)

It preserves the Historic Characteristics of this wonderful historic site.
It provides 558 (or 744 in the Variant) housing units.
It builds them in three years.
It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.
It does not create 8,000 retail auto trips per day.
It does not generate approx. 15,000 tons of greenhouse gases.
It preserves both the present childcare center and the existing café.
It is compatible with the surrounding neighborhoods for character, style, scale and bulk.

I strongly oppose the Developers Destructive Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it poses threats to pedestrian safety; it contributes to climate change.

4 (ME-1)

The Community Full Preservation Alternative will generate ZERO retail auto trips to 3333 as opposed to the 8,000 retail caused the Developers Destructive Proposal.

5 (AL-2)

The Community Full Preservation Alternative Preserves and Protects Small and Family Owned Businesses

5 (AL-2) cont'd

The Community Full Preservation Alternative will protect the small, family owned businesses in Laurel Village, Sacramento St. and Presidio Ave. A quick walk around these neighborhoods will clearly show the immense pressure these businesses are experiencing. More retail is unneeded and unwanted. It will destroy our local businesses.

The Neighborhoods are well served by businesses at Laurel Village, Sacramento St., Trader Joe's, City Center, California St. etc. we do not need more, more, more.

We do not need the more than 100,000 square feet of Retail, Office, Commercial space that the Developers Destructive Proposal calls for.

One of the reasons the Developer destroys this historic site is to create enough space for this unneeded and unwanted Retail/Office/Commercial (ROC) nonsense.

The CPMC development, a Community supported plan by the way, adds 270 housing units and the Developer and neighbors have agreed to have no Retail. Why is 3333 being treated differently by forcing unneeded and unwanted ROC (Retail/Office/Commercial) against the overwhelming opposition of the surrounding residents?

The Community Unanimously Opposed the Developers' Massive Retail, Office, Commercial (ROC) Complex.

In a recent Petition Drive at Laurel Village over 800 residents signed the Petition opposing the Developers Full Destruction and Massive ROC plan and supporting the Community's residential Alternative. Three people opposed it the Petition. These signatures were gathered in less than 8 hours.

In the Petition Drive the 800 signatories opposed rezoning 3333 and also opposed revoking Resolution 4109, an agreement between the City and the surrounding neighborhoods.

6 (PP-1)

"A deal is a deal "was how everyone felt.

The Community Full Preservation Alternative will already be more than twice as dense as the surrounding neighborhoods so any rezoning is uncalled for, unneeded and unwanted.

These signatures are in the hands of the District 2 Supervisor.

The Developers Destructive Proposal Generates Excessive Levels of Greenhouse Gases and Even More Destructive Climate Gases.

7 (GHG-2)

Based on current estimates, it will generate approx. 15,000 tons of Greenhouse Gases (GHG)

and the many associated and far more destructive climate changing gases that accompany the primary Carbon Dioxide gas.
The Community's Full Preservation Alternative will, by comparison, generate approx. 4,100 tons of GHG.
The Community Alternative mitigates the GHG generated by more than 70 percent, providing a dramatic reduction in a time of climate change.
The GHG calculation is our best estimate. Neither Planning nor the Developer will provide the volume of concrete or weight of steel required.
The Developer claims to have built many buildings and many complexes, Planning claims to oversee thousands of such projects and yet no one can even make an educated estimate as to the concrete and steel required.
Could there be something they want to conceal from the public?
Much like they concealed the Historic nature of 3333 for over 4 years?

Planning ignores the GHG generated by the construction materials despite the requirement to address "indirect" GHG. Planning requires the GHG generated in dispensing water to control dust, etc, to be calculated but not the GHG generated in manufacturing the materials used in the construction!
Example: The GHG generated by the diesel fuel burned to deliver a load of concrete is calculated to the decimal point but the GHG generated by the concrete itself is ignored.
What do the numbers show?
Assume a 30 mile round trip: the truck burns approx. 10 gallons of diesel and generates 225 lbs. of CO2. The concrete in the truck generated over 5,000 lbs. of CO2 during manufacture.
So, Planning recognizes the 225bs. but claims the 5,000lbs. is irrelevant **essentially ignoring 95% of the real GHG!**
And using this logic throughout the Initial Study Planning concludes that GHG are "Less than Significant" and therefore need not be addressed!
Folks, you can't make this stuff up as its beyond one's imagination.
The steel, glass, etc. are all treated similarly.
Apparently if you can't see the GHG actually being emitted into the air it doesn't actually exist sothere is no need to consider it. So much for a responsible approach to Climate Change.

As noted above the Community Full Preservation Alternative generates less than one third the GHG, however Planning chooses to calculate them.
NOTE: Over 95% of the cement/concrete used in the Bay Area is totally manufactured in the Bay Area beginning with the mining process so these GHG are being injected into our air.

7 (GHG-2) cont'd

The Community Alternative is Superior, Sooner and Safer

8 (AL-2)

We pollute less and protect the environment: the Community Alternative will ALWAYS generate less than one third the GHG generated the Developers Full Destructive Alternative:
We destroy less: we preserve the historic site.
We build less: 4 new buildings versus the Developers'11 new buildings plus creating two tall towers out of the existing main building.
One single level underground parking garage for 450 spaces versus a complex of parking garages, some of three levels, for 896 spaces;
We excavate less: 90,000cubic yards (9,000 dump truck loads) versus 288,000 cubic yards (32,000 dump truck loads);
We preserve and protect our local businesses and shops: no added unwanted and unneeded and neighborhood destroying family-owned or small retail or business;
We better protect the health and well being of everyone: no 13,000+ auto trips to pollute the air, generate the noise, put pedestrians at risk, unload trucks on the streets, etc.

The Community's Full Preservation Alternative solution will always be three times More Climate Friendly; Far Less Disruptive; Far More Family Friendly; Far Safer for Pedestrians; Far Healthier Air Quality-wise; and Provide Critical Housing at Least Three Times Faster than Developers' solution.

We fully support housing

9 (ME-1)

The Community has supported the Lucky Penny (95 units), CPMC (270 units) and now 3333 (558) units. It was the Community that spearheaded the effort that led to the approval of the Lucky Penny Project.
Over 1,000 units in a half mile radius.
So please don't offend me and misrepresent the Community's position.
We support housing and history; we oppose unneeded, unwanted and unnecessary Retail and mindless destruction of a historic site.
AND we provide housing in as much as 12 years sooner than the Developers Full Destructive Plan does.
The YIMBYs should be 100% in favor of the Community's Full Preservation plan and if they're not then they are being grossly hypocritical.

10
(TR-2)

The Community Full Preservation Alternative Prevents Excessive Traffic from the Massive ROC Complex, Uber & Lyft. Etc. from Overrunning our Neighborhoods.

Recent studies have shown that the City's method of calculating auto trips, and the resulting chaos and congestion is deeply flawed, to the point of being misleading.
At the time the VMT (Vehicle Miles Travelled) methodology was developed, SF CHAMP last updated Nov. 2014, the Transportation Networking Companies (TNCs) -Uber/Lyft/Chariot etc. were still in their infancy and so the VMT methodology fails to account for their incredibly disruptive impact.
The TNCs average, conservatively, in excess of 170,000 trips per day in San Francisco.
There are about 2,000 taxi medallions in San Francisco so TNCs do not just replace taxis they overwhelm them by orders of magnitude.
Also, implementation of the VMT methodology is not mandated until 2019 but as Planning and The Developers were unable to explain away the 8,000 Retail Auto trips generated by the existing, and still acceptable, Level of Service methodology, they implemented the VMT methodology with "refinements." Planning calculates the Developers Destructive Proposal using VMT methodology will generate approx. 5,800 total auto trips for 3333 for Retail + Office + Residential which is an entirely bogus number based on questionable assumptions, such as "The SF Guidelines **do not provide a specific methodology to** assess the number of trips….." Planning has therefore, with no supporting documentation or analyses, applied "appropriate refinements to the standard travel demand…."
Rather amazing that these "refinements" all work in the Developers favor.
Nowhere in these "refinements" have TNCs been taken into account!

Oh, by the way, the "refinements" used were created for The Mission Rock Project at Seawall Lot 337 and Pier 48 as well as the Pier 70 Mixed Use District Project!

Seawall Lot 337 & Pier 48 summary:
Project type Mixed-use, open space, residential, commercial
Project area Approx. 28 acres
Proposed building area 1.3 – 1.7 million sf commercial; 750,000 - 1.5 million sf residential; 150,000 – 200,000 sf retail, 850,000 sf structured parking

Seawall Lot 337 & Pier 48

10
(TR-2)
cont'd

Pier 70 summary: "The 35acre waterfront mixed-use neighborhood will provide housing, waterfront parks, artist space, local manufacturing and rehabilitated historic buildings." Altogether the redevelopment covers 35 acres and up to 3,025 new units of housing—the exact count is still in flux, with a low end of 1,645—and its roots stretch back a decade to a 2007 port plan.

WOW! What remarkably similar projects to 3333. What "refinements" could possibly be comparable? Simply bogus.
The DEIR consistently attempts to misrepresent and mislead the public.
It is incomplete, incorrect, inaccurate and invalid and NOTHING demonstrates this better than the above.

Under their previous, Level of Service, methodology they would have calculated 8,000 retail trips alone. I
I think it safe to say that the numbers presented by Planning are simply "Developer friendly!". Their VMT methodology with "refinements" will generate fewer trips, especially since there are no criteria for calculating the impact of TNCs, but there is nothing in the legislation that remotely suggests it would generate 35% less trips! This entire section is suspect and Planning must explain this profound discrepancy.
As noted above, nowhere are the TNCs incorporated into the calculations.

All of which renders the Traffic Analysis incorrect, incomplete, inaccurate, invalid.

The Planning Department proposes to reduce the number of retail parking spaces as a mitigation measure to reduce the significant traffic impact.
This is a false assumption and shows the extent to which the Developer and Planning misunderstand, or simply choose not to understand, the impact that the TNCs have.
Planning's mitigation measure is a stone age solution to a digital age problem.
How will many people respond to a perceived lack of parking?
They'll simply call a TNC and go anyway.

Eliminating parking won't eliminate auto trips it will actually increase auto trips.

A UC Davis study shows that people make MORE trips because of TNCs than if they had to use their own cars or take public transit. People now make trips they would never have made in the past – by any mode of transport.

The VMT methodology used by the Planning Department fails to account for the impact of TNCs.

10 (TR-2) cont'd

And, the use of TNCs makes the GHG situation worse.

Let's assume I want to go to 3333 by auto. I could personally drive 2 miles to get to the 3333 Retail/Office/Commercial complex, park, then shop or do business, the drive 2 miles home for a total of 4 miles.

Data shows that many people will now use a TNC rather than drive their own cars. This will be even more pronounced if Parking is reduced!

So now the TNC has to come to me, assume 2 miles, and take me the 2 miles to 3333 for a total of 4 miles.

When I go home the same thing happens or an additional 4 miles for a grand total of 8 miles. Twice the GHG generated per trip!

So, not only do we have 8,000 retail auto trips, excluding the effect of TNCs (not addressed) to deal with we have many of them generating significant more GHG per trip!

Planning needs to do a comprehensive analysis using credible data and a credible methodology so that the public knows the extent of the GHG generated.

We are in a crisis with climate change and the methodology shown in the DEIR fails to address this crisis credibly.

In fact climate change is more of a threat to the future of San Francisco than housing is and it isn't being addressed accurately in the DEIR.

11 (GHG-1)

The Community Full Preservation Alternative Protects the Historic Site, Protects the Greenspaces, Maintains the Existing RM-1 Zoning and Resolution 4109, Maintains the Public's Permanent Right-of-Use of the Greenspaces .

12 (AL-2)

The Developers Destructive Proposal first demolishes and destroys the Historic Characteristics and nature of 3333.

13 (CR-2)

Then it virtually destroys all of Laurel Hill itself, with the exception of a small sliver at the southwest corner, by excavating the entire site to depths ranging from 15 to 40 ft.

The only area that isn't excavated is under a portion of the existing building!

Not sure how they missed that opportunity!

14 (GEO-3)

Removal of the demolition debris and the excavated soils will require approx. 28,000 dump

15 (AQ-1)

truck loads, all of which have to pass though and pollute our neighborhoods. 15 (AQ-1) cont'd

By contrast, the Community Full Preservation Alternative generates approx. 9,000 dump truck loads, one quarter as many! 16 (AL-2)

After the demolition the Developer has to then deliver all the new materials required to rebuild what they demolished plus 11 new buildings.

How many large truck loads, concrete truck loads, etc. will this require?

The Community Alternative only builds 4 new buildings so like the GHG and the debris/soil removals the Community Full Preservation Alternative requires far fewer, probably about one third, or less, as many delivery loads.

A quick look at the turning radii of the trucks, ie. SU-30 Circulation Exhibit and WB-40 Circulation Exhibit clearly demonstrates that all the deliveries during destruction, demolition, excavation, construction and long term operations pose significant threats to traffic safety, pedestrian safety, congestion and pollution. 17 (TR-7)

In fact, as WB-40 shows large trucks cannot safely navigate 5 of the 6 major intersections surrounding the site. There are no plans to mitigate this profound situation which will essentially exist from the beginning of the project ad infinitum. Planning and the Developers have simply washed their hands of the problem a la Pontius Pilate.

The Community Full Preservation Alternative will preserve most of the mature trees at 3333, some of which date back to the time of the Laurel Hill cemetery whereas the Developers Destructive Proposal will attempt to spare approx. 4. 18 (AL-2)

The Community Full Preservation Alternative Keeps the Loading and Unloading Traffic Within the Site as Opposed to External to the Site 19 (TR-10)

The Developers Destructive Proposal surrounds 3333 with five major Loading/unloading zones for TNCs and Freight traffic. Initially the Developers promised that all the unloading would be done underground or on-site and now the site is ringed with these zones! These zones not only eliminate approx. 40 parking spaces but they will create additional traffic congestion and pollution. So we have a ring of loading zones in addition to the inevitable double parking that occurs for deliveries and drop-offs. A perfect storm!

I-FRISBIER2

January 8, 2019

Kei Zushi, Senior Planner
Environmental Planning Division
San Francisco Planning Department
1650 Mission Street, Suite 400 San Francisco, CA 94103

Subject: Comments to 3333 California St. Mixed-Use Project DEIR

Planning Department Case No. 2015-014028ENV

State Clearinghouse No. 2017092053

Dear. Mr. Zushi,

Find attached my comments concerning Deficiencies associated with the Subject document.

If there are any questions please contact me.

Respectfully.

F. Richard Frisbie

415-666-3550

Table of Contents

Section A

DEIR Deficiencies for Greenhouse Gas Calculations and Demolition Debris Processing

DEIR Deficiencies - Greenhouse Gas (GHG) Calculation and Demolition Debris Processing

Attachment 1: Comments on 3333 California St. GHG Calculation Deficiencies with respect to the Initial Study dated April 25, 2018 and Version 2 dated May 14, 2018.

Attachment 2: 3333 California Street Mixed-Use Project Application for Environmental Leadership Development Project including Attachment E of same.

Attachment 3: 3333 California St. Initial Study pg. 146 Impact C-AQ-1.

Attachment 4: San Francisco 2004 and 2009 Housing Element, Cover and pg.V.1-17

Attachment 5: FN 130 SF Planning Department "Compliance Checklist Greenhouse Gas Analysis" Cover and pg. 19.

Attachment 6: San Francisco Planning Department "Greenhouse Gas Analysis Pursuant to CEQA" dated November 12, 2010.

Attachment 7: Initial Study No. 2015-014028ENV. Project Description pg. 6.

1
(GHG-1)

In addition to the comments in this letter I am resubmitting my revised Initial Study Comments (Attachment 1) as the Planning Department has failed to address them and has withheld critical, pertinent and specific information from the public. The revisions reflect information gleaned from the Initial Study and subsequent documents. It also reflects corrections and adjustments to relevant criteria.
As noted below, had Planning provided the information requested it would have permitted the GHG issue to be analyzed quickly but, to date, the public has not been provided this fundamental data.
Regardless, the Community Alternative will generate less than one third the GHG generated by the Developers' Project. It will also clearly shows that the Community Alternative is a far superior solution in that it generates approx. 30% of the total GHG generated by the Developers' Plan. A significant Mitigation Measure in itself.

In the Initial Study Impact C-AQ-1 (Attachment 3) was deemed "less than Significant."
No data or analyses was provided to support this erroneous determination which was incomplete, incorrect and inadequate. The text which followed was simply a rehash of all the relevant documents but nowhere was there any analyses that showed compliance with the requirement to consider "greenhouse gas emissions, directly or indirectly".....
No Indirect GHG were calculated as noted in Attachment 1 and required by Attachments 3, 4 and 5.
The only information provided in Volume 2 dealt with construction GHG and operational GHG, nothing addressed the GHG related to the manufacture and use of the basic building materials

to be used in constructing the buildings, underground garages, etc.
Indirect GHG are required to be calculated, analyzed and incorporated into the conclusions and Mitigation Measures. The Planning Department has failed to do any of this.
Indirect GHG are also required to be similarly addressed in the San Francisco 2004 and 2009 Housing Element Impact GH-1 (Attachment 4). None of this was done.

CEQA Guidelines section 15358(a)(2) defines "effects" of a project to include "indirect" effects. These indirect effects are cumulative in nature. They are also reasonably foreseeable and the DEIR was inadequate for failure to consider them.

15358. EFFECTS "Effects" and "impacts" as used in these Guidelines are synonymous. (a) Effects include: (1) Direct or primary effects which are caused by the project and occur at the same time and place. Association of Environmental Professionals 2018 CEQA Guidelines 261 (2) Indirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems. (b) Effects analyzed under CEQA must be related to a physical change. Note: Authority cited: Section 21083, Public Resources Code; Reference: Sections 21068 and 21100, Public Resources Code.

Despite multiple requests we have not been provided with an estimate of the volumes of concrete, weights of steel and glass to be used in the project. This information would quickly reveal the massive amounts of GHG involved in the Developers' 3333 Plan.
Planning supposedly oversees thousands of major projects and PSKS supposedly develops multiple large buildings/projects and yet no such estimates are available, or so we are told.

Planning has had access to a detailed GHG Study prepared by SWCA since August 2018 which specifically addresses GHG in the Attachment E AB900 Analysis by Ramboll. The SWAC Study lists total construction GHG of 4,273 metric tons (Attachment E Construction GHG Emissions Table 4 pg. 8) which clearly exceeds the limits in Attachment 6.
However, these are only "direct" GHG and do not include the "indirect" GHG generated by the manufacture of the concrete, steel, glass, etc. which will be used to construct the buildings. ALL indirect GHG are missing from ALL the Planning Department's documents and conclusions which are incorrect, incomplete, and inadequate. Nothing in Attachment 6 excludes construction materials from the process. In fact the very term "energy associated with treatment" on page 2 can refer to the treatment of raw materials. The etc. at the end of the same sentence clearly indicates that a number of other "indirect" GHG are to be considered if present. None of this has been done.

The DEIR Lacks Substantive Evidence That GHG are "Less Than Significant."

1
(GHG-1)
cont'd

Processing of Demolition Debris

Furthermore, nowhere in the Initial Study, the DEIR or the SWAC Report is there any mention, analyses or compilation for the GHG generated by processing the debris from the demolition of the site as required by the City's applicable Ordinance - Planning Department's Reference FN 130 "Compliance Checklist Greenhouse Gas Analysis" pg. 19 "San Francisco Construction and Demolition Debris Recovery Ordinance" (Attachment 5).

The first paragraph of the Requirements says that "All (100 percent)...to be processed for recycling."

Second paragraph says that "projects that include full demolition of a structure..." allows for the processing of a minimum 65% of the demolition debris...."

The Developer is NOT demolishing 100% of the main building and MUST recycle 100% of the demolition debris from the main building. Attachment 7 "the existing approx. 55.5-foot tall building at the center of the site would be partially demolished....." Pretty clear statement and supporting drawings.

Demolishing 100% of the Annex building does not qualify as exempting the debris from the main building from the 100% requirement.

In the Remarks column the Planning Department states that a "minimum of 65%..." and then references the Annex building in an attempt to limit the overall processing to 65%.

The Annex Building demolition is trivial with comparison to the main building and yet is used in an attempt to reduce the 100 percent processing required of the main building debris.

This is a deliberate abuse of the language and intent of the Ordinance.

The Annex building and main building are separate and distinct and the disparity in volume of debris is more than an order of magnitude.

The Developer must process 100% of all the debris from the main building demolition.

Using the annex building as a pretext for setting the processing percentages is disingenuous and violates the City's own Ordinance.

In addition, no calculation is shown that indicates the amount of GHG generated from the processing of the 65% of the Annex Building and the 100% of the main building debris as well as the parking lots, garage ramps, etc.

All of these generate the "indirect GHG" required to be addressed in the GHG totals. No calculations for the processing of the demolition debris has been presented.

The GHG analysis is further invalidated by the incorrect interpretation and implementation of the City's own Ordinance and the failure to make the appropriate GHG calculation.

Frankly this is a deliberate attempt to circumvent the City's own rules!

In addition, Attachment 2 Item 9 "Consistency with statutory Requirements for CEQA Streamlining" states "to offset GHG emissions...." certain steps will be taken. Interesting that mitigation measure are proposed for a situation that is already defined "Less than Significant" in the Initial Study. One might even consider it bizarre. (GHG-1) cont'd

However, the steps proposed fall woefully short of offsetting the "direct and indirect" (the indirect are yet to be calculated but I offer the attached table in order to assist the Planning Department in complying with CEQA) GHG generated during the construction phases(s).

It is simply impossible to conclude, as C-AQ-1 attempts to do, that the GHG generated are "less than Significant."

Furthermore, the California Air Resource Board itself requires that both direct and indirect GHG be calculated.

DEMAND is that we be provided with ALL data, calculations, documentation, etc. that have any bearing on GHG associated with 3333 California Street inclusive of Initial Study, Application for an Environmental Leadership Project, the DEIR and 3333 California Street in toto.

DEMAND is that ALL GHG, direct and indirect, including those generated by the manufacture and transport of the building materials themselves, be calculated as required by both the City and the State.

DEMAND is also that the GHG be reclassified properly as "Significant" and are as of now Unmitigated.

DEMAND is that the Community's Alternative GHG levels, one third of the Developers' levels, be used as the baseline for setting the standard for 3333 California St.

DEMAND is that the processing of demolition debris from the main building be properly calculated by requiring 100% processing of the main building debris.

DEMAND is that the GHG generated by this processing be accounted for: a minimum of 65% of the Annex Building and 100% of the main building debris. No information is provided as to the percentage of the parking lots and garage ramps that will be processed. We require this information.

The DEIR is incomplete, inaccurate and incorrect in totally ignoring GHG from construction material manufacture and transport, demolition debris, etc.

Attachment 1

Comments on 3333 California St. GHG Calculations Deficiencies with respect to Initial Study dated April 25, 2018 and Version 2 dated May 14, 2018

GREENHOUSE GAS EMISSIONS (see note 1)

EXECUTIVE SUMMARY

This document is a revised and updated version with corrections to the document submitted to the Planning Department April 25, 2018. It addresses the incorrect, incomplete and inaccurate data (where provided), analyses (where provided) and conclusions stated in the Initial Study.
None of these were corrected in the DEIR.
The Initial Study's (Reference 4 to this submission) conclusion on page 146 per the Table, items 7(a) and (b) as well as on page 148 "Impact C-GG-1" that the construction phase of the project will generate "Less than significant" Greenhouse Gases is incomplete, inaccurate, inadequate and invalid.
The approximate 14,000 tons of Greenhouse Gases generated, direct and indirect, as a consequence of the construction phase of the proposed development is hardly a "less than significant" tonnage as stated in the Initial Study and not addressed in the DEIR. Essentially the subject is being ignored.

2
(GHG-1)

The Community Residential Alternative, supported by the coalition of neighbors surrounding 3333, will generate only 30% (4,100 tons) of the Greenhouse Gases generated by the PSKS plan, as a consequence of their construction phases, while protecting the historically significant main building and landscaping.
The Community Alternative provides a significant mitigation of Greenhouse Gases and the destructive impact they have on health, quality of life and climate change.

Notes:
This document addresses only the generation and release of Carbon Dioxide, direct and indirect, as a consequence of the construction phase.
However, the other Greenhouse Gases associated with this type of work –methane, nitrous oxide, etc.- although present at much lower levels than carbon dioxide have a GWP (Global Warming Potential) anywhere from 25-300 times greater than carbon dioxide (Reference 11) and need to be addressed as well.
The indirectly generated Greenhouse Gases has not been taken into account in either the Initial Study or the DEIR.
San Francisco and the California Air Resources Board (CARB) require that all Greenhouse Gases, direct and indirect, be calculated, analyzed and properly presented with mitigation measures being required.
The DEIR is incomplete, incorrect and inadequate as it fails to address the indirect Greenhouse Gases.

INTRODUCTION

Reference 4 Section E. 7 - Greenhouse Gas Emission pages 146-150:
Impact C-AQ-1 (Potentially Significant). "Potential cumulative air quality impacts will be addressed in the EIR."

2 (GHG-1) cont'd

Table: 7 GREENHOUSE GAS EMISSIONS (page 146)

Would the project:

(a) "Generate greenhouse gas emissions, either directly or indirectly (underline added), that may have a significant impact on the environment?"
"Less Than Significant" is checked.

(b) "Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases?"
"Less Than Significant" is checked.

Not a single calculation, analysis, compilation or comparison is presented to support these inadequate conclusions of "Less Than Significant."
These conclusions are incomplete, inaccurate, inadequate and invalid in toto.
The project proposed by the developers (PSKS) would generate as a consequence of the construction phase alone approximately:

13,525 TONS OF GREENHOUSE GASES (see Note 1)

Due to the complete absence of any supporting data, as well as Planning's delayed response to relevant questions, it has been necessary to make some assumptions in analyzing details of the PSKS plans.
By comparison, the Community Residential alternative, supported by the coalition of neighbors surrounding 3333, would generate Greenhouse Gases at levels less than 30 percent (4,100 tons) of the PSKS levels. The Community Residential alternative represents a 70% mitigation of these harmful gases to health, well-being and the environment.

Thus, without the relevant data and corresponding analyses based on available air emission models, Planning's conclusions have no basis in fact and are incorrect, incomplete, inadequate and invalid.

On page 148, first paragraph, of reference 4, it is stated "The following analysis of the proposed project....."
In reality there is no analysis whatsoever in the referenced document as to the Greenhouse Gases generated as a consequence of the construction phase which, as shown above, produces significant amounts of harmful Greenhouse gases.
Pages 148-150 speak exclusively to the Operational phase of the project while completely omitting even a reference to the construction phase.
There is no reference made as to the volume of concrete, weight of steel, weight of glass, etc. included in the project - all of which have profound implications as to the levels of Greenhouse Gases emitted into the atmosphere as a consequence of the construction phase.
I am still awaiting answers to question submitted to Planning on related issues.

It would appear that no analyses have been made, certainly none are presented, as to the Embodied Energy content of the construction methods and materials.
Such analyses would immediately highlight the significant levels of Greenhouse Gases that would be generated as a consequence of the PSKA planned construction phase and highlights the need for mitigation measures.

2 (GHG-1) cont'd

Due to the absence of data it was necessary to use information listed in the references to develop the approximate levels of Greenhouse Gas tonnages generated as a consequence of the construction phase. Had the Initial Study, which, forms the basis for the EIR, carried out some fairly straightforward analyses we could have compared the results to determine where additional study is required.
At such time as the City provides the necessary technical data, such as the energy required to recycle the main building debris (see note 1), volume of concrete and weight of steel, glass, etc. required for the re-construction, etc. the estimated Greenhouse Gas tonnages generated as a consequence of the construction phase could be re-calculated accordingly.

Notes:

1. There appears to be no calculation or consideration in any of the City's documents that addresses the Greenhouse Gases generated by the recycling of the debris from the main building.
   Recycling steel and concrete is energy intensive and needs to be properly accounted for in the Greenhouse Gases budget.
   The only thing more harmful is to simply dispose of reusable materials in a landfill.

2 (GHG-1) cont'd

The Greenhouse Gases generated as a consequence of the Construction phase will be discussed in the following order:

1. Demolition of portions of main building, service building, parking lots, garage ramps.
2. Removal of Debris generated in 1. Above.
3. Excavation of site for underground parking, building foundations, etc.
4. Removal of Spoils generated in 3. Above.
5. Reconstruction, strengthening and increased height of the main building.
6. Construction of underground parking garages.
7. Construction of Masonic, Euclid and Mayfair buildings.
8. Construction of Plaza A & B and Walnut buildings.
9. Construction of Laurel St. duplexes.

1-4: DEMOLTION, EXCAVATION AND REMOVAL OF DEBRIS AND SPOILS.

The first four activities, 1-4, listed above will be looked at together as they basically utilize energy to carry out the activity.

PSKS proposes to demolish approximately 50% of the existing main historic building as well as most of the historic landscaping. In addition, the various parking lots and roadways on the site will be demolished as well as the circular garage ramps. After demolition the debris will be removed and the site will be excavated and the spoils hauled away. Reference 26 shows the approximate amount of fuel, diesel and gasoline, and electricity consumed. Some of this is spread over the construction phase of the building cycle. As items such as the map of the routes selected (Reference 9) have not been made available, but have been requested, it is impossible to judge the reasonableness of some of these calculations.

It should be noted that the 0.05 gallons per horsepower-hour used in the Reference 26 is 10-15% lower than industry data available from multiple sources (see Reference 29, the value 0.056, as an example).

Also of significance, which is not addressed, is the volume of serpentine that could be present and which requires significantly more energy to remove than soils and clays.

The five primary boring sites related to geology are of considerable interest.

Major excavation will take place along Masonic and Euclid and yet no borings were made at any intermediate location along this >600ft segment of the property.

The boring sites appear in Reference 30.

A boring (B-3) was done at Masonic and Presidio where no excavation will take place.

The only other boring on the southern half of the property was taken very near the Euclid-Laurel intersection (B-4) where, again, no excavation will take place.

So, all the excavation for the Masonic and Euclid buildings will be done without any specific first-hand knowledge of the geology at those locations.

And yet it was deemed appropriate to do boring B-5, a site where the Laurel St. duplexes will be constructed and which require significant less critical subsoil information as they do not have underground garages supporting major buildings. 2 (GHG-1) cont'd

Outcrops of serpentine exist throughout this general area so it is probable that these areas of excavation will encounter significant deposits of serpentine, the excavation of which is far more difficult and energy intensive than for stiff clays etc. as well as posing a health risk which could be of a much greater magnitude than that presented in the Initial Study.
Frankly one could conclude that the boring sites were carefully selected to avoid discovering any controversial conditions that may well underlay the site!

The net result is that the energy discussed in Reference 26 must be considered to be at the very low end of likelihood.
Higher values should be expected and this likelihood is not addressed in the DEIR.
Despite the optimistic view of Reference 26, these phases of the project will still generate approx.

3,500 TONS OF GREENHOUSE GASES

As noted above in the Introduction, no consideration appears to have been made for the energy associated with the recycling of the reusable components of the debris from the main building.
So, what would be a more realistic estimate?
The Community Residential alternative would generate approx. 23 percent of that, or 800 tons, of Greenhouse Gases.

5. RECONSTRUCTION, STRENGTHENING AND INCREASED HEIGHT OF MAIN BUILDING

First, the remaining portions of the historical main building will require strengthening as it was not originally designed or built to accommodate three additional floors and their related infrastructure.
The volumes of concrete and steel involved will result in significant generation of Greenhouse Gases, no mention of which appears anywhere in the Initial Study or the DEIR! The DEIR is simply incorrect, incomplete and inaccurate with respect to direct and indirect greenhouse gases and also Air Quality.
The DEIR should, but did not, disclose the volumes of concrete and/or weight of wood, as well as the weights of steel and glass that would be used in the PSKS proposed development.
This information is relevant to the calculation of Greenhouse Gas Emissions.
Projects involving buildings of this size, and larger, have seen significant reductions savings of Greenhouse Gases saved through re-use of the building as opposed to major demolition and re-construction.
So, conservatively it can be estimated that this re-construction will generate approx.

2,000 TONS OF GREENHOUSE GASES

Had we been provided with information regarding volumes of concrete and weight of steel required for this rebuild, strengthening and height increases, we could have provided a more specific estimate.

It should be noted that concrete has an Embodied Energy Content of 12.5MJ/kg, Steel 11.0MJ/kg. and Wood 2.0MJ/kg.

Cement is an energy intensive product and generates significant Greenhouse Gases during its production process so a cubic yard of concrete is responsible for approximately 500 lbs. of Greenhouse Gases being released into our atmosphere. See References 16, 17, 18 and 23.

95% of the cement used in the Bay Area is manufactured here so these GHG are our GHG.

This estimated 2,000 tons of Greenhouse Gas generated by PSKS would hardly seem to be compatible with Page 146 and the "Less Than Significant" conclusion by the City, further reinforcing the conclusion that the Initial Study, and this DEIR, is inaccurate, inadequate, incomplete and invalid.

The Community Residential alternative generates 0 tons of Greenhouse Gas emissions.

There is no demolition of the main building; no additional strengthening or structure for additional floors; no rebuilding of the exterior of the main historic building.

However, to take into account modifications for providing sunlight courts, etc. let's assign a number of 200 tons of Greenhouse Gases.

2
(GHG-1)
cont'd

6. CONSTRUCTION OF UNDERGROUND PARKING GARAGES.

The site will be underpinned by underground parking garages over approx. 60% of the site.

Along California St. these are two and three levels.

Under Masonic, Euclid and Mayfair these are one level.

Construction is assumed to be steel reinforced concrete designed to support the buildings that are above all the parking garage areas.

The DEIR failed to disclose the volumes of concrete and weight of steel, glass, etc. required.

Concrete's Embodied Energy is 12.5MJ/kg., weighs approx. 2 ton per cubic yard which emits up to 500 lbs. in Greenhouse Gases, CO_2, during the manufacture and construction processes.

As no volumes of concrete or weight of reinforcing steel has been provided by the City, the calculations of Greenhouse Gases generated as a consequence of the construction phase has used industry standards for parking garages (Reference 25).

These are all above ground garages without any overlying buildings so the calculations should be considered on the low end when applied to an underground complex supporting 4-7 story buildings above.

The average cubic yards of concrete to square foot of structural slab ratio varies from 4.5% to 10% (Reference 25).

Assume a 6% ratio which is conservative due to the nature of the complex AND excludes any consideration of the required reinforcing steel.

When Planning provides the necessary information, these calculations can be updated.

Again, with apparently no information, no calculations, etc. Planning concluded that the

6,000 TONS OF GREENHOUSE GASES

generated as a consequence of the construction of the underground parking garages are "Less Than Significant" on page 146 of the Initial Study and not even addressed in the DEIR.

The DEIR fails to address indirect Greenhouse Gases as required; it is incomplete, inaccurate and incorrect.
The Community Residential alternative generates approx. 1,000 tons of greenhouse gases, as it requires only a new single level residential parking garage along California St.

2 (GHG-1) cont'd

7. CONSTRUCTION OF MASONIC, EUCLID AND MAYFAIR BUILDINGS.

Once again it is necessary to include the following caveat "the Initial Study provides no information as to the construction methodology proposed nor the volumes of concrete and weight of steel required."
However, at public meetings, as well as smaller private ones, it was indicated that reinforced concrete and glass would be the primary components of construction so these assumptions have been adopted herein.
Applying References 16-24 with included references to the proposed buildings for reasonably equivalent sized buildings, the proposed buildings would generate approx.

450 TONS OF GREENHOUSE GASES.

If Planning will provide the appropriate information concerning construction methodology, materials, volumes of concrete, weight of steel, etc. we can adjust the calculations accordingly.
The All Residential alternative will construct only the Mayfair Building and generate approx.. 100 tons of Greenhouse Gases as we do not intend to destroy these historically significant landscaped areas.

8. CONSTRUCTION OF PLAZA A & B AND WALNUT BUILDINGS.

The same assumptions as to construction methodology applied in 7 above is utilized herein.
These three buildings will generate

1,500 TONS OF GREENHOUSES GASES WITH THE VARIANT PROPOSED.

The Community Residential alternative would generate less than 1,000 tons of greenhouse gases. For details refer to References 16-24 with included references.

9.CONSTRUCTION OF LAUREL ST. DUPLEXES.

It is assumed that these are constructed predominantly of wood should generate less than

75 TONS OF GREENHOUSE GASES.

If this assumption is incorrect the tonnage of greenhouse gases generated would be significantly higher.
I await Planning's information on construction methodology.
The Community Residential alternative concept will generate ZERO tons of Greenhouse Gases as it does not envision destruction of the historic nature of that area.

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24. "Energy and CO2 Advantages of Wood for Sustainable Buildings", Andy Buchanan University of Canterbury including all references.
25. "Parking Garages" www.clevelandcement.com.
26. FN317 "3333 California Street Mixed Use Development Energy Assessment" prepared by SWCA dated April 12 2018.
27. U.S. Energy Information Administration "How much carbon dioxide is produced per kilowatt of U.S. energy generation?" updated April 5 2018.
28. Pacific Gas and Electric Company "Carbon Footprint Calculator Assumptions" 3 pages.
29. "Diesel engine power to Fuel Consumption" published my Barrington Diesel Club, 10-01-2017
30. FN40 "Site Plan with Boring Locations" from Langan Treadwell Rollo Report.
31. "The Greenest Building: Quantifying the Environmental Value of Building Reuse" a report by Preservation Green Lab-National Trust for Historic Preservation.

2
(GHG-1)
cont'd

SUMMARY OF GREENHOUSE GENERATED (tons)

PHASE of PROJECT	GREENHOUSE GASES-TONS PSKS	AR (1)
Demolition of portions of main building, service building, parking lots, garage ramps; Removal of Debris generated above; Excavation of site for underground parking, building foundations, etc.; and Removal of Spoils generated above. References: 26, 27, 28. x	3,500 (2)	800
Reconstruction of main building with strengthening and additional floors. References: 14 thru 19.	2,000	200
Construction of underground parking garages.	6,000 (3)	2,000
Construction of Masonic, Euclid & Mayfair buildings.	450	100
Construction of Plaza A & B and Walnut buildings.	1,500	1,000 (4)
Construction of Laurel St. duplexes.	75	0
TOTALS (5)	13,525	4,100

1. AR: All Residential alternative supported by the coalition of neighbors surrounding the site.
2. The literature indicates that the fuel consumption listed in Reference 26 is approx. 10-15% lower than other industry consumption figures. The lower SWCA (reference 26) number is used.
3. Low estimate: approx. 26,000 cubic yards of concrete; no reinforcing steel included.
4. As noted previously this number is based on a 7 story Walnut Building to be consistent with the PSKS Variant. The All Residential alternative envisions a 4 story Walnut Building which achieves the requisite 558 residential units.
5. At such time as Planning provides all the relevant data associated with the project the Greenhouse Gas tonnage estimates can be revised.
   However, regardless of revisions to the tonnages, the All Residential alternative will always represent a small, less than one third, portion of the PSKE proposed development and the required mitigation measures will have to reflect this.

Attachment 2

3333 CALIFORNIA STREET MIXED-USE PROJECT
APPLICATION FOR ENVIRONMENTAL LEADERSHIP DEVELOPMENT PROJECT

Prepared for

Laurel Heights Partners, LLC
150 Post Street Suite 320
San Francisco, CA 94108

Prepared by

SWCA Environmental Consultants
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August 17, 2018

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INTRODUCTION

The Project Sponsor, Laurel Heights Partners, LLC, is submitting this Application for certification of the 3333 California Street Mixed-Use Project as an Environmental Leadership Development Project (ELDP), pursuant to AB 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, as amended effective January 1, 2018, and codified in Public Resources Code Section 21178 et. seq. Although codified within the California Environmental Quality Act (CEQA), the process for certification of the project as an ELDP is separate from all but a few of the steps required for preparing a CEQA environmental review document.

PROJECT DESCRIPTION

Proposed Development Project

The project site, an approximately 10.25-acre parcel in San Francisco's Laurel Heights/Jordan Park neighborhood, is developed with a 1950s-era corporate campus featuring a four-story office building at the center of the site, a three-level, partially below-grade parking garage, a one story annex building, three surface parking lots, two circular garage ramp structures leading to below-grade parking levels, and mature landscaping or landscaped open space. A portion of the space in the surface parking lots accommodates 60 parking spaces allocated to public use, with payment.

The project sponsor, Laurel Heights Partners, LLC, owns the site and leases it to the Regents of the University of California, which uses the project site for its University of California San Francisco (UCSF) Laurel Heights Campus. Prior to the project sponsor's recent acquisition of fee title to the site, the project sponsor had entered into a 99-year pre-paid ground lease with the Regents in 2014. The office building provides space for UCSF administrative, academic research, and social and behavioral science department uses (including common areas) and space for accessory uses and support programs, such as a daycare center, a conference center/auditorium, and a cafeteria.

The project sponsor is proposing to redevelop the site with adaptively reused and new buildings and shift the primary use from office to residential. The 14,000-gross-square-foot annex building and the two garage ramp structures would be demolished, and the three surface parking lots would be removed. The 455,000-gross-square-foot office building would be partially demolished, divided into two separate buildings (Center Buildings A and B), connected by a covered bridge, expanded to include two to three new levels, and adapted for residential use. A total of 13 new buildings—the Plaza A, Plaza B, Walnut, Masonic, Euclid, and Mayfair buildings, and the Laurel Duplexes (seven buildings)—would be constructed along the California Street, Masonic Avenue, Euclid Avenue, and Laurel Street edges of the project site. **Attachment A,** Project Drawings, provides a site plan, elevations of buildings along each street frontage, and representative floor plans of proposed buildings. **Attachment B,** Project Photo-simulations, presents the proposed project in context of existing surrounding streets and buildings.

All of the renovated or new buildings except one, the Walnut Building, would contain residential uses; the Walnut Building would provide space for two different uses—office and a childcare center. Retail space would be provided on the ground floor in the proposed Plaza A, Plaza B, Walnut, and Euclid buildings. Overall, the proposed project would include 558 dwelling units within 824,691 gross square feet of residential floor area; 49,999 gross square feet of office floor area; 54,117 gross square feet of retail floor area; a 14,690-gross-square-foot childcare center; 428,773 gross square feet of parking with 895 parking spaces; and approximately 236,000 square feet of open areas.

The proposed parking program would replace the existing 543 surface and subsurface parking spaces on the project site and would provide 352 more parking spaces than are currently on the site. The spaces would be allocated to offer 558 spaces for residential uses, 138 spaces for retail uses, 100 spaces for office uses, 29 spaces for the childcare use, 60 spaces for commercial (paid) parking, and 10 spaces for car-share vehicles. Four separate below-grade parking garages with 883 spaces are planned: the California Street Garage, which would be constructed under the Plaza A, Plaza B, and Walnut buildings; the Center Building B Garage, which would encompass the two renovated below-grade parking levels under Center Building B; the Masonic Garage, which would be developed under the Masonic and Euclid buildings; and the Mayfair Garage, which would be developed under the Mayfair Building. In addition, six two-car parking garages would be provided for the Laurel Duplexes. The seventh Laurel Duplex would have two parking spaces in the Masonic Garage.

The project site is proposed to be laid out so that it would be newly integrated with the existing street grid. New pedestrian promenades would align with Walnut Street and connect to Masonic and Euclid avenues (north/south direction), and with Mayfair Drive connecting to Presidio and Masonic avenues and Pine Street (east/west direction) These interior promenades would be closed to vehicular traffic, except at the Walnut Street extension a short distance into the site where a driveway and roundabout would allow for passenger drop-off and pick-up as well as provide access to the California Street Garage. Sidewalks along the project boundaries on Presidio Avenue, Masonic Avenue, Euclid Avenue, and Laurel Street would be widened.

Approximately 53 percent of the overall lot area (approximately 236,000 square feet, excluding green roofs) would be retained as open area, with portions developed as a combination of common open space (some of which would be open to the public) and private open space such as ground-level terraces, interior courtyards and private internal walkways. Overall, the proposed project would provide approximately 103,000 square feet of common useable open area that meets the San Francisco Planning Code section 135 definition of open space. New landscaped open space would be added throughout the project site. The proposed project would remove 185 of the approximately 195 trees on the site, retaining 10 of the mature trees. The 15 street trees along California Street would be removed and replaced. The project includes installation of 270 replacement trees on the project site plus 92 street trees to be planted along California Street, Masonic Avenue, Euclid Avenue and Laurel Street.

The project sponsor is considering a project variant, the Walnut Building Variant, that would change the uses and height of the proposed Walnut Building. With the variant, the building's proposed office space would be replaced with residential uses, three new residential floors would be added, and the retail space and the childcare center space would be reduced. Overall, with the variant there would be 186 additional residential units, for a total of 744 residential units within 978,611 gross square feet of residential floor area; no office space; 48,593 gross square feet of retail floor area; a 14,650-gross-square-foot childcare center; and 435,133 gross square feet of parking with 971 parking spaces. The amount of space devoted to open areas would be the same as under the proposed project.

The proposed project or variant would be constructed in four overlapping development phases, with full build-out expected to occur approximately seven years after project entitlements, if executed from start to finish of the prescribed overlapping development phases.

The project sponsor submitted a Transportation Demand Management (TDM) Plan Application to the San Francisco Planning Department in August 2017 and has agreed to implement selected TDM measures, such as improving walking conditions and providing onsite child care, bicycle parking, and car share parking, to reduce per capita automobile use. The project sponsor has committed to meeting and exceeding the requirements of the San Francisco Green Building Ordinance (part of the San Francisco Building Code) by achieving Leadership in Energy and Environmental Design (LEED) for Neighborhood

Development certification at a minimum Gold level for the full development. The Applicant is considering living (green) roofs, solar photovoltaic systems for some roofs, solar thermal hot water systems for other roof areas, and water-smart landscaping, among other sustainability features. Each of the new buildings would comply with the San Francisco Non-Potable Water Ordinance that requires use of onsite alternate water sources including graywater and/or rainwater.

The proposed project would include affordable housing units as required under San Francisco Planning Code section 415 and/or as set forth in a Development Agreement (DA) for the proposed project between the project sponsor and the City. The terms of the DA regarding provision of affordable housing and other matters are still under discussion, and, in addition, the project sponsor is gathering community input regarding this matter.

Project Site

3333 California Street is a Midcentury Modern-designed corporate campus originally constructed in 1956-1957. The approximately 10.25-acre project site occupies Lot 003 on Assessor's Block 1032 in the Laurel Heights/Jordan Park area of San Francisco's Presidio Heights neighborhood. The irregularly shaped parcel is bounded by California Street to the north (an approximately 730-foot-long frontage), Presidio Avenue to the east (an approximately 280-foot-long frontage), Masonic Avenue to southeast (an approximately 422-foot-long frontage), Euclid Avenue to the south (an approximately 348-foot-long frontage), and Laurel Street/Mayfair Drive to the west (an approximately 742-foot-long frontage).

The campus contains a four-story office building with three levels of partially below-grade parking; a one-story annex building (which contains equipment such as boilers, chillers and water treatment facilities for the office building, other plant operations systems, office space for the physical plant engineers, and unused laboratory office space) at the northwestern corner of the project site; approximately 2.75 acres of surface parking in three lots; and 3 acres of designed landscape or landscaped open space. Approximately 63 percent of the site is covered by buildings or other impermeable surfaces, such as internal roadways and surface parking lots, and 37 percent is landscaping or landscaped open space. UCSF currently grants public access to the grass lawns on the site at the corner of Euclid Avenue and Laurel Street, extending partially down Euclid Avenue, and at Presidio Avenue just north of the Masonic Avenue and Pine Street intersection.

The project site is well-served by Muni transit service, with the 1 California, 1 BX California Express (AM and PM peak hours only), and 2 Clement bus routes on California Street; the 3 Jackson bus route on Presidio Avenue, California Street, and Walnut Street; and the 43 Masonic bus route on Presidio Avenue.

The area in which the project site is located is highly urbanized and essentially fully built out. Low- to mid-rise mainly multi-family residential uses surround the project site to the north, east, and south, across California Street, Presidio Avenue, and Euclid Avenue. The west side of Laurel Street across from the project site is lined by single-family houses between Euclid and Mayfair avenues. Other nearby land uses include the SF Fire Credit Union, at the southwest corner of California Street and Presidio Avenue, adjacent to the project site; the Jewish Community Center of San Francisco, across California Street from the project site; San Francisco Fire Station 10, across Masonic Avenue southeast of the project site; the San Francisco Municipal Railway's (Muni) Presidio Yard bus storage depot, across Euclid and Masonic avenues south of the project site; and the Laurel Village Shopping Center along California Street, across Laurel Street west of the project site.

CONSISTENCY WITH STATUTORY REQUIREMENTS FOR CEQA STREAMLINING

This Application was prepared in accordance with the Governor's Guidelines for Streamlining Judicial Review under CEQA, provided on the Governor's Office of Planning and Research (OPR) website and updated in January 2018 to comply with Senate Bill 734 (2016) and Assembly Bill 246 (2017).[1] The following information (including all Attachments) is submitted to show that the project and variant each satisfies the statutory requirements for CEQA streamlining, as further set forth in the Governor's Guidelines, pursuant to Public Resources Code Section 21187 *et seq*.

1. Information to show the project or variant is residential, retail, commercial, sports, cultural, entertainment, or recreational in nature.

The proposed project or variant is residential, commercial, and retail in nature. As explained above, the proposed project would have approximately 558 dwelling units, 49,999 gross square feet of office floor area, 54,117 gross square feet of retail floor area, and a 14,690-gross-square-foot childcare center, in addition to parking, circulation and loading space, and approximately 236,000 square feet of open space. The project variant would replace the office space with 186 additional dwelling units for a total of 744 units, approximately 48,593 gross square feet of retail space and a 14,650 gross square foot childcare center, with parking, circulation and loading space and open space similar to the proposed project.

The proposed project and variant would demolish a portion of the existing office building and adapt it for residential use. The perimeter of the site is proposed to be developed with 13 new buildings, with all except the Walnut Building containing primarily residential uses (with ground floor retail in some buildings). The Walnut Building, located at the Walnut Street entrance to the project site from California Street, is proposed with office, childcare, and retail uses. The new buildings would front on California Street, Masonic Avenue, Euclid Avenue, and Laurel Street. The variant would construct residential, childcare, and retail uses in a taller Walnut Building, replacing the proposed office use.

Open space would be provided on the site in the form of public plazas and walkways, and as private open space for the use of new residents. A total of approximately 236,000 square feet of open space is included, excluding green roofs. One of the publicly accessible open areas, the proposed Euclid Green, would maintain most of the existing open space along Euclid Avenue to which UCSF has been granting public access (although privately owned).

The site plans for the proposed project and variant are included in **Attachment A**. Several renderings of the proposed project in the existing urban context are shown in **Attachment B**.

[1] Governor's Office of Planning and Research, *Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act Pursuant to AB 900 (Chapter 352, Statutes of 2011)*, available at http://opr.ca.gov/docs/20180103-AB_900_Guidelines_January_2018.pdf. Accessed July 11, 2018.

2. Information to show that the project or variant, upon completion, will qualify for LEED Gold Certification or better. The Application shall specify those design elements that make the project or variant eligible for LEED Gold Certification, and the Applicant shall submit a binding commitment to delay the project or variant until it receives LEED Gold Certification or better. If, upon completion of construction, LEED Gold Certification or better is delayed as a result of the certification process rather than a project deficiency, the Applicant may petition the Governor to approve project operation pending completion of the LEED certification process.

The design for the proposed project or variant would meet or exceed current uniform codes, and is created to achieve at the minimum a Leadership in Energy and Environmental Design (LEED) Neighborhood Development (ND) Gold rating. The LEED ND certification has four certification levels that correspond to the number of credits that are achieved in five categories: Smart Location and Linkage (SLL), Neighborhood Pattern and Design (NPD), Green Infrastructure and Buildings (GIB), Innovation (IN), and Regional Priority (RP). The number of points that a project earns within the credits it achieves determines the level of certification that it will receive:

- LEED Certified™: 40-49 points earned
- LEED Silver®: 50-59 points earned
- LEED Gold®: 60-79 points earned
- LEED Platinum®: 80+ points earned.

LEED provides a level of flexibility for projects to choose the credits and project features that will contribute to certification. The proposed project and variant will each integrate low-impact development and transportation demand management, energy efficiency, water conservation, and other green-building practices to achieve a minimum LEED ND Gold certification; however, at the time of submitting this Application, the exact LEED credits that would contribute to the achievement of LEED ND Gold certification (i.e., 60-79 LEED points) have not yet been determined. That said, most or all of the following features will contribute to LEED certification.

In the charts below, "yes" indicates high confidence points and "likely" indicates other anticipated points. Additional points will also be targeted as the design develops to increase confidence in achievement of LEED Gold. The stars (*) indicate prerequisites, which are required for all LEED certifications and carry no points.

SMART LOCATION AND LINKAGE (SLL)

A proposal earns many conservation and proximity credits by virtue of its location. The project or variant is situated on a previously developed infill site that is served by existing water and wastewater infrastructure and within walking distance of enough full-time equivalent jobs to serve the anticipated number of residents. Additionally, transit access credits are earned through existing service: multiple types of transit service currently serve this site, with numerous trips made daily. All trips are made available to 100% of the proposed dwelling units.

Smart Location and Linkage – LEED ND v4 Preliminary Checklist

Yes	Likely	Prerequisite or Credit	Key Applicable Requirements and Assumptions
*		Smart Location	Project site is served by existing water/wastewater infrastructure.
	*	Imperiled Species and Ecological Communities	No listed endangered species on the project site.
*		Wetland and Water Body Conservation	No wetlands or water bodies on site
*		Agricultural Land Conservation	Project site is an infill site with no agricultural use or zoning designation
*		Floodplain avoidance	Project site is outside flood hazard area based on San Francisco's Preliminary Floodplain Maps.
5		Preferred Locations	Project site is an infill site that is also a previously developed site → 5 points. There are only 179 intersections in closest 1 square mile → 0 additional points.
7		Access to quality transit	Minimum daily transit service with multiple transit types: Project site has 470 weekday trips total. 293 weekend trips from bus lines 1, 2, 3, 43. All trips are available to 100% of dwelling units.
2	1	Housing and Jobs Proximity	Proposal is at least 30% Residential AND is within a 1/2-mile walking distance of enough existing full-time equivalent jobs to serve residents→2 points AND Provide affordable housing meeting various criteria for a minimum of 15 years →1 point
1		Site Design for Habitat or Wetland and Water Body Conservation	No significant habitat and no wetland/water bodies on proposed site.
15	**1**		

Source: ARUP, 2018

NEIGHBORHOOD PATTERN AND DESIGN (NPD)

The proposal's location within a dense, mixed-use neighborhood, as well as its strong internal connectivity, walkability, community connectivity, and integrated parking all contribute to its achievement of numerous Neighborhood Pattern and Design credits. The proposed parking integration strategies contribute to the achievement of the Compact Development, Walkable Streets, and Community Connectivity prerequisites and credits. The existing transit infrastructure and the transportation demand management strategies contribute to the achievement of the Transit Facilities, Transportation Demand Management, and Reduced Parking Footprint credits. The site location and internal connectivity contribute to its achievement of several prerequisites and credits, including the Walkable Streets, Access to Civic and Public Space, Connected and Open Community, Mixed-Use Neighborhoods, and Neighborhood Schools credits. The integrated design approach, which has been highly inclusive of the community, contributes directly to the achievement of the Community Outreach and Involvement credit, but the approach has also indirectly contributed to the majority of credits achieved in this category.

Neighborhood Planning & Design – LEED ND v4 Preliminary Checklist

Yes	Likely	Prerequisite or Credit	Key Applicable Requirements and Assumptions
*		Walkable Streets	90% of proposed buildings have a functional entry onto the circulation network/public space. At least 15% of the block length of the existing/planned circulation networks within and bordering the project have a minimum building-height-to-street-centerline ratio of 1:1.5 for every 1.5 feet of width from street centerline to building façade. The proposal provides continuous sidewalks or equivalent all-weather routes for walking along both sides of 90% of the circulation network block length within the project. No more than 20% of the block length of the circulation network within the proposal is faced directly by garage and service bay openings.
*		Compact Development	The proposal includes 54.7 dwelling units per acre of buildable land are available for residential uses, well over the 12 required and a floor-area ratio of 1.8 for non-residential components.
*		Connected and Open Community	Proposal includes over 140 intersections per square mile and 13 internal intersections. No more than 10% of the project area may be accessed via gated circulation network. The proposal includes more than one through-connection that terminates at the project boundary and intersects the circulation network. These connections are approximately 400' between entries
5	2	Walkable Streets	Proposal includes a high total linear distance of building façades that face the circulation network, with high ground-level window and door percentages, parking, and safe pedestrian and bicycle travel lanes.
4		Compact Development	The residential density per acre of the proposed project is 54.7, which is between the 38 and 63 thresholds.
4		Mixed-Use Neighborhoods	100% of proposed units are within a ¼-mile walk of >23 uses.
4	2	Housing Types and Affordability	Proposal includes many different housing types of diverse sizes and 12% of housing priced up to 120% of area median income.
	1	Reduced Parking Footprint	Proposed project includes no new off-street surface parking lots and provides preferred parking for carpool or shared-use vehicle parking space that is equivalent to at least 10% of the total off-street parking space for each nonresidential and mixed-use building on the site.
2		Connected and Open Community	Proposed site has 805 intersections within 1 square mile → 2 points
	1	Transit Facilities	Proposed site includes existing transit agency-approved shelters that meet minimum LEED criteria at existing stops.
	1	Transportation Demand Management	Proposed project will include unbundled parking and will likely include vehicle sharing → 1 Point
1		Access to Civic & Public Space	90% of planned dwelling units and nonresidential entrances within a ¼-mile walk of at least one civic and passive use space.
1		Access to Recreation Facilities	90% of planned dwelling units in the proposed project are located within a ½-mile walking distance of a publicly accessible indoor recreational facility of at least 25,000 square feet.
	1	Visitability and Universal Design	Proposal will likely include a minimum of 20% of units with one of: 1) Universal Design Throughout the Home; 2) Universal Design Kitchen Features; 3) Universal Design Bedroom and Bathroom Features.
2		Community Outreach and Involvement	Community has been included in predesign, preliminary design, and ongoing communication Proposal has obtained endorsement from local NGOs, including the Housing Action Coalition and the San Francisco Bay Area Planning and Urban Research Association (SPUR)
1	2	Local Food Production	Proposal includes ample landscaped space, some of which has been allocated for food production → 1 Point Tenants in proposal may enroll in CSA programs → 1 Point Proposal is less than ½ mile to Kaiser Farmer's Market → 1 Point

2		Tree-Lined and Shaded Streetscapes	Proposal provides trees at intervals of no more than 50 feet along at least 60% of the total existing and planned block length within the project → 1Point Proposal provides shade from trees or permanent structures over at least 40% of the total length of existing and planned sidewalks within or bordering the project → 1Point
1		Neighborhood Schools	Proposed project at least 30% residential, AND at least 50% of the proposed units are within a 1/2-mile walk of the entry of an existing or new elementary or middle school or within a 1-mile walk of the entry of an existing or new high school.
27	**10**		

Source: ARUP, 2018

GREEN INFRASTRUCTURE AND BUILDINGS (GIB)

Water credits are achieved through the integration of ultra-low flow fixtures in residential restrooms and non-potable water reuse strategies, which reduce indoor water use by at least 40 percent from baseline. Outdoor water use reductions are achieved through the use of native/adapted plant species and minimal turf grass. Energy performance credits are achieved through optimized orientation and massing strategies, high-performance mechanical equipment, and on-site renewable energy production, which collectively reduce building energy by an estimated average of 20% from baseline. Materials credits are achieved through the partial reuse of the existing building on site and a detailed and progressive solid waste management strategy.

Green Infrastructure and Buildings – LEED ND v4 Preliminary Checklist

Yes	Likely	Prerequisite or Credit	Key Applicable Requirements and Assumptions
*		Certified Green Building	The proposal includes one building to be certified under LEED-BD+C.
*		Minimum Building Energy Performance	Each building in the proposal performs well above the required 5% modeled energy savings compared to baseline (ASHRAE 90.1 2010).
*		Indoor Water Use Reduction	The proposal reduces indoor water usage by an estimated average of 20% from baseline.
*		Construction Activity Pollution Prevention	The proposal includes an erosion and sedimentation control plan.
	1	Certified Green Buildings	The proposal anticipates that one building will be certified, which account for more than 10% and less than 20% of the total floor area.
	2	Optimize Building Energy Performance	Whole building energy simulation of the proposal shows an average estimated improvement of 20% over baseline.
	1	Indoor Water Use Reduction	The proposal integrates water reuse for flushing, which reduces indoor water usage by an average of 40% from baseline.
1	1	Outdoor Water Use Reduction	The proposal integrates the extensive use of native/adapted plants to achieve an estimated 50% reduction in outdoor water use versus baseline.
1		Building Reuse (50% of 1)	The proposal retains 59% of the floor plate of the main existing building.
1		Heat Island Reduction	The proposal includes both cool and vegetated roofs to reduce heat island effect.
1		Solar Orientation	The project site has favorable solar orientation, with a longer east-west than north-south axis.

	3	Renewable Energy Production	The proposed photovoltaic panels will reduce annual electrical and thermal energy production costs by approximately 20%.
1		Solid Waste Management	The proposal integrates several progressive solid waste management strategies that far exceed the requirements for this credit.
	1	Light Pollution Reduction	Various requirements including full cutoff fixtures in circulation areas
5	**9**		

Source: ARUP 2018

3. Information to show the project or variant will achieve at least 15 percent greater transportation efficiency, as defined in Public Resources Code section 21180(c), than comparable projects. The Applicant shall provide information setting forth its basis for determining and evaluating comparable projects and their transportation efficiency, and how the proposed project will achieve at least 15 percent greater transportation efficiency. For residential projects, the Applicant shall also submit information demonstrating that the number of vehicle trips by residents divided by the number of residents is 15 percent more efficient than for comparable projects. For the purpose of this provision, comparable means a project of the same size, capacity, and location type.

The *AB 900 Transportation Assessment* for the 333 California Street Project, dated July 2018, provides detailed trip generation calculations and other information about the proposed project and project variant as well as a comparison with vehicle trips generated by a comparable project. The *AB900 Transportation Assessment* is attached to this Application as **Attachment C, Transportation Efficiency**, and is summarized here.

The proposed project or project variant would replace the existing office building, the existing 212- space partially below-grade garage and 331 surface parking spaces, and the annex building at the corner of California Street and Laurel Street with a primarily residential mixed-use development on the project site. The proposed project and variant each include a mix of neighborhood-serving commercial uses (day care and retail) that would provide convenient local destinations for the development project's residents without having to drive to other locations. The proposed project also includes office space that could serve project residents as well as other residents in the neighborhood. Office space is not included in the project variant.

The project site is located close to pedestrian networks and bicycle facilities, major transit services, and a diversity of land uses. The project site is in a highly-walkable area of San Francisco with an established pedestrian network. All nearby streets have sidewalks, and crosswalks are well marked. The proposed project and project variant both would improve pedestrian facilities by widening the existing 10-foot-wide sidewalks on Presidio Avenue and Masonic Avenue (adjacent to the project site) to meet the 15-foot recommended width identified in the San Francisco Better Streets Plan.[2] The existing sidewalks on Euclid Avenue (10.5 feet wide) and Laurel Street (10 feet wide) would be widened to meet the 12-foot minimum width identified in the Better Streets Plan. The proposed project and project variant both include other streetscape changes as part of a series of proposed improvements resulting in changes to the intersections of Presidio Avenue/Masonic Avenue/Pine Street, Masonic Avenue/Euclid Avenue, and Mayfair Drive/Laurel Street to enhance pedestrian safety. There are striped bicycle lanes in nearby streets on Arguello Boulevard from Washington Street in the Presidio to John F. Kennedy Drive in Golden Gate Park; on Euclid Avenue from Arguello Boulevard to Masonic Avenue and connecting to the signed route on Presidio Avenue that runs north-south between Lincoln Boulevard in the Presidio and Page Street via

[2] San Francisco Planning Department, San Francisco Better Streets Plan, January 2011, http://www.sf-planning.org/ftp/BetterStreets/proposals.htm#Final_Plan, accessed July 27, 2018.

Masonic Avenue; and on Post Street from Presidio Avenue to Steiner Street and continuing as a signed route to Market Street in downtown San Francisco.

The proposed project and variant are close to major transit services. The San Francisco Municipal Railway (Muni) operates ten bus routes with stops located within one half mile of the project site (1 California, 1BX California 'B' Express, 2 Clement, 3 Jackson, 31BX Balboa 'B' Express, 33 Ashbury-18th, 38 Geary, 38BX Geary 'B' Express, 38R Geary Rapid, and 43 Masonic). Bus stops are located adjacent to the project site and across the street at nearby corners on California Street, and on Walnut Street north of California Street. All are less than one block from the project site.

The project site is also served indirectly by a network of regional transportation facilities that provide access to the greater Bay Area. Regional transit provides service to the East Bay via Bay Area Regional Transit (BART) commuter rail service, Alameda-Contra Costa Transit buses, and Water Emergency Transportation Authority ferries; service to the North Bay via Golden Gate Transit buses and ferries; and service to the Peninsula/South Bay via Caltrain commuter rail, BART, and San Mateo County Transit buses. Regional transit services are generally not within walking distance of the project site, but can be reached by bicycle or from various Muni lines. The project site is also served by Chariot, a private commuter shuttle.

PROJECT AND VARIANT TRIP GENERATION

The proposed development project, with 558 residential units, 49,999 gross square feet of office space, 54,117 gross square feet of retail space, a child care center, and 895 off-street vehicle parking spaces,[3] would generate 16,462 daily person trips by residents, employees, and visitors to the project site. The calculations of person trips accounts for existing activity on the site by current occupants, and also accounts for internal trip capture. Internalization is dependent on the quantity and mix of uses as well as the varying levels of activity they generate at various times of day. As a result, the internalization percentage is different for each scenario and time period. These internal trips begin and end on the project site and would not be made by automobile but by walking and bicycling. Approximately 17.6 percent of the trips generated by the proposed project would be internal to the project site in the a.m. peak hour, and 18.9 percent would be internal in the p.m. peak hour. The proposed project would generate approximately 5,760 daily vehicle trips external to the project site, with 691 weekday a.m. peak hour vehicle trips, and 752 weekday p.m. peak hour vehicle trips.

The project variant would have the same land uses as the proposed project, with the exception that the 49,999 square feet of office space would not be included and in its place an additional 186 residential units would be constructed, for a total of 744 dwelling units on the site. In addition, the retail and child care spaces would be slightly reduced. With the additional residential units but reduced commercial space, there would be 971 off-street vehicle parking spaces. The project variant would generate approximately 16,171 daily person trips by residents, employees, and visitors. Approximately 19 percent of the trips would be internal to the project site in the a.m. peak hour and approximately 19.2 percent would be internal to the site in the p.m. peak hour. The project variant would result in approximately 5,744 daily vehicle trips external to the project site, with 726 a.m. weekday peak hour vehicle trips, and 804 weekday p.m. peak hour vehicle trips.

Both the proposed project and project variant include bicycle parking in the amounts required in the San Francisco Planning Code. The proposed project includes 592 class 1 secure bicycle parking spaces for residents and employees and 101 class 2 bicycle parking spaces in bike racks for public use. The project

[3] Note that for both the proposed project and the project variant, 60 of these parking spaces would replace 60 existing parking spaces on the site that are available for public parking on a paid hourly basis.

variant includes 768 class 1 secure bicycle parking spaces and 122 class 2 bicycle parking spaces in bike racks.

COMPARABLE PROJECT TRIP GENERATION

To analyze the transportation efficiency of the proposed and variant projects, the projects' vehicle trip generation was examined against that of comparable developments. The comparable project is assumed to be a project with similar land uses as the proposed project but with vehicle trip generation that is more typical of national averages. In addition to the same numbers of residential units and a childcare center, the comparable project includes a low-rise shopping center, a donut shop, and a quality restaurant to make its land uses similar to the retail uses in the proposed project and project variant, and includes general office space in the same amount as in the proposed project. The comparable development's vehicle trip generation was calculated using the standard national reference, the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*.[4] The comparable project has the same land uses and quantities (size/number of units) as the proposed project and project variant, but may not have the same characteristics as the proposed project and project variant that would lead to trip reductions, such as an urban location near transit on an infill site.

The comparable project that corresponds to the proposed project would generate 13,532 total daily vehicle trips, including 1,374 total vehicle trips in the weekday AM peak hour and 975 total vehicle trips in the weekday PM peak hour. The comparable project that corresponds to the project variant would generate 13,847 total daily vehicle trips, including 1,350 total weekday a.m. peak hour vehicle trips and 962 total weekday p.m. peak hour vehicle trips.

VEHICLE MILES TRAVELED

In addition to vehicle trip generation, there are other factors related to vehicular travel. These factors include housing density, diversity of land uses, design of the transportation network, and distance to high-quality transit, among others. Typically, low-density development at greater distances from other land uses and located in areas with poor access to transit generates more automobile travel and higher vehicle miles traveled (VMT) than development in urban areas with higher densities, a greater mix of land uses, and more travel options than private automobiles. San Francisco has a lower average VMT traveled ratio than the San Francisco Bay Area region, because it has higher residential densities, is well-served by transit and other travel modes such as the bicycle network, and has multiple neighborhood-serving commercial areas.

The project site is located in transportation analysis zone (TAZ) 709, which is close to transit services and bicycle and pedestrian networks, and has a diversity of land uses. Therefore, a project located in TAZ 709 has substantially reduced vehicle trips and shorter vehicle distances, and thus reduced VMT per capita and per employee, compared to other areas of the region. The average daily VMT per capita for residential uses in TAZ 709 is 7.3 miles, which is approximately 58% below the regional average daily VMT per capita of 17.2 miles. Additionally, the average daily VMT per employee for office uses in TAZ 709 is 10.1 miles, which is approximately 47% below the regional average daily VMT per employee of 19.1 miles. The average daily VMT per employee for retail uses in TAZ 709 is 8.3 miles, which is approximately 44% below the regional average daily VMT per employee of 14.9 miles.

TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM

The project sponsor will be required to implement a Transportation Demand Management (TDM) Program to encourage the use of non-auto modes and reduce vehicle trips, pursuant to San Francisco

[4] *Trip Generation Manual 10th Edition.* Institute of Transportation Engineers, 2017.

Planning Code section 169. The measures in the project's TDM Program would reduce vehicle trips generated by the proposed project or project variant; however, they have not been taken into account in calculating trip generation for the proposed project or project variant and therefore are not reflected in the comparison with the comparable project.

The project sponsor currently proposes the following TDM measures. These measures are subject to revision during the planning review process for project entitlements.

- **Improve Walking Conditions (TDM Measure Active-1A)**: Streetscape improvements proposed along California Street, Presidio Avenue, Masonic Avenue, Euclid Avenue and Laurel Street will be consistent with the Better Streets Plan. The proposed Mayfair and Walnut walks are intended to integrate the 10-acre site with the existing pedestrian network.
- **Bicycle Parking (TDM Measure Active-2)**: Bicycle parking would be provided for residential, office, and retail uses. For residential uses the project will provide the required class 1 secure space for each dwelling unit and two class 2 spaces for every 20 units. The number of spaces provided for office, childcare, and retail uses will comply with the San Francisco Planning Code.
- **Showers and Lockers (TDM Measure Active-3)**: At least one shower and at least six clothes lockers will be provided for every 30 class 1 bicycle parking spaces. The number of showers and clothes lockers will meet San Francisco Planning Code requirements.
- **Bicycle Repair Station (TDM Measure Active-5)**: A bicycle repair station, with tools and supplies such as a bicycle pump and wrenches, is proposed on the project site.
- **Car Share Parking (TDM Measure Cshare-1)**: Ten car share spaces will be provided in Basement Level B3 of the California Street Garage in accordance with the San Francisco Planning Code.
- **Delivery Supportive Amenities (TDM Measure Delivery-1)**: An area for the receipt and temporary storage of package deliveries will be provided in the off-street loading areas or other location on the project site.
- **Onsite Childcare (TDM Measure Family-2)**: An onsite childcare facility in the Walnut Building is part of the proposed project or project variant.
- **Multimodal Wayfinding Signage (TDM Measure Info-1)**: Multimodal wayfinding signage that directs tenants, residents, visitors, and employees to nearby transportation services will be provided. Signage will comply with San Francisco standards.
- **Real Time Information Displays (TDM Measure Info-2)**: Real time information displays (showing information about transit lines, walk time to transit locations, or the location of onsite car share vehicles, for example) will be provided in prominent locations on the project site.
- **Tailored Transportation Marketing (TDM Measure Info-3)**: Individualized, tailored marketing and communication campaigns regarding sustainable transportation modes will be implemented. A TDM coordinator will manage these marketing services, to include promotions and welcome packets with information about transportation options. Personal consultations will be offered to new residents and retail employees along with a request for a commitment to try sustainable transportation options.
- **Unbundle Parking (TDM Measure Pkg-1)**: All accessory parking for the proposed project will be leased or sold separately from the rental or purchase fees.

Based on the analysis included in the TDM Technical Justification Memo,[5] prepared by various San Francisco city agencies in support of the TDM ordinance, measures from the TDM Program such as improving walking conditions could reduce VMT by up to two percent, and unbundled parking could reduce VMT by up to 4.5 percent. As such, implementation of the proposed TDM package would result in a further reduction in vehicle trips to and from the site.

TRIP GENERATION AND VMT COMPARISON SUMMARY

To compare the overall trip generation of the proposed project and project variant to the comparable project, the trip generation estimates for the proposed project and project variant were adjusted to account for existing uses and internal trips. The resulting vehicle-trip generation estimates were then compared to the trip generation estimates for the comparable project.

As shown in the following tables both the proposed project and the project variant would result in a decrease in vehicle trip generation compared to the respective comparable project. Table 1, Trip Generation Comparison for Proposed Project, shows that the proposed project would generate 7,772 fewer daily vehicle trips than the respective comparable project. This equates to a 57 percent decrease in daily vehicle trips, a 50 percent decrease in weekday a.m. peak hour vehicle trips, and a 23 percent decrease in weekday p.m. peak hour vehicle trips.

Table 1: Trip Generation Comparison for Proposed Project

Project	Land Use	Size	Total Daily Trips	Weekday AM Peak Hour Total (In and Out)	Weekday PM Peak Hour Total (In and Out)
Comparable Development	Residential	558 units	13,532	1,374	975
	Retail/ Childcare	68,807 gsf			
	Office	49,999 gsf			
Proposed Project	Residential	558 units	5760	689	751
	Retail/Childcare	68,807 gsf			
	Office	49,999 gsf			
	Vehicle Trip Decrease	--	**7,772**	**685**	**224**
	Percent Decrease		**57%**	**50%**	**23%**

Source: ITE Trip Generation Manual, 10th Edition; Kittelson & Associates, Inc., 2018

As shown in Table 2: Trip Generation Comparison for Project Variant, it is estimated that there would be 8,103 fewer daily vehicle trips generated compared to the comparable project, which corresponds to a 59 percent decrease in daily vehicle trips, a 46 percent decrease in weekday AM peak hour vehicle trips, and a 16 percent decrease in weekday PM peak hour vehicle trips.

In comparison to the regional average daily VMT per capita/employee, as discussed above, the average daily VMT per capita within TAZ 709 for residential, office, and retail uses is 58 percent, 47 percent, and 44 percent lower, respectively, when compared to the regional averages. This shows that, for both the proposed project and the project variant, there is expected to be lower than average daily VMT when compared to the regional average daily VMT, substantially more than a 15 percent reduction.

[5] City and County of San Francisco, *Transportation Demand Management Technical Justification*, Appendix B, January 2018. Available online at http://default.sfplanning.org/plans-and-programs/emerging_issues/tsp/TDM_Technical_Justification_update2018.pdf, accessed July 27, 2018

Table 2: Trip Generation Comparison for Project Variant

Project	Land Use	Size	Total Daily Trips	Weekday AM Peak Hour Total (In and Out)	Weekday PM Peak Hour Total (In and Out)
Comparable Development	Residential	744 units	13,847	1,350	962
	Retail/ Childcare	63,243 gsf			
Project Variant	Residential	744 units	5,744	726	804
	Retail/ Childcare	63,243 gsf			
	Vehicle Trip Decrease	--	**8,103**	**624**	**158**
	Percent Decrease		**59%**	**46%**	**16%**

Source: ITE Trip Generation Manual, 10th Edition; Kittelson & Associates, Inc., 2018

CONCLUSION

The combined effects of the project's urban infill location along a major transit corridor that is close to transit, bicycle, and pedestrian amenities would reduce the anticipated daily vehicular trip generation estimates by approximately 57 percent (project) or 59 percent (variant) as compared to a comparable mixed-use project. Therefore, the proposed project or project variant would exceed the 15 percent greater transportation efficiency threshold for an Environmental Leadership Development Project. Implementation of the TDM Program will enhance the transportation efficiency even more.

4. Information to show that the project is located on an infill site as defined at Public Resources Code Section 21061.3, and in an urbanized area, as defined at Public Resources Code Section 21071.

The project site is located in San Francisco on an infill site surrounded by existing residential, commercial, and institutional development. An infill site is defined in Public Resources Code section 21061.3 as a site that "has been previously developed for qualified urban uses." A "qualified urban use" is defined in Public Resources Code section 21072 as "any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses." The project site meets this definition as it is currently a commercial office use and a public institutional use occupied by the University of California, San Francisco, with associated parking and landscaping.

The project site is located in an urbanized area as defined in Public Resources Code section 21071, as it is in "an incorporated city" that has a population of at least 100,000 persons. The City and County of San Francisco is an incorporated city that has an estimated population of 884,363 according to the 2017 estimates prepared by the United States Census Bureau.

Thus, the proposed project and variant would be an urban infill development because it is located on an infill site previously developed with a qualified urban use in an urbanized area.

5. Information required by Public Resources Code section 21180(b)(1) is available for projects within a metropolitan planning organization for which a sustainable communities strategy or alternate planning strategy is in effect. For the purposes of this provision, "in effect" means that the sustainable communities strategy or the alternative planning strategy has been adopted by the metropolitan planning organization, and that the Air Resources Board has accepted the metropolitan planning organization's determination that the sustainable communities strategy or alternative planning strategy meets the adopted greenhouse gas reduction targets and is not the subject of judicial challenge.

Senate Bill (SB) 375 was adopted by the legislature in August 2008 and signed into law by the Governor in September 2008. This legislation links regional planning for housing and transportation with the greenhouse gas (GHG) reduction goals in Assembly Bill 32. Each Metropolitan Planning Organization is required to adopt a Sustainable Communities Strategy to encourage compact land development to reduce passenger vehicle miles traveled and vehicle trips so that the region will meet targets established by the California Air Resources Board (CARB) for reducing GHG emissions. In September 2010, the CARB adopted regional GHG targets for passenger vehicles and light trucks for the years 2020 and 2035 for the various Municipal Planning Organizations in California. Two climate protection targets were established for the San Francisco Bay Area by the CARB: a per capita reduction of GHG emissions by 7 percent by year 2020 and 15 percent by year 2035.[6]

The project is within the jurisdiction of the Association of Bay Area Governments (ABAG). ABAG and the Metropolitan Transportation Commission (MTC) published the draft Plan Bay Area, the region's proposed Regional Transportation Plan/Sustainable Communities Strategy, in 2010. ABAG and MTC adopted the final Sustainable Communities Strategy in 2013 and submitted the final Plan Bay Area, containing the final Sustainable Communities Strategy, to the CARB in early 2014. The supporting documentation for the Sustainable Communities Strategy shows that the Plan would accomplish a 10 percent per capita carbon dioxide emissions reduction from passenger vehicles by 2020 and a 16 percent per capita reduction by 2035. CARB Executive Order G-14-028, approved in April 2014, indicated that the CARB accepted ABAG's quantification of GHG emissions from the Sustainable Communities Strategy and determined that if implemented, Plan Bay Area would achieve the established reduction targets in compliance with SB 375. Plan Bay Area was challenged in court in 2014 in multiple actions; each of the challenges has either been settled or the Plan was upheld in the courts.

More recently, MTC and ABAG prepared and adopted Plan Bay Area 2040 in July 2017, containing updates to the original Plan Bay Area based on new forecasts of regional population and employment growth and distribution using upgraded models, and on adjusted approaches to some GHG reduction strategies based on surveys of their effectiveness. The basic land use and transportation strategies from the 2013 Sustainable Communities Strategy remain, promoting infill development with higher densities and more multi-family housing in mixed-use communities focused on neighborhoods with transit. Transportation strategies focus on enhancing transit and improving roadways, with more high-occupancy vehicle lanes and toll lanes.

Plan Bay Area 2040 would exceed the GHG emissions target established by the CARB in 2010, achieving a 16 percent reduction by the year 2035 and an 18 percent reduction in emissions between 2005 and 2040,

[6] In March 2018 CARB adopted updated targets for ABAG/MTC that will be applicable beginning in October 2018. These new targets are a per capita reduction in GHG emissions of 10 percent by year 2020 and 19 percent by 2025. SB 375 Regional Greenhouse Gas Emissions Reduction Targets, CARB Resolution 18-12, adopted March 22, 2018. Resolution is available at https://www.arb.ca.gov/cc/sb375/finalres18-12.pdf. Updated targets are available at https://www.arb.ca.gov/cc/sb375/finaltargets2018.pdf.

according to the *Performance Assessment Report* for Plan Bay Area 2040, published by ABAG and MTC in July 2017 [p. 11]. The CARB staff reviewed Plan Bay Area 2040 and approved a technical evaluation of the GHG reduction quantifications in June 2018.[7]

Plan Bay Area focuses on where the region is expected to grow and what transportation investments will support that growth. It encourages infill development and multifamily development particularly close to public transit and in walkable neighborhoods. The proposed project or variant, once approved, will be consistent with the "general use designation, density, building intensity, and applicable policies specified for the project area in …a sustainable communities strategy" as required in Public Resources Code section 21180(b)(1). The development program provides for reasonable-density infill development in a transit priority area as defined in Public Resources Code Section 21099(a)(7). Although the project site is not in a Priority Development Area designated in Plan Bay Area 2040, it fulfills many of the strategies contained in the plan, as the site is located in a mixed-use neighborhood with retail, restaurant, childcare and other community services that will encourage residents to walk or bicycle to nearby services. The project or project variant will include retail space and a childcare center on the site that will further reduce automobile travel generated.

6. If the project is a multi-family residential project, evidence that (1) private vehicle parking spaces are priced and rented or purchased separately from dwelling units; or (2) the dwelling units are subject to affordability restrictions that prescribe rent or sale prices, and the cost of parking spaces cannot be unbundled from the cost of dwelling units.

The project or variant proposes to provide unbundled parking for all residential units except for any dwelling units subject to affordability restrictions that prescribe rent or sale prices and for which the cost of parking spaces cannot be unbundled from the cost of the affordable dwelling units.

7. Information establishing that the project entails a minimum investment of $100 million in California through the time of completion of construction.

The proposed project includes 558 residential units in addition to office, retail and childcare space and subsurface parking. The project variant includes 744 residential units in addition to retail and childcare space and subsurface parking. The project or variant will have expended over $175 million in construction costs by the time construction is completed, according to the estimate presented in the Applicant's Environmental Evaluation Application to the San Francisco Planning Department in March 2016. In addition, with a range of approximately 75 to 175 construction workers on the site on a typical day during construction, based on current prevailing wages, construction labor costs alone could be approximately $150 to $175 million. Thus, the project or variant will exceed the minimum investment of $100 million by the time of completion of construction.

8. Information establishing that the prevailing and living wage requirements of Public Resources Code section 21183(b) will be satisfied.

Public Resources Code section 21183(b) requires that a project to be certified by the Governor must create "high-wage, highly skilled jobs that pay prevailing wages for construction jobs and living wages and provide construction jobs and permanent jobs for Californians, and help reduce unemployment." Up to 75 to 175 construction workers would be on the project site on a typical day during the approximately 7-year construction period estimated for the proposed project or variant.

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[7] California Air Resources Board staff, *Technical Evaluation of the Greenhouse Gas Reduction Quantification for the Association of Bay Area Government's and Metropolitan Transportation Commission's SB375 2017 Sustainable Communities Strategy, June 2018. Available at* http://www.arb.ca.gov/cc/sb375/sb375.htm Accessed on August 3, 2018.

Public Resources Code section 21183(b) defines "jobs that pay prevailing wages" as "all construction workers employed in the execution of the project will receive at least the general prevailing rate of per diem wages for the type of work and geographic area, as determined by the Director of Industrial Relations pursuant to Sections 1773 and 1773.9 of the Labor Code." The Applicant will include the prevailing wage requirement in all construction contracts.

The proposed project or variant will create high-wage, highly skilled jobs, both during construction and during operation. Approximately 395 permanent jobs would be created with the proposed project, and approximately 206 permanent jobs would be created by the project variant. In addition to the prevailing wage requirements for construction workers, the Applicant will be required to comply with local ordinances that require payment of living wages. Chapter 12R of the San Francisco Administrative Code requires payment of a minimum wage that is higher than that required by the State of California. As of July 1, 2018, the minimum wage in San Francisco is $15.00 per hour, substantially higher than the California minimum wage of $11.00 per hour in 2018. The San Francisco ordinance provides for annual increases in July of each year after 2018 based on the Consumer Price Index for urban wage earners for the San Francisco-Oakland-San Jose, California metropolitan statistical area. The requirements of Chapter 12R are not applicable to employees who are covered by a collective bargaining agreement if the agreement expressly waives the ordinance's requirements. A copy of Chapter 12R is presented in **Attachment D** to this Application, along with a copy of the California Department of Industrial Relations' letter approving the San Francisco Office of Labor Standards Enforcement's Labor Compliance Program.

9. Information establishing that the project will not result in any net additional greenhouse gas emissions. This information is subject to a determination signed by the Executive Officer of the Air Resources Board that the project does not result in any net additional greenhouse gas emissions, following the procedures set forth in section 6 of the Governor's Guidelines.

The California Air Resources Board (CARB) must review the analysis of greenhouse gas emissions (GHG) from construction and operation of the proposed project or project variant. The analysis should include the technical basis for characterizing and analyzing GHG emissions and for identifying and quantifying the GHG reduction potential of proposed strategies to fully offset any GHG emissions generated by a proposed project. A Memorandum prepared by Ramboll presents the technical methodology for and results of quantifying the GHG emissions from the existing activities on the project site and the GHG emissions from construction and operation of the proposed project or project variant. The Memorandum and its Appendix materials are in **Attachment E**.

The baseline for the analysis of the proposed project and project variant is the emissions from existing activities on the project site. Project-generated emissions were calculated yearly during construction phases, with operation of earlier phases overlapping with later construction phases. Construction was assumed to occur over a 7-year period; however, the applicant may choose to develop the project site over a timeframe of up to 15 years. The calculations assume a seven-year timeframe to present the most conservative approach to the analysis with the most concentrated emissions. Operational emissions were calculated for 2020 through 2057 to account for an approximately 30-year lifespan of the project following buildout.

Total construction emissions of GHG would be 4,273 metric tons (MT) of CO_2e for both the proposed project and project variant. Total operational emissions would be 3,703 MT for the proposed project and 6,235 MT for the project variant. Total gross operational emissions for the lifetime of the proposed project or project variant do not include any credits from years where existing emissions were calculated to be higher than those from the proposed project or the project variant. By 2038 for the proposed project

and by 2044 for the project variant, with anticipated reductions from the California Renewables Portfolio Standard and fleet turnover, operational emissions of the proposed project or project variant would be below existing emissions.

To offset GHG emissions from construction in 2020 through 2027 and from operation in 2026 through 2037 for the proposed project or through 2044 for the project variant, the project sponsor commits to measures to ensure there would be no net additional GHG emissions from the project or project variant. This would be achieved through on-site measures such as installing additional solar panels, additional on-site electric vehicle charging stations, or through the purchase of qualified GHG credits, or a combination of on-site measures and credits.

10. Information establishing that the project will comply with the requirements for commercial and organic waste recycling in Chapters 12.8 (commencing with Public Resources Code section 42649) and 12.9 (commencing with Public Resources Code Section 42649.8), as applicable.

California has had statutory and regulatory requirements related to solid waste recycling for well over 10 years requiring local governments to reduce solid waste in landfills with waste diversion programs. The two more recent statutes, in Chapters 12.8 and 12.9 of Division 30 of the Public Resources Code related to waste management, require recycling of solid waste and organic waste. Chapter 12.8 requires that businesses and multi-family residential buildings with five units or more that generate more than four cubic yards of solid waste per week source separate its solid waste and subscribe to some kind of recycling service consistent with local ordinances or state regulations. Chapter 12.9 requires that businesses generating over specified amounts of organic solid waste per week arrange for recycling services for that organic solid waste, and also requires that if the state has not reached a reduction of 50 percent below the 2014 level of disposal of organic waste by 2020, businesses that generate more than two cubic yards of solid waste per week must source separate and arrange for recycling of organic solid waste. These statutes also require local jurisdictions to establish a commercial solid waste recycling program if it did not already have one as of July 2012, and an organic solid waste recycling program by January 2016 if it did not already have one.

The proposed project or variant will be subject to these statutory requirements, and will comply by following all of the requirements of San Francisco's local recycling and composting ordinances.

San Francisco's Mandatory Recycling and Composting Ordinance (No. 100-09) in Chapter 19 of the San Francisco Environment Code is a local municipal ordinance requiring all persons located in San Francisco to separate their recyclables, compostable and landfilled trash and to participate in recycling and composting programs. The Applicant has included appropriate recycling and composting collection facilities in the design of each building and in the overall site design so that these materials can be easily disposed of by residents and employees and easily collected by the various solid waste collection and disposal companies that serve the project site.

Demolition and construction of the proposed project would generate an estimated 47,000 cubic yards of debris, and an estimated 241,300 net cubic yards of soil from excavation of the site. The San Francisco Construction and Demolition Debris Recovery Ordinance (No. 27-06), Chapter 14 in the San Francisco Environment Code, requires that substantial amounts of construction and demolition debris material removed from a project must be recycled or reused. All demolition and construction debris must be transported by a registered transporter and processed by a registered facility. The processing facility must divert a minimum of 65 percent of total waste received from landfills, including materials separated for reuse and recycling. No construction and demolition debris can be taken to landfill or put in the garbage, according to San Francisco Health Code Section 288. Copies of these local ordinances are provided in **Attachment F**.

Thus, the Applicant will be required to comply not only with the Public Resources Code requirements for commercial and organic waste recycling, but also with the requirements of San Francisco's local ordinances requiring recycling and composting solid waste both during construction and during operation of the proposed project or variant.

11. Information documenting a binding agreement between the project proponent and the lead agency establishing the requirements set forth in Public Resources Code section 21183(e) (all mitigation measures will be conditions of approval and enforceable, and environmental mitigation measures will be monitored and enforced for the life of the obligation), (f) applicant will pay costs for hearing by Court of Appeal, and (g) (applicant will pay costs of preparing the record of proceedings).

Written acknowledgement from the project sponsor containing commitments regarding Public Resources Code sections 21183(e)(f) and (g) is included as **Attachment G.** The Applicant is committed to comply with all Mitigation Monitoring and Reporting Program measures from the EIR that are included as conditions of approval and that those conditions will be fully enforceable by the San Francisco Planning Department, Department of Building Inspection, Health Department, and/or the Department of the Environment. The Applicant agrees to pay the costs for hearing by the Court of Appeal, and will pay the costs of preparing the record of proceedings.

REFERENCES

Association of Bay Area Governments/Metropolitan Transportation Commission, *Performance Assessment Report, Plan Bay Area 2040*, July 2017.

California Air Resources Board, Executive Order G-14-028, April 10, 2014.

California Air Resources Board, Resolution 18-12, March 18, 2018.

California Air Resources Board, SB375 Regional Greenhouse Gas Emissions Reduction Targets.

California Air Resources Board, *Technical Evaluation of the Greenhouse Gas Reduction Quantification for the Association of Bay Area Government's and Metropolitan Transportation Commission's SB375 2017 Sustainable Communities Strategy, June 2018.*

Environmental Evaluation Application, 3333 California Street, submitted to San Francisco Planning Department by The Prado Group on March 29, 2016.

City and County of San Francisco, *Transportation Demand Management Technical Justification*, Appendix B, January 2018.

Institute of Transportation Engineers, *Trip Generation Manual, 10th edition*, 2017.

Office of Planning and Research, *Governor's Guide for Streamlining Judicial Review under the California Environmental Quality Act Pursuant to AB900*, January 2018.

San Francisco Planning Department, *Better Streets Plan*, January 2011.

Attachment 3

Operation of the proposed new land uses, which are typical urban land uses, are not anticipated to create significant sources of new odors. Thus, odors would not be expected to occur as a result of the operation of the proposed project or project variant.

Therefore, odor impacts related to the construction and operation of the proposed project or project variant would be less than significant, and no mitigation measures are necessary. This topic will not be discussed in the EIR.

Impact C-AQ-1: The proposed project or project variant, in combination with past, present, and reasonably foreseeable future projects, could contribute to cumulative air quality impacts. (*Potentially Significant*)

The construction and operational emissions discussed above would be evaluated at a project level. Air quality impacts associated with the proposed project or project variant could substantially contribute to cumulative impacts. For these reasons, the proposed project or project variant, in combination with other past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable air quality impact. Therefore, potential cumulative air quality impacts will be addressed in the EIR.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
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?	☐	☐	☒	☐	☐
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	☐

Greenhouse gas (GHG) emissions and global climate change represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from past, present, and future projects have contributed and will continue to contribute to global climate change and its associated environmental impacts.

The Bay Area Air Quality Management District (air district) has prepared guidelines and methodologies for analyzing GHGs. These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan.

Attachment 4

DRAFT ENVIRONMENTAL IMPACT REPORT

San Francisco 2004 and 2009 Housing Element

Volume I: Draft EIR (Section I to Section V.G)

PLANNING DEPARTMENT
CASE NO. **2007.1275E**

STATE CLEARINGHOUSE NO. 2008102033

Draft EIR Publication Date:	**June 30, 2010**
Draft EIR Public Hearing Date:	**August 5, 2010**
Draft EIR Public Comment Period:	**June 30, 2010 – August 16, 2010**

SAN FRANCISCO
PLANNING
DEPARTMENT

Written comments should be sent to:
Environmental Review Officer | 1650 Mission Street, Suite 400 | San Francisco, CA 94103

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

As climate change is an irreversible, significant cumulative impact on a global scale, consideration of an impact to climate change is essentially an analysis of the contribution to a cumulatively significant global impact through its emission of GHGs and therefore addressed in the cumulative evaluation.

As discussed previously, the 2004 Housing Element and 2009 Housing Element would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the RHNA. Therefore, the rezoning of land uses is not required. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. On the other hand, the 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

Cumulative Impacts

Impact GH-1: The proposed Housing Elements would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. (Less than Significant)

The subject of this EIR is the proposed revision of the Housing Element of the San Francisco General Plan. The 2004 and 2009 Housing Elements are updates to the 1990 Residence Element of the San Francisco General Plan, a public policy document that addresses issues of housing needs for San Francisco residents and households. As discussed above, new residential development would occur regardless of the proposed Housing Elements; the proposed Housing Elements provide direction for how new housing should occur.

Attachment 5

SAN FRANCISCO
PLANNING DEPARTMENT

Compliance Checklist
Greenhouse Gas Analysis

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

A. GENERAL PROJECT INFORMATION:

Case No: 2015-014028ENV

Project name/Address: 3333 California Street Mixed-Use Project

Block/Lot: 1032/003

Brief Project description: The 10.25-acre project site is currently occupied by the University of California San Francisco Laurel Heights Campus in the Presidio Heights neighborhood of San Francisco. The project would demolish an existing annex building, surface parking lots, and circular garage ramp structures. The existing four-story office building would be partially demolished and divided into two separate buildings, expanded to include new levels (80 to 92 feet in height), and adapted for residential use. Portions of the below-grade parking garage would be retained and incorporated into a larger parking structure. Thirteen new buildings, ranging in height from 30 to 45 feet, would be constructed on the site with of mix of residential, office, retail, and child care uses. The proposed project would result in 558 dwelling units within 824,691 gross square feet of residential floor area; 49,999 gross square feet of office floor area; 54,117 gross square feet of retail floor area; and a 14,690- gross-square-foot child care center. The proposed project would include 895 vehicle parking spaces in four below-grade garages and six individual, two-car garages; 592 class 1 and 101 class 2 bicycle parking spaces; and 236,000 square feet of open areas, including publicly accessible plazas and public walkways. A project variant that would add two levels and replace the proposed office space in one of the buildings with 186 residential units (for a total of 744 dwelling units) is also being considered.

B. COMPLIANCE CHECKLIST TABLE

Complete and attach to this form the appropriate compliance table by determining project compliance with the identified regulations and providing project-level details in the discussion column. Please note that Table 1 applies to Private Development Projects, Table 2 applies to Municipal Projects, and Table 3 is for plan-level analysis. Projects that do not comply with an ordinance/regulation may be determined to be inconsistent with San Francisco's qualified GHG reduction strategy.

Compliance Checklist Table attached: ☒ Table 1. Private Development

☐ Table 2. Municipal Project

Regulation	Requirements	Project Compliance	Remarks
			project site's solid waste collection rooms at the basement levels of the proposed California Street Garage (Basement Level B3) and Masonic Garage (Basement Level B1) to pick up collected solid waste on a regularly scheduled basis. Pickup would also occur off Laurel Street to service the Laurel Street Duplexes and the Mayfair Building.
San Francisco Construction and Demolition Debris Recovery Ordinance (San Francisco Environment Code, chapter 14, San Francisco Building Code, chapter 13B, and San Francisco Health Code, section 288)	Applies to all projects: No construction and demolition material may be taken to landfill or placed in the garbage. All (100 percent of) mixed debris must be transported by a registered hauler to a registered facility to be processed for recycling. Source separated material must be taken to a facility that recycles or reuses those materials. Additionally, projects that include full demolition of an existing structure must submit a waste diversion plan to the Director of the Department of Environment and the plan must provide for a minimum of 65 percent diversion from landfill of construction and demolition debris, including materials source separated for reuse or recycling.	☒Project Complies ☐Not Applicable ☐Project Does Not Comply	The proposed project or project variant would comply with San Francisco Construction and Demolition Debris Recovery Ordinance. The project sponsor would not plan to truck construction and demolition material directly to a landfill or place it directly in the garbage. Project sponsor would use a registered hauler to transport the mixed debris to a registered facility for processing and recycling. A waste diversion plan documenting a minimum 65 percent diversion of construction and demolition debris from landfills would be required due to the proposed demolition of the existing annex building. The waste diversion plan would be prepared by the general contractor and submitted to the Director of the Department of Environment.

Attachment 6

SAN FRANCISCO
PLANNING DEPARTMENT

MEMO

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DATE: **November 12, 2010**

TO: **Major Environmental Analysis and Environmental Consultants**

FROM: **Jessica Range, Environmental Planner**

RE: **Greenhouse Gas Analyses Pursuant to CEQA**

This memorandum supercedes that titled "Consultant Prepared_GHGMemorandums_030408", dated March 4, 2008. This update is necessary to address recent requirements for greenhouse gas (GHG) analyses pursuant to CEQA, namely amendments to the State CEQA guidelines as per Senate Bill (SB) 97 and the Bay Area Air Quality Management District's (BAAQMD) *2010 CEQA Air Quality Guidelines* and updated thresholds of significance. SB 97 amended the State CEQA guidelines to address the feasible mitigation of GHG emissions or the effects of GHGs, and added a new section to the CEQA Checklist (CEQA Guidelines Appendix G) to address questions regarding a project's potential to emit GHGs.

Additionally, on June 2, 2010, BAAQMD adopted new and revised CEQA air quality thresholds of significance and issued revised guidelines that replace the 1999 air quality guidelines. The *2010 CEQA Air Quality Guidelines* provide for the first time CEQA thresholds of significance for greenhouse gas emissions. The BAAQMD has identified three options for determining whether a project's GHG emissions are significant. These options are as follows:

1. Compliance with a Qualified Greenhouse Gas Reduction Strategy, or
2. Whether a project's GHG emissions exceed 1,100 metric tons of carbon dioxide equivalents ($MTCO_2E$), or
3. Whether a project's GHG emissions exceed 4.6 $MTCO_2E$ per service population.

A lead agency may choose which threshold to analyze a project against for determining whether the project's GHG emissions are significant, however BAAQMD encourages lead agencies to prepare a Qualified GHG Reduction Strategy. On August 12, 2010, the San Francisco Planning Department submitted to the BAAQMD a draft of the City and County of San Francisco's *Strategies to Address Greenhouse Gas Emissions*. This document presents a comprehensive assessment of policies, programs and ordinances that collectively represent San Francisco's Qualified Greenhouse Gas Reduction Strategy. The BAAQMD reviewed San Francisco's GHG reduction strategy and concluded that the strategy meets the criteria for a Qualified GHG Reduction Strategy as outlined in BAAQMD's CEQA Guidelines (2010).[1] Therefore, projects that

[1] San Francisco's *Strategies to Address Greenhouse Gas Emissions* and BAAQMD's letter are available online at: http://www.sfplanning.org/index.aspx?page=1570.

are consistent with San Francisco's GHG reduction strategy would result in less than significant GHG emissions.

Compliance with a Qualified GHG Reduction Strategy

In order to facilitate a determination of compliance with San Francisco's GHG reduction strategy, the Planning Department has prepared a Greenhouse Gas Analysis Compliance Checklist. Projects that are seeking a determination of CEQA GHG significance based on compliance with San Francisco's GHG reduction strategy must complete the Greenhouse Gas Analysis Compliance Checklist. The MEA planner or CEQA consultant in coordination with the project sponsor can prepare this checklist. However, only an MEA planner may make a determination of whether the project is consistent with San Francisco's GHG reduction strategy. Only projects located within the City and County of San Francisco are eligible to seek a determination of compliance with San Francisco's GHG reduction strategy.

For those projects that are seeking a determination of compliance with San Francisco's GHG reduction strategy, the MEA planner or CEQA consultant should prepare the Greenhouse Gas Analysis Compliance Checklist. If the CEQA consultant is preparing the checklist, it should be submitted to the MEA planner for a determination of compliance. The signed checklist should be included in the project file and is used to complete the required CEQA document. For projects that do comply with San Francisco's GHG reduction strategy, the MEA planner or CEQA consultant should follow the Standard Climate Change Language v.7, and include appropriate information from the Greenhouse Gas Analysis Compliance Checklist. A quantitative greenhouse gas analysis is not required.

CEQA Significance Based on Quantitative Thresholds

Generally, projects that do not comply with San Francisco's *Strategies to Address Greenhouse Gas Emissions,* or projects that are located outside of the City and County of San Francisco, or are otherwise not eligible to be analyzed qualitatively must conduct a quantitative analysis of the project's GHG emissions. The quantitative analysis must be prepared pursuant to BAAQMD's *2010 CEQA Air Quality Guidelines* and supporting documents. These projects are required to submit a GHG Technical Memorandum that at a minimum includes the following:

(1) A summary of the **direct** (on-road and off-road mobile sources, heating, electricity generation, and land conversion, etc.) and **indirect** (off-site electricity generation, methane released from landfills, energy associated with water use, transport and treatment, etc.) project induced greenhouse gas emissions. Calculations should be conducted for both project operations and construction emissions.

(2) Methodology and assumptions used for calculating a project's greenhouse gas emissions. This section should clearly identify the models used, each input and its source (e.g., transportation report, etc.), and any other assumptions relied upon. Calculations should

be included as an attachment, if not directly written into the memorandum. All models and inputs must be referenced appropriately.

(3) Results of the total direct and indirect project induced greenhouse gas emissions resulting from project operations and construction. Construction emissions should be presented as total emissions as well as amortized emissions over the life of the project.

   a. If the project is seeking a determination using the service population threshold, the Results section should identify the project's service population and emissions based on this service population.

Greenhouse gas technical memoranda should be submitted to the MEA case planner. The MEA case planner will enter the project into the GHG Review Log. The GHG analysis will be assigned to an MEA planner for review. CEQA consultants should anticipate at least one draft and one final GHG technical memorandum. General practice is that if a project is being prepared by a CEQA consultant, the consultant must also prepare the GHG analysis. For projects in which MEA is preparing the CEQA document in-house, the GHG analysis may also be conducted in-house. However, large or particularly complex projects may require a consultant to prepare the GHG analysis. For in-house GHG analyses, the MEA planner must complete a [Greenhouse Gas Analysis Request Form].

For questions regarding this memorandum, the Greenhouse Gas Analysis Compliance Checklist, or greenhouse gas analyses, please contact Jessica Range at (415) 575-9018 or Debra Dwyer at (415) 575-9031.

Attachment 7

OVERVIEW OF PROPOSED PROJECT AND PROJECT VARIANT

The project sponsor is requesting rezoning and adoption of a Special Use District, Conditional Use authorization and approval of a planned unit development, and approval of a Development Agreement for a multiphase, mixed-use development on the project site to be developed over a 7-to 15-year construction timeframe. The project site plan is shown in Figure 3, p. 5. As envisioned, the proposed project would include phased development (four phases) of residential uses (anticipated to include both market-rate and affordable dwelling units), retail uses, office uses, a child care center, parking, streetscape improvements, and open space. The project sponsor is also studying a variant to the proposed project: the Walnut Building Variant that replaces the proposed office use in the Walnut Building with residential uses and less retail space.[7]

Under the proposed project, the existing annex building, surface parking lots, and circular garage ramp structures along California Street would be demolished. The existing approximately 55.5-foot-tall office building at the center of the site (exclusive of the approximately 13-foot-tall mechanical penthouse) would be partially demolished and adapted to serve as two separate buildings, Center Building A and Center Building B, connected by a covered bridge. Dividing the building would allow for the development of a linear north-south connection from California Street to Euclid Avenue through the middle of the project site. The proposed north-south connection would align with Walnut Street (the proposed Walnut Walk) incorporating the site into the surrounding street grid. Center Building A and Center Building B would be renovated, adapted for residential use, and strengthened to accommodate vertical additions (see Figure 3, p. 5). Two residential levels would be added to Center Building A for a building height of approximately 80 feet tall. Two residential levels would be added to the east portion of Center Building B and three residential levels would be added to the west portion, for a building height ranging from approximately 80 feet on the east portion to 92 feet on the west portion. The heights are measured from the proposed residential lobbies adjacent to the proposed Walnut Walk to the top of the roof. A total of 13 new buildings would be constructed along California Street, Masonic Avenue, Euclid Avenue, and Laurel Street for a total of 15 buildings on site. The new buildings would consist of the following:

- The Plaza A and Plaza B buildings, two four-story mixed-use residential buildings with ground floor retail along California Street between Laurel and Walnut streets with proposed heights of 45 feet[8]
- The Walnut Building, a three-story mixed-use office building with ground floor retail and child care space along California Street east of Walnut Street with a proposed height of 45 feet

[7] The project variant is also identified as the Mixed-Use Multi-Family Housing Variant in the technical background studies and background supporting documentation.

[8] The overall heights referenced above, below and throughout the document are determined as described in Planning Code section 260 or will require a modification to the methodology through the planned unit development approval process.

Developers' Demolition of Existing Historic Building

Existing
362,000 GSF

Proposed Removal
(185,958 GSF)
51% Removed

Proposed New
322,888 GSF
New Levels Added

I-FRISBIER2

Section B

DEIR Deficiencies for Construction Trip Generation

DEFICIENCIES -CONSTRUCTION TRIP CALCULATIONs in the DEIR.

3
(GHG-1)

Attachment 1: SWAC Report 3333 California Street Mixed-Use Project Application for Environmental Leadership Development Project - Attachment E (Ramboll) - Table Con-5 Project Construction Trip Assumptions.

Attachment 2: 3333 California St. Mixed-Use Project DEIR Volume 2c: Appendices D-G Cover: EIR Appendix D "Transportation and Circulation"; Table of Contents: Section 8 "Truck Turning Templates."

Table Con-5 grossly understates the number of trips that will be required to remove the demolition debris and excavated soils from the site. Neither the authors of the reference nor the Planning Department have shown by analyses or data that this information is accurate or correct. The data is provided strictly by the "Project Sponsor" and no one has performed the basic due diligence needed to validate it.

The Project Sponsor understates the number of Hauling Trips by approx. 45% which directly under-represents the GHG calculations (in violation of FN 130 Planning Department "Compliance Checklist for GHG Analysis"; of Impact C-AQ-1 "less than Significant" conclusion pg. 146 of the Initial Study dated April 25, 2018; and of San Francisco 2004 and 2009 Housing element), under-reports the impact on Air Quality calculations and the resulting conclusions based on this discrepancy are simply erroneous and incorrect.

Table Con-5 shows a total of 18,020 Hauling Trips to remove the 288,000 cubic yards of demolition debris and Excavated Soils. This is an average of 16 cubic yards per trip. A dump truck capable of hauling 16 cubic yards would be unable to safely navigate 5 of the 6 major intersections around the site and pass safely through the surrounding neighborhoods. The DEIR Section 8 Truck Turning Templates of Volume 2 Appendix D "Transportation & Circulation Section 8 "truck Turning Templates."

A large tandem dump truck can haul approx. 11 cubic yards of soil and less of a mixed debris such as concrete, asphalt, steel. It is approx. 30ft in length and is also wider, by 11%, than the truck shown on Template SU-30. The narrower truck barely is able to make legal turns and this assume ideal conditions, no obstructions-cyclists, pedestrians, rain, etc. A wider dump truck would impinge on incoming traffic. A 16 cubic yard truck would be significantly more hazardous as s can be seen from Template WB-40 Circulation Exhibit; such a vehicle could not operate safely in any of the neighborhoods surrounding the site.

The number of trips is grossly underestimated by the Project Sponsor.
Assuming approx. 88,000 cubic yards of hard debris – concrete, asphalt, steel, aluminum, etc. - and an average load of 9 cubic yards results in approx. 9,800 dump truck loads.
Assuming the remaining 200,000 cubic yards to be soil, some wet, and an average load of 11

cubic yards results in 18,200 loads for a total of 28,000 loads or 1.55 times the number submitted by the Project Sponsor and accepted without validation by the Planning Department.

3
(GHG-1)
cont'd

As a result the GHG calculations in the Attachment are significantly understated by approx. 45% and the GHG are in fact "Significant" and require that they be correctly and accurately studied in the EIR. The Air Quality around the site will also be impacted by this gross under-calculation and the DEIR GHG, Air Quality and Traffic Analysis conclusions are, by definition, defective and invalid. The information is incomplete, incorrect, inaccurate.

Our DEMAND is that the number of Hauling Loads be recalculated using appropriate load factors; that the resulting GHG be properly and accurately re-calculated; that the Air Quality issues be revised to reflect the higher number of trips by the largest pieces of site equipment; that the Traffic Circulation be redone to reflect accurate information.

Our DEMAND is that GHG be correctly re-classified as "Signicant" and addressed appropriately.

Our DEMAND is that the Developer's excessive, unmitigated "Significant" GHG be compared against the Community Alternative Plan which generates less than one third of the GHG; impacts Air Quality by having one third the impact on the Hauling Trip totals alone (9,000 vs 27,000+).
The Community Alternative actually meets the standard for "Less than Significant."

The failure to validate key information provided by the Project Sponsor and their sub-contractors is a major failing of the DEIR. The Planning Department's failure to exercise the appropriate oversight of the information it uses to reach conclusions results in the DEIR being a collection of erroneous and self- serving conclusions that fails to meet the criteria for accuracy, completeness and correctness.

Attachment 1

3333 CALIFORNIA STREET MIXED-USE PROJECT
APPLICATION FOR ENVIRONMENTAL LEADERSHIP DEVELOPMENT PROJECT

Prepared for

Laurel Heights Partners, LLC
150 Post Street Suite 320
San Francisco, CA 94108

Prepared by

SWCA Environmental Consultants
330 Townsend Street, suite 216
San Francisco, CA 94107

August 17, 2018

I-FRISBIER2

Prepared for
The Prado Group
San Francisco, CA

Prepared by
Ramboll US Corporation
San Francisco, CA

Project Number
1690008541

Date
August 2018

AB900 ANALYSIS
3333 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA

Table Con-5. Project Construction Trip Assumptions
3333 California Street
San Francisco, California

Phase	Trip Category	Total Trips[1]	Total Trip Length[2] (miles)
1	Worker	58,050	21
2		38,625	
3		69,570	
4		32,175	
1	Non-hauling	2,500	14
2		500	
3		3,500	
4		400	
1	Vendor	1,300	14
2		1,000	
3		1,500	
4		850	
1	Hauling (Hazardous Waste)	1,636	60
2		24	
3		1,631	
4		313	
1	Hauling (Non-Hazardous Waste)	3,271	17
2		48	
3		3,263	
4		626	
1		3,271	48
2		48	
3		3,263	
4		626	

Notes:

1. Trips were provided by the Project Sponsor.
2. Worker, non-hauling, and vendor trip lengths assume CalEEMod® default values. Hauling trip lengths were provided by the Project Sponsor.

Abbreviations:

CalEEMod® - California Emissions Estimator MODel

Attachment 2

3333 CALIFORNIA STREET MIXED-USE PROJECT

DRAFT ENVIRONMENTAL IMPACT REPORT VOLUME 2c: APPENDICES D-G

CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT: CASE NO. 2015-014028ENV
STATE CLEARINGHOUSE NO. 2017092053

DRAFT EIR PUBLICATION DATE: NOVEMBER 7, 2018
DRAFT EIR PUBLIC HEARING DATE: DECEMBER 13, 2018
DRAFT EIR PUBLIC COMMENT PERIOD: NOVEMBER 8, 2018 - DECEMBER 24, 2018

WRITTEN COMMENTS SHOULD REFERENCE THE CASE NO. AND BE SENT TO:

Kei Zushi, EIR Coordinator
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103
CPC.3333CaliforniaEIR@sfgov.org

SAN FRANCISCO
PLANNING
DEPARTMENT

3333 California Street Mixed-Use Project

Case No. 2015-014028ENV

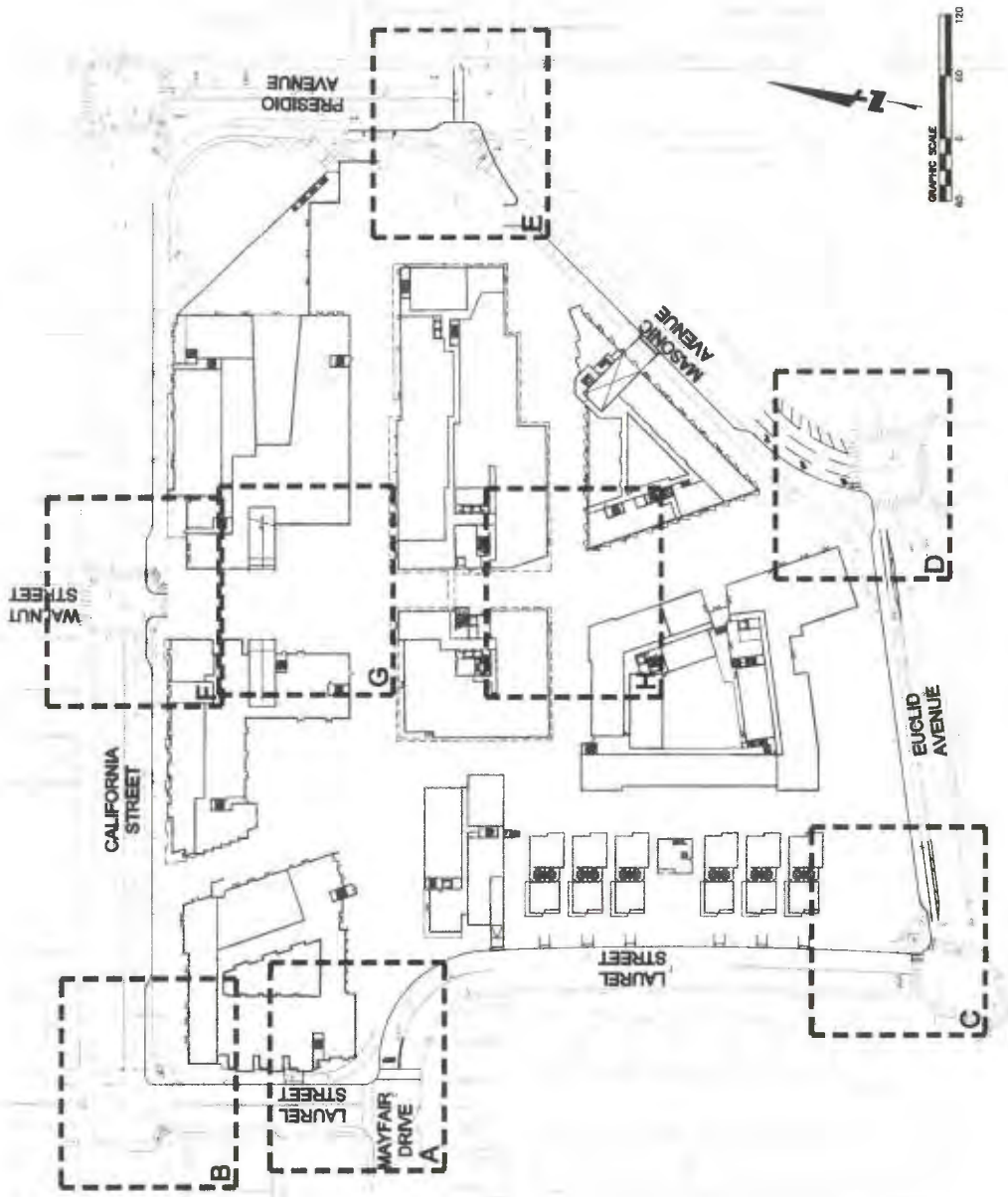
EIR Appendix D

Transportation and Circulation

Table of Contents

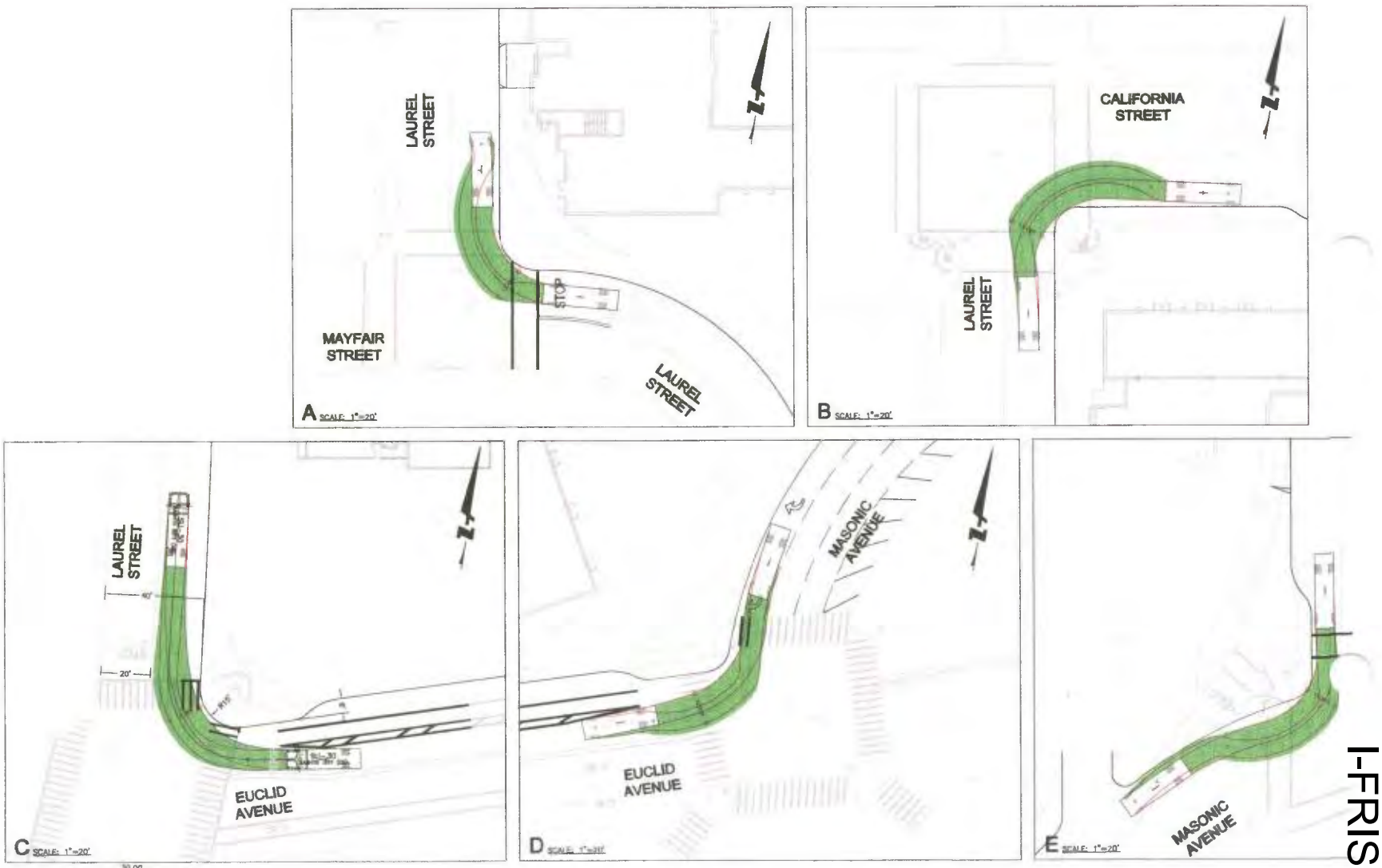
8. Truck Turning Templates

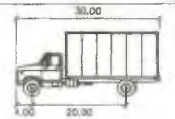
I-FRISBIER2



3333 CALIFORNIA

TRUCK TURNING INDEX





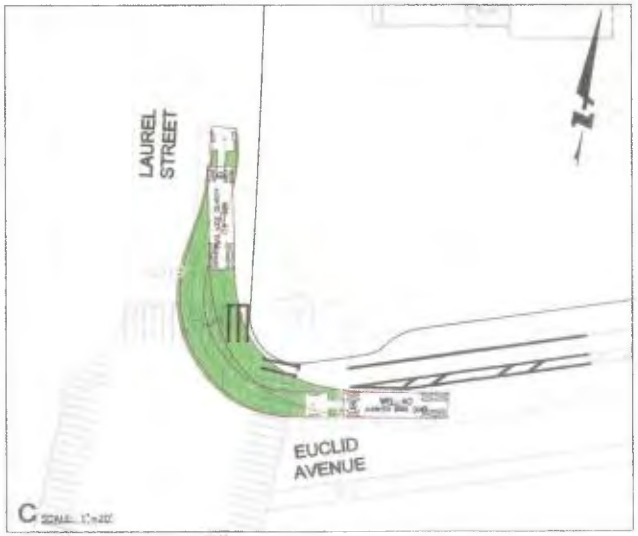
SU-30	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

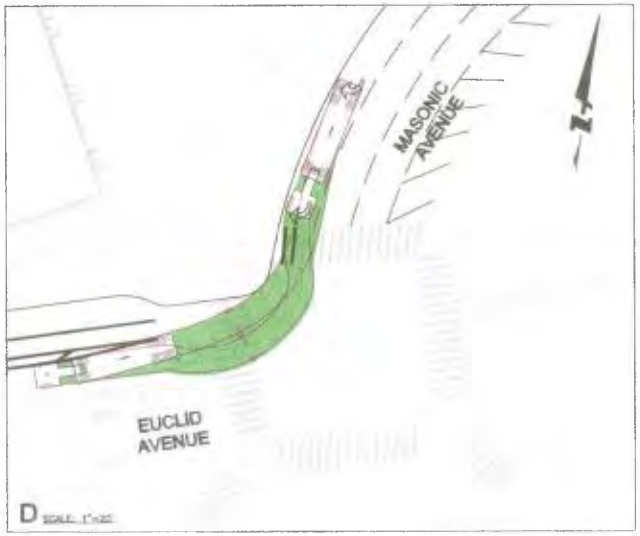
3333 CALIFORNIA

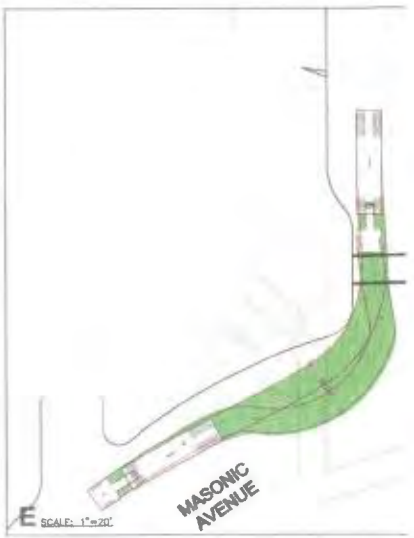
SU-30 CIRCULATION EXHIBIT

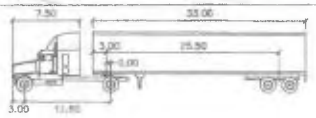
I-FRISBIER2

I-FRISBIER2









WB-40

		feet		
Tractor Width	:	8.00	Lock to Lock Time	6.0
Trailer Width	:	8.00	Steering Angle	20.3
Tractor Track	:	8.00	Articulating Angle	70.0
Trailer Track	:	8.00		

3333 CALIFORNIA

WB-40 CIRCULATION EXHIBIT

Section C

Deficiencies for Hydrology and Water Quality

COMMENTS TO E 14: HYDROLOGY AND WATER QUALITY; INITIAL STUDY 3333 CALIFORNIA STREET MIXED USE PROJECT

Planning Department Case No. 2015-014028ENV April 25, 2018(reference 1)

On page 216 of the Initial Study (IS), reference 1, the IS states that the project could have significant impact if it could: 4 (HWQ-1)

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 that would result in substantial erosion or siltation on- or off-site?"
This is restated in Impact HY-3 on page 222 of reference 1.
An underground stream or flow of water is equally as relevant (and potentially more impactful) as a more visible surface stream. There is no indication in the Initial Study that this has been considered.
Planning nevertheless checked "Less Than Significant Impact."

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 increased the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?"
This is also restated In Impact HY-3 on page 222.
Again, as noted above, underground flow of water is equally as important and requires equal consideration.
Planning checked "Less Than Significant Impact."

As discussed below these conclusions are not supported by substantial evidence inasmuch as the factual data and analysis upon which they are based are insufficient to support the determination of "no-significant impact."
The City failed to use best efforts to investigate and disclose all that it reasonably can with respect to the project's potential adverse impacts.
The IS's analysis failed to consider the impact of the project on underground flows of water and did not make a finding as to whether the existing underground drainage patterns of the site or area could be affected.

DISCUSSION

4 (HWQ-1) cont'd

The Preliminary Geotechnical Investigation conducted (FN40) by Langan Treadwell Rollo dated 3 Dec. 2014 (Reference 2), page 5, table 1 shows 5 borings with Depth to Groundwater varying from 18.8 feet to 38.8 feet.
However the Phase I Environmental Site Assessment (FN244) by Langan Treadwell Rollo dated 3 Dec. 2014 (Reference 3) page 8 states "However, two borings at the Firemen's Credit Union site (northeast of the site) encountered groundwater levels as shallow as 13 feet bgs."
The Firemen's Credit Union is immediately adjacent to 3333, and is part of the same block. It is not a separate site geologically or hydrologically.

Reference 3 further states "The direction of groundwater flow is *assumed* (italics and underlining added) to be to the northeast, based on topography and the groundwater monitoring reports for 3201 California Street; *however* the site is located near the boundary between the Downtown and Westside Groundwater Basins, *so it is possible* that the groundwater flow direction *varies* across the site."
It is clear from the above that Langan Treadwell Rollo, as well as Planning, has not conducted an investigation that would be adequate to assess the hydrology of the site, including the direction to which the groundwater flows.

The IS states that dewatering the groundwater would likely be required during construction because the depth of excavation would be up as much as 40 feet below ground surface and the groundwater level at the project site is "about 18 to 39 feet below ground surface (IS, page 219).
Actually the groundwater is almost certainly much closer to the surface as noted in reference 3 above as well as for reasons that will be discussed in this section.

There is clearly a subsurface flow of this groundwater. What is it, what is its flow rate and in what direction does it flow?
It would appear prudent to better understand the situation before beginning to excavate up to 40 feet bgs as well as essentially building a concrete dam in the form of underground garages that would stretch from Laurel St. to Presidio Ave., and completely block off any flow across the entire site.
At present there is only minimal obstruction, as the underground garage is a very small portion of the Laurel to Presidio distance and the buildings foundations present a minimal barrier to this subsurface flow.

What is the underground water going to do if this project is constructed?
We know the groundwater under the site will be diverted.
It is reasonable (if we had better data it would probably show with certainty) to conclude that the groundwater diverted by the below ground construction will have considerably higher flow velocities and energy at whatever point(s) it departs the site as the flow will be concentrated at the end(s) of the underground concrete barrier (parking garages).
We know that these higher subsurface flow rates and energies will create higher erosion rates and could lead to flooding at a downstream location due to these higher flow rates.
What are these higher erosion rates going to do to the foundations of buildings exposed to an entirely

new flow regime, none of which existed when they were constructed?
What analysis has been done concerning these potential impacts on the buildings along the lower portion of Laurel St and Presidio Ave.?

4
(HWQ-1)
cont'd

Unfortunately these are not the only shortcomings of the data presented in the Initial Study.
Nor are they the most damaging to the conclusions reached as to Impact HY-3.
A review of the boring logs indicates the borings were carried out August 20-26, 2014 and generated the groundwater bgs data that appears in table 1, page 5 of FN40, reference 2.
The August 2014 date leaps out like a red flag; as it should have for everyone associated with FN 40 and the Initial Study.

California entered the most severe drought in its history in 2011 and did not exit it until 2017.
August 2014 is the approximate midpoint in this period so any of the FN40 groundwater levels quoted are those determined three years into a prolonged severe drought.
Essentially such data are irrelevant for a normal year(s) and consequentially egregiously understate the hydrological condition of the site.

According to Wikipedia (with additional support in the article's references), "2011-2017 California Drought" (reference 4) page 2: "By February 1, 2014, Felicia Marcus, the chairwoman of the State Water Resources Control Board, claimed the 2014 drought 'is the most serious drought we've faced in modern times.'"
On the same page; "According to NASA, tests published in January 2014 have shown that the twelve months prior to January 2014 were the driest on record, since record-keeping began in 1885."
The references included in this document further reinforce the historic shortfalls of rain during this drought.

Per weather.com/science/environment/news/california-drought-seconds-20141009 (reference 5) page 1: "As a result, 2013 was California's **driest year ever recorded** (emphasis in the report).
San Francisco, which usually averages 23.65 inches of rain a year, only experienced 5.60." This is approximately 24% of a normal year.
The map on page 16 of "275 California drought maps show deep drought and recovery" LA Times April 7, 2017 (reference 6), included at the end of this document, shows the extent and severity of the drought as of Aug.3, Aug. 12, Aug. 19, Aug. 26, Sept.2 – which is the precise period in which the borings took place.

So, in the midst of a record drought, one that was already three years in extent; after the driest year on record (2013); after a year that produced less than 24% of the normal rainfall; and then after five months of a normal zero rainfall dry season the developer commissioned Langan Treadwell and Rollo to carry out borings with one of the specific objectives to determine the depth of groundwater below surface!
It is inconceivable, literally, to conjure up a more perfect set of circumstances to produce a more misleading series of conclusions more amenable and favorable to the developers' plan.
It is also perplexing that Planning has accepted these results on face value, has done no analysis or

research of its own to validate the reasonableness of these results; and has used these results as the basis for a finding of "Less Than Significant."

As a minimum, the conclusions of Impact HY-3 are inaccurate, inadequate, incomplete and invalid. Due to the total absence of relevant analysis and data, the IS failed to consider the impact on the existing underground drainage patterns of the site. The IS discusses impacts on surface runoff and fails to analyze the impact of the construction of the project on the alteration of the existing drainage pattern of the site, including through the alteration of the course of a subsurface stream or river. The EIR should analyze whether the project could alter the existing drainage pattern of groundwater or alter the course and/or characteristics of the underground water flows.
It should also analyze the potential impact on existing buildings in the vicinity of the site as a result of the alterations to underground water flows.

The Initial Study and the DEIR Lack Substantive Evidence that the "Less than Significant" finding for Hydrology and Water Quality, Section E-14 of the Initial Study, is correct, complete and accurate. In fact the evidence shows that there is no basis for this conclusion and it must be re-studied and re-concluded using credible evidence.

4
(HWQ-1)
cont'd

REFERENCES

1. Initial Study 3333 California Street Mixed Use Project Planning Department Case No. 2015-014028ENV dated April 25, 2018.
2. FN40: Langan Treadwell Rollo " Preliminary Geotechnical Investigation 3333 California Street" dated 3 Dec. 2014.
3. FN244: Langan Treadwell Rollo "Phase I Environmental Site Assessment 3333 California Street" dated 3 Dec. 2014
4. "2011-2017 California Drought" www.en.wikipeida.org and references.
5. "weather.com/science/environment/news/california-drought-seconds-20141009
6. "275 California drought maps show deep drought and recovery" LA Times April 7, 2017 with data from US Drought Monitor.

I-FRISBIER2

Section D

Attachment E to Section A

ATTACHMENT E

3333 California Street

Greenhouse Gas Emissions Analysis

I-FRISBIER2

Prepared for
The Prado Group
San Francisco, CA

Prepared by
Ramboll US Corporation
San Francisco, CA

Project Number
1690008541

Date
August 2018

AB900 ANALYSIS
3333 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA

CONTENTS

TABLES

APPENDICES

1. INTRODUCTION

The mixed-use development project located at 3333 California Street in San Francisco, California (herein referred to as the "Proposed Project" or "Project") has applied for California Environmental Quality Act (CEQA) judicial streamlining under Public Resources Code (PRC) Section 21178 et seq. The Application also addresses a variant to the Proposed Project that removes proposed office space and replaces it with additional residences (hereinafter referred to as the "Project Variant"). In support of the Application, Ramboll US Corporation (Ramboll) quantified both direct and indirect greenhouse gas (GHG) emissions associated with the Proposed Project's and Project Variant's operation, including ongoing emissions reductions associated with transportation and building energy usage, to show the Project and Project Variant meet the requirement for no "net additional emission of greenhouse gases [GHG], including greenhouse gas emissions from employee transportation" [California PRC §21183(c)].

Throughout this report, GHG emissions are reported in units of metric tons of carbon dioxide equivalents (MT CO_2e). Carbon dioxide equivalents are emissions of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), weighted by the global warming potentials (GWP) from Title 40 of the Code of Federal Regulations (CFR), Part 98, Table A-1, as referenced by the California Mandatory Reporting Rule for GHG (Title 17 of the California Code of Regulations, §§95100- 95158). GHG emissions are quantified for this Project (including construction and operational emissions) as well as existing uses. This document summarizes the assumptions and calculation methodologies Ramboll used to estimate GHG emissions. Summary tables are provided in the text, while more detailed calculation tables are provided in Appendix 1.

1.1 Project Description

1.1.1 Existing Conditions

The project site is currently developed with a four-story office building at the center of the site, a three-level partially subsurface parking garage, three surface parking lots, and a one-story annex building. The site currently has a diesel emergency generator located within Basement Level B1 (within a mechanical room in the easternmost circular garage ramp structure) and an above-ground fuel storage tank immediately east of Basement Level B2 near the Presidio Avenue entry driveway. The emergency diesel generator and above-ground fuel storage tank would be removed from the site during Phase 2 of construction, prior to the installation of a new emergency generator. Land uses are shown in **Table 1.**

The existing buildings contain University of California San Francisco (UCSF) administrative, academic research, social, behavioral, and policy science research department uses (including common areas and space for accessory uses and support programs, such as a daycare center, a conference center/auditorium, and a cafeteria). Prior to commencing Phase 1 of the four-phase construction program for the Proposed Project or Project Variant (see descriptions below), all existing UCSF uses and services are anticipated to be moved to other existing UCSF locations, such as the Mission Bay or Parnassus campuses.

1.1.2 Proposed Project

The Proposed Project would be a mixed-use development with predominantly residential uses and a mix of other uses (office, retail, and childcare). The development site is approximately 446,490 square feet or 10.252 acres located in San Francisco's Presidio

Heights neighborhood. The Proposed Project would include development of 558 residential units, 54,117 gross square feet of retail uses, 49,999 gross square feet of office uses, 14,690 gross square feet of childcare uses, 895 parking spaces in 428,773 gross square feet of below-grade garages, streetscape improvements, and open space. These proposed uses would be located in 13 new buildings and in the adaptively reused office building, which would be divided into two separate residential buildings. Plaza A and Plaza B buildings would be mixed-use residential buildings with ground floor retail units. The Walnut building would be a mixed-used office building with ground floor retail and childcare uses. The Masonic building and Laurel Duplexes (7 buildings) would contain only residential units and the Euclid building would be a mixed-use residential building with ground floor retail space.

Land uses for the Proposed Project are shown in **Table 1.**

1.1.3 Proposed Project Variant

Under the Project Variant, 744 dwelling units would be developed on the project site (186 more than the Proposed Project). The 49,999 gross square feet of commercial office space in the Proposed Project's Walnut Building would be replaced with a larger residential use, the retail floor area would be reduced, and the childcare use would be retained but slightly reduced. Overall, the Walnut Building under the Project Variant would be approximately 368,170 gross square feet, compared to 263,453 gross square feet under the Proposed Project, and would be 22 feet taller. There would be an additional 76 vehicle parking spaces provided under the Project Variant. The other proposed new buildings would not change relative to the Proposed Project.

Land uses for the Proposed Project Variant are shown in **Table 1.**

Table 1: Land Use

Land Use	Units	Existing Conditions	Project	Project Variant
Office Building*	Square Feet	364,500	49,999	N/A
Childcare Center	Square Feet	11,500	14,690	14,650
Open Space	Acres	3.79	5.42	5.42
Apartments (categorized as Mid Rise)	Dwelling Units	N/A	558	744
Retail	Square Feet	N/A	54,117	48,593
Parking Garage	Spaces	212	895	971
Parking Lot	Spaces	331	N/A	N/A
Bicycle Parking	Spaces	15	693	890

* Includes annex and storage space for the existing conditions scenario.

2. CONSTRUCTION GHG EMISSIONS

Construction of the Proposed Project and Project Variant will generate "one-time" emissions, that is, discrete emissions that are not associated with ongoing Project/Project Variant operation. These emissions are quantified and disclosed for the Proposed Project and Project Variant. Methodologies for quantifying construction GHG emissions are detailed in the following sections.

2.1 Construction Phasing

The Proposed Project and Project Variant would be constructed in four overlapping development phases with full buildout expected to occur approximately seven years after project entitlements. This analysis is based on an approximately seven-year construction duration and four-phase program that would constitute maximum development on the site; however, the project sponsor may choose to develop the Proposed Project or Project Variant over a timeframe of up to 15 years. Under an up to 15-year construction timeframe the same development program would be implemented; however, periods of dormancy would be introduced between construction phases, and some construction activities currently assumed as concurrent would occur separately over a longer timeframe. Thus, potential physical environmental effects of the Proposed Project or Project Variant under a longer construction timeframe would be similar to, but less severe, than those under a condensed construction timeframe.[1]

This analysis conservatively assumes that the residential buildings constructed in each phase of the construction program (i.e., Phase 1, Phase 2, or Phase 3) would be occupied and fully operational as soon as construction of a phase is completed. This is conservative because occupancy and operation of each phase would likely ramp up over time. The analysis also assumes that operational emissions from a phase can overlap with construction emissions from subsequent phases.

The first phase of the construction program (Phase 1) would commence after all existing uses at the UCSF Laurel Heights Campus, including the existing daycare center, have vacated. The preliminary construction schedule assumes that construction would start in 2020, that it would last approximately seven years or longer, and that it would take place for five days per week with different equipment operating for different hours. Due to the similar nature of the Proposed Project and Project Variant (including similar overall square footage), construction phasing, equipment, and schedule would be similar for both. See **Table 2** for a summary of the expected construction phasing timeline, provided by the project sponsor. Table Con-1 in Appendix 1 shows the phased construction duration by year for different phases. Appendix 3 contains construction information provided by the project sponsor.

[1] San Francisco Planning Department. 2018. Initial Study 3333 California Street Mixed Use Project. April 25. Available at: http://sfmea.sfplanning.org/3333%20California%20Street%20Initial%20Study_4-25-18.pdf

Table 2: Construction and Operation Timeline

Phase	Construction				Operation
	Phase Name	Start Date	End Date	Total Number of Work Days	Start Date
1	Masonic/Euclid	3/2/2020	8/19/2022	645	8/20/2022
2	Center Building A/B	9/10/2021	8/31/2023	515	9/1/2023
3	Plaza A/Plaza B/ Walnut	12/4/2022	11/18/2025	773	11/19/2025
4	Mayfair/Laurel Townhouse/Euclid Park	5/22/2025	1/12/2027	429	1/13/2027
			TOTAL	**2,362**	

Source: Webcor and Prado, 2017.

Phase 1 would include demolition of the existing annex building and the southern portion of the existing office building. After demolition, Phase 1 would include excavation on the southern portion of the site for the proposed Masonic Garage and construction of the Masonic and Euclid buildings, as well as portions of the privately owned common open spaces that would be open to the public. Phase 2 would include demolition of the northern portion of the existing building and the circular ramp structures, the partial demolition of the existing office building (to be separated into two structures, Center Buildings A and B), as well as some interior renovations, vertical additions of two to three stories, and seismic upgrades to adaptively reuse the existing office building as two separate residential buildings. The existing emergency generator would be removed during this phase and a new emergency generator would be installed.

Phase 3 would include demolition of the existing surface parking lots along California Street, followed by the excavation for the California Street Garage and construction of the California Street buildings (Plaza A, Plaza B and Walnut buildings). The new childcare facility is planned to be occupied by the end of Phase 3 construction. In Phase 4, there would be a limited amount of demolition of surface parking lots, as well as excavation for the Mayfair Garage and the private parking garages for the Laurel Duplexes and construction of the Mayfair Building and Laurel Duplexes. Land uses and amounts are shown by phase in **Table 3**.

Table 3: Project Land Use by Construction Phase

Land Use	Size Units	Phase 1	Phase 2	Phase 3		Phase 4
				Project	Project Variant	
Apartments (categorized as Mid Rise)	Dwelling Units	196	190	128	314	44
Childcare Center	Square Feet	--	--	14,690	14,650	--
General Office Building	Square Feet	--	--	49,999	--	--
Open Space	Acres	1.4	1.4	2.2		0.5
Retail	Square Feet	4,287	--	49,830	44,306	--
Parking	Spaces	209	190	452	528	44

2.2 Construction-Related GHG Emissions

Construction emissions include emissions from both off-road construction equipment (diesel and electric powered) and on-road construction vehicles, including haul trucks, concrete deliveries, and vendor trips. Due to the similarity in nature of the Proposed Project and Project Variant including construction equipment, phasing, and schedule, estimated construction emissions for the Proposed Project and Project Variant would be similar. Therefore, only one analysis was completed for the two scenarios.

2.2.1 Emissions from Diesel-Fueled Construction Equipment

Emissions calculations associated with off-road construction equipment are based on the construction schedule, type and quantity of equipment and hours of operation for each piece of equipment based on project specific information provided by the project sponsor[2] which is summarized in Table Con-2 of Appendix 1. GHG emissions from off-road construction equipment are estimated using methodologies consistent with the California Emissions Estimator Model (CalEEMod®) version 2016.3.2. All off-road equipment is assumed to have CalEEMod® default diesel engines without any mitigation. Electric equipment is discussed in section 2.2.2. Emissions associated with diesel fuel include only running exhaust emissions since starting emissions are assumed to be minimal for diesel-fueled equipment. Exhaust emissions calculations are based on California Air Resources Board's (CARB's) OFFROAD 2011 methodology as below:

[2] Bell, Joe, Webcor Builders, e-mail correspondence with Peter Mye at SWCA regarding construction data, September 14, 2017.

$$E_C = \sum(EF_C * HP * LF * Hr * Red * C)$$

Where:

E_C: off-road equipment exhaust emissions in pounds (lbs.)

EF_C: emission factor (g/bhp-hr). Emission factors for diesel equipment are default CalEEMod emission factors by Tier

HP: equipment horsepower. Project-specific equipment horsepower were provided by the project sponsor.

LF: equipment load factor. Project-specific or CalEEMod defaults

Hr: equipment operating hours

Red: reduction from Diesel Particulate Filter (DPF), as applicable

C: unit conversion factor

GHG emissions for each year of construction were then calculated based on the overall construction duration for each phase in a given year. Table Con-3 in Appendix 1 represents the yearly GHG emissions for each phase from off-road diesel equipment. The total GHG emissions associated with off-road construction diesel equipment are shown in **Table 4**. Supporting construction information provided by the project sponsor is included in Appendix 3.

2.2.2 Emissions from Electric Construction Equipment

GHG emissions from the use of electrical off-road equipment are estimated based on type and usage of each equipment. Usage information for all the electrical construction equipment is from SWCA's "Energy Assessment".[3] The Energy Assessment is attached in Appendix 3. Table Con-4 in Appendix 1 shows the yearly electricity consumption by construction equipment and GHG emission by year. Total electricity usage from operation of equipment is estimated to be about 7,170 MWh per year for both the Project and Project Variant.

Yearly GHG emissions were calculated by multiplying the CO_2e intensity factor with the scaled electricity consumption for each year. Electricity consumption was scaled by the overall construction duration of each phase and by the fraction of construction duration of each phase in a given year. The total GHG emissions associated with off-road construction electric equipment are shown in **Table 4**.

2.2.3 Emissions from On-Road Construction Trips

On-road construction vehicles such as passenger vehicles for workers and vendors, and trucks for soil and material hauling generate GHG emissions. These emissions are calculated based on the number of trips and vehicle miles traveled (VMT) along with emissions factors from Emission Factors Model (EMFAC2014).[4] Trip counts are provided

[3] SWCA. 2018. 3333 California Street Mixed-Use Project Energy Assessment / Case No. 2015-015028ENV. April 12. Revised July 23.

[4] A more recent version of EMFAC, EMFAC2017, has now been released. However, this model has not yet been approved by the USEPA or incorporated into CalEEMod®. Ramboll carried out a preliminary analysis of construction emissions using EMFAC 2017. The preliminary EMFAC2017 results confirmed that results would not change any of the original conclusions. If EMFAC2017 were incorporated, it would not be expected to significantly affect results.

by the project sponsor and CalEEMod® default trip lengths for worker, vendors and haul trips are used in the analysis. Trip counts and trip lengths are shown in Table Con-5 in Appendix 1. Sponsor provided construction data is included in Appendix 3. Running emission factors include running exhaust and running losses estimated for the years 2020-2027. Running emissions are calculated as,

$$E_R = \sum(EF_R * VMT * C)$$

Where:

VMT or Vehicle Miles Traveled: Trip Length*Trip Number

EF_R: running emission factor (g/mile) from EMFAC2014

C: unit conversion factor

On-road emissions also include exhaust emissions from vehicle idling. Idling emissions from EMFAC2014 are estimated only for heavy duty trucks since idling emissions occur during extended idling events for these trucks, and EMFAC-2014 takes account of idling emissions from light duty vehicles and other vehicle types in running emissions estimates. Idling emissions are estimated as,

$$E_I = \sum(EF_I * Idle\ Time * Trip\ Number)$$

Where:

EF_I = vehicle idling emissions factor (g/trip) from EMFAC 2014.

Idle Time = assumed to be 5 minutes of idling per one-way trip.

Trip Number = heavy duty truck trips provided by project sponsor

Idle time is consistent with California ATCM to limit diesel-fueled commercial motor vehicle idling (Title 13, CCR, section 2485)

GHG emissions for each year of construction are estimated based on the overall construction duration for each phase in a year. Table Con-3 in Appendix 1 reports the yearly GHG on-road emissions for each phase. The total GHG emissions associated with on-road construction trucks are shown in **Table 4**.

2.2.4 Watering for Dust Control

GHG emissions associated with the electricity consumed during watering for construction dust control are calculated based on the total water consumption, electricity use for watering, and the electricity intensity for water supply, distribution and treatment over the phased construction period. Total water consumption is from the Water Supply Assessment[5] which was summarized in the Energy Assessment. Table Con-6 in Appendix 1 reports the electricity construction and GHG emissions split by phase and year. Total GHG emissions associated with watering for dust control are shown in **Table 4**.

2.3 Summary of Construction GHG Emissions

The total emissions from construction are summarized in **Table 4**. Total GHG emissions from diesel off-road equipment, on-road trucks and electrical off-road equipment are 1,465, 1,716 and 1,090 MT CO_2e, respectively. Total GHG emissions from construction activities are approximately 4,273 MT CO_2e.

[5] San Francisco Water Power Sewer. 2017. Water Supply Assessment. June 13.

Table 4: Construction GHG Emissions (MT/year)					
Year	**Diesel Off-Road Equipment**	**On-Road Trucks**	**Electric Equipment**	**Electricity Use for Watering Dust Control**	**Total GHG Emissions**
2020	173	259	109	0.028	541
2021	248	318	167	0.035	733
2022	277	243	212	0.028	732
2023	281	271	201	0.030	752
2024	194	252	118	0.026	564
2025	216	278	170	0.029	664
2026	74	92	111	0.012	277
2027	2.2	2.8	3.2	0.0003	8.3
Total GHG emissions from construction (MT)					**4,273**

3. OPERATIONAL GHG EMISSIONS

GHG emissions are quantified using the California Air Resources Board's current approved model, CalEEMod® version 2016.3.2. CalEEMod® was run for several scenarios including operation of the existing site, the Proposed Project (by phase), and Project Variant (by phase). Emissions categories include on-road vehicle exhaust (mobile), stationary sources within the project site (generators), energy (indirect emissions from electricity and direct emissions from natural gas), water and wastewater, solid waste disposal and area sources such as landscaping equipment.

3.1 GHG Emissions from Existing Conditions

Total GHG emissions from operation of the existing site in 2020 are shown in **Table 5**. Total GHG emissions are 3,873 MT CO_2e/year, with mobile sources being the largest contributor to GHG emissions, followed by electricity and natural gas use. The site currently includes one diesel emergency generator, three natural gas boilers, and two electrical substations within the Basement Levels B1 and B2, respectively and an above-ground diesel fuel storage tank located adjacent to Basement Level B2. The diesel emergency generator along with the substations will be decommissioned in 2023 during the completion of Phase 2 (Center Buildings A and B) of the Proposed Project or Project Variant. Emissions from the natural gas boilers are included in the building natural gas emissions. Emissions from the electrical substations are included in the building electrical emissions. Emissions from the diesel storage tank are minimal and are therefore not quantified.

To calculate emissions, CalEEMod® was run for year 2020 using data on existing land uses, with adjustments from defaults as described below. The lifetime of a building is assumed to be 30 years from full build out. Full build out of the Project and Project Variant was assumed to be 2028 so corresponding lifetime operational emissions occur until 2057. GHG emissions for existing conditions are assumed to be constant between 2020 and 2057, to compare existing emissions to lifetime operational emissions for a full 30 years after the Proposed Project or Project Variant is fully built out. No adjustments are made to existing emissions post-2020, consistent with CEQA methodology. CalEEMod® outputs and detailed calculations for the existing conditions are presented in Appendix 2 and Tables Ops-1 through Ops-17 of Appendix 1.

3.1.1 Mobile

CalEEMod® estimates mobile GHG emissions from running, idling, and starting exhaust for the aggregated projected vehicle fleet in a given calendar year and county. Mobile emissions for existing conditions for trips associated with workers and visitors are estimated using CalEEMod® based on the land uses shown in **Table 1**. Trip rates for the land use sub-types are estimated using the AM and PM peak hour driveway counts from the travel demand memorandum from Kittelson & Associates,[6] as shown in Table Ops-1a of Appendix 1. Trip lengths, trip types, and vehicle fleet mix are default values from CalEEMod®. Vehicle emission factors are the default values in CalEEMod®, which are obtained from EMFAC2014. Emissions are summarized in **Table 5**.

3.1.2 Energy

Energy emissions include indirect emissions from electricity used by buildings and direct natural gas combustion emissions. For each type of emissions, the historic energy

[6] Kittelson & Associates. 2018. Travel Demand Memorandum – Final. March 9.

consumption is multiplied by the relevant emission factor per energy unit. Pacific Gas & Electric (PGE) utility bill data is used from 2012-2014 to reflect the existing condition energy use, as shown in Table Ops-2 of Appendix 1. PGE data is included in Appendix 3.

Indirect GHG emissions, which occur when electricity is used, are typically due to electricity generation from offsite power plant locations. Electrical power is supplied to the study area by PGE. To estimate emissions, the electricity usage is multiplied by the emission intensity factors for the GHGs. Emission intensity factors are GHG emission rates from a given source in terms of the amount of GHG released (lbs) per megawatt hour (MWh) of energy produced. The GHG emission factors for electricity use change over time due to the California Renewables Portfolio Standard (RPS), a program designed to meet statewide GHG reduction targets. The RPS requires grid electricity to come from 33% renewable sources by 2020. Ramboll used emission factors and renewables percentages for 2014 through 2016 from PGE to project future electricity intensity based on the State achieving the 2020 target for the baseline inventory. The default electricity intensity for methane (CH_4) and nitrous oxide (N_2O) were obtained from CalEEMod® Appendix D (using PGE values) and were conservatively not adjusted for future inventory years. This calculation is shown in Table Ops-3 of Appendix 1.

GHG emissions from natural gas combustion are generated from commercial usage (e.g., cooking and heating) and industrial usage (e.g., boilers). CalEEMod® default emission factors are used.

Energy emissions are summarized in **Table 5**.

3.1.3 Water and Wastewater

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Water for the study area is sourced from the San Francisco Public Utilities Commission (SFPUC). Additional emissions from wastewater treatment include CH_4 and N_2O, which are emitted directly from the wastewater.

Water use rates are based on CalEEMod® defaults for San Francisco County. The electricity intensity factor is the same as used for electricity emissions, as described in Section 3.1.2. Emissions are summarized in **Table 5**.

3.1.4 Solid Waste Disposal

Emissions from the transport and processing of solid waste are calculated using solid waste generation rates from CalEEMod® for San Francisco County. Indirect GHG emissions associated with waste disposal include CH_4 generation from the decomposition of waste and the CO_2 emissions associated with the combustion of CH_4, if applicable. GHG emissions associated with non-landfill diverted waste streams are not considered, because it is generally assumed that these diversions do not result in any appreciable amounts of GHG emissions when operated effectively. These waste diversion alternatives may result in differences in life-cycle emissions of GHGs, but it is not appropriate to combine life-cycle emissions for only one category of emissions. Biogenic CO_2 emissions were not included when CARB analyzed the GHG emissions inventory under Assembly Bill (AB) 32. Therefore, they are not included in the emissions inventory. Emissions are summarized in **Table 5**.

3.1.5 Area Sources

GHG emissions from area sources, such as architectural coatings and landscaping equipment, were estimated using CalEEMod® based on the type and size of land uses associated with the existing conditions. Emissions are summarized in **Table 5**.

3.1.6 Back-Up Generator

The site contains an existing 380 horsepower (HP) diesel generator that directly emits GHGs. Emissions are calculated as a product of engine horsepower, a CO_2 emission factor of 523.5 grams per horsepower hour (g/hp-hr) based on the CalEEMod® default factor, and 20 hours of annual operation for routine maintenance and testing based on the existing BAAQMD permit. Emissions calculations are shown in Table Ops-4 of Appendix 1.

Table 5: Existing Conditions Emissions Summary

Category	CO_2e Emissions (MT/year)
Mobile	2,199
Electricity	671
Natural Gas	659
Water and Wastewater	167
Solid Waste	172
Area Sources	0.0174
Stationary Source	4.0
Total[1]	**3,873**

Notes:
[1] Sub-totals may not sum to the total due to rounding.

3.2 GHG Emissions from Proposed Project and Project Variant

Project GHG emissions at the first full year of buildout (2028) would be 4,410 MT CO_2e/year, with mobile sources being the largest contributor to GHG emissions, followed by electricity and natural gas. Project Variant GHG emissions at the first full year of buildout (2028) would be 4,585 MT CO_2e/year, with mobile sources being the largest contributor to GHG emissions, followed by electricity and natural gas. An emissions summary at the full buildout year is shown in **Table 6**. Total GHG emissions from operation of the Proposed Project and Project Variant from 2020 to 2057 are shown in **Table 7**.

To calculate emissions, CalEEMod® was run for the buildout year of each phase, with adjustments from defaults and for future years as described below. CalEEMod® outputs and detailed calculations for the Proposed Project and Project Variant are presented in Appendix 2 and Tables Ops-1 through Ops-17 of Appendix 1.

3.2.1 Mobile

Mobile source emissions for the Proposed Project and Project Variant are calculated using the same methodology as described in Section 3.1.1 and represent emissions associated with resident, worker, and visitor trips. Emissions are based on daily vehicle trip data provided in the travel demand memorandum, with adjustments as shown in Table Ops-1b of Appendix 1. Trips were adjusted to remove double-counted internal trips, non-automobile trips, and double-counted carpool trips.

CO_2e emission factors from mobile sources are assumed to decrease over time to reflect fleet turnover and more efficient vehicle standards. Fleet-average emission factors through 2050 were calculated using EMFAC2017, and mobile emissions from the Proposed Project were adjusted to reflect the decreasing factors each year.[7] The fleet-average mobile emission factors decrease over time due to fleet turnover and regulations such as Advanced Clean Cars (ACC). Table Ops-5 of Appendix 1 summarizes the fleet-average mobile CO_2e emission factors and percent change that was used in the yearly analysis. Tables Ops-6 and Ops-7 of Appendix 1 summarize the yearly mobile emissions for the Proposed Project and Project Variant, respectively.

3.2.2 Energy

As described in Section 3.1.2, energy emissions include indirect emissions from electricity used by buildings and direct natural gas combustion emissions. Energy emissions for the Proposed Project and Project Variant were quantified using the same methodology as for the existing conditions, but reflect buildings constructed to 2013 Title 24 Building Energy Efficiency Standards and incorporate conservation measures such as increased lighting, cooling, and water heating efficiencies, solar photovoltaic (PV) electricity generation, and solar hot water heating. Annual energy use totals for the Proposed Project and Project Variant are taken from the Energy Assessment and supporting CEQA Energy Inputs from Arup ("CEQA Energy Inputs").[8] The Energy Assessment and supporting CEQA Energy Inputs report are attached in Appendix 3. Project and Project Variant energy use totals are shown in Table Ops-8 of Appendix 1. Energy use is further reduced through solar PV electricity generation and solar hot water heating, as described below and as shown in Table Ops-9 of Appendix 1.

3.2.2.1 Electricity

Indirect electricity emissions for the Proposed Project and Project Variant are estimated using the same methodology as described for the existing conditions in Section 3.1.2, except that intensity factors decrease each year up to 2050. The intensity factors assume that California achieves the State's Senate Bill (SB) 350 requirement to acquire 50 percent of energy from renewable sources by 2030.[9] For 2050, it assumes that to achieve California's 2050 GHG goal of 80% GHG emissions below 1990 levels, the State will similarly achieve 80% RPS by 2050. This is consistent with the RPS assumptions in the CARB 2017 Climate Change Scoping Plan.[10]

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[7] Since these fleet-average emission factors were calculated outside of CalEEMod®, the newest version of the EMFAC model (EMFAC2017) was used to estimate percent change over time.

[8] Arup. 2018. 3333 California St. CEQA Energy Calculations, Draft 2. January 12.

[9] CEC. 2016. Clean Energy & Pollution Reduction Act SB 350 Overview. Available at: http://www.energy.ca.gov/sb350/. Accessed: July 2018.

[10] CARB. 2017. 2017 Scoping Plan, Appendix D: PATHWAYS, pg. 12 (November). Available at: https://www.arb.ca.gov/cc/scopingplan/2030sp_appd_pathways_final.pdf

Energy use rates from the Energy Assessment that reflect 2013 Title 24 and energy conservation measures are used. Energy use is estimated by phase and calendar year based on the Energy Assessment's supporting data, with maximum energy use at full buildout. Renewable electricity due to rooftop solar PV is projected to offset a portion of the Proposed Project and Project Variant's electricity consumption and emissions. The amount of electricity offset by renewables is taken from the Energy Assessment and the CEQA Energy Inputs.

Emissions are summarized in Table 6. Tables Ops-5 and Ops-10 of Appendix 1 summarize the CO_2e intensity factors used in the yearly analysis and the yearly electricity emissions, respectively. Table Ops-9 of Appendix 1 summarizes the annual reductions due to solar PV.

3.2.2.2 Natural Gas

GHG emissions from natural gas combustion are generated from residential usage, commercial usage (e.g., cooking and heating) and industrial usage. Energy usage rates from the Energy Assessment that reflect 2013 Title 24 and energy conservation measures are used.

Energy use is estimated by phase and calendar year based on the Energy Assessment's supporting data, with maximum energy use at full buildout. Hot water generated by rooftop solar tubes is projected to offset a portion of the Proposed Project and Project Variant's natural gas consumption and emissions. The amount of natural gas offset by solar hot water is taken from the Energy Assessment and the CEQA Energy Inputs.

CalEEMod® default emission factors are used. Emissions are summarized in **Table 6**. Table Ops-10 of Appendix 1 summarizes the yearly natural gas emissions. Table Ops-9 of Appendix 1 summarizes the annual reductions due to solar water heating.

3.2.3 Water and Wastewater

Emissions from water and wastewater use for the Proposed Project and Project Variant are calculated using the same methodology as described in Section 3.1.3. Project-specific water use totals are estimated by phase and calendar year based on the Energy Assessment and supporting SFPUC's Water Supply Assessment[11] and CEQA Energy Inputs, with maximum annual water use at full buildout. Water use is shown in Table Ops-8 of Appendix 1. Indirect electricity emissions to supply, treat, and distribute water decrease over time as the electricity intensity factor decreases. The indirect electricity emissions per gallon of water are taken from the CEQA Energy Inputs. Direct and indirect emissions from wastewater are based on CalEEMod® defaults and are shown in Tables Ops-11 and Ops-12 of Appendix 1. Emissions are summarized in **Table 6**, with year-by-year emissions shown in Table Ops-13 of Appendix 1.

3.2.4 Solid Waste Disposal

Emissions from solid waste disposal for the Proposed Project and Project Variant are calculated using the same methodology as described in Section 3.1.4. Project-specific waste use totals are estimated by phase and calendar year based on the Energy Assessment and CEQA Energy Inputs, with maximum annual waste disposal at full buildout. Waste generation and emissions are shown in Table Ops-14 of Appendix 1. Emissions are summarized in **Table 6**.

[11] San Francisco Public Utilities Commission (SFPUC). 2017. Water Supply Assessment for the 3333 California Street Project. May 17.

3.2.5 Area

GHG emissions from area sources, such as architectural coatings and landscaping equipment, for the Proposed Project and Project Variant were calculated using the same methodology as described in Section 3.1.5. Emissions are based on the type and size of land uses associated with the Proposed Project and Project Variant. Emissions are summarized in **Table 6**.

3.2.6 Back-Up Generator

Operation of standby emergency engines will result in direct emissions of GHGs. The Proposed Project includes the installation of one 1,073 horsepower (HP) diesel generator. Emissions are calculated as a product of engine horsepower, a CO_2e emission factor of 523.5 g/hp-hr based on Tier 2 diesel equipment, and a limit of 50 hours of operation for routine maintenance and testing. This is consistent with the maximum allowed testing time from the Airborne Toxics Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115) for a Tier 2 engine. The final BAAQMD permit for the generator may have a condition for fewer hours of operation for routine maintenance and testing (such as the 20 hours for the existing generator at the site); however, for this analysis we conservatively assumed the highest limit allowed by the ATCM. This is shown in Table Ops-4 of Appendix 1.

3.2.7 Vegetation Changes

The Project and Project Variant propose to create a net increase in new trees and grassland, which sequester GHG emissions over their lifetime. Emissions calculations are shown in Table Ops-15 of Appendix 1.

3.2.8 Emissions by Phase

The fraction of land use subtypes built in each phase is shown in Table Ops-16 of Appendix 1, while area and mobile source emissions by phase for each year of ongoing construction from 2022 through 2028 are presented in Table Ops-17 of Appendix 1.

3.3 Summary of Operational GHG Emissions

Operational source emissions are slightly different for the Project compared to the Project Variant due to differences in land use. Project and Project Variant operational emissions for full buildout are shown in **Table 6**.

Table 6: Project and Project Variant Operational Emissions for Full Build Out Year (2028)		
Category	**Project CO_2e Emissions (MT)**	**Project Variant CO_2e Emissions (MT)**
Mobile	3,339	3,396
Electricity	662	695
Natural Gas	568	638
Water and Wastewater	43	54
Solid Waste	37	32
Area Sources	29	39
Stationary Source	28	28
Solar Reductions	-284	-284
Vegetation Reductions	-13	-13
Total	**4,410**	**4,585**

4. MEASURES FOR OFFSETTING NET INCREASE GHG EMISSIONS

4.1 Overall Year-by-Year Emissions

The year-by-year summary comparison of the existing condition to the Proposed Project and Project Variant is shown in **Table 7**. Detailed yearly GHG emissions for construction and concurrent operations for the Project and Project Variant are presented in Tables Ops-6 and Ops-7 of Appendix 1. Project emissions would exceed existing condition emissions from 2026 through 2037. Project Variant emissions would exceed existing emissions from 2026 through 2043.

From 2020 to 2025, the Project and Project Variant would not be fully operational and emissions from phases 1 and 2 of operation would be below existing condition emissions. The added operation of phase 3 in 2026 would increase the Project and Project Variant emissions above existing condition emissions. By 2038 for the Proposed Project and by 2044 for the Project Variant, with anticipated reductions from the RPS and fleet turnover, Project and Project Variant emissions would be below existing emissions.

Total construction emissions would be 4,273 MT for both the Project and the Project Variant. Total gross operational emissions would be 3,703MT for the Project and 6,235 MT for the Project Variant. Total gross operational emissions for the lifetime of the Project or Project Variant do not include any benefits or credits from any years where the existing conditions are higher than Project or Project Variant emissions.

Table 7: Year-by-Year Comparison of GHG Emissions

Year	GHG Emissions ($MT CO_2e$/year)					
	Existing Condition Emissions	**Project Operational Emissions**	**Project Operational Difference[1]**	**Project Variant Operational Emissions**	**Project Variant Operational Difference[1]**	**Construction Emissions[2]**
2020	3,873	0	**-3,873**	0	**-3,873**	541
2021	3,873	0	**-3,873**	0	**-3,873**	733
2022	3,873	340	**-3,533**	331	**-3,542**	732
2023	3,873	1,235	**-2,637**	1,201	**-2,672**	752
2024	3,873	1,733	**-2,140**	1,678	**-2,195**	564
2025	3,873	1,858	**-2,015**	1,832	**-2,041**	664
2026	3,873	4,481	**609**	4,669	**796**	277
2027	3,873	4,496	**623**	4,674	**801**	8
2028	3,873	4,410	**537**	4,585	**712**	--
2029	3,873	4,326	**453**	4,498	**626**	--
2030	3,873	4,251	**378**	4,421	**548**	--

Table 7: Year-by-Year Comparison of GHG Emissions

Year	GHG Emissions ($MT CO_2e$/year)					
	Existing Condition Emissions	Project Operational Emissions	Project Operational Difference[1]	Project Variant Operational Emissions	Project Variant Operational Difference[1]	Construction Emissions[2]
2031	3,873	4,184	311	4,352	480	--
2032	3,873	4,123	251	4,290	418	--
2033	3,873	4,069	197	4,235	362	--
2034	3,873	4,021	148	4,184	311	--
2035	3,873	3,977	104	4,139	266	--
2036	3,873	3,937	64	4,098	225	--
2037	3,873	3,901	28	4,060	187	--
2038	3,873	3,868	-4	4,026	153	--
2039	3,873	3,839	-34	3,995	122	--
2040	3,873	3,812	-61	3,967	94	--
2041	3,873	3,787	-86	3,941	68	--
2042	3,873	3,764	-109	3,917	44	--
2043	3,873	3,742	-130	3,894	21	--
2044	3,873	3,722	-151	3,872	0	--
2045	3,873	3,702	-170	3,852	-21	--
2046	3,873	3,683	-189	3,832	-41	--
2047	3,873	3,677	-196	3,824	-49	--
2048	3,873	3,658	-214	3,805	-68	--
2049	3,873	3,641	-232	3,786	-87	--
2050	3,873	3,625	-248	3,769	-104	--
2051	3,873	3,625	-248	3,769	-104	--
2052	3,873	3,625	-248	3,769	-104	--
2053	3,873	3,625	-248	3,769	-104	--
2054	3,873	3,625	-248	3,769	-104	--
2055	3,873	3,625	-248	3,769	-104	--
2056	3,873	3,625	-248	3,769	-104	--

Table 7: Year-by-Year Comparison of GHG Emissions

Year	GHG Emissions ($MT CO_2e$/year)					
	Existing Condition Emissions	**Project Operational Emissions**	**Project Operational Difference[1]**	**Project Variant Operational Emissions**	**Project Variant Operational Difference[1]**	**Construction Emissions[2]**
2057	3,873	3,625	-248	3,769	-104	--
Total Gross Emissions (MT)[2]	**--**	**--**	**3,703**	**--**	**6,235**	**4,273**

Notes:
[1] Where existing emissions are greater than operational emissions, no credit has been taken in the "Total Gross Operational Emissions" summation.
[2] Project and Project Variant emissions for 2020 through 2021 include only construction-related emissions. Project and Project Variant emissions for 2022 through 2027 include both construction-related and operational emissions. All construction emissions are considered to be a net increase for those analysis years and apply to both the Proposed Project and Project Variant.

4.2 Mitigation Measures/Voluntary Carbon Credits/Conclusions

To offset the increase in GHG emissions from construction in 2020 through 2027 and from operation in 2026 through 2037 (Project) and 2043 (Project Variant), the project sponsor commits to measures to ensure there will be no net additional GHG emissions associated with the Project or Project Variant. This could be achieved through on-site mitigation measures such as installing additional solar panels or electric vehicle charging stations, or through the purchase of qualified GHG credits.

APPENDIX 1
RAMBOLL SUPPORTING TABLES

Table Con-1. Construction Phase Duration by Year
3333 California St AB900
San Francisco, CA

Phase	Phase Name	Start Date	End Date	Total number of work days	Construction phase duration by year[1,2]							
					2020	2021	2022	2023	2024	2025	2026	2027
1	Masonic/Euclid	3/2/2020	8/19/2022	645	34%	41%	26%	--	--	--	--	--
2	Center Building A/B	9/10/2021	8/31/2023	515	--	16%	51%	34%	--	--	--	--
3	Plaza A/Plaza B/ Walnut	12/4/2022	11/18/2025	773	--	--	3%	34%	34%	30%	--	--
4	Mayfair/Townhouse/Euclid Park	5/22/2025	1/12/2027	429	--	--	--	--	--	37%	61%	2%
			TOTAL	2,362								

Notes:

[1] Construction duration per year is calculated as construction duration of phase in a year/total construction duration.

[2] Total percentages in the table may not add up to 100% due to rounding.

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Table Con-2. Project Off-Road Diesel Construction Equipment List
3333 California Street
San Francisco, California

Subphase[1]	Equipment Type	Number	Hours/day	Horsepower	Load Factor	Phase
Exterior	Aerial Lifts	2	8	63	0.31	All
Demolition	Air Compressors	2	5	78	0.48	All
Excavation	Crawler Tractors with Rippers	1	8	208	0.43	All
Excavation	Excavators	2	8	163	0.38	All
Excavation	Excavators with Hoe Ram	2	8	163	0.38	All
Exterior	Forklifts	1	8	89	0.20	All
Exterior	Pavers	1	8	126	0.42	Street Paving[1]
Exterior	Paving Equipment	1	8	131	0.36	Street Paving[1]
Structure	Pumps	1	8	84	0.74	Pouring Days[2]
Exterior	Rollers	1	6	81	0.38	Street Paving[1]
All	Rough Terrain Forklifts	2	8	100	0.40	All
Demolition	Skid Steer Loaders (Bobcat)	1	8	65	0.37	All
All	Sweepers/Scrubbers	1	3	64	0.46	All
Excavation	Tractors/Loaders/Backhoes	2	8	98	0.37	All

Notes:

1. Street paving occurs for one day at the completion of each construction phase.
2. There will be approximately 50 pouring days during Phase 1, 15 pouring days during Phase 2, 70 pouring days during Phase 3, and 12 pouring days during Phase 4.

Table Con-3. Construction Offroad and Onroad GHG Emissions
3333 California St AB900
San Francisco, CA

Emission Source	Phase	Total CO_2e Emissions (MT)	CO_2e Emissions by Year[1]							
			2020	2021	2022	2023	2024	2025	2026	2027
Offroad Diesel Equipment[2]	1	512	173	207	131	--	--	--	--	--
	2	259	--	41	131	87	--	--	--	--
	3	573	--	--	15	194	194	170	--	--
	4	122	--	--	--	--	--	46	74	2
Onroad Trucks and Vehicles[3]	1	763	259	309	195	--	--	--	--	--
	2	58	--	9	29	19	--	--	--	--
	3	745	--	--	19	252	252	221	--	--
	4	152	--	--	--	--	--	57	92	3
Total	All	3,182	432	567	520	552	447	494	167	5

Notes:

[1] Yearly emissions split by fraction of phase in each year.

[2] Emissions are calculated based on default CalEEMod® off-road construction equipment tiers for each piece of equipment in the emissions year modeled. A construction equipment list and hours of operation for each piece of equipment for each phase were provided by the Project Sponsor.

[3] Total number of hauling, concrete, and delivery trips and trip distances are discussed in Table Con-5.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric ton

Table Con-4. Electricity Usage and Emissions from Construction Electric Equipment
3333 California St AB900
San Francisco, California

Electricity Usage[1]

Total Electricity Usage	7,169,549	kWh

Phase	Number of Days	Electric Equipment Usage (kWh)	Usage by Year[2] (kWh)							
			2020	2021	2022	2023	2024	2025	2026	2027
1	645	1,957,815	663,482	794,003	500,331	--	--	--	--	--
2	515	1,563,217	--	245,338	792,464	525,414	--	--	--	--
3	773	2,346,343	--	--	60,831	792,977	795,149	697,385	--	--
4	429	1,302,175	--	--	--	--	--	486,145	792,156	23,873
Total	2,362	7,169,549	663,482	1,039,341	1,353,626	1,318,391	795,149	1,183,530	792,156	23,873

Phase	CO_2e Intensity Factor by Year[3] (lb CO_2e/MWh)							
	2020	2021	2022	2023	2024	2025	2026	2027
All	363	354	345	335	326	317	308	299

Phase	CO_2e Emissions by Year (MT/yr)							
	2020	2021	2022	2023	2024	2025	2026	2027
1	109	127	78	--	--	--	--	--
2	--	39	124	80	--	--	--	--
3	--	--	9.5	121	118	100	--	--
4	--	--	--	--	--	70	111	3.2
Total	109	167	212	201	118	170	111	3.2

Notes:

[1] Total electricity usage from SWCA's Energy Assessment report (July 2018).

[2] Yearly electricity usage split by fraction of phase in each year. Electricity usage and GHG emissions are same for both Project and Project Variant.

[3] See Table Ops-5 for CO_2e intensity factor calculations.

Abbreviations:

CO_2e - carbon dioxide equivalents
kWh - kilowatt hour
lb - pound
MT - metric ton
MWh - megawatt hour
yr - year

Table Con-5. Project Construction Trip Assumptions
3333 California Street
San Francisco, California

Phase	Trip Category	Total Trips[1]	Total Trip Length[2] (miles)
1	Worker	58,050	21
2		38,625	
3		69,570	
4		32,175	
1	Non-hauling	2,500	14
2		500	
3		3,500	
4		400	
1	Vendor	1,300	14
2		1,000	
3		1,500	
4		850	
1	Hauling (Hazardous Waste)	1,636	60
2		24	
3		1,631	
4		313	
1	Hauling (Non-Hazardous Waste)	3,271	17
2		48	
3		3,263	
4		626	
1		3,271	48
2		48	
3		3,263	
4		626	

Notes:

1. Trips were provided by the Project Sponsor.
2. Worker, non-hauling, and vendor trip lengths assume CalEEMod® default values. Hauling trip lengths were provided by the Project Sponsor.

Abbreviations:

CalEEMod® - California Emissions Estimator MODel

Table Con-6. Water Usage and Emissions from Construction Dust Control
3333 California St AB900
San Francisco, California

Usage Information[1]

Total water consumption	226,500	gallons
Energy intensity	0.005411	kWh/gallon
Total electricity use	1,226	kWh

Phase	Number of Days	Total Electricity (kWh)	Electricity by Year[2] (kWh)							
			2020	2021	2022	2023	2024	2025	2026	2027
1	147	509	172	206	130	--	--	--	--	--
2	20	69	--	11	35	23	--	--	--	--
3	147	509	--	--	13	172	172	151	--	--
4	40	138	--	--	--	--	--	52	84	2.5
Total	354	1,226	172	217	178	195	172	203	84	2.5

Phase	CO_2e Intensity Factor by Year[3] (lb CO_2e/MWh)							
	2020	2021	2022	2023	2024	2025	2026	2027
All	363	354	345	335	326	317	308	299

Phase	CO_2e Emissions by Year (MT/yr)							
	2020	2021	2022	2023	2024	2025	2026	2027
1	0.028	0.033	0.020	--	--	--	--	--
2	--	0.002	0.005	0.004	--	--	--	--
3	--	--	0.002	0.026	0.026	0.022	--	--
4	--	--	--	--	--	0.007	0.012	0.0003
Total	0.028	0.035	0.028	0.030	0.026	0.029	0.012	0.0003

Notes:
[1] Total water consumption and energy intensity from San Francisco Water Power Sewer's Water Supply Assessment and SWCA's Energy Assessment report.
[2] Yearly electricity usage split by fraction of phase in each year.
[3] See Table Ops-5 for CO_2e intensity factor calculations.

Abbreviations:
CO_2e - carbon dioxide equivalents
kWh - kilowatt hour
lb - pound
MT - metric ton
MWh - megawatt hour
yr - year

Table Ops-1a. Trip Rates - Existing Conditions
3333 California St AB900
San Francisco, California

Land Use Data		CalEEMod Defaults[1]						Driveway Count[2]				ITE Trips[2]		Calculated Rates[3]			
Land Use Sub-Type	Size	Weekday Trip Rate	Saturday Trip Rate	Sunday Trip Rate	Weekday Trips	Saturday Trips	Sunday Trips	AM Peak Hour	PM Peak Hour	Scaled AM Peak Hour Trips	Scaled PM Peak Hour Trips	% of Daily Trips in AM Count	% of Daily Trips in PM Count	Weekday Trip Counts	Weekday Trip Rate	Saturday Trip Rate	Sunday Trip Rate
	ksf	trips/ksf/day			trips/day			trips/hr	trips/hr	trips	trips	%	%	trips/day	trips/ksf/day		
General Office Building	352	11.03	2.46	1.05	3,883	866	370	266	296	218	243	8.2%	8.5%	2,758	7.84	1.75	0.75
Day-care Center	11.5	74.06	6.21	5.83	852	71	67			48	53	17.6%	18%	284	24.68	2.07	1.94

Notes:

[1] CalEEMod version 2016.3.2 default trip rates for San Francisco County, urban setting.

[2] AM and PM peak hour driveway counts and percent of daily trips in AM and PM count from Project Travel Demand Memorandum (Kittelson & Associates, March 2018). Scaled by land use using CalEEMod default trips.

[3] Weekday trip counts estimated by dividing AM and PM peak hour trips by ITE percent of daily trips in AM and PM trips and taking the average of the two values. Weekend trip rates estimated using ratio of CalEEMod default weekday to weekend rates.

Abbreviations:

hr - hour

ksf - thousand square feet

ITE - Institute of Transportation Engineers

Table Ops-1b. Trip Rates - Project and Project Variant
3333 California St AB900
San Francisco, California

Project[1]

Land Use Sub-Type	Size Metric	Size	Person-Trips	Adjusted Person-Trips	Vehicle Trips	Trip Rate
			(trips/day)	(trips/day)	(trips/day)	(trip/size/day)
Apartments Mid Rise	Dwelling Unit	558	5,002	2,498	1,431	2.56
Open Space	Acre	5.42	0	0	0	0
Day-Care Center	1000sqft	14.69	984	491	281	19.16
Enclosed Parking Structure	Spaces	895	0	0	0	0
General Office Building	1000sqft	49.999	905	452	259	5.18
Parking Lot	1000sqft	10.836	0	0	0	0
Strip Mall	1000sqft	54.117	12,753	6,370	3,648	67.41

Variant[1]

Land Use Sub-Type	Size Metric	Size	Person-Trips	Adjusted Person-Trips	Vehicle Trips	Trip Rate
			(trips/day)	(trips/day)	(trips/day)	(trip/size/day)
Apartments Mid Rise	Dwelling Unit	744	6,670	3,274	1,917	2.58
Open Space	Acre	5.42	0	0	0	0
Day-Care Center	1000sqft	14.65	984	483	283	19.30
Enclosed Parking Structure	Spaces	971	0	0	0	0
General Office Building	1000sqft	0	0	0	0	0
Parking Lot	1000sqft	10.836	0	0	0	0
Strip Mall	1000sqft	48.593	11,925	5,854	3,427	70.52

Notes:

[1] Project and Variant trip rates from the traffic memorandum (Kittelson & Associates, March 2018). Strip mall is assumed to include "General Retail", "Sit-Down", and "Composite" land uses. Daily person-trips are adjusted to remove double-counted internal trips, non-auto trips, and double-counted carpool trips. For emissions purposes, daily trips are assumed constant for weekdays and weekends. These factors are shown below.

Variable	Project	Variant
Total Vehicle-Trips/ Total Person-Trips	0.57	0.59
% internal, average	18.25	19.10
% external auto, average	61.10	60.68

Abbreviations:

1000sqft - thousand square feet

Table Ops-2. Existing Conditions Energy Emissions
3333 California St AB900
San Francisco, California

Energy Sector	Average Monthly Data[1]	Average Annual Usage	Usage Units	Emission Factor	Emissions Factor Units	CO_2e Emissions (MT/year)
Electricity	340	4,076	MWh	363	lbs CO_2e/MWh delivered	671
Natural Gas	1,028	12,332	MMBtu	117.77	lb CO_2e/MMBtu	659
					Total	1,330

Notes:

[1] Average monthly usage from PG&E bills July 2012 - September 2014. Data provided by Project Sponsor.

Abbreviations:

CO_2e - carbon dioxide equivalents
lb - pound
MMBTU - million British Thermal Units
MT - metric ton
MWh - megawatt-hour
PG&E - Pacific Gas and Electric

Table Ops-3. Electricity Intensity Factor Derivations
3333 California St AB900
San Francisco, California

	2014[1,2]	2015[1,3]	2016[1,4]	Average[5]	Units
CO_2 Intensity Factor per Total Energy Delivered	434.92	404.51	293.7	377.7	lbs CO_2/MWh delivered
% of Total Energy From Renewables	27%	29.5%	32.8%	29.8%	
CO_2 Intensity Factor per Total Non-Renewable Energy[6]	595.78	573.77	437	537.8	lbs CO_2/MWh delivered
Estimated Intensity Factor for Total Energy Delivered[7,8]					
2020 RPS (33%)	399.2	384.4	292.8	360.3	lbs CO_2/MWh delivered
	401.7	387.0	295.4	362.9	lbs CO_2e/MWh delivered
2030 RPS (50%)[9]	297.9	286.9	218.5	268.9	lbs CO_2/MWh delivered
	300.5	289.5	221.1	271.453	lbs CO_2e/MWh delivered
2050 RPS (80%)[10]	119.2	114.8	87.4	107.6	lbs CO_2/MWh delivered
	121.7	117.3	90.0	110.1	lbs CO_2e/MWh delivered

Notes:

[1] Total CO_2 emission factor from The Climate Registry. Available at: https://www.theclimateregistry.org/our-members/cris-public-reports/. Accessed: June 2018.

[2] Percent of total energy from eligible renewables is from the PGE 2015 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2015/PGE_CRSR_2015.pdf.

[3] Percent of total energy from eligible renewables is from the PGE 2016 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2016/PGE_CRSR_Environment.pdf.

[4] Percent of total energy from eligible renewables is from the PGE 2017 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2017/assets/PGE_CRSR_2017_Environment.pdf.

[5] This average uses the most recent three years of data.

[6] The emissions metric presented here is calculated based on the total CO_2 intensity factor divided by the percent of energy delivered from non-renewable sources.

[7] The intensity factor for total energy delivered is estimated by multiplying the percentage of energy delivered from non-renewable energy by the CO_2 emissions per total non-renewable energy metric calculated above. The estimate provided here and the energy reports issued by PGE assume that renewable energy sources do not result in any CO_2 emissions.

[8] Global Warming Potentials (GWP) are based on the IPCC Fourth Assessment Report. CH_4 and N_2O emission factors are from the CalEEMod version 2016.3.2 defaults for PGE, and are conservatively assumed not to change from these estimates. As more renewable energy is integrated into the electricity grid, these intensity factors will also decrease.

[9] Emission factor presented here is 50% projected RPS for 2030 consistent with SB 32 and SB 350. Available at: http://www.energy.ca.gov/sb350/.

[10] The projected 2050 RPS target is based on 80% RPS in 2050, consistent with the CARB Final 2017 Scoping Plan, Appendix D PATHWAYS, pg 12 (November, 2017). Available at: https://www.arb.ca.gov/cc/scopingplan/2030sp_appd_pathways_final.pdf

Abbreviations:

CARB - California Air Resources Board
CO_2 - carbon dioxide
GHG - greenhouse gases
IPCC - Intergovernmental Panel on Climate Change
lbs - pounds
MWh - megawatt-hour
RPS - Renewable Portfolio Standards
PGE - Pacific Gas & Electric
SB - Senate Bill

Table Ops-4. Stationary Source Emissions
3333 California St AB900
San Francisco, California

Stationary Source	Engine Tier	HP	Fuel Type	Operation[1]	CO_2e Emission Factor[2]	CO_2e Emissions
				hrs/yr	g/bhp-hr	MT/yr
Existing Generator	None	380	Diesel	20	523.5	4.0
Proposed Generator	Tier 2	1,073	Diesel	50	523.5	28.1

Notes:

[1] Operation of existing generator is 20 hours, based on the existing BAAQMD Permit. Operation of proposed generator is assumed to be 50 hours per year for routine maintenance and testing. This is consistent with the Maximum Allowed Testing Time from the Airborne Toxics Control Measure for Stationary Compression Ignition Engines (17 CCR 93115) for a Tier 2 engine.

[2] Generator emission factors are from CalEEMod and do not depend on engine tier.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
bhp - brake-horsepower
CO2e - carbon dioxide equivalents
g - grams
hrs - hours
MT - metric tons
yr - year

Table Ops-5. Electricity and Mobile Emission Factors
3333 California St AB900
San Francisco, California

Year	CO2e Intensity Factor	Fleet CO2e EF	Change in carbon intensity from previous year	Change in Fleet EF from previous year
	lb CO2e/MWh	metric ton/mi	%	%
2020	363	4.00E-04	--	--
2021	354	3.90E-04	-3%	-2%
2022	345	3.80E-04	-3%	-3%
2023	335	3.69E-04	-3%	-3%
2024	326	3.59E-04	-3%	-3%
2025	317	3.49E-04	-3%	-3%
2026	308	3.40E-04	-3%	-3%
2027	299	3.32E-04	-3%	-2%
2028	290	3.25E-04	-3%	-2%
2029	281	3.18E-04	-3%	-2%
2030	271	3.12E-04	-3%	-2%
2031	263	3.07E-04	-3%	-2%
2032	255	3.03E-04	-3%	-1%
2033	247	2.99E-04	-3%	-1%
2034	239	2.96E-04	-3%	-1%
2035	231	2.93E-04	-3%	-1%
2036	223	2.90E-04	-3%	-1%
2037	215	2.88E-04	-4%	-1%
2038	207	2.86E-04	-4%	-1%
2039	199	2.85E-04	-4%	-1%
2040	191	2.83E-04	-4%	0%
2041	183	2.82E-04	-4%	0%
2042	175	2.81E-04	-4%	0%
2043	167	2.81E-04	-5%	0%
2044	159	2.80E-04	-5%	0%
2045	150	2.80E-04	-5%	0%
2046	142	2.79E-04	-5%	0%
2047	134	2.79E-04	-6%	0%
2048	126	2.78E-04	-6%	0%
2049	118	2.78E-04	-6%	0%
2050	110	2.78E-04	-7%	0%
2051	110	2.78E-04	0%	0%
2052	110	2.78E-04	0%	0%
2053	110	2.78E-04	0%	0%
2054	110	2.78E-04	0%	0%
2055	110	2.78E-04	0%	0%

Year	CO2e Intensity Factor	Fleet CO2e EF	Change in carbon intensity from previous year	Change in Fleet EF from previous year
	lb CO2e/MWh	metric ton/mi	%	%
2056	110	2.78E-04	0%	0%
2057	110	2.78E-04	0%	0%

Notes:

[1] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[2] Approximation of the decrease in vehicle emission factors over time, based on San Francisco fleet-average emission factors from 2020-2050. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

Abbreviations:

CO_2e - carbon dioxide equivalents

EF - emission factor

lb - pound

mi - mile

MWh - megawatt-hour

Table Ops-6. Project Operational CO_2e Emissions by Year
3333 California St AB900
San Francisco, California

Year	CO_2e (MT/yr)[3]											
	Area	Energy		Mobile[2]	Waste	Water		Stationary Source[4]	Construction	Solar Reductions	Vegetation Reduction	Total
		Electricity[1]	Natural Gas			Treatment	Transportation					
2020	--	--	--	--	--	--	--	--	541	0	0	541
2021	--	--	--	--	--	--	--	--	733	0	0	733
2022	4	74	65	233	2	4	2	--	732	-45	0	1,071
2023	14	245	235	761	7	13	8	9	752	-56	0	1,988
2024	20	334	347	1,019	10	19	11	28	564	-55	0	2,297
2025	21	367	369	1,286	13	20	11	28	664	-256	0	2,522
2026	27	664	529	3,408	36	27	14	28	277	-252	0	4,759
2027	29	681	567	3,412	37	29	15	28	8	-290	-13	4,504
2028	29	662	568	3,339	37	29	15	28	--	-284	-13	4,410
2029	29	641	568	3,271	37	29	14	28	--	-279	-13	4,326
2030	29	620	568	3,211	37	29	14	28	--	-273	-13	4,251
2031	29	602	568	3,159	37	29	13	28	--	-268	-13	4,184
2032	29	583	568	3,112	37	29	13	28	--	-264	-13	4,123
2033	29	565	568	3,072	37	29	12	28	--	-259	-13	4,069
2034	29	546	568	3,037	37	29	12	28	--	-254	-13	4,021
2035	29	528	568	3,008	37	29	12	28	--	-249	-13	3,977
2036	29	510	568	2,982	37	29	11	28	--	-244	-13	3,937
2037	29	491	568	2,960	37	29	11	28	--	-240	-13	3,901
2038	29	473	568	2,941	37	29	10	28	--	-235	-13	3,868
2039	29	454	568	2,926	37	29	10	28	--	-230	-13	3,839
2040	29	436	568	2,913	37	29	10	28	--	-225	-13	3,812
2041	29	417	568	2,902	37	29	9	28	--	-220	-13	3,787
2042	29	399	568	2,893	37	29	9	28	--	-215	-13	3,764
2043	29	381	568	2,885	37	29	8	28	--	-211	-13	3,742
2044	29	362	568	2,879	37	29	8	28	--	-206	-13	3,722
2045	29	344	568	2,874	37	29	8	28	--	-201	-13	3,702
2046	29	325	568	2,868	37	29	7	28	--	-196	-13	3,683
2047	29	307	568	2,863	37	29	7	28	--	-191	0	3,677
2048	29	288	568	2,859	37	29	6	28	--	-187	0	3,658
2049	29	270	568	2,855	37	29	6	28	--	-182	0	3,641
2050	29	252	568	2,853	37	29	6	28	--	-177	0	3,625
2051	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2052	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2053	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2054	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2055	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2056	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2057	29	252	568	2,853	37	29	6	28	--	-177	0	3,625

Notes:

[1] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[2] Approximation of the decrease in vehicle emission factors over time, based on San Francisco fleet-average emission factors from 2020-2050. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

[3] Assume all buildings become operational as soon as phase is constructed, based on percent of operational land uses by Phase as shown in Table Ops-16. The only changes in emissions are due to transportation and electricity becoming cleaner.

[4] Assumes generator operational with phase 2

Abbreviations:

AB - Assembly Bill
CARB - California Air Resources Board
CO_2e - carbon dioxide equivalent
EMFAC - CARB Emissions Factor model
g - gram
lb - pound
mi - mile
MWh - megawatt-hour
MT - metric ton
RPS - Renewables Portfolio Standard

Table Ops-7. Project Variant Operational CO_2e Emissions by Year
3333 California St AB900
San Francisco, California

Year	CO_2e (MT/yr)[3]											
	Area	Energy		Mobile[2]	Waste	Water		Stationary Source	Construction	Solar Reductions	Vegetation Reduction	Total
		Electricity[1]	Natural Gas			Treatment	Transportation					
2020	--	--	--	--	--	--	--	--	541	0	0	541
2021	--	--	--	--	--	--	--	--	733	0	0	733
2022	3.8	68	58	238	2	3.5	2.1	--	732	-45	0	1,063
2023	14	225	209	774	6	12	7	9	752	-56	0	1,953
2024	20	304	309	1,033	8	18	11	28	564	-55	0	2,242
2025	22	346	344	1,305	11	20	11	28	664	-256	0	2,496
2026	37	702	603	3,467	31	34	18	28	277	-252	0	4,946
2027	39	716	637	3,470	32	36	19	28	8	-290	-13	4,682
2028	39	695	638	3,396	32	36	18	28	--	-284	-13	4,585
2029	39	673	638	3,326	32	36	18	28	--	-279	-13	4,498
2030	39	651	638	3,266	32	36	17	28	--	-273	-13	4,421
2031	39	632	638	3,212	32	36	17	28	--	-268	-13	4,352
2032	39	612	638	3,165	32	36	16	28	--	-264	-13	4,290
2033	39	593	638	3,125	32	36	16	28	--	-259	-13	4,235
2034	39	574	638	3,089	32	36	15	28	--	-254	-13	4,184
2035	39	554	638	3,059	32	36	15	28	--	-249	-13	4,139
2036	39	535	638	3,033	32	36	14	28	--	-244	-13	4,098
2037	39	516	638	3,010	32	36	14	28	--	-240	-13	4,060
2038	39	496	638	2,991	32	36	13	28	--	-235	-13	4,026
2039	39	477	638	2,975	32	36	13	28	--	-230	-13	3,995
2040	39	458	638	2,962	32	36	12	28	--	-225	-13	3,967
2041	39	438	638	2,951	32	36	12	28	--	-220	-13	3,941
2042	39	419	638	2,942	32	36	11	28	--	-215	-13	3,917
2043	39	399	638	2,934	32	36	10	28	--	-211	-13	3,894
2044	39	380	638	2,928	32	36	10	28	--	-206	-13	3,872
2045	39	361	638	2,923	32	36	9	28	--	-201	-13	3,852
2046	39	341	638	2,917	32	36	9	28	--	-196	-13	3,832
2047	39	322	638	2,912	32	36	8	28	--	-191	0	3,824
2048	39	303	638	2,907	32	36	8	28	--	-187	0	3,805
2049	39	283	638	2,904	32	36	7	28	--	-182	0	3,786
2050	39	264	638	2,902	32	36	7	28	--	-177	0	3,769
2051	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2052	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2053	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2054	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2055	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2056	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2057	39	264	638	2,902	32	36	7	28	--	-177	0	3,769

Notes:

[1] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[2] Approximation of the decrease in vehicle emission factors over time, based on San Francisco fleet-average emission factors from 2020-2050. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

[3] Assume all buildings become operational as soon phase is constructed, based on percent of operational land uses by Phase as shown in Table Ops-16.. The only changes in emissions are due to transportation and electricity becoming cleaner.

[4] Assumes generator operational with phase 2.

Abbreviations:

AB - Assembly Bill
CARB - California Air Resources Board
CO_2e - carbon dioxide equivalent
EMFAC - CARB Emissions Factor model
g - gram
lb - pound
mi - mile
MWh - megawatt-hour
MT - metric ton
RPS - Renewables Portfolio Standard

Table Ops-8. Energy and Water Use Values
3333 California St AB900
San Francisco, California

Scaled Building Energy Use (kBTU/year)[1]

Building Type	Project Case		Project Variant	
	Natural Gas	Electricity	Natural Gas	Electricity
Apartments	9,289,299	8,968,899	11,023,050	10,642,850
Day-Care Center	96,402	278,149	96,139	277,392
Parking Structure	0	5,374,715	0	5,454,439
General Office Building	330,377	708,129	0	0
Parking Lot	0	0	0	0
Strip Mall	922,059	1,853,528	827,940	1,664,329
Total (kBTU/yr)	**10,638,137**	**17,183,420**	**11,947,129**	**18,039,010**

Water Use and Electricity for Water Use[2]

Type	Water				Electricity to Supply, Treat, and Distribute Water			
	Project Case		Project Variant		Project		Project Variant	
	Indoor (gal)	Outdoor (gal)	Indoor (gal)	Outdoor (gal)	kWh/year	Kwh/gal	kWh/year	Kwh/gal
Commercial	422,000	0	229,000	0	2,280	0.0054	1,238	0.0054
Residential	17,125,000	0	22,398,000	0	92,663	0.0054	121,194	0.0054
HVAC/Cooling	1,995,000	0	1,995,000	0	10,795	0.0054	10,795	0.0054
Landscape/Irrigation	0	1,626,000	0	1,626,000	5,689	0.0035	5,689	0.0035
Total	**19,542,000**	**1,626,000**	**24,622,000**	**1,626,000**	**111,427**	**-**	**138,916**	**-**

Distributing Water Use for CalEEMod Land Uses[3]

Land Use Sub-Type	CalEEMod Default Indoor Water Use	Project Case				Project Variant			
	(gal/land use size/year)	Land Use	Land Use (sq ft)	Indoor (gal/year)	Outdoor (gal/year)	Land Use	Land Use (sq ft)	Indoor (gal/year)	Outdoor (gal/year)
Apartments (DU)	65,154	558	824,691	18,868,788	0	744	978,611	24,271,899	0
Open Space (Acres)	0	5.42	236,000	0	1,626,000	5.42	236,000	-	1,626,000
Day-Care Center (ksf)	42,890	14.69	14,690	50,720	0	14.65	14,650	62,087	
General Office Building (ksf)	177,734	49.999	49,999	382,990	0	0	0	0	0
Strip Mall (ksf)	74,073	54.117	54,117	239,502	0	48.593	48,593	288,014	0
Total	-	-	-	**19,542,000**	**1,626,000**	-	-	**24,622,000**	**1,626,000**

Notes:

[1] From 3333 California CEQA Energy Inputs, Arup (January 2018), Tables 10 and 11, including energy conservation measures. CEQA Energy Inputs is supporting information for the Energy Assessment.

[2] From 3333 California CEQA Energy Inputs, Arup (January 2018), Tables 4 and 5. CEQA Energy Inputs is supporting information for the Energy Assessment.

[3] Water use is distributed among land uses on a square footage basis for CalEEMod purposes. The total water use is from San Francisco Water Power Sewer's Water Supply Assessment (June 2017) which is summarized in the Energy Assessment.

Abbreviations:

DU - dwelling units
gal - gallon
kBTU - thousand British Thermal Units
sq ft - square feet

Table Ops-9. GHG Emissions Reductions from Solar Energy
3333 California St AB900
San Francisco, California

Energy Assessment Solar Data by Building and Phase[1]

Building	Proposed Total Solar Equipment Area (sqft)	Estimated PV Energy Output (kBTU/year)	Estimated Solar Hot Water Energy Output (kBTU/year)	Construction Phase
Center Building A	0	0	0	2
Center Building B	2,597	180,864	82,000	2
Plaza A Building	12,190	795,497	380,000	3
Plaza B Building	11,812	828,163	384,000	3
Walnut Building	19,771	1,397,159	635,000	3
Masonic Building	0	0	0	1
Euclid Building	9,036	638,342	289,000	1
Laurel Duplexes	6,384	394,514	207,000	4
Mayfair Building	3,550	251,107	107,000	4
Total	**65,340**	**4,485,646**	**2,084,000**	

Year-By-Year Reductions due to Solar

Year	CO_2e Intensity Factor (lb CO_2e/MWh)[2]	Solar PV Reductions (MT)	CO_2e Intensity Factor NG (lb CO_2e/kBTU)[3]	Solar Heating Reductions (MT)	Latest completed Phase[4]
2020	363	0	0.118	0	-
2021	354	0	0.118	0	-
2022	345	-29	0.118	-15	1
2023	335	-37	0.118	-20	2
2024	326	-36	0.118	-20	2
2025	317	-162	0.118	-95	3
2026	308	-157	0.118	-95	3
2027	299	-178	0.118	-111	4
2028	290	-173	0.118	-111	4
2029	281	-167	0.118	-111	4
2030	271	-162	0.118	-111	4
2031	263	-157	0.118	-111	4
2032	255	-152	0.118	-111	4
2033	247	-147	0.118	-111	4
2034	239	-143	0.118	-111	4
2035	231	-138	0.118	-111	4
2036	223	-133	0.118	-111	4
2037	215	-128	0.118	-111	4
2038	207	-123	0.118	-111	4
2039	199	-119	0.118	-111	4
2040	191	-114	0.118	-111	4
2041	183	-109	0.118	-111	4
2042	175	-104	0.118	-111	4
2043	167	-99	0.118	-111	4
2044	159	-95	0.118	-111	4
2045	150	-90	0.118	-111	4
2046	142	-85	0.118	-111	4
2047	134	-80	0.118	-111	4
2048	126	-75	0.118	-111	4
2049	118	-70	0.118	-111	4

Year	CO_2e Intensity Factor (lb CO_2e/MWh)[2]	Solar PV Reductions (MT)	CO_2e Intensity Factor NG (lb CO_2e/kBTU)[3]	Solar Heating Reductions (MT)	Latest completed Phase[4]
2050	110	-66	0.118	-111	4
2051	110	-66	0.118	-111	4
2052	110	-66	0.118	-111	4
2053	110	-66	0.118	-111	4
2054	110	-66	0.118	-111	4
2055	110	-66	0.118	-111	4
2056	110	-66	0.118	-111	4
2057	110	-66	0.118	-111	4

Notes:

[1] From SWCA's Energy Assessment (July 2018), Table 10.

[2] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[3] CO_2e intensity factor for natural gas is from CalEEMod Appendix D.

[4] The solar for each building is assumed to become active when the relevant Phase is complete.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
kBTU - thousand British Thermal Units
lb - pound
MT - metric ton
MWh - megawatt-hour
sqft - square feet

Table Ops-10. Energy Emissions Year-by-Year
3333 California St AB900
San Francisco, California

Year	CO2e Intensity Factor[1]		Project Case[2]				Project Variant[2]			
	Electricity	Natural Gas	Electricity Use[3]	Natural Gas Use[3]	Electricity Emissions	Natural Gas Emissions	Electricity Use[3]	Natural Gas Use[3]	Electricity Emissions	Natural Gas Emissions
	lb CO2e/MWh	lb CO2e/kBTU	MWh	kBTU	MT CO2e/year		MWh	kBTU	MT CO2e/year	
2020	363	0.118	0	0	0	0	0	0	0	0
2021	354	0.118	0	0	0	0	0	0	0	0
2022	345	0.118	473	1,224,705	74	65	436	1,092,913	68	58
2023	335	0.118	1,612	4,393,180	245	235	1,478	3,917,878	225	209
2024	326	0.118	2,255	6,498,974	334	347	2,055	5,791,991	304	309
2025	317	0.118	2,550	6,900,308	367	369	2,405	6,440,318	346	344
2026	308	0.118	4,754	9,905,647	664	529	5,027	11,295,228	702	603
2027	299	0.118	5,027	10,614,055	681	567	5,278	11,925,697	716	637
2028	290	0.118	5,036	10,638,137	662	568	5,287	11,947,129	695	638
2029	281	0.118	5,036	10,638,137	641	568	5,287	11,947,129	673	638
2030	271	0.118	5,036	10,638,137	620	568	5,287	11,947,129	651	638
2031	263	0.118	5,036	10,638,137	602	568	5,287	11,947,129	632	638
2032	255	0.118	5,036	10,638,137	583	568	5,287	11,947,129	612	638
2033	247	0.118	5,036	10,638,137	565	568	5,287	11,947,129	593	638
2034	239	0.118	5,036	10,638,137	546	568	5,287	11,947,129	574	638
2035	231	0.118	5,036	10,638,137	528	568	5,287	11,947,129	554	638
2036	223	0.118	5,036	10,638,137	510	568	5,287	11,947,129	535	638
2037	215	0.118	5,036	10,638,137	491	568	5,287	11,947,129	516	638
2038	207	0.118	5,036	10,638,137	473	568	5,287	11,947,129	496	638
2039	199	0.118	5,036	10,638,137	454	568	5,287	11,947,129	477	638
2040	191	0.118	5,036	10,638,137	436	568	5,287	11,947,129	458	638
2041	183	0.118	5,036	10,638,137	417	568	5,287	11,947,129	438	638
2042	175	0.118	5,036	10,638,137	399	568	5,287	11,947,129	419	638
2043	167	0.118	5,036	10,638,137	381	568	5,287	11,947,129	399	638
2044	159	0.118	5,036	10,638,137	362	568	5,287	11,947,129	380	638
2045	150	0.118	5,036	10,638,137	344	568	5,287	11,947,129	361	638
2046	142	0.118	5,036	10,638,137	325	568	5,287	11,947,129	341	638
2047	134	0.118	5,036	10,638,137	307	568	5,287	11,947,129	322	638
2048	126	0.118	5,036	10,638,137	288	568	5,287	11,947,129	303	638
2049	118	0.118	5,036	10,638,137	270	568	5,287	11,947,129	283	638
2050	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2051	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2052	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2053	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2054	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2055	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2056	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2057	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638

Notes:

[1] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[2] Does not include the benefits of solar photovoltaics or solar water heating. These are shown in Table Ops-9.

[3] While construction is underway, energy use is based on the percent of operational land uses by Phase as shown in Table Ops-16.

Abbreviations:

CO_2e - carbon dioxide equivalents
EF - emission factor
lb - pound
kBTU - thousand British Thermal Units
MT - metric ton
MWh - megawatt-hour

Table Ops-11. Wastewater Treatment Types and Electricity Intensity
3333 California St AB900
San Francisco, California

Wastewater Electricity Intensity

County	Electricity to Treat Wastewater (kWh/million gal)[1]
San Francisco	1,911

Wastewater Treatment Types[2]

County	Septic Tank	Aerobic	Anaerobic, Facultative Lagoons	Anaerobic, Combustion of Gas	Anaerobic, Cogeneration of Gas
San Francisco	10.33%	87.46%	2.21%	100%	0%

Wastewater Treatment Direct Emission Factors[3]

Wastewater Treatment Type	CO_2 Biogenic, ton/gal	CO_2 Non-Biogenic, ton/gal	CH_4, ton/gal	N_2O, ton/gal
Septic	0	0	2.50E-07	8.48E-10
Aerobic	3.90E-07	0	1.34E-09	8.48E-10
Anaerobic Facultative	3.90E-07	0	4.02E-07	8.48E-10
Digester Burn	0	0	0	0
Digester Cogen	0	0	0	0

Notes:

[1] Water Electricity Intensity from Table 9.2 of Appendix D of the CalEEMod User's Guide.

[2] Water Treatment Types from Table 9.3 of Appendix D of the CalEEMod User's Guide.

[3] Wastewater Treatment Direct Emission Factors from Table 9.4 of Appendix D of the CalEEMod User's Guide.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
gal - gallon
kWh - kilowatt-hours
N_2O - nitrogen oxides

Table Ops-12. Water Treatment Emissions
3333 California St AB900
San Francisco, California

Land Use	Project Case				Project Variant			
	Septic Tank Direct Emissions	Aerobic Direct Emissions	Facultative Lagoon Direct Emissions	Total Treatment Emissions	Septic Tank Direct Emissions	Aerobic Direct Emissions	Facultative Lagoon Direct Emissions	Total Treatment Emissions
	MT CO2e/year							
Apartments (DU)	11.51	10.12	4.04	25.68	14.81	13.02	5.20	33.04
Day-Care Center (ksf)	0.03	0.03	0.01	0.07	0.04	0.03	0.01	0.08
Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building (ksf)	0.23	0.21	0.08	0.52	0.00	0.00	0.00	0.00
Strip Mall (ksf)	0.15	0.13	0.05	0.33	0.18	0.15	0.06	0.39
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Space (Acres)	0.99	0.87	0.35	2.21	0.99	0.87	0.35	2.21
Total	**12.92**	**11.36**	**4.54**	**28.81**	**16.02**	**14.08**	**5.63**	**35.73**

Notes:

[1] Treatment factors are shown in Table Ops-11.

[2] Water usage is shown in Table Ops-8.

Abbreviations:

CO_2e - carbon dioxide equivalents

DU - dwelling units

ksf - thousand square feet

MT - metric tons

Table Ops-13. Water Emissions Year-by-Year
3333 California St AB900
San Francisco, California

Year	CO2e Intensity Factor	Project Case			Variant		
		Electricity Consumption[1]	Distribution Emissions	Treatment Emissions[2]	Electricity Consumption[1]	Distribution Emissions	Treatment Emissions[2]
	lb CO_2e/MWh	MWh	MT CO_2e		MWh	MT CO_2e	
2020	363	0	0	0	0	0	0
2021	354	0	0	0	0	0	0
2022	345	14	2.2	3.6	13	2.1	3.5
2023	335	50	7.6	13	48	7.4	12
2024	326	74	11	19	72	11	18
2025	317	78	11	20	79	11	20
2026	308	103	14	27	131	18	34
2027	299	111	15	29	139	19	36
2028	290	111	15	29	139	18	36
2029	281	111	14	29	139	18	36
2030	271	111	14	29	139	17	36
2031	263	111	13	29	139	17	36
2032	255	111	13	29	139	16	36
2033	247	111	12	29	139	16	36
2034	239	111	12	29	139	15	36
2035	231	111	12	29	139	15	36
2036	223	111	11	29	139	14	36
2037	215	111	11	29	139	14	36
2038	207	111	10	29	139	13	36
2039	199	111	10	29	139	13	36
2040	191	111	10	29	139	12	36
2041	183	111	9.2	29	139	12	36
2042	175	111	8.8	29	139	11	36
2043	167	111	8.4	29	139	10	36
2044	159	111	8.0	29	139	10	36
2045	150	111	7.6	29	139	9.5	36
2046	142	111	7.2	29	139	9.0	36
2047	134	111	6.8	29	139	8.5	36
2048	126	111	6.4	29	139	8.0	36
2049	118	111	6.0	29	139	7.4	36
2050	110	111	5.6	29	139	6.9	36
2051	110	111	5.6	29	139	6.9	36
2052	110	111	5.6	29	139	6.9	36
2053	110	111	5.6	29	139	6.9	36
2054	110	111	5.6	29	139	6.9	36
2055	110	111	5.6	29	139	6.9	36
2056	110	111	5.6	29	139	6.9	36
2057	110	111	5.6	29	139	6.9	36

Notes:

[1] Electricity use is calculated based on phased water use and usage factors from the Energy Assessment (SWCA, July 2018) and supporting Water Supply Assessment (San Francisco Water Power Sewer, June 2017) and CEQA Energy Inputs (Arup, 2018). While construction is underway, water use is based on the percent of operational land uses by Phase as shown in Table Ops-16. Electricity Usage Factors taken from the Energy Assessment are shown below.

Indoor (kwh/gal)	Outdoor (kwh/gal)
0.0054	0.0035

[2] Emissions from wastewater treatment are calculated in Table Ops-12.

Abbreviations:

CO_2e - carbon dioxide equivalents
lb - pounds
MT - metric tons
MWh - megawatt-hour

Table Ops-14. Waste Generation and Emissions
3333 California St AB900
San Francisco, California

Space Type	Project		Variant	
	Waste Generated	CO_2e Emissions[1]	Waste Generated	CO_2e Emissions[1]
	Cubic yards/day	MT/yr	Cubic yards/day	MT/yr
Residential	18.3	12.9	19.8	13.9
Commercial	34	23.9	25.5	17.9
Total	**52.5**	**36.8**	**45.3**	**31.8**

Land Use[2]	Total CO_2e (MT/yr)	
	Project	Variant
Apartments	13	14
Day-Care Center	3.0	4.1
Parking Structure	0	0
General Office Building	10	0
Parking Lot	0	0
Retail	11	14

Year	Total CO_2e (MT/yr)[3]	
	Project	Variant
2022	2.0	1.8
2023	6.9	6.1
2024	9.8	8.4
2025	13	11
2026	36	31
2027	37	32
2028	37	32

Notes:

[1] Total waste emissions are from CEQA Energy Inputs (ARUP, January 2018).

[2] Commercial waste generation was split by total land uses among daycare, office, and retail based on square footage.

[3] While construction is underway, waste is based on the percent of operational land uses by Phase as shown in Table Ops-16.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric tons

yr - year

Table Ops-15. GHG Emissions Sequestration from Vegetation
3333 California St AB900
San Francisco, California

Number of Net New Trees[1]	Units	Broad Species Class	Annual CO_2 accumulation per tree (MT CO_2/tree/year)[2]	Project GHG Sequestration (MT CO_2e)
162	Trees	Miscellaneous	-0.0354	-115
Number of Net New Acres[1]	**Units**	**Vegetation Land Use Subtype**	**Annual CO_2 accumulation per acre (MT CO_2/acre/year)[2]**	**Project GHG Sequestration (MT CO_2e)**
1.63	Acres	Grassland	-4.31	-140
			Total, Trees and Acres Covered	-255

Notes:

1. Number of net new trees from Project Description. Total number of trees - number of existing trees
2. From CalEEMod User's Guide Appendix A.
3. All vegetation types are assumed to have a growing period of 20 years.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric tones

Table Ops-16. Phased Land Use
3333 California St AB900
San Francisco, California

Land Use	Size Metric	Phase[1]					% Total in Phase[2]			
		Phase 1	Phase 2	Phase 3	Phase 4	All	Phase 1	Phase 2	Phase 3	Phase 4
Project Case										
Apartments	DU	196	190	128	44	558	35%	34%	23%	8%
Day-Care Center	ksf	0	0	14.69	0.00	14.69	0%	0%	100%	0%
Parking Structure	ksf	87.98	19.26	301.06	20.48	428.77	21%	4%	70%	5%
General Office Building	ksf	0	0	50.00	0.00	50	0%	0%	100%	0%
Parking Lot	ksf	3.936	2.51	3.82	0.58	10.84	36%	23%	35%	5%
Retail	ksf	4.287	0	49.83	0	54.12	8%	0%	92%	0%
Open Space	acre	1.42	1.35	2.19	0.46	5.42	26%	25%	40%	9%
Project Variant										
Apartments	DU	196	190	314	44	744	26%	26%	42%	6%
Day-Care Center	ksf	0	0	14.65	0.00	14.65	0%	0%	100%	0%
Parking Structure	ksf	87.98	19.26	307.42	20.48	435.13	20%	4%	71%	5%
General Office Building	ksf	0	0	-	0.00	0	-	-	-	-
Parking Lot	ksf	3.94	2.51	6.18	0.58	13.2	30%	19%	47%	4%
Retail	ksf	4.29	0	44.31	0	48.59	9%	0%	91%	0%
Open Space	acre	1.42	1.35	2.19	0.46	5.42	26%	25%	40%	9%

Notes:

[1] Land use totals and Phase descriptions provided by Project sponsor.

[2] Percent of total in Phase is used to quantify emissions at buildout of each Phase. Phases 1, 2, 3, and 4 are assumed to be operational in 2022, 2023, 2025, and 2027, respectively.

Abbreviations:

DU - dwelling units

ksf - thousand square feet

Table Ops-17. Area and Mobile Emissions by Phase
3333 California St AB900
San Francisco, California

Phase[1]	Operational Year	% Change in Mobile Emissions Factor[2]	Project		Variant	
			Area	Mobile	Area	Mobile
			CO_2e (MT/yr)[3]			
1	2022	--	3.8	233	3.8	238
1	2023	-2.81%	10	618	10	630
1	2024	-2.67%	10	602	10	613
1	2025	-2.82%	10	585	10	596
1	2026	-2.54%	10	570	10	580
1	2027	-2.39%	10	556	10	567
1	2028	-2.23%	10	544	10	554
2	2022	--	0	0	0	0
2	2023	-2.81%	3.3	143	3.3	144
2	2024	-2.67%	10	417	10	421
2	2025	-2.82%	10	406	10	409
2	2026	-2.54%	10	395	10	398
2	2027	-2.39%	10	386	10	389
2	2028	-2.23%	10	377	10	380
3	2022	--	0	0	0	0
3	2023	-2.81%	0	0	0	0
3	2024	-2.67%	0	0	0	0
3	2025	-2.82%	0.8	295	1.9	301
3	2026	-2.54%	6.7	2,443	17	2,488
3	2027	-2.39%	6.7	2,384	17	2,428
3	2028	-2.23%	6.7	2,331	17	2,374
4	2022	--	0	0	0	0
4	2023	-2.81%	0	0	0	0
4	2024	-2.67%	0	0	0	0
4	2025	-2.82%	0	0	0	0
4	2026	-2.54%	0	0	0	0
4	2027	-2.39%	2.2	85	2.2	86
4	2028	-2.23%	2.3	86	2.3	87

Notes:

[1] Operational year and fraction of operation in Table Ops-16.

[2] Mobile emissions change is shown in Table Ops-5.

[3] Area and mobile emissions from buildout year for each Phase are from CalEEMod outputs. Emissions from energy, water, waste, stationary sources, and reductions from solar and vegetation are shown in Tables Ops-7 and Ops-8.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric ton

yr - year

APPENDIX 2
CALEEMOD® OUTPUT FILES

3333 CalSF Existing Emissions - 2020

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	352.00	1000sqft	8.08	352,000.00	0
Day-Care Center	11.50	1000sqft	0.26	11,500.00	0
Enclosed Parking Structure	212.00	Space	1.91	105,500.00	0
Parking Lot	331.00	Space	2.98	134,680.00	0
City Park	3.79	Acre	3.79	165,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	360.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

I-FRISBIER2

3333 CalSF Existing Emissions - 2020 - San Francisco County, Annual

Project Characteristics - Updated CO2 Intensity Factor

Land Use - Parking area updated based on initial study.

Construction Phase - Construction not evaluated.

Grading -

Architectural Coating -

Vehicle Trips - Trip rates based on data from traffic engineers dated March 2018.

Consumer Products - Updated ROG EF

Energy Use - Not modeling energy use for baseline operations

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	300.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	3.11	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	4.34	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	1.27	0.00
tblEnergyUse	NT24E	4.80	0.00
tblEnergyUse	NT24NG	1.62	0.00
tblEnergyUse	NT24NG	1.01	0.00
tblEnergyUse	T24E	0.86	0.00
tblEnergyUse	T24E	3.92	0.00

tblEnergyUse	T24E	5.42	0.00
tblEnergyUse	T24NG	17.50	0.00
tblEnergyUse	T24NG	22.58	0.00
tblLandUse	LandUseSquareFeet	84,800.00	105,500.00
tblLandUse	LandUseSquareFeet	132,400.00	134,680.00
tblLandUse	LandUseSquareFeet	165,092.40	165,200.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	360.31
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	6.21	2.07
tblVehicleTrips	ST_TR	2.46	1.75
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	5.83	1.94
tblVehicleTrips	SU_TR	1.05	0.75
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	74.06	24.68
tblVehicleTrips	WD_TR	11.03	7.84

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

I-FRISBIER2

3333 CalSF Existing Emissions - 2020 - San Francisco County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2141	8.0000e-005	8.4200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0163	0.0163	4.0000e-005	0.0000	0.0174
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6616	2.6104	7.1980	0.0240	1.9679	0.0333	2.0012	0.5304	0.0314	0.5618	0.0000	2,196.9475	2,196.9475	0.0982	0.0000	2,199.4035
Waste						0.0000	0.0000		0.0000	0.0000	69.5528	0.0000	69.5528	4.1105	0.0000	172.3142
Water						0.0000	0.0000		0.0000	0.0000	20.0046	81.0050	101.0096	2.0612	0.0499	167.3986
Total	**1.8758**	**2.6105**	**7.2064**	**0.0240**	**1.9679**	**0.0333**	**2.0013**	**0.5304**	**0.0314**	**0.5618**	**89.5574**	**2,277.9687**	**2,367.5262**	**6.2699**	**0.0499**	**2,539.1337**

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	1.2141	8.0000e-005	8.4200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0163	0.0163	4.0000e-005	0.0000	0.0174
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6616	2.6104	7.1980	0.0240	1.9679	0.0333	2.0012	0.5304	0.0314	0.5618	0.0000	2,196.9475	2,196.9475	0.0982	0.0000	2,199.4035
Waste						0.0000	0.0000		0.0000	0.0000	69.5528	0.0000	69.5528	4.1105	0.0000	172.3142
Water						0.0000	0.0000		0.0000	0.0000	20.0046	81.0050	101.0096	2.0612	0.0499	167.3986
Total	**1.8758**	**2.6105**	**7.2064**	**0.0240**	**1.9679**	**0.0333**	**2.0013**	**0.5304**	**0.0314**	**0.5618**	**89.5574**	**2,277.9687**	**2,367.5262**	**6.2699**	**0.0499**	**2,539.1337**

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

3.0 Construction Detail

Construction Phase

I-FRISBIER2

3333 CalSF Existing Emissions - 2020 - San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/17/2018	5/16/2018	5	0	
2	Site Preparation	Site Preparation	6/14/2018	6/13/2018	5	0	
3	Grading	Grading	6/28/2018	6/27/2018	5	0	
4	Building Construction	Building Construction	8/9/2018	8/8/2018	5	0	
5	Paving	Paving	10/3/2019	10/2/2019	5	0	
6	Architectural Coating	Architectural Coating	10/31/2019	10/30/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.89

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 545,250; Non-Residential Outdoor: 181,750; Striped Parking Area: 14,411 (Architectural Coating – sqft)

OffRoad Equipment

I-FRISBIER2

3333 CalSF Existing Emissions - 2020 - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-FRISBIER2

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	288.00	126.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

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

3.2 Demolition - 2018

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2018

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

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

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

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

3.4 Grading - 2018

Unmitigated Construction On-Site

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

3.4 Grading - 2018

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2018

Mitigated Construction Off-Site

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

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2019

Unmitigated Construction On-Site

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

3.6 Paving - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2019

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6616	2.6104	7.1980	0.0240	1.9679	0.0333	2.0012	0.5304	0.0314	0.5618	0.0000	2,196.9475	2,196.9475	0.0982	0.0000	2,199.4035
Unmitigated	0.6616	2.6104	7.1980	0.0240	1.9679	0.0333	2.0012	0.5304	0.0314	0.5618	0.0000	2,196.9475	2,196.9475	0.0982	0.0000	2,199.4035

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Day-Care Center	283.82	23.81	22.31	246,497	246,497
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	2,759.68	616.00	264.00	5,011,107	5,011,107
Parking Lot	0.00	0.00	0.00		
Total	3,043.50	639.81	286.31	5,257,604	5,257,604

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.607015	0.041018	0.191033	0.087570	0.015386	0.004865	0.027149	0.008727	0.004280	0.004624	0.006947	0.000926	0.000460
Day-Care Center	0.607015	0.041018	0.191033	0.087570	0.015386	0.004865	0.027149	0.008727	0.004280	0.004624	0.006947	0.000926	0.000460
Enclosed Parking Structure	0.607015	0.041018	0.191033	0.087570	0.015386	0.004865	0.027149	0.008727	0.004280	0.004624	0.006947	0.000926	0.000460
General Office Building	0.607015	0.041018	0.191033	0.087570	0.015386	0.004865	0.027149	0.008727	0.004280	0.004624	0.006947	0.000926	0.000460
Parking Lot	0.607015	0.041018	0.191033	0.087570	0.015386	0.004865	0.027149	0.008727	0.004280	0.004624	0.006947	0.000926	0.000460

5.0 Energy Detail

Historical Energy Use: Y

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive 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	1.2141	8.0000e-005	8.4200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0163	0.0163	4.0000e-005	0.0000	0.0174
Unmitigated	1.2141	8.0000e-005	8.4200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0163	0.0163	4.0000e-005	0.0000	0.0174

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	0.1946					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.9000e-004	8.0000e-005	8.4200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0163	0.0163	4.0000e-005	0.0000	0.0174
Total	**1.2141**	**8.0000e-005**	**8.4200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0163**	**0.0163**	**4.0000e-005**	**0.0000**	**0.0174**

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	0.1946					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.9000e-004	8.0000e-005	8.4200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0163	0.0163	4.0000e-005	0.0000	0.0174
Total	**1.2141**	**8.0000e-005**	**8.4200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0163**	**0.0163**	**4.0000e-005**	**0.0000**	**0.0174**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.0096	2.0612	0.0499	167.3986
Unmitigated	101.0096	2.0612	0.0499	167.3986

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.51571	2.5831	2.1000e-004	4.0000e-005	2.6011
Day-Care Center	0.49323 / 1.26831	1.3182	0.0162	4.0000e-004	1.8412
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	62.5623 / 38.3446	97.1083	2.0448	0.0494	162.9564
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**101.0096**	**2.0612**	**0.0499**	**167.3987**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.51571	2.5831	2.1000e-004	4.0000e-005	2.6011
Day-Care Center	0.49323 / 1.26831	1.3182	0.0162	4.0000e-004	1.8412
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	62.5623 / 38.3446	97.1083	2.0448	0.0494	162.9564
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**101.0096**	**2.0612**	**0.0499**	**167.3987**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	69.5528	4.1105	0.0000	172.3142
Unmitigated	69.5528	4.1105	0.0000	172.3142

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.33	0.0670	3.9600e-003	0.0000	0.1660
Day-Care Center	14.95	3.0347	0.1794	0.0000	7.5184
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	327.36	66.4511	3.9272	0.0000	164.6298
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**69.5528**	**4.1105**	**0.0000**	**172.3142**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.33	0.0670	3.9600e-003	0.0000	0.1660
Day-Care Center	14.95	3.0347	0.1794	0.0000	7.5184
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	327.36	66.4511	3.9272	0.0000	164.6298
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**69.5528**	**4.1105**	**0.0000**	**172.3142**

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

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User Defined Equipment

Equipment Type	Number

11.0 Vegetation

3333 CalSF Project Case Masonic/Euclid Project

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	87.98	1000sqft	2.02	87,977.00	0
Parking Lot	3.94	1000sqft	0.09	3,936.00	0
City Park	1.42	Acre	1.42	61,855.20	0
Apartments Mid Rise	196.00	Dwelling Unit	5.16	266,251.00	561
Strip Mall	4.29	1000sqft	0.10	4,287.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	342.03	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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3333 CalSF Project Case Masonic/Euclid Project - San Francisco County, Annual

Project Characteristics - CO2 intensity factor for 2022.

Land Use - Land uses for Phase 1 construction (Masonic/Euclid)

Construction Phase - No construction in this run

Grading -

Vehicle Trips - Upddated with trip rates from traffic memo

Woodstoves - No woodstoves or wood fireplaces

Consumer Products - Updatd ROG factor

Energy Use - Not modeling energy sources of operational emissions

Water And Wastewater - Not modeling water and wastewater sources of operational emissions

Solid Waste - Not modeling solid waste sources of operational emissions

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	230.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	4.88	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	3.36	0.00
tblEnergyUse	NT24NG	2,615.00	0.00

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tblEnergyUse	NT24NG	0.70	0.00
tblEnergyUse	T24E	426.45	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	6,115.43	0.00
tblEnergyUse	T24NG	3.90	0.00
tblFireplaces	NumberGas	29.40	62.72
tblFireplaces	NumberWood	33.32	0.00
tblLandUse	LandUseSquareFeet	87,980.00	87,977.00
tblLandUse	LandUseSquareFeet	3,940.00	3,936.00
tblLandUse	LandUseSquareFeet	196,000.00	266,251.00
tblLandUse	LandUseSquareFeet	4,290.00	4,287.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	342.03
tblSolidWaste	SolidWasteGenerationRate	90.16	0.00
tblSolidWaste	SolidWasteGenerationRate	0.12	0.00
tblSolidWaste	SolidWasteGenerationRate	4.50	0.00
tblVehicleTrips	ST_TR	6.39	2.56
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	42.04	67.41
tblVehicleTrips	SU_TR	5.86	2.56
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	20.43	67.41
tblVehicleTrips	WD_TR	6.65	2.56
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	44.32	67.41
tblWater	IndoorWaterUseRate	12,770,189.02	0.00
tblWater	IndoorWaterUseRate	317,771.12	0.00

tblWater	OutdoorWaterUseRate	8,050,771.34	0.00
tblWater	OutdoorWaterUseRate	1,691,903.52	0.00
tblWater	OutdoorWaterUseRate	194,762.94	0.00
tblWoodstoves	NumberCatalytic	3.92	0.00
tblWoodstoves	NumberNoncatalytic	3.92	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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9885	0.0236	1.4607	1.2000e-004		8.6000e-003	8.6000e-003		8.6000e-003	8.6000e-003	0.0000	10.2089	10.2089	2.4500e-003	1.4000e-004	10.3129
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1852	0.7221	1.9679	6.9100e-003	0.6000	7.7800e-003	0.6077	0.1616	7.2800e-003	0.1689	0.0000	635.2422	635.2422	0.0274	0.0000	635.9278
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1737**	**0.7456**	**3.4285**	**7.0300e-003**	**0.6000**	**0.0164**	**0.6163**	**0.1616**	**0.0159**	**0.1775**	**0.0000**	**645.4511**	**645.4511**	**0.0299**	**1.4000e-004**	**646.2407**

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	0.9885	0.0236	1.4607	1.2000e-004		8.6000e-003	8.6000e-003		8.6000e-003	8.6000e-003	0.0000	10.2089	10.2089	2.4500e-003	1.4000e-004	10.3129
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1852	0.7221	1.9679	6.9100e-003	0.6000	7.7800e-003	0.6077	0.1616	7.2800e-003	0.1689	0.0000	635.2422	635.2422	0.0274	0.0000	635.9278
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1737**	**0.7456**	**3.4285**	**7.0300e-003**	**0.6000**	**0.0164**	**0.6163**	**0.1616**	**0.0159**	**0.1775**	**0.0000**	**645.4511**	**645.4511**	**0.0299**	**1.4000e-004**	**646.2407**

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

3.0 Construction Detail

Construction Phase

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3333 CalSF Project Case Masonic/Euclid Project - San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/1/2020	5	0	
2	Site Preparation	Site Preparation	3/28/2020	3/27/2020	5	0	
3	Grading	Grading	4/11/2020	4/10/2020	5	0	
4	Building Construction	Building Construction	5/9/2020	5/8/2020	5	0	
5	Paving	Paving	3/27/2021	3/26/2021	5	0	
6	Architectural Coating	Architectural Coating	4/24/2021	4/23/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.11

Residential Indoor: 539,158; Residential Outdoor: 179,719; Non-Residential Indoor: 6,431; Non-Residential Outdoor: 2,144; Striped Parking Area: 5,515 (Architectural Coating – sqft)

OffRoad Equipment

I-FRISBIER2

3333 CalSF Project Case Masonic/Euclid Project - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	207.00	47.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2020

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

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

3.4 Grading - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2020

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2020

Mitigated Construction Off-Site

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

3.5 Building Construction - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

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

3.6 Paving - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2021

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2021

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1852	0.7221	1.9679	6.9100e-003	0.6000	7.7800e-003	0.6077	0.1616	7.2800e-003	0.1689	0.0000	635.2422	635.2422	0.0274	0.0000	635.9278
Unmitigated	0.1852	0.7221	1.9679	6.9100e-003	0.6000	7.7800e-003	0.6077	0.1616	7.2800e-003	0.1689	0.0000	635.2422	635.2422	0.0274	0.0000	635.9278

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	501.76	501.76	501.76	1,158,869	1,158,869
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	289.19	289.19	289.19	445,360	445,360
Total	790.95	790.95	790.95	1,604,229	1,604,229

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
City Park	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
Enclosed Parking with Elevator	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
Parking Lot	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
Strip Mall	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive 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	0.9885	0.0236	1.4607	1.2000e-004		8.6000e-003	8.6000e-003		8.6000e-003	8.6000e-003	0.0000	10.2089	10.2089	2.4500e-003	1.4000e-004	10.3129
Unmitigated	0.9885	0.0236	1.4607	1.2000e-004		8.6000e-003	8.6000e-003		8.6000e-003	8.6000e-003	0.0000	10.2089	10.2089	2.4500e-003	1.4000e-004	10.3129

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	0.1916					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7521					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.9000e-004	6.7600e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.8299	7.8299	1.5000e-004	1.4000e-004	7.8765
Landscaping	0.0441	0.0168	1.4578	8.0000e-005		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	2.3790	2.3790	2.3000e-003	0.0000	2.4364
Total	**0.9885**	**0.0236**	**1.4607**	**1.2000e-004**		**8.6000e-003**	**8.6000e-003**		**8.6000e-003**	**8.6000e-003**	**0.0000**	**10.2089**	**10.2089**	**2.4500e-003**	**1.4000e-004**	**10.3129**

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	0.1916					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7521					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.9000e-004	6.7600e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.8299	7.8299	1.5000e-004	1.4000e-004	7.8765
Landscaping	0.0441	0.0168	1.4578	8.0000e-005		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	2.3790	2.3790	2.3000e-003	0.0000	2.4364
Total	**0.9885**	**0.0236**	**1.4607**	**1.2000e-004**		**8.6000e-003**	**8.6000e-003**		**8.6000e-003**	**8.6000e-003**	**0.0000**	**10.2089**	**10.2089**	**2.4500e-003**	**1.4000e-004**	**10.3129**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

I-FRISBIER2

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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User Defined Equipment

Equipment Type	Number

11.0 Vegetation

3333 CalSF Masonic/Euclid Variant

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	87.98	1000sqft	2.02	87,977.00	0
Parking Lot	3.94	1000sqft	0.09	3,936.00	0
City Park	1.42	Acre	1.42	61,855.20	0
Apartments Mid Rise	196.00	Dwelling Unit	5.16	266,251.00	561
Strip Mall	4.29	1000sqft	0.10	4,287.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	342.03	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

I-FRISBIER2

3333 CalSF Masonic/Euclid Variant - San Francisco County, Annual

Project Characteristics - CO2 intensity factor for 2022.

Land Use - Land uses for Phase 1 construction (Masonic/Euclid)

Construction Phase - No construction in this run.

Grading -

Vehicle Trips - Updated trip rates from traffic memo

Woodstoves - No woodstoves or wood fireplaces

Consumer Products - Updated ROG Factor

Energy Use - Not modeling energy sources of operational emissions

Water And Wastewater - Not modeling water and wastewater sources of operational emissions

Solid Waste - Not modeling solid waste sources of operational emissions

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	230.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	4.88	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	3.36	0.00
tblEnergyUse	NT24NG	2,615.00	0.00

tblEnergyUse	NT24NG	0.70	0.00
tblEnergyUse	T24E	426.45	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	6,115.43	0.00
tblEnergyUse	T24NG	3.90	0.00
tblFireplaces	NumberGas	29.40	62.72
tblFireplaces	NumberWood	33.32	0.00
tblLandUse	LandUseSquareFeet	87,980.00	87,977.00
tblLandUse	LandUseSquareFeet	3,940.00	3,936.00
tblLandUse	LandUseSquareFeet	196,000.00	266,251.00
tblLandUse	LandUseSquareFeet	4,290.00	4,287.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	342.03
tblSolidWaste	SolidWasteGenerationRate	90.16	0.00
tblSolidWaste	SolidWasteGenerationRate	0.12	0.00
tblSolidWaste	SolidWasteGenerationRate	4.50	0.00
tblVehicleTrips	ST_TR	6.39	2.58
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	42.04	70.52
tblVehicleTrips	SU_TR	5.86	2.58
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	20.43	70.52
tblVehicleTrips	WD_TR	6.65	2.58
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	44.32	70.52
tblWater	IndoorWaterUseRate	12,770,189.02	0.00
tblWater	IndoorWaterUseRate	317,771.12	0.00

tblWater	OutdoorWaterUseRate	8,050,771.34	0.00
tblWater	OutdoorWaterUseRate	1,691,903.52	0.00
tblWater	OutdoorWaterUseRate	194,762.94	0.00
tblWoodstoves	NumberCatalytic	3.92	0.00
tblWoodstoves	NumberNoncatalytic	3.92	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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9885	0.0236	1.4607	1.2000e-004		8.6000e-003	8.6000e-003		8.6000e-003	8.6000e-003	0.0000	10.2089	10.2089	2.4500e-003	1.4000e-004	10.3129
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1890	0.7364	2.0060	7.0400e-003	0.6110	7.9200e-003	0.6190	0.1646	7.4200e-003	0.1720	0.0000	647.0609	647.0609	0.0280	0.0000	647.7595
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1775**	**0.7600**	**3.4667**	**7.1600e-003**	**0.6110**	**0.0165**	**0.6276**	**0.1646**	**0.0160**	**0.1806**	**0.0000**	**657.2698**	**657.2698**	**0.0304**	**1.4000e-004**	**658.0724**

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	0.9885	0.0236	1.4607	1.2000e-004		8.6000e-003	8.6000e-003		8.6000e-003	8.6000e-003	0.0000	10.2089	10.2089	2.4500e-003	1.4000e-004	10.3129
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1890	0.7364	2.0060	7.0400e-003	0.6110	7.9200e-003	0.6190	0.1646	7.4200e-003	0.1720	0.0000	647.0609	647.0609	0.0280	0.0000	647.7595
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1775**	**0.7600**	**3.4667**	**7.1600e-003**	**0.6110**	**0.0165**	**0.6276**	**0.1646**	**0.0160**	**0.1806**	**0.0000**	**657.2698**	**657.2698**	**0.0304**	**1.4000e-004**	**658.0724**

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

3.0 Construction Detail

Construction Phase

I-FRISBIER2

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/1/2020	5	0	
2	Site Preparation	Site Preparation	3/28/2020	3/27/2020	5	0	
3	Grading	Grading	4/11/2020	4/10/2020	5	0	
4	Building Construction	Building Construction	5/9/2020	5/8/2020	5	0	
5	Paving	Paving	3/27/2021	3/26/2021	5	0	
6	Architectural Coating	Architectural Coating	4/24/2021	4/23/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.11

Residential Indoor: 539,158; Residential Outdoor: 179,719; Non-Residential Indoor: 6,431; Non-Residential Outdoor: 2,144; Striped Parking Area: 5,515 (Architectural Coating – sqft)

OffRoad Equipment

I-FRISBIER2

3333 CalSF Masonic/Euclid Variant - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-FRISBIER2

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	207.00	47.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	41.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2020

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

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

3.4 Grading - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2020

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2020

Mitigated Construction Off-Site

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

3.5 Building Construction - 2020

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

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

3.6 Paving - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2021

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2021

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1890	0.7364	2.0060	7.0400e-003	0.6110	7.9200e-003	0.6190	0.1646	7.4200e-003	0.1720	0.0000	647.0609	647.0609	0.0280	0.0000	647.7595
Unmitigated	0.1890	0.7364	2.0060	7.0400e-003	0.6110	7.9200e-003	0.6190	0.1646	7.4200e-003	0.1720	0.0000	647.0609	647.0609	0.0280	0.0000	647.7595

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	505.68	505.68	505.68	1,167,922	1,167,922
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	302.53	302.53	302.53	465,907	465,907
Total	808.21	808.21	808.21	1,633,830	1,633,830

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
City Park	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
Enclosed Parking with Elevator	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
Parking Lot	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
Strip Mall	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9885	0.0236	1.4607	1.2000e-004		8.6000e-003	8.6000e-003		8.6000e-003	8.6000e-003	0.0000	10.2089	10.2089	2.4500e-003	1.4000e-004	10.3129
Unmitigated	0.9885	0.0236	1.4607	1.2000e-004		8.6000e-003	8.6000e-003		8.6000e-003	8.6000e-003	0.0000	10.2089	10.2089	2.4500e-003	1.4000e-004	10.3129

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	0.1916					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7521					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.9000e-004	6.7600e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.8299	7.8299	1.5000e-004	1.4000e-004	7.8765
Landscaping	0.0441	0.0168	1.4578	8.0000e-005		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	2.3790	2.3790	2.3000e-003	0.0000	2.4364
Total	**0.9885**	**0.0236**	**1.4607**	**1.2000e-004**		**8.6000e-003**	**8.6000e-003**		**8.6000e-003**	**8.6000e-003**	**0.0000**	**10.2089**	**10.2089**	**2.4500e-003**	**1.4000e-004**	**10.3129**

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	0.1916					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7521					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.9000e-004	6.7600e-003	2.8800e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.8299	7.8299	1.5000e-004	1.4000e-004	7.8765
Landscaping	0.0441	0.0168	1.4578	8.0000e-005		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	2.3790	2.3790	2.3000e-003	0.0000	2.4364
Total	**0.9885**	**0.0236**	**1.4607**	**1.2000e-004**		**8.6000e-003**	**8.6000e-003**		**8.6000e-003**	**8.6000e-003**	**0.0000**	**10.2089**	**10.2089**	**2.4500e-003**	**1.4000e-004**	**10.3129**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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

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User Defined Equipment

Equipment Type	Number

11.0 Vegetation

3333 CalSF - Phase 2 Project - Center Building AB
San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	19.26	1000sqft	0.44	19,258.00	0
Parking Lot	2.51	1000sqft	0.06	2,508.00	0
City Park	1.35	Acre	1.35	58,806.00	0
Apartments Mid Rise	190.00	Dwelling Unit	5.00	322,888.00	543

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	332.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - CO2 intensity factor in 2023 accounting for RPS

Land Use - Phase 2 land uses from Project sponsor

Construction Phase - No construction emissions in this run.

Grading - no grading

Vehicle Trips - Updated trip rates from trip memo

Woodstoves - No woodstoves or wood fireplaces

Consumer Products - Updated ROG factor

Energy Use - Not modeling energy sources of operational emissions.

Water And Wastewater - Not modeling water and wastewater sources of operational emissions.

Solid Waste - Not modeling solid waste sources of operational emissions.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	230.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	2,615.00	0.00
tblEnergyUse	T24E	426.45	0.00
tblEnergyUse	T24E	3.92	0.00

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tblEnergyUse	T24NG	6,115.43	0.00
tblFireplaces	NumberGas	28.50	60.80
tblFireplaces	NumberWood	32.30	0.00
tblLandUse	LandUseSquareFeet	19,260.00	19,258.00
tblLandUse	LandUseSquareFeet	2,510.00	2,508.00
tblLandUse	LandUseSquareFeet	190,000.00	322,888.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	332.89
tblSolidWaste	SolidWasteGenerationRate	87.40	0.00
tblSolidWaste	SolidWasteGenerationRate	0.12	0.00
tblVehicleTrips	ST_TR	6.39	2.56
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	5.86	2.56
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	6.65	2.56
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	12,379,264.87	0.00
tblWater	OutdoorWaterUseRate	7,804,319.16	0.00
tblWater	OutdoorWaterUseRate	1,608,499.82	0.00
tblWoodstoves	NumberCatalytic	3.80	0.00
tblWoodstoves	NumberNoncatalytic	3.80	0.00

2.0 Emissions Summary

I-FRISBIER2

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					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	1.1628	0.0228	1.4141	1.2000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003	0.0000	9.8951	9.8951	2.3600e-003	1.4000e-004	9.9957
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1119	0.4264	1.2523	4.6500e-003	0.4200	4.9500e-003	0.4250	0.1131	4.6200e-003	0.1178	0.0000	428.4388	428.4388	0.0178	0.0000	428.8847
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.2747**	**0.4492**	**2.6664**	**4.7700e-003**	**0.4200**	**0.0133**	**0.4333**	**0.1131**	**0.0130**	**0.1261**	**0.0000**	**438.3339**	**438.3339**	**0.0202**	**1.4000e-004**	**438.8804**

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	1.1628	0.0228	1.4141	1.2000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003	0.0000	9.8951	9.8951	2.3600e-003	1.4000e-004	9.9957
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1119	0.4264	1.2523	4.6500e-003	0.4200	4.9500e-003	0.4250	0.1131	4.6200e-003	0.1178	0.0000	428.4388	428.4388	0.0178	0.0000	428.8847
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2747	0.4492	2.6664	4.7700e-003	0.4200	0.0133	0.4333	0.1131	0.0130	0.1261	0.0000	438.3339	438.3339	0.0202	1.4000e-004	438.8804

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

3.0 Construction Detail

Construction Phase

I-FRISBIER2

3333 CalSF - Phase 2 Project - Center Building AB - San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/10/2021	9/9/2021	5	0	
2	Site Preparation	Site Preparation	10/8/2021	10/7/2021	5	0	
3	Grading	Grading	10/22/2021	10/21/2021	5	0	
4	Building Construction	Building Construction	11/19/2021	11/18/2021	5	0	
5	Paving	Paving	10/7/2022	10/6/2022	5	0	
6	Architectural Coating	Architectural Coating	11/4/2022	11/3/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.5

Residential Indoor: 653,848; Residential Outdoor: 217,949; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,306 (Architectural Coating – sqft)

OffRoad Equipment

3333 CalSF - Phase 2 Project - Center Building AB - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-FRISBIER2

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	171.00	34.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.2 Demolition - 2021

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2021

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

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3.3 Site Preparation - 2021

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
	tons/yr										MT/yr					
Category																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2021

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
	tons/yr										MT/yr					
Category																
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2021

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
	tons/yr										MT/yr					
Category																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2021

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
	tons/yr										MT/yr					
Category																
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2021

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
	tons/yr										MT/yr					
Category																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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
	tons/yr										MT/yr					
Category																
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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3.5 Building Construction - 2021

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
	tons/yr										MT/yr					
Category																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2022

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
	tons/yr										MT/yr					
Category																
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2022

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
	tons/yr										MT/yr					
Category																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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
	tons/yr										MT/yr					
Category																
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2022

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2022

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
	tons/yr										MT/yr					
Category																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

I-FRISBIER2

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Mitigated	0.1119	0.4264	1.2523	4.6500e-003	0.4200	4.9500e-003	0.4250	0.1131	4.6200e-003	0.1178	0.0000	428.4388	428.4388	0.0178	0.0000	428.8847
Unmitigated	0.1119	0.4264	1.2523	4.6500e-003	0.4200	4.9500e-003	0.4250	0.1131	4.6200e-003	0.1178	0.0000	428.4388	428.4388	0.0178	0.0000	428.8847

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	486.40	486.40	486.40	1,123,393	1,123,393
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	486.40	486.40	486.40	1,123,393	1,123,393

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

I-FRISBIER2

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.605107	0.038687	0.192108	0.089453	0.014064	0.005036	0.030434	0.009181	0.004309	0.003768	0.006404	0.000941	0.000505
City Park	0.605107	0.038687	0.192108	0.089453	0.014064	0.005036	0.030434	0.009181	0.004309	0.003768	0.006404	0.000941	0.000505
Enclosed Parking with Elevator	0.605107	0.038687	0.192108	0.089453	0.014064	0.005036	0.030434	0.009181	0.004309	0.003768	0.006404	0.000941	0.000505
Parking Lot	0.605107	0.038687	0.192108	0.089453	0.014064	0.005036	0.030434	0.009181	0.004309	0.003768	0.006404	0.000941	0.000505

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

Land Use	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
	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

I-FRISBIER2

	ROG	NOx	CO	SO2	Fugitive 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	1.1628	0.0228	1.4141	1.2000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003	0.0000	9.8951	9.8951	2.3600e-003	1.4000e-004	9.9957
Unmitigated	1.1628	0.0228	1.4141	1.2000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003	0.0000	9.8951	9.8951	2.3600e-003	1.4000e-004	9.9957

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	0.2278					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8918					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7000e-004	6.5500e-003	2.7900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5902	7.5902	1.5000e-004	1.4000e-004	7.6353
Landscaping	0.0425	0.0163	1.4113	7.0000e-005		7.8100e-003	7.8100e-003		7.8100e-003	7.8100e-003	0.0000	2.3049	2.3049	2.2200e-003	0.0000	2.3603
Total	**1.1628**	**0.0228**	**1.4141**	**1.1000e-004**		**8.3400e-003**	**8.3400e-003**		**8.3400e-003**	**8.3400e-003**	**0.0000**	**9.8951**	**9.8951**	**2.3700e-003**	**1.4000e-004**	**9.9956**

6.2 Area by SubCategory

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Architectural Coating	0.2278					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8918					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7000e-004	6.5500e-003	2.7900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5902	7.5902	1.5000e-004	1.4000e-004	7.6353
Landscaping	0.0425	0.0163	1.4113	7.0000e-005		7.8100e-003	7.8100e-003		7.8100e-003	7.8100e-003	0.0000	2.3049	2.3049	2.2200e-003	0.0000	2.3603
Total	**1.1628**	**0.0228**	**1.4141**	**1.1000e-004**		**8.3400e-003**	**8.3400e-003**		**8.3400e-003**	**8.3400e-003**	**0.0000**	**9.8951**	**9.8951**	**2.3700e-003**	**1.4000e-004**	**9.9956**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

3333 CalSF - Phase 2 Variant - Center Building AB

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	19.26	1000sqft	0.44	19,258.00	0
Parking Lot	2.51	1000sqft	0.06	2,508.00	0
City Park	1.35	Acre	1.35	58,806.00	0
Apartments Mid Rise	190.00	Dwelling Unit	5.00	322,888.00	543

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	332.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

I-FRISBIER2

Project Characteristics - CO2 intensity factor in 2023 accounting for RPS

Land Use - Phase 2 land uses from Project sponsor

Construction Phase - No construction in this analysis

Grading -

Vehicle Trips - Updated trip rates from traffic memo

Woodstoves - No woodstoves or wood bruining fireplaces

Consumer Products - Updated ROG EF

Energy Use - Not modeling energy sources of operational emissions

Water And Wastewater - Not modeling water and wastewater sources of operational emissions

Solid Waste - Not modeling solid waste sources of operational emissions

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	230.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	2,615.00	0.00
tblEnergyUse	T24E	426.45	0.00
tblEnergyUse	T24E	3.92	0.00

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tblEnergyUse	T24NG	6,115.43	0.00
tblFireplaces	NumberGas	28.50	60.80
tblFireplaces	NumberWood	32.30	0.00
tblLandUse	LandUseSquareFeet	19,260.00	19,258.00
tblLandUse	LandUseSquareFeet	2,510.00	2,508.00
tblLandUse	LandUseSquareFeet	190,000.00	322,888.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	332.89
tblSolidWaste	SolidWasteGenerationRate	87.40	0.00
tblSolidWaste	SolidWasteGenerationRate	0.12	0.00
tblVehicleTrips	ST_TR	6.39	2.58
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	5.86	2.58
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	6.65	2.58
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	12,379,264.87	0.00
tblWater	OutdoorWaterUseRate	7,804,319.16	0.00
tblWater	OutdoorWaterUseRate	1,608,499.82	0.00
tblWoodstoves	NumberCatalytic	3.80	0.00
tblWoodstoves	NumberNoncatalytic	3.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

I-FRISBIER2

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1628	0.0228	1.4141	1.2000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003	0.0000	9.8951	9.8951	2.3600e-003	1.4000e-004	9.9957
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1127	0.4297	1.2621	4.6900e-003	0.4233	4.9800e-003	0.4283	0.1140	4.6600e-003	0.1187	0.0000	431.7859	431.7859	0.0180	0.0000	432.2354
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.2755**	**0.4525**	**2.6762**	**4.8100e-003**	**0.4233**	**0.0133**	**0.4366**	**0.1140**	**0.0130**	**0.1270**	**0.0000**	**441.6810**	**441.6810**	**0.0203**	**1.4000e-004**	**442.2311**

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	1.1628	0.0228	1.4141	1.2000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003	0.0000	9.8951	9.8951	2.3600e-003	1.4000e-004	9.9957
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1127	0.4297	1.2621	4.6900e-003	0.4233	4.9800e-003	0.4283	0.1140	4.6600e-003	0.1187	0.0000	431.7859	431.7859	0.0180	0.0000	432.2354
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2755	0.4525	2.6762	4.8100e-003	0.4233	0.0133	0.4366	0.1140	0.0130	0.1270	0.0000	441.6810	441.6810	0.0203	1.4000e-004	442.2311

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

3.0 Construction Detail

Construction Phase

I-FRISBIER2

3333 CalSF - Phase 2 Variant - Center Building AB - San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/25/2018	5/24/2018	5	0	
2	Site Preparation	Site Preparation	6/22/2018	6/21/2018	5	0	
3	Grading	Grading	7/6/2018	7/5/2018	5	0	
4	Building Construction	Building Construction	8/3/2018	8/2/2018	5	0	
5	Paving	Paving	6/21/2019	6/20/2019	5	0	
6	Architectural Coating	Architectural Coating	7/19/2019	7/18/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.5

Residential Indoor: 653,848; Residential Outdoor: 217,949; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,306 (Architectural Coating – sqft)

OffRoad Equipment

I-FRISBIER2

3333 CalSF - Phase 2 Variant - Center Building AB - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-FRISBIER2

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	171.00	34.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

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

3.2 Demolition - 2018

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2018

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

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

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3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

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

3.4 Grading - 2018

Unmitigated Construction On-Site

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

3.4 Grading - 2018

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2018

Mitigated Construction Off-Site

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

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2019

Unmitigated Construction On-Site

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

3.6 Paving - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2019

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Mitigated	0.1127	0.4297	1.2621	4.6900e-003	0.4233	4.9800e-003	0.4283	0.1140	4.6600e-003	0.1187	0.0000	431.7859	431.7859	0.0180	0.0000	432.2354
Unmitigated	0.1127	0.4297	1.2621	4.6900e-003	0.4233	4.9800e-003	0.4283	0.1140	4.6600e-003	0.1187	0.0000	431.7859	431.7859	0.0180	0.0000	432.2354

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	490.20	490.20	490.20	1,132,169	1,132,169
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	490.20	490.20	490.20	1,132,169	1,132,169

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

I-FRISBIER2

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.605107	0.038687	0.192108	0.089453	0.014064	0.005036	0.030434	0.009181	0.004309	0.003768	0.006404	0.000941	0.000505
City Park	0.605107	0.038687	0.192108	0.089453	0.014064	0.005036	0.030434	0.009181	0.004309	0.003768	0.006404	0.000941	0.000505
Enclosed Parking with Elevator	0.605107	0.038687	0.192108	0.089453	0.014064	0.005036	0.030434	0.009181	0.004309	0.003768	0.006404	0.000941	0.000505
Parking Lot	0.605107	0.038687	0.192108	0.089453	0.014064	0.005036	0.030434	0.009181	0.004309	0.003768	0.006404	0.000941	0.000505

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

I-FRISBIER2

	ROG	NOx	CO	SO2	Fugitive 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	1.1628	0.0228	1.4141	1.2000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003	0.0000	9.8951	9.8951	2.3600e-003	1.4000e-004	9.9957
Unmitigated	1.1628	0.0228	1.4141	1.2000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003	0.0000	9.8951	9.8951	2.3600e-003	1.4000e-004	9.9957

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	0.2278					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8918					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7000e-004	6.5500e-003	2.7900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5902	7.5902	1.5000e-004	1.4000e-004	7.6353
Landscaping	0.0425	0.0163	1.4113	7.0000e-005		7.8100e-003	7.8100e-003		7.8100e-003	7.8100e-003	0.0000	2.3049	2.3049	2.2200e-003	0.0000	2.3603
Total	**1.1628**	**0.0228**	**1.4141**	**1.1000e-004**		**8.3400e-003**	**8.3400e-003**		**8.3400e-003**	**8.3400e-003**	**0.0000**	**9.8951**	**9.8951**	**2.3700e-003**	**1.4000e-004**	**9.9956**

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	0.2278					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8918					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7000e-004	6.5500e-003	2.7900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.5902	7.5902	1.5000e-004	1.4000e-004	7.6353
Landscaping	0.0425	0.0163	1.4113	7.0000e-005		7.8100e-003	7.8100e-003		7.8100e-003	7.8100e-003	0.0000	2.3049	2.3049	2.2200e-003	0.0000	2.3603
Total	**1.1628**	**0.0228**	**1.4141**	**1.1000e-004**		**8.3400e-003**	**8.3400e-003**		**8.3400e-003**	**8.3400e-003**	**0.0000**	**9.8951**	**9.8951**	**2.3700e-003**	**1.4000e-004**	**9.9956**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

I-FRISBIER2

Equipment Type	Number

11.0 Vegetation

3333 CalSF - Plaza A/B Walnut Project

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	50.00	1000sqft	1.15	49,999.00	0
Day-Care Center	14.69	1000sqft	0.34	14,690.00	0
Enclosed Parking with Elevator	301.06	1000sqft	6.91	301,060.00	0
Parking Lot	3.82	1000sqft	0.09	3,816.00	0
City Park	2.19	Acre	2.19	95,396.40	0
Apartments Mid Rise	128.00	Dwelling Unit	3.37	138,370.00	366
Strip Mall	49.83	1000sqft	1.14	49,830.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	314.6	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

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3333 CalSF - Plaza A/B Walnut Project - San Francisco County, Annual

Project Characteristics - CO2 intensity for 2025 accounting for RPS

Land Use - Phase 3 land uses from project sponsor

Construction Phase - No construction in this analysis

Grading -

Vehicle Trips - Updated trip rates from traffic memo

Woodstoves - No woodstoves or wood burning fireplaces

Consumer Products - Updated ROG factor

Energy Use - Not modeling energy sources of operational emissions.

Water And Wastewater - Not modeling water and wastewater sources of operational emissions

Solid Waste - Not modeling solid waste sources of operational emissions.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	300.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	2.51	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	3.58	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	4.88	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	1.27	0.00

tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	4.80	0.00
tblEnergyUse	NT24E	3.36	0.00
tblEnergyUse	NT24NG	2,615.00	0.00
tblEnergyUse	NT24NG	1.62	0.00
tblEnergyUse	NT24NG	1.01	0.00
tblEnergyUse	NT24NG	0.70	0.00
tblEnergyUse	T24E	426.45	0.00
tblEnergyUse	T24E	0.66	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.10	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	6,115.43	0.00
tblEnergyUse	T24NG	14.85	0.00
tblEnergyUse	T24NG	18.32	0.00
tblEnergyUse	T24NG	3.90	0.00
tblFireplaces	NumberGas	19.20	40.96
tblFireplaces	NumberWood	21.76	0.00
tblLandUse	LandUseSquareFeet	50,000.00	49,999.00
tblLandUse	LandUseSquareFeet	3,820.00	3,816.00
tblLandUse	LandUseSquareFeet	128,000.00	138,370.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	314.6
tblSolidWaste	SolidWasteGenerationRate	58.88	0.00
tblSolidWaste	SolidWasteGenerationRate	0.19	0.00
tblSolidWaste	SolidWasteGenerationRate	19.10	0.00
tblSolidWaste	SolidWasteGenerationRate	46.50	0.00
tblSolidWaste	SolidWasteGenerationRate	52.32	0.00

tblVehicleTrips	ST_TR	6.39	2.56
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	6.21	19.16
tblVehicleTrips	ST_TR	2.46	5.18
tblVehicleTrips	ST_TR	42.04	67.41
tblVehicleTrips	SU_TR	5.86	2.56
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	5.83	19.16
tblVehicleTrips	SU_TR	1.05	5.18
tblVehicleTrips	SU_TR	20.43	67.41
tblVehicleTrips	WD_TR	6.65	2.56
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	74.06	19.16
tblVehicleTrips	WD_TR	11.03	5.18
tblVehicleTrips	WD_TR	44.32	67.41
tblWater	IndoorWaterUseRate	8,339,715.28	0.00
tblWater	IndoorWaterUseRate	630,047.75	0.00
tblWater	IndoorWaterUseRate	8,886,687.40	0.00
tblWater	IndoorWaterUseRate	3,691,033.75	0.00
tblWater	OutdoorWaterUseRate	5,257,646.59	0.00
tblWater	OutdoorWaterUseRate	2,609,344.16	0.00
tblWater	OutdoorWaterUseRate	1,620,122.78	0.00
tblWater	OutdoorWaterUseRate	5,446,679.37	0.00
tblWater	OutdoorWaterUseRate	2,262,246.49	0.00
tblWoodstoves	NumberCatalytic	2.56	0.00
tblWoodstoves	NumberNoncatalytic	2.56	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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9104	0.0154	0.9553	8.0000e-005		5.6400e-003	5.6400e-003		5.6400e-003	5.6400e-003	0.0000	6.6734	6.6734	1.6000e-003	9.0000e-005	6.7415
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.7587	2.8768	7.5116	0.0271	2.5707	0.0291	2.5998	0.6922	0.0272	0.7193	0.0000	2,503.7046	2,503.7046	0.1073	0.0000	2,506.3859
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6690**	**2.8922**	**8.4668**	**0.0272**	**2.5707**	**0.0348**	**2.6055**	**0.6922**	**0.0328**	**0.7250**	**0.0000**	**2,510.3780**	**2,510.3780**	**0.1089**	**9.0000e-005**	**2,513.1273**

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	0.9104	0.0154	0.9553	8.0000e-005		5.6400e-003	5.6400e-003		5.6400e-003	5.6400e-003	0.0000	6.6734	6.6734	1.6000e-003	9.0000e-005	6.7415
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.7587	2.8768	7.5116	0.0271	2.5707	0.0291	2.5998	0.6922	0.0272	0.7193	0.0000	2,503.7046	2,503.7046	0.1073	0.0000	2,506.3859
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6690**	**2.8922**	**8.4668**	**0.0272**	**2.5707**	**0.0348**	**2.6055**	**0.6922**	**0.0328**	**0.7250**	**0.0000**	**2,510.3780**	**2,510.3780**	**0.1089**	**9.0000e-005**	**2,513.1273**

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

3.0 Construction Detail

Construction Phase

I-FRISBIER2

3333 CalSF - Plaza A/B Walnut Project - San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/12/2022	4/11/2022	5	0	
2	Site Preparation	Site Preparation	5/10/2022	5/9/2022	5	0	
3	Grading	Grading	5/24/2022	5/23/2022	5	0	
4	Building Construction	Building Construction	7/5/2022	7/4/2022	5	0	
5	Paving	Paving	8/29/2023	8/28/2023	5	0	
6	Architectural Coating	Architectural Coating	9/26/2023	9/25/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 7

Residential Indoor: 280,199; Residential Outdoor: 93,400; Non-Residential Indoor: 171,779; Non-Residential Outdoor: 57,260; Striped Parking Area: 18,293 (Architectural Coating – sqft)

OffRoad Equipment

I-FRISBIER2

3333 CalSF - Plaza A/B Walnut Project - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-FRISBIER2

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	298.00	98.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	60.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2022

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2022

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

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

3.4 Grading - 2022

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2022

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2022

Mitigated Construction Off-Site

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

3.5 Building Construction - 2022

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

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

3.6 Paving - 2023

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2023

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2023

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7587	2.8768	7.5116	0.0271	2.5707	0.0291	2.5998	0.6922	0.0272	0.7193	0.0000	2,503.7046	2,503.7046	0.1073	0.0000	2,506.3859
Unmitigated	0.7587	2.8768	7.5116	0.0271	2.5707	0.0291	2.5998	0.6922	0.0272	0.7193	0.0000	2,503.7046	2,503.7046	0.1073	0.0000	2,506.3859

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	327.68	327.68	327.68	756,812	756,812
City Park	0.00	0.00	0.00		
Day-Care Center	281.46	281.46	281.46	331,456	331,456
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	259.00	259.00	259.00	618,946	618,946
Parking Lot	0.00	0.00	0.00		
Strip Mall	3,359.04	3,359.04	3359.04	5,173,033	5,173,033
Total	4,227.18	4,227.18	4,227.18	6,880,247	6,880,247

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
City Park	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
Day-Care Center	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
Enclosed Parking with Elevator	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
General Office Building	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
Parking Lot	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
Strip Mall	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

3333 CalSF - Plaza A/B Walnut Project - San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9104	0.0154	0.9553	8.0000e-005		5.6400e-003	5.6400e-003		5.6400e-003	5.6400e-003	0.0000	6.6734	6.6734	1.6000e-003	9.0000e-005	6.7415
Unmitigated	0.9104	0.0154	0.9553	8.0000e-005		5.6400e-003	5.6400e-003		5.6400e-003	5.6400e-003	0.0000	6.6734	6.6734	1.6000e-003	9.0000e-005	6.7415

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	0.1635					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7175					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.2000e-004	4.4200e-003	1.8800e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1134	5.1134	1.0000e-004	9.0000e-005	5.1438
Landscaping	0.0289	0.0110	0.9534	5.0000e-005		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	1.5600	1.5600	1.5100e-003	0.0000	1.5977
Total	**0.9104**	**0.0154**	**0.9553**	**8.0000e-005**		**5.6400e-003**	**5.6400e-003**		**5.6400e-003**	**5.6400e-003**	**0.0000**	**6.6734**	**6.6734**	**1.6100e-003**	**9.0000e-005**	**6.7415**

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	0.1635					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7175					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.2000e-004	4.4200e-003	1.8800e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1134	5.1134	1.0000e-004	9.0000e-005	5.1438
Landscaping	0.0289	0.0110	0.9534	5.0000e-005		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	1.5600	1.5600	1.5100e-003	0.0000	1.5977
Total	**0.9104**	**0.0154**	**0.9553**	**8.0000e-005**		**5.6400e-003**	**5.6400e-003**		**5.6400e-003**	**5.6400e-003**	**0.0000**	**6.6734**	**6.6734**	**1.6100e-003**	**9.0000e-005**	**6.7415**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

I-FRISBIER2

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

I-FRISBIER2

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

3333 CalSF - Plaza A/B Walnut Variant

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	14.65	1000sqft	0.34	14,650.00	0
Enclosed Parking with Elevator	307.42	1000sqft	7.06	307,420.00	0
Parking Lot	6.18	1000sqft	0.14	6,180.00	0
City Park	2.19	Acre	2.19	95,396.40	0
Apartments Mid Rise	314.00	Dwelling Unit	8.26	292,290.00	898
Strip Mall	44.31	1000sqft	1.02	44,306.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	314.6	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

I-FRISBIER2

3333 CalSF - Plaza A/B Walnut Variant - San Francisco County, Annual

Project Characteristics - estimated intensity factor (CO2)

Land Use - Phase 3 land uses from Project Sponsor

Construction Phase - Not modeling construction emissions

Vehicle Trips - Given trips

Woodstoves - no woodstoves, only gas fireplaces

Consumer Products - ROG EF changed to 1.51E-5

Energy Use - Not modeling energy sources of operational emissions

Water And Wastewater - Not modeling water and wastewater sources of operational emissions

Solid Waste - Not modeling solid waste sources of operational emissions

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	300.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	2.51	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	4.88	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	1.27	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24E	3.36	0.00

tblEnergyUse	NT24NG	2,615.00	0.00
tblEnergyUse	NT24NG	1.62	0.00
tblEnergyUse	NT24NG	0.70	0.00
tblEnergyUse	T24E	426.45	0.00
tblEnergyUse	T24E	0.66	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	6,115.43	0.00
tblEnergyUse	T24NG	14.85	0.00
tblEnergyUse	T24NG	3.90	0.00
tblFireplaces	NumberGas	47.10	100.48
tblFireplaces	NumberWood	53.38	0.00
tblGrading	AcresOfGrading	0.00	75.00
tblLandUse	LandUseSquareFeet	314,000.00	292,290.00
tblLandUse	LandUseSquareFeet	44,310.00	44,306.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	314.6
tblSolidWaste	SolidWasteGenerationRate	144.44	0.00
tblSolidWaste	SolidWasteGenerationRate	0.19	0.00
tblSolidWaste	SolidWasteGenerationRate	19.05	0.00
tblSolidWaste	SolidWasteGenerationRate	46.53	0.00
tblVehicleTrips	ST_TR	6.39	2.58
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	6.21	19.30
tblVehicleTrips	ST_TR	42.04	70.52
tblVehicleTrips	SU_TR	5.86	2.58
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	5.83	19.30

tblVehicleTrips	SU_TR	20.43	70.52
tblVehicleTrips	WD_TR	6.65	2.58
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	74.06	19.30
tblVehicleTrips	WD_TR	44.32	70.52
tblWater	IndoorWaterUseRate	20,458,364.05	0.00
tblWater	IndoorWaterUseRate	628,332.16	0.00
tblWater	IndoorWaterUseRate	3,282,153.43	0.00
tblWater	OutdoorWaterUseRate	12,897,664.29	0.00
tblWater	OutdoorWaterUseRate	2,609,344.16	0.00
tblWater	OutdoorWaterUseRate	1,615,711.28	0.00
tblWater	OutdoorWaterUseRate	2,011,642.42	0.00
tblWoodstoves	NumberCatalytic	6.28	0.00
tblWoodstoves	NumberNoncatalytic	6.28	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					
2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3037	0.0377	2.3373	1.9000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	16.3590	16.3590	3.9000e-003	2.3000e-004	16.5251
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.7628	2.8997	7.6092	0.0276	2.6215	0.0296	2.6511	0.7058	0.0276	0.7335	0.0000	2,550.0140	2,550.0140	0.1089	0.0000	2,552.7365
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0664**	**2.9374**	**9.9465**	**0.0278**	**2.6215**	**0.0434**	**2.6649**	**0.7058**	**0.0415**	**0.7473**	**0.0000**	**2,566.3729**	**2,566.3729**	**0.1128**	**2.3000e-004**	**2,569.2616**

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	1.3037	0.0377	2.3373	1.9000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	16.3590	16.3590	3.9000e-003	2.3000e-004	16.5251
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.7628	2.8997	7.6092	0.0276	2.6215	0.0296	2.6511	0.7058	0.0276	0.7335	0.0000	2,550.0140	2,550.0140	0.1089	0.0000	2,552.7365
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0664**	**2.9374**	**9.9465**	**0.0278**	**2.6215**	**0.0434**	**2.6649**	**0.7058**	**0.0415**	**0.7473**	**0.0000**	**2,566.3729**	**2,566.3729**	**0.1128**	**2.3000e-004**	**2,569.2616**

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

3.0 Construction Detail

Construction Phase

I-FRISBIER2

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/19/2025	3/19/2025	5	0	
2	Site Preparation	Site Preparation	12/17/2025	8/13/2025	5	0	
3	Grading	Grading	12/31/2025	12/3/2024	5	0	
4	Building Construction	Building Construction	2/11/2026	2/10/2026	5	0	
5	Paving	Paving	4/7/2027	10/27/2026	5	0	
6	Architectural Coating	Architectural Coating	5/5/2027	7/9/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 7.2

Residential Indoor: 591,887; Residential Outdoor: 197,296; Non-Residential Indoor: 88,434; Non-Residential Outdoor: 29,478; Striped Parking Area: 18,816 (Architectural Coating – sqft)

OffRoad Equipment

I-FRISBIER2

3333 CalSF - Plaza A/B Walnut Variant - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-FRISBIER2

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	418.00	110.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	84.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2025

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2025

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2025

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2025

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2025

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2025

Mitigated Construction Off-Site

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

3.5 Building Construction - 2026

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2026

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2026

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

I-FRISBIER2

	ROG	NOx	CO	SO2	Fugitive 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	0.7628	2.8997	7.6092	0.0276	2.6215	0.0296	2.6511	0.7058	0.0276	0.7335	0.0000	2,550.0140	2,550.0140	0.1089	0.0000	2,552.7365
Unmitigated	0.7628	2.8997	7.6092	0.0276	2.6215	0.0296	2.6511	0.7058	0.0276	0.7335	0.0000	2,550.0140	2,550.0140	0.1089	0.0000	2,552.7365

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	810.12	810.12	810.12	1,871,059	1,871,059
City Park	0.00	0.00	0.00		
Day-Care Center	282.75	282.75	282.75	332,969	332,969
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	3,124.74	3,124.74	3124.74	4,812,205	4,812,205
Total	4,217.61	4,217.61	4,217.61	7,016,233	7,016,233

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
City Park	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
Day-Care Center	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
Enclosed Parking with Elevator	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
Parking Lot	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534
Strip Mall	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

3333 CalSF - Plaza A/B Walnut Variant - San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

I-FRISBIER2

	ROG	NOx	CO	SO2	Fugitive 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	1.3037	0.0377	2.3373	1.9000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	16.3590	16.3590	3.9000e-003	2.3000e-004	16.5251
Unmitigated	1.3037	0.0377	2.3373	1.9000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	16.3590	16.3590	3.9000e-003	2.3000e-004	16.5251

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	0.2430					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9891					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.2700e-003	0.0108	4.6100e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.5439	12.5439	2.4000e-004	2.3000e-004	12.6184
Landscaping	0.0703	0.0269	2.3327	1.2000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	3.8151	3.8151	3.6600e-003	0.0000	3.9068
Total	**1.3037**	**0.0377**	**2.3373**	**1.9000e-004**		**0.0138**	**0.0138**		**0.0138**	**0.0138**	**0.0000**	**16.3590**	**16.3590**	**3.9000e-003**	**2.3000e-004**	**16.5251**

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	0.2430					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9891					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.2700e-003	0.0108	4.6100e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.5439	12.5439	2.4000e-004	2.3000e-004	12.6184
Landscaping	0.0703	0.0269	2.3327	1.2000e-004		0.0129	0.0129		0.0129	0.0129	0.0000	3.8151	3.8151	3.6600e-003	0.0000	3.9068
Total	**1.3037**	**0.0377**	**2.3373**	**1.9000e-004**		**0.0138**	**0.0138**		**0.0138**	**0.0138**	**0.0000**	**16.3590**	**16.3590**	**3.9000e-003**	**2.3000e-004**	**16.5251**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

3333 CalSF - Mayfair Townhouse Project

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	20.48	1000sqft	0.47	20,478.00	0
Parking Lot	0.58	1000sqft	0.01	576.00	0
City Park	0.46	Acre	0.46	20,037.60	0
Apartments Mid Rise	44.00	Dwelling Unit	1.16	97,182.00	126

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	296.32	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

I-FRISBIER2

Project Characteristics - Projected intensity factor in 2027

Land Use - Calculated square footage

Construction Phase - Zeroed out construction

Vehicle Trips - updated vehicle trips

Woodstoves - set woodstoves to 0, made all fireplaces gas

Consumer Products - ROG EF changed to 1.51E-5

Energy Use - Not modeling energy sources of operational emissions

Water And Wastewater - Not modeling water and wastewater sources of operational emissions

Solid Waste - Not modeling solid waste sources of operational emissions

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	3.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	2,615.00	0.00
tblEnergyUse	T24E	426.45	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24NG	6,115.43	0.00

tblFireplaces	NumberGas	6.60	14.08
tblFireplaces	NumberWood	7.48	0.00
tblGrading	AcresOfGrading	0.00	3.00
tblGrading	AcresOfGrading	0.00	4.50
tblLandUse	LandUseSquareFeet	20,480.00	20,478.00
tblLandUse	LandUseSquareFeet	580.00	576.00
tblLandUse	LandUseSquareFeet	44,000.00	97,182.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	296.32
tblSolidWaste	SolidWasteGenerationRate	20.24	0.00
tblSolidWaste	SolidWasteGenerationRate	0.04	0.00
tblVehicleTrips	ST_TR	6.39	2.56
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	5.86	2.56
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	6.65	2.56
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	2,866,777.13	0.00
tblWater	OutdoorWaterUseRate	1,807,316.02	0.00
tblWater	OutdoorWaterUseRate	548,081.42	0.00
tblWoodstoves	NumberCatalytic	0.88	0.00
tblWoodstoves	NumberNoncatalytic	0.88	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3482	5.2800e-003	0.3272	3.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	2.2918	2.2918	5.5000e-004	3.0000e-005	2.3150
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0211	0.0864	0.2340	9.5000e-004	0.0972	9.6000e-004	0.0981	0.0262	8.9000e-004	0.0271	0.0000	88.1513	88.1513	3.5800e-003	0.0000	88.2407
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3693**	**0.0917**	**0.5613**	**9.8000e-004**	**0.0972**	**2.8900e-003**	**0.1001**	**0.0262**	**2.8200e-003**	**0.0290**	**0.0000**	**90.4431**	**90.4431**	**4.1300e-003**	**3.0000e-005**	**90.5558**

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	0.3482	5.2800e-003	0.3272	3.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	2.2918	2.2918	5.5000e-004	3.0000e-005	2.3150
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0211	0.0864	0.2340	9.5000e-004	0.0972	9.6000e-004	0.0981	0.0262	8.9000e-004	0.0271	0.0000	88.1513	88.1513	3.5800e-003	0.0000	88.2407
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3693**	**0.0917**	**0.5613**	**9.8000e-004**	**0.0972**	**2.8900e-003**	**0.1001**	**0.0262**	**2.8200e-003**	**0.0290**	**0.0000**	**90.4431**	**90.4431**	**4.1300e-003**	**3.0000e-005**	**90.5558**

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

3.0 Construction Detail

Construction Phase

I-FRISBIER2

3333 CalSF - Mayfair Townhouse Project - San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/13/2018	10/18/2017	5	0	
2	Site Preparation	Site Preparation	2/10/2018	8/16/2017	5	0	
3	Grading	Grading	2/15/2018	9/13/2017	5	0	
4	Building Construction	Building Construction	2/23/2018	2/2/2011	5	0	
5	Paving	Paving	12/28/2018	3/7/2018	5	0	
6	Architectural Coating	Architectural Coating	1/11/2019	6/14/2017	5	0	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.48

Residential Indoor: 196,794; Residential Outdoor: 65,598; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,263 (Architectural Coating – sqft)

OffRoad Equipment

I-FRISBIER2

3333 CalSF - Mayfair Townhouse Project - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	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	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	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	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-FRISBIER2

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	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	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.6 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0211	0.0864	0.2340	9.5000e-004	0.0972	9.6000e-004	0.0981	0.0262	8.9000e-004	0.0271	0.0000	88.1513	88.1513	3.5800e-003	0.0000	88.2407
Unmitigated	0.0211	0.0864	0.2340	9.5000e-004	0.0972	9.6000e-004	0.0981	0.0262	8.9000e-004	0.0271	0.0000	88.1513	88.1513	3.5800e-003	0.0000	88.2407

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	112.64	112.64	112.64	260,154	260,154
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	112.64	112.64	112.64	260,154	260,154

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561
City Park	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561
Enclosed Parking with Elevator	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561
Parking Lot	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3482	5.2800e-003	0.3272	3.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	2.2918	2.2918	5.5000e-004	3.0000e-005	2.3150
Unmitigated	0.3482	5.2800e-003	0.3272	3.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	2.2918	2.2918	5.5000e-004	3.0000e-005	2.3150

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	0.0689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2694					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.8000e-004	1.5200e-003	6.5000e-004	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7577	1.7577	3.0000e-005	3.0000e-005	1.7682
Landscaping	9.8200e-003	3.7600e-003	0.3266	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5341	0.5341	5.1000e-004	0.0000	0.5469
Total	**0.3482**	**5.2800e-003**	**0.3272**	**3.0000e-005**		**1.9300e-003**	**1.9300e-003**		**1.9300e-003**	**1.9300e-003**	**0.0000**	**2.2918**	**2.2918**	**5.4000e-004**	**3.0000e-005**	**2.3150**

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	0.0689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2694					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.8000e-004	1.5200e-003	6.5000e-004	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7577	1.7577	3.0000e-005	3.0000e-005	1.7682
Landscaping	9.8200e-003	3.7600e-003	0.3266	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5341	0.5341	5.1000e-004	0.0000	0.5469
Total	**0.3482**	**5.2800e-003**	**0.3272**	**3.0000e-005**		**1.9300e-003**	**1.9300e-003**		**1.9300e-003**	**1.9300e-003**	**0.0000**	**2.2918**	**2.2918**	**5.4000e-004**	**3.0000e-005**	**2.3150**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

I-FRISBIER2

Equipment Type	Number

11.0 Vegetation

3333 CalSF - Mayfair Townhouse Variant

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	20.48	1000sqft	0.47	20,478.00	0
Parking Lot	0.58	1000sqft	0.01	576.00	0
City Park	0.46	Acre	0.46	20,037.60	0
Apartments Mid Rise	44.00	Dwelling Unit	1.16	97,182.00	126

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	296.32	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

I-FRISBIER2

3333 CalSF - Mayfair Townhouse Variant - San Francisco County, Annual

Project Characteristics - Projected intensity factor in 2027

Land Use - Calculated square footage

Construction Phase - Zeroed out construction

Vehicle Trips - updated vehicle trips for variant case

Woodstoves - set woodstoves to 0, made all fireplaces gas

Consumer Products - ROG EF changed to 1.51E-5

Energy Use - Not modeling energy sources of operational emissions

Water And Wastewater - Not modeling water and wastewater sources of operational emissions

Solid Waste - Not modeling solid waste sources of operational emissions

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	220.00	0.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	6.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	3.00	0.00
tblConstructionPhase	PhaseEndDate	1/24/2019	1/10/2019
tblConstructionPhase	PhaseEndDate	12/27/2018	2/22/2018
tblConstructionPhase	PhaseEndDate	2/9/2018	1/12/2018
tblConstructionPhase	PhaseEndDate	2/22/2018	2/14/2018
tblConstructionPhase	PhaseEndDate	1/10/2019	12/27/2018
tblConstructionPhase	PhaseEndDate	2/14/2018	2/9/2018
tblConsumerProducts	ROG_EF	2.14E-05	1.51E-05
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	LightingElect	0.35	0.00

tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	2,615.00	0.00
tblEnergyUse	T24E	426.45	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24NG	6,115.43	0.00
tblFireplaces	NumberGas	6.60	14.08
tblFireplaces	NumberWood	7.48	0.00
tblGrading	AcresOfGrading	0.00	3.00
tblGrading	AcresOfGrading	0.00	4.50
tblLandUse	LandUseSquareFeet	20,480.00	20,478.00
tblLandUse	LandUseSquareFeet	580.00	576.00
tblLandUse	LandUseSquareFeet	44,000.00	97,182.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	296.32
tblSolidWaste	SolidWasteGenerationRate	20.24	0.00
tblSolidWaste	SolidWasteGenerationRate	0.04	0.00
tblVehicleTrips	ST_TR	6.39	2.58
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	5.86	2.58
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	6.65	2.58
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	2,866,777.13	0.00
tblWater	OutdoorWaterUseRate	1,807,316.02	0.00
tblWater	OutdoorWaterUseRate	548,081.42	0.00
tblWoodstoves	NumberCatalytic	0.88	0.00
tblWoodstoves	NumberNoncatalytic	0.88	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3482	5.2800e-003	0.3272	3.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	2.2918	2.2918	5.5000e-004	3.0000e-005	2.3150
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0212	0.0871	0.2359	9.6000e-004	0.0979	9.6000e-004	0.0989	0.0264	9.0000e-004	0.0273	0.0000	88.8400	88.8400	3.6000e-003	0.0000	88.9301
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3694**	**0.0924**	**0.5631**	**9.9000e-004**	**0.0979**	**2.8900e-003**	**0.1008**	**0.0264**	**2.8300e-003**	**0.0292**	**0.0000**	**91.1318**	**91.1318**	**4.1500e-003**	**3.0000e-005**	**91.2451**

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	0.3482	5.2800e-003	0.3272	3.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	2.2918	2.2918	5.5000e-004	3.0000e-005	2.3150
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0212	0.0871	0.2359	9.6000e-004	0.0979	9.6000e-004	0.0989	0.0264	9.0000e-004	0.0273	0.0000	88.8400	88.8400	3.6000e-003	0.0000	88.9301
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3694**	**0.0924**	**0.5631**	**9.9000e-004**	**0.0979**	**2.8900e-003**	**0.1008**	**0.0264**	**2.8300e-003**	**0.0292**	**0.0000**	**91.1318**	**91.1318**	**4.1500e-003**	**3.0000e-005**	**91.2451**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/13/2018	1/12/2018	5	0	
2	Site Preparation	Site Preparation	2/10/2018	2/9/2018	5	0	
3	Grading	Grading	2/15/2018	2/14/2018	5	0	
4	Building Construction	Building Construction	2/23/2018	2/22/2018	5	0	
5	Paving	Paving	12/28/2018	12/27/2018	5	0	
6	Architectural Coating	Architectural Coating	1/11/2019	1/10/2019	5	0	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.48

Residential Indoor: 196,794; Residential Outdoor: 65,598; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,263 (Architectural Coating – sqft)

OffRoad Equipment

3333 CalSF - Mayfair Townhouse Variant - San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	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	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	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	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

I-FRISBIER2

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	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	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

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

3.2 Demolition - 2018

Unmitigated Construction Off-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2018

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

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

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

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

3.4 Grading - 2018

Unmitigated Construction On-Site

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

3.4 Grading - 2018

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.4 Grading - 2018

Mitigated Construction Off-Site

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

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

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

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0212	0.0871	0.2359	9.6000e-004	0.0979	9.6000e-004	0.0989	0.0264	9.0000e-004	0.0273	0.0000	88.8400	88.8400	3.6000e-003	0.0000	88.9301
Unmitigated	0.0212	0.0871	0.2359	9.6000e-004	0.0979	9.6000e-004	0.0989	0.0264	9.0000e-004	0.0273	0.0000	88.8400	88.8400	3.6000e-003	0.0000	88.9301

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	113.52	113.52	113.52	262,187	262,187
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	113.52	113.52	113.52	262,187	262,187

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

I-FRISBIER2

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561
City Park	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561
Enclosed Parking with Elevator	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561
Parking Lot	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

I-FRISBIER2

	ROG	NOx	CO	SO2	Fugitive 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	0.3482	5.2800e-003	0.3272	3.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	2.2918	2.2918	5.5000e-004	3.0000e-005	2.3150
Unmitigated	0.3482	5.2800e-003	0.3272	3.0000e-005		1.9300e-003	1.9300e-003		1.9300e-003	1.9300e-003	0.0000	2.2918	2.2918	5.5000e-004	3.0000e-005	2.3150

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	0.0689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2694					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.8000e-004	1.5200e-003	6.5000e-004	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7577	1.7577	3.0000e-005	3.0000e-005	1.7682
Landscaping	9.8200e-003	3.7600e-003	0.3266	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5341	0.5341	5.1000e-004	0.0000	0.5469
Total	**0.3482**	**5.2800e-003**	**0.3272**	**3.0000e-005**		**1.9300e-003**	**1.9300e-003**		**1.9300e-003**	**1.9300e-003**	**0.0000**	**2.2918**	**2.2918**	**5.4000e-004**	**3.0000e-005**	**2.3150**

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	0.0689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2694					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.8000e-004	1.5200e-003	6.5000e-004	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7577	1.7577	3.0000e-005	3.0000e-005	1.7682
Landscaping	9.8200e-003	3.7600e-003	0.3266	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5341	0.5341	5.1000e-004	0.0000	0.5469
Total	**0.3482**	**5.2800e-003**	**0.3272**	**3.0000e-005**		**1.9300e-003**	**1.9300e-003**		**1.9300e-003**	**1.9300e-003**	**0.0000**	**2.2918**	**2.2918**	**5.4000e-004**	**3.0000e-005**	**2.3150**

7.0 Water Detail

7.1 Mitigation Measures Water

I-FRISBIER2

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

I-FRISBIER2

Equipment Type	Number

11.0 Vegetation

APPENDIX 3
ADDITIONAL SUPPORTING INFORMATION

Construction

- **CO-1**: *Please provide construction schedule for the new buildings and the renovation schedule for the existing office building and show all overlaps.*

  Describe demolition, excavation, and construction activities for the new buildings that will occur while the existing office building is still occupied?

  Will new buildings on the project site be occupied when demolition of the south wing of the existing building and demolition of portions of the existing buildings' east and west wings (for interior renovations and seismic upgrade work) commences?

  Construction stages are: demolition, excavation, foundations, structure, exterior finishing, interior.

  - *Duration (weeks) for each stage*
  - *Duration (weeks) of lane closures and sidewalk closures by stage*
  - *Timing of shifts*
  - *Hours of construction on weekdays and weekends for each stage*

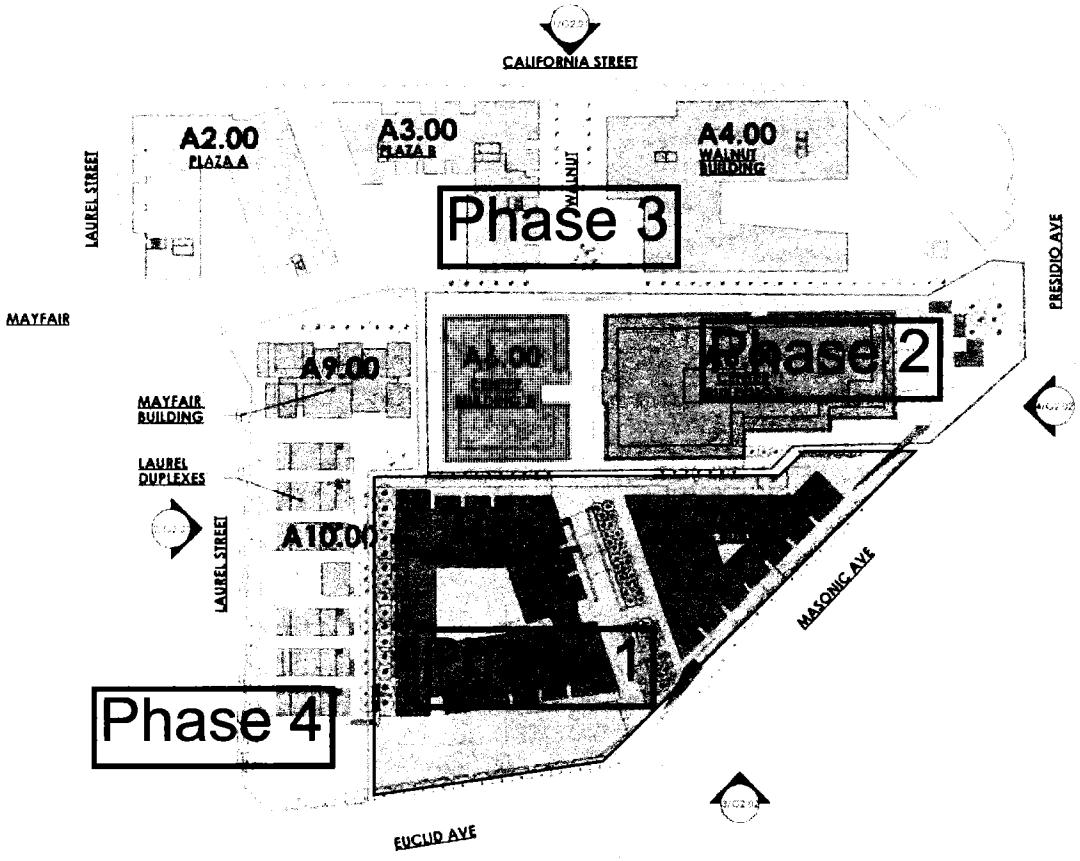
1. **See attached preliminary project schedule showing new buildings (Phases 1, 3 and 4), Renovation (Phase 2) and Overlaps.**

2. From the onset of Phase 1 the entire site will be unoccupied. The existing building demolition will commence in sequence with the Phased construction plan. Interior renovations for the Phase 2 building will be ongoing when the Phase 1 project nears completion and becomes occupied.

3. Project shift times will be weekdays from 7am – 3:30pm with occasional weekend work required.

Duration for Each stage			
Project Element/Phase	**Start Date**	**End Date**	**Number of Work Days**
1. 3333 California Street			
Masonic/Euclid	3/2/2020	8/19/2022	645
Center Buildings A/B	9/10/2021	8/31/2023	515
Plaza A/Plaza B/Walnut	12/4/2022	11/18/2025	773
Mayfair/T-house/Euclid Park	5/22/2025	1/12/2027	429
Shift Times			
Project Element/Phase	**Weekdays**	**Weekends**	**Number of Work Days**
2. 3333 California Street			
Masonic/Euclid	7 AM - 3:30PM	7 AM - 3:30PM	645
Center Buildings A/B	7 AM - 3:30PM	7 AM - 3:30PM	515
Plaza A/Plaza B/Walnut	7 AM - 3:30PM	7 AM - 3:30PM	773
Mayfair/T-house/Euclid Park	7 AM - 3:30PM	7 AM - 3:30PM	429

Phasing Diagram



"PRESIDIO BUILDING" REMOVED FROM PROJECT A5 SERIES OMITTED

I-FRISBIER2

3333 CALIFORNIA STREET SAN FRANCISCO, CA

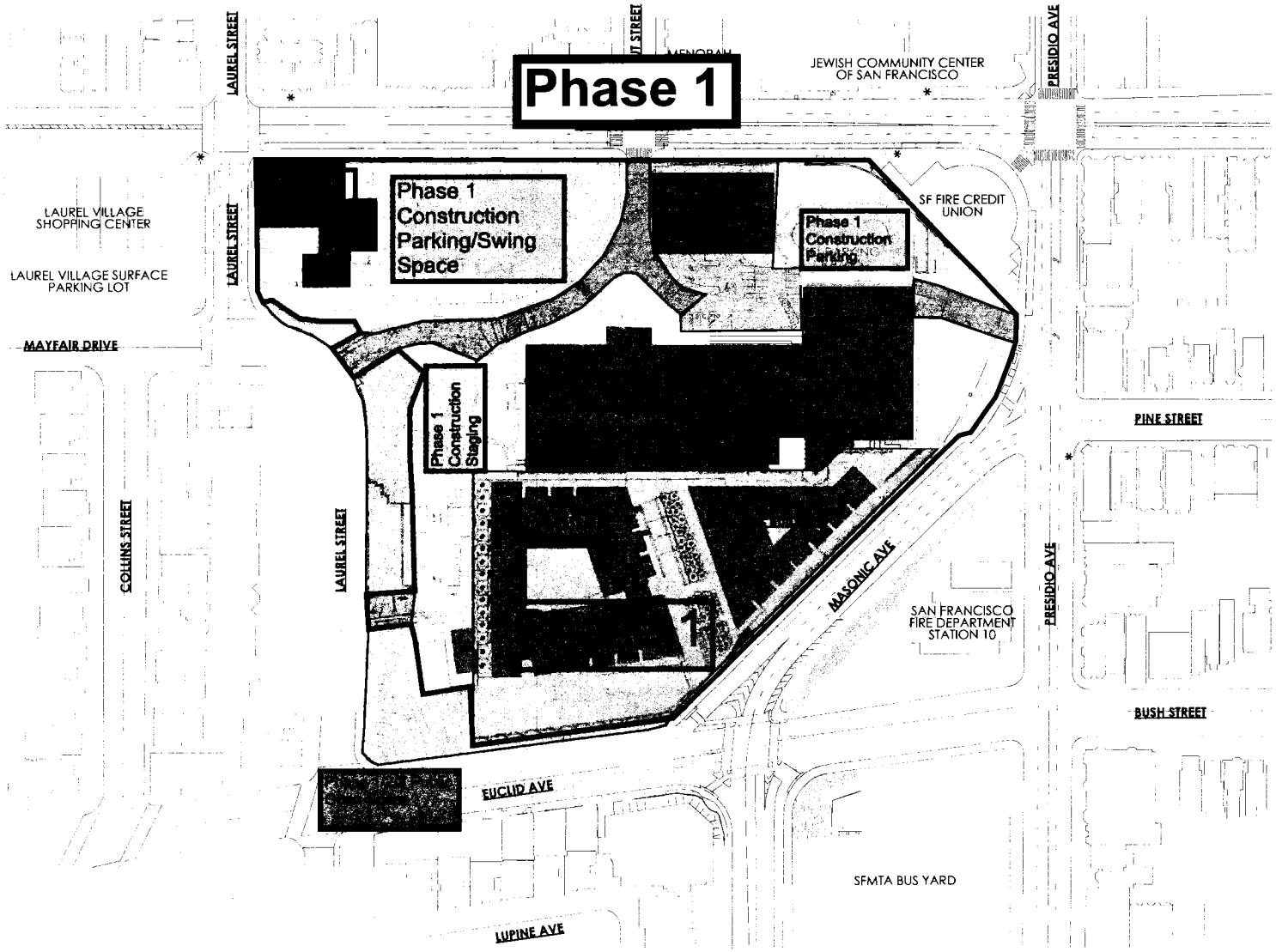
SKS | JAMES CORNER FIELD OPERATIONS | ARUP BAR architects | JENSEN | SCB

KEYING SITE PLAN - PROPOSED

03.06.2017
REVISED EEA SUBMITTAL

0 30' 60' 120' 180'

G1.02



* DENOTES (E) BUS STOP

3333 CALIFORNIA STREET SAN FRANCISCO, CA

SITE PLAN - EXISTING

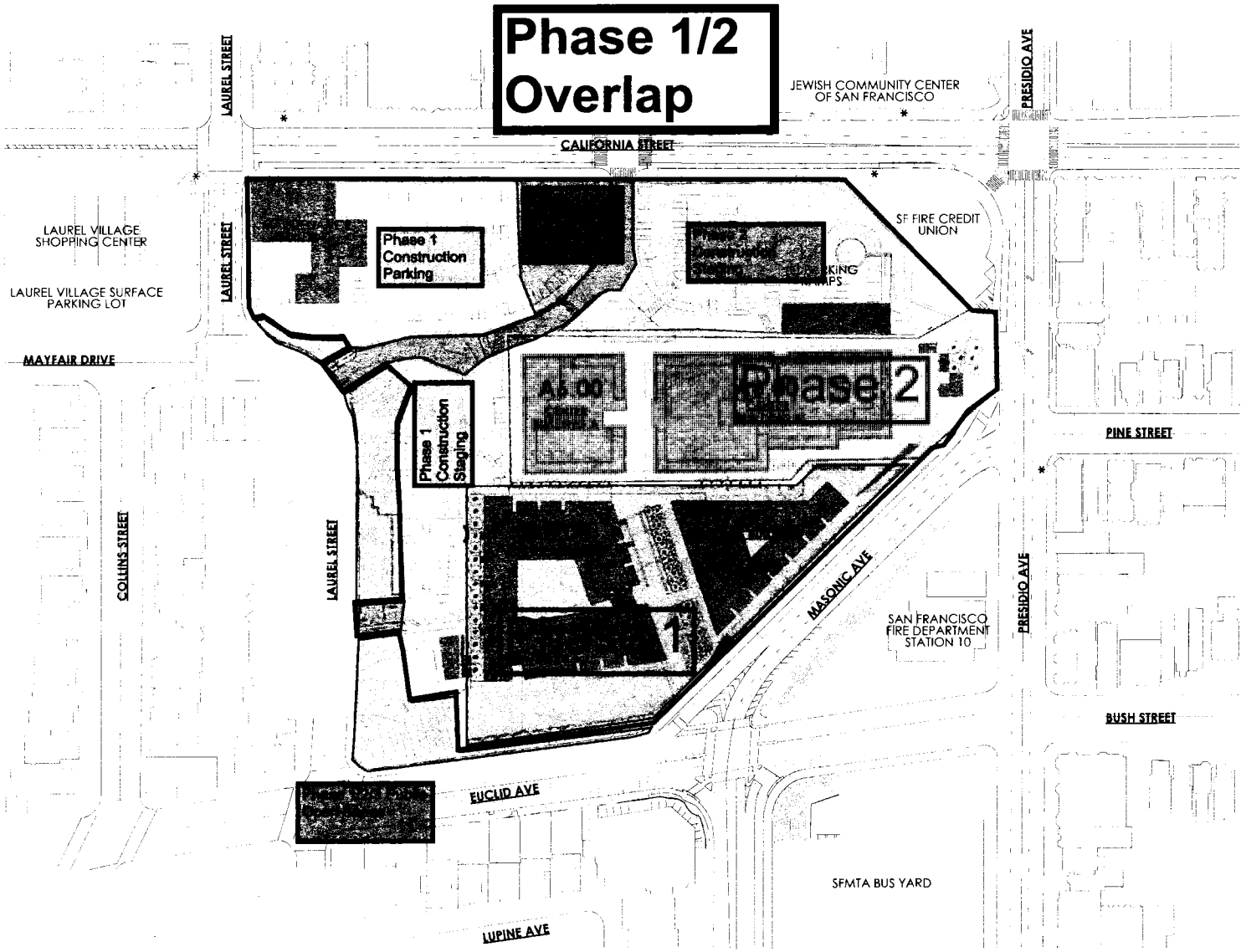
SKS | JAMES CORNER FIELD OPERATIONS | ARUP | BAR architects | JENSEN | SCB

03.06.2017
REVISED EEA SUBMITTAL

0 30' 60' 120' 180'

G1.01

I-FRISBIER2



3333 CALIFORNIA STREET SAN FRANCISCO, CA

SITE PLAN - EXISTING

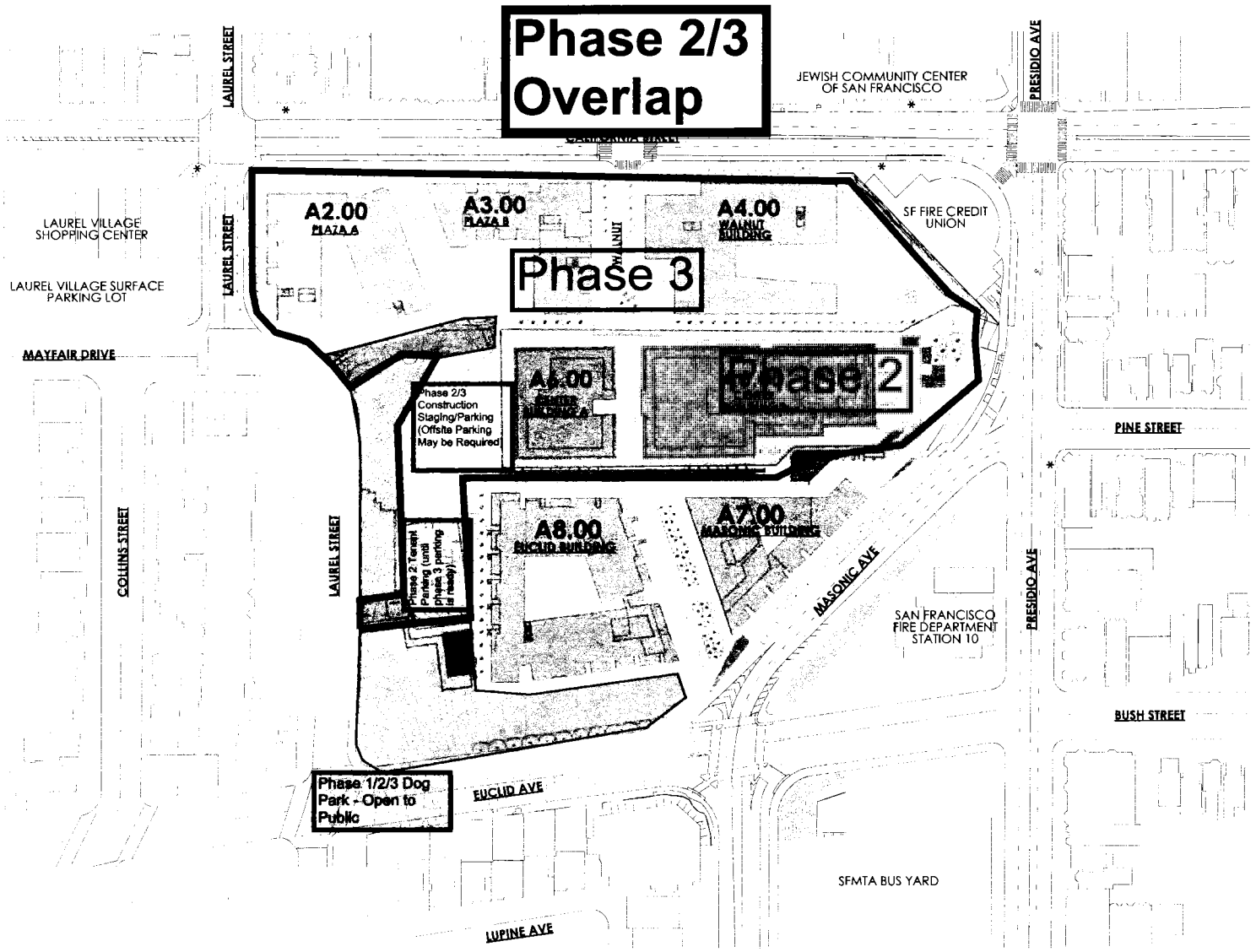
S+S | JAMES CORNER FIELD OPERATIONS | ARUP BAR architects | JENSEN | SCB

03.06.2017
REVISED EEA SUBMITTAL

0 30' 60' 120' 180'

G1.01

I-FRISBIER2



* DENOTES (E) BUS STOP

3333 CALIFORNIA STREET SAN FRANCISCO, CA

SITE PLAN - EXISTING

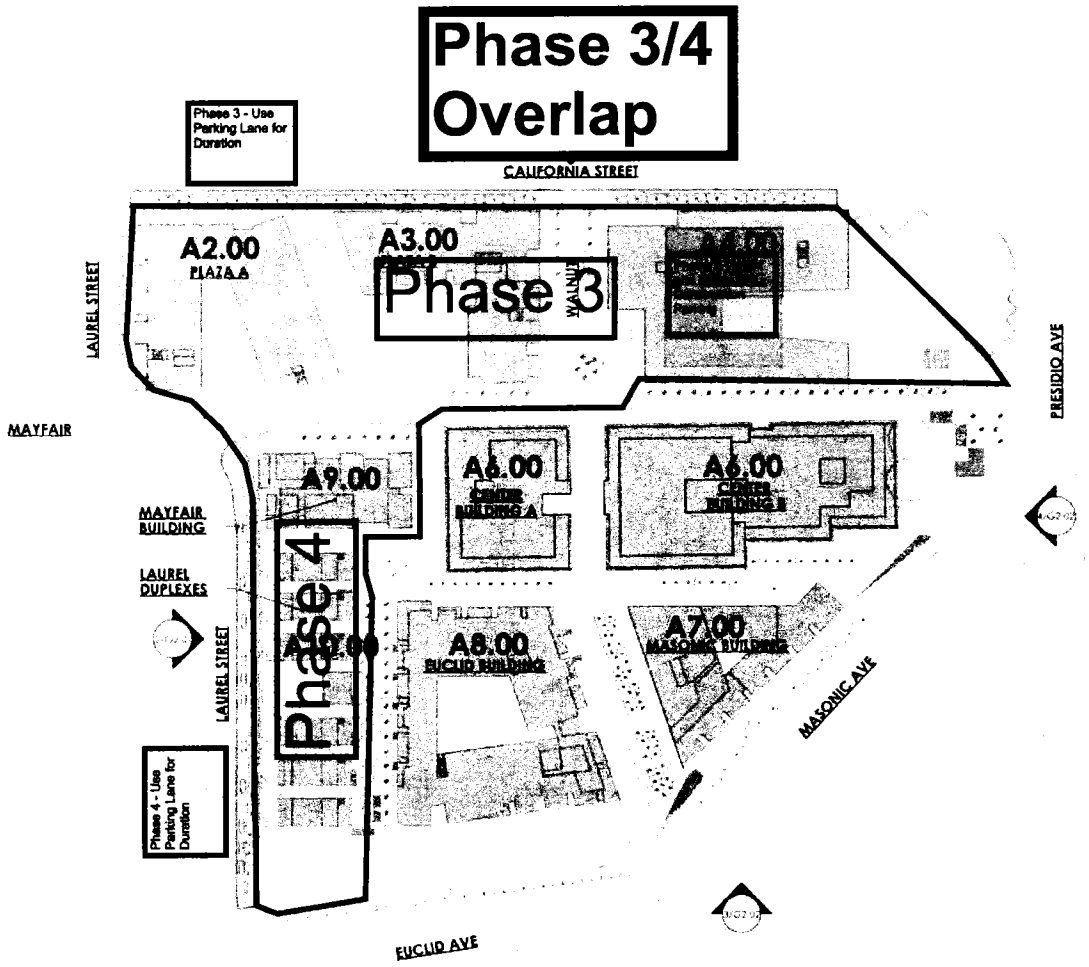
SAS | JAMES CORNER FIELD OPERATIONS | ARUP BAR architects | JENSEN | SCB

03.06.2017
REVISED EEA SUBMITTAL

0 30' 60' 120' 180'

G1.01

I-FRISBIER2



"PRESIDIO BUILDING" REMOVED FROM PROJECT
A5 SERIES OMITTED

I-FRISBIER2

3333 CALIFORNIA STREET SAN FRANCISCO, CA

SHS | JAMES CORNER FIELD OPERATIONS | ARUP BAR architects | JENSEN | SCB

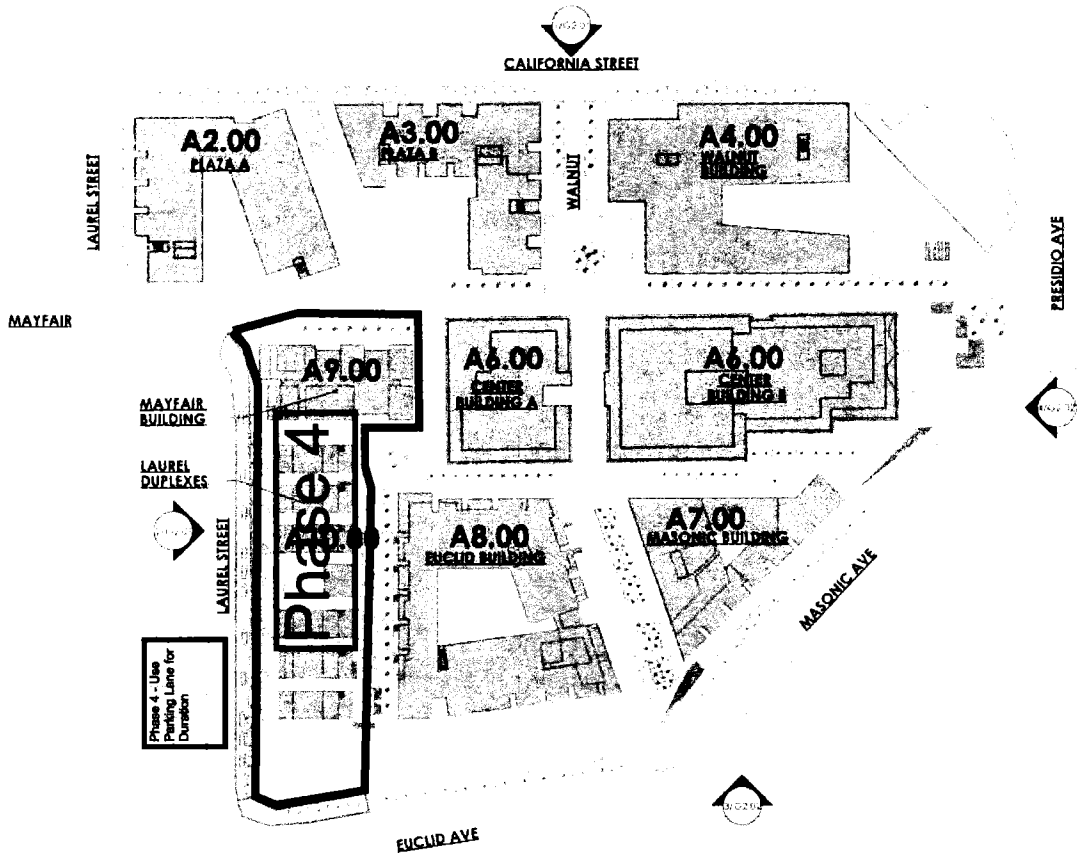
KEYING SITE PLAN - PROPOSED

03.06.2017
REVISED EEA SUBMITTAL

0 30' 60' 120' 180'

G1.02

Phase 4



"PRESIDIO BUILDING" REMOVED FROM PROJECT - A5 SERIES OMITTED

I-FRISBIER2

3333 CALIFORNIA STREET SAN FRANCISCO, CA

KEYING SITE PLAN - PROPOSED

SKS | JAMES CORNER FIELD OPERATIONS | ARUP BAR architects | JENSEN | SCB

03.06.2017
REVISED EEA SUBMITTAL

0 30' 60' 120' 180'

G1.02

CO-2 Construction Equipment

Equipment Type	Fuel	Number of Pieces	Days of Use	Hours/Day	Phase(s), if applicable
Aerial Lifts	Diesel	2	SKIN	8	ALL
Air Compressors	Diesel	2	DEMO	5	ALL
Cranes	Elec	2	TOWER	8	ALL
Crawler Tractors with Rippers	Diesel	1	EXCAVATION	8	ALL
Excavators	Diesel	2	EXCAVATION	8	ALL
Excavators with Hoe Ram	Diesel	2	EXCAVATION	8	ALL
Forklifts	Propane	1	EXTERIOR	8	All
Other General Industrial Equipment	Gasoline	X		8	ALL
Pavers	Diesel	1	EXTERIOR	8	Street Paving
Paving Equipment	Diesel	1	EXTERIOR	8	Street Paving
Pumps	Diesel	1	STRUCTURE	8	Pour Days Only
Rollers	Diesel	1	4	6	Street Paving
Rough Terrain Forklifts	Diesel	2	Gradeall	8	ALL
Signal Boards	Elec	2	ALL	24/7	Phase 3/Phase 4
Skid Steer Loaders (Bobcat)	Diesel	1	Demo	8	ALL
Sweepers/Scrubbers	Gasoline	1	Street Clean	3	ALL
Tractors/Loaders/Backhoes	Diesel	2	EXCAVATION	8	ALL
Welders	Elec	2	STRUCTURE	8	ALL

- **CO-3:** *Construction workers for each construction stage.*
  - *Average number of workers by shift*
  - *Maximum number of workers by shift*
  - *Any information on mode of access of construction workers (e.g., car, transit, walking)*

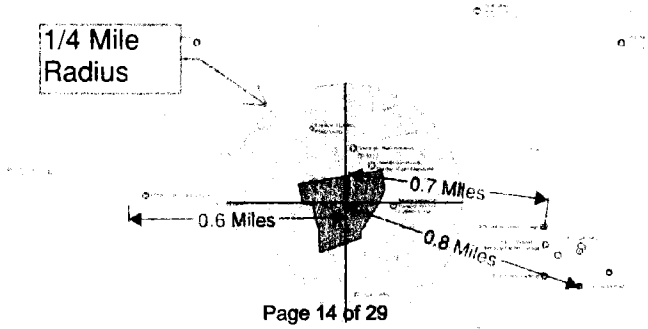
1. Project manpower requirements typically follow a bell curve with fewer workers at the beginning and end of a project. The maximum number of workers for each phase will be at their peak from the end of structure through exterior and will taper off at the end of interiors. These 'bell curves' will overlap for the phases as well. We expect half of the workforce to drive and the other half to take alternate means of transportation.

Project Element/Phase	Work Days	Average Number of Workers	Maxiumum Number of Workers
Masonic/Euclid	645	90	175
Center Buildings A/B	515	75	150
Plaza A/Plaza B/Walnut	773	90	175
Mayfair/T-house/Euclid Park	429	75	175

- **CO-4:** *Location of parking for construction workers for each construction stage.*
  - *Locations and number of spaces at each location*
  - *If offsite, will worker shuttles be provided? Describe.*

Phase Overlap			
Project Element/Phase	**Method/Location**	**Shuttle Required**	**Approx # of Spaces Req**
Phase 1	Onsite - Phase 3	No	100
Phase 1/Phase 2 Overlap	Onsite - Phase 3	No	200
Phase 2	Onsite - Phase 3	No	100
Phase 2/Phase 3 Overlap	Onsite - Phase 4	No	200
Phase 3	Onsite - Phase 4	No	100
Phase 3/Phase 4 Overlap	Onsite - Phase 3 (new)	No	200
Phase 4	Offsite	Yes	100

1. See map below for the closest three parking garages to the project site. These parking garages will only be required for construction parking during the end of Phase 4. All other phases will utilize onsite parking.



- **CO-5:** *Construction truck trips for each construction stage.*
  - *Average number of trucks per shift and per day*
  - *Maximum number of trucks per shift and per day (typically during excavation)*
  - *For concrete pours, give separate truck information and description of activities.*

1. **See attached models showing the existing topography compared to the new topography.**

2. Excavation and demolition will be 1 shift per day with the below table showing the average number of truck trips per day and the possible maximum number of truck trips per day.

Project Element/Phase	Duration of Demo/Excavation	Avg. Trips Per Day During Demo/Excavation	Maximum Trips Per Day	Total # of Trips
Masonic/Euclid	7 months	60	80	8,178
Center Buildings A/B	1 month	10	10	121
Plaza A/Plaza B/Walnut	7 months	60	80	8,157
Mayfair/T-house/Euclid Park	2 months	60	80	1,566

Laurel Heights
Utilities Data

FY1415	GAS	ELECTRICITY	WATER
Month	Therms	KWH	CCF
Jul-14	11,350	342,443	1,110
Aug-14	10,640	353,986	994
Sep-14	-	361,968	593
Total	21,990	1,058,397	2,697

FY1314	GAS	ELECTRICITY	WATER
Month	Therms	KWH	CCF
Jul-13	9,850	355,705	1,168
Aug-13	10,935	325,269	984
Sep-13	11,317	357,431	1,271
Oct-13	7,253	363,280	1,286
Nov-13	10,004	339,480	508
Dec-13	9,991	321,227	720
Jan-14	12,616	324,316	770
Feb-14	12,576	338,539	520
Mar-14	11,690	355,557	608
Apr-14	10,638	321,585	444
May-14	10,855	350,958	668
Jun-14	11,813	344,803	886
Total	129,538	4,098,150	9,833

FY1213	GAS	ELECTRICITY	WATER
Month	Therms	KWH	CCF
Jul-12	8,177	355,352	1,314
Aug-12	8,129	336,804	977
Sep-12	8,633	343,872	920
Oct-12	8,618	342,295	748
Nov-12	6,782	295,884	1,120
Dec-12	11,532	331,613	734
Jan-13	9,228	328,046	369
Feb-13	12,308	333,171	378
Mar-13	11,834	338,977	473
Apr-13	10,551	332,124	722
May-13	10,226	344,880	1,030
Jun-13	9,638	330,840	1,075
Total	115,656	4,013,858	9,860

SWCA
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July 23,2018

Julie Moore, Environmental Planner
San Francisco Planning
1650 Mission Street, Suite 400
San Francisco, CA 94103

Re: REVISED Final 3333 California Street Mixed-Use Project Energy Assessment / Case No. 2015-014028ENV

Dear Ms. Moore:

SWCA Environmental Consultants updated minor errors in the April 12, 2018 energy assessment and calculations prepared for the proposed 3333 California Street Mixed-Use Project (proposed project) and project variant pursuant to Appendix F: Energy Conservation of the California Environmental Quality Act (CEQA) Guidelines.

Minor errors were identified by Ramboll during quantification of greenhouse gas emissions pursuant to AB900 requirements. The errors were related to an incorrect conversion factor "1 kBTU=3.412 kWh". In addition, one of the underlying formulas in the attached spreadsheets did not include all cell values.

The changes below are shown in double underline and strikethrough and are called out in the attached REVISED Final Energy Assessment dated July 23, 2018 using a "revision symbol" in the left hand margin of the page.

Last paragraph on p. A-2 in the Energy Assessment should read as follows:

> "Two tower cranes (179 kW) each would be used for the tower phase of construction over 1,054 days (8,432 hours), resulting in 3,018,656 kWh of electricity use. Including the additional electric construction equipment, the estimated total energy use during construction may increase to approximately ~~6,000,000~~ 7,170,000 kWh. Electricity use estimates are the same for the proposed project and project variant."

The note in Table 4. Operational Energy Use – Buildings on p. A-4 should read as follows:

> "1 ~~kBTU~~ kWh = 3.412 ~~kWh~~ kBTU

Second to last paragraph on p. A-10 should read as follows:

> "As shown on Table 10, the estimated renewable energy output is 4,485,641 kBTU/year (~~1,315,626~~ 1,314,666 kWh/year) for PV systems and 2,084,000 kBTU/year (610,786 kWh/year) for solar hot water heaters. The roof area allocated to solar equipment is consistent between the proposed project and the project variant; therefore, the estimated renewable energy production in the proposed case remains the same under the variant."

The calculations attached to the April 12, 2018 energy assessment have been updated. No other changes are needed for the revised energy assessment or calculations. This update replaces the April 12, 208 version in your Administrative Record files. All Initial Study Administrative Record CDs should be recycled.

The energy assessment provides the basis for the discussion in Section E.16 (Mineral and Energy Resources) of the Initial Study. The updated numbers are not substantially different from those in the original assessment thus conclusions regarding the effects of the construction and operation energy usage will not change. However, minor updates must be made to the Initial Study to update text and numbers (see p. 243 under "Construction" and footnote 318 and p. 244 – first full paragraph). These will be completed as part of staff-initiated text changes when the Response to Comments phase commences.

If there are any questions or concerns, please contact me.

Sincerely,

Peter Mye

Peter A. Mye
Senior Planner

Attachment

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April 12, 2018

Julie Moore, Environmental Planner
San Francisco Planning
1650 Mission Street, Suite 400
San Francisco, CA 94103

Re: 3333 California Street Mixed-Use Project Energy Assessment / Case No. 2015-014028ENV

Dear Ms. Moore:

SWCA Environmental, with input from ARUP and Ramboll, conducted an energy assessment for the proposed 3333 California Street Mixed-Use Project (proposed project) and the Mixed Use Multi-Family Housing Variant (project variant). The energy assessment provides the basis for the discussion in Section E.16 (Mineral and Energy Resources) of the Initial Study and evaluates energy use associated with construction and operation of the proposed project and the project variant.

The analysis was prepared pursuant to Appendix F: Energy Conservation of the California Environmental Quality Act (CEQA) Guidelines. Appendix F of the CEQA Guidelines requires lead agencies to address the construction-related and operational energy impacts of a project, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. Energy conservation is defined as a goal in Appendix F - the wise and efficient use of energy - and the means to achieving this goal are:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on natural gas and oil; and
- Increasing reliance on renewable energy sources.

Sincerely,

Amanda Tyrrell

Amanda Tyrrell
Senior Environmental Planner

Attachment

- **REVISED ATTACHMENT A. ENERGY ASSESSMENT**

EXISTING REGIONAL ENERGY SUPPLY AND DEMAND

This section summarizes the existing energy supply mix from renewable and non-renewable sources and energy demand for the San Francisco Bay Area region.

Pacific Gas and Electric Company (PG&E) primarily supplies power to customers in San Francisco from a variety of renewable and non-renewable sources both within and outside of the State. In 2016, PG&E's resource mix was approximately 33 percent renewables, 24 percent nuclear, 17 percent natural gas, 14 percent unspecified sources, and 12 percent large hydroelectric.[1] The San Francisco Public Utilities Commission (SFPUC) provides clean energy to select local residential and business communities and for public transit. The SFPUC owns and operates the Hetch Hetchy Power System, a clean energy system that draws its power from hydroelectric, solar, and biomass/biowaste sources.

Electrical energy demand is measured by power flow, expressed in kilowatt-hours (kWh) and in gigawatt-hours when describing large-scale uses, such as a city. San Francisco uses about 6,000 gigawatt-hours of electricity per year, and this use is expected to grow at a rate of 1.3 percent per year to about 8,000 gigawatt-hours by 2030.[2]

Natural gas is measured in cubic feet of gas or by its heat content in British Thermal Units (BTU), or therms. PG&E supplies natural gas to San Francisco from sources in the western United States. Natural gas is commonly used to generate electricity and for heating in California, and compressed and liquefied natural gas is a viable alternative transportation fuel. Natural gas demand is projected to remain relatively flat as energy efficiency measures are expected to continue to reduce demand, but closure of nuclear generating facilities will require some replacement generation from natural gas in California.[3]

Petroleum-based fuels, including diesel and gasoline, are measured in gallons and consumed almost exclusively by the transportation sector in California. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles.[4] Construction equipment typically uses diesel fuel.

PROPOSED ENERGY DEMAND

This section describes the energy demand associated with construction and operation of the proposed project and the project variant.

Construction Energy Demand

Energy use associated with phased construction of the proposed project or project variant would include electricity usage associated with water consumption for dust control and use of electric equipment, diesel fuel consumption from on-road hauling trips and off-road construction diesel equipment, and gasoline consumption from on-road worker commute and vendor trips. The methodology and estimated energy demands for each category are provided below.

---

[1] Pacific Gas & Electric Company (PG&E), "Clean Energy Solutions". Available at https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page?WT.mc_id=Vanity_cleanenergy. Accessed January 18, 2018.

[2] San Francisco Public Utilities Commission (SFPUC), "San Francisco's Updated Electricity Resource Plan". Available at http://sfwater.org/index.aspx?page=700. Accessed January 18, 2018.

[3] California Energy Commission (CEC). "2013 Natural Gas Issues, Trends, and Outlook". Available at http://www.energy.ca.gov/2014publications/CEC-200-2014-001/CEC-200-2014-001-SF.pdf. Accessed January 18, 2018.

[4] CEC. "California Gasoline Data, Facts, and Statistics". Available at http://www.energy.ca.gov/almanac/transportation_data/gasoline. Accessed January 18, 2018.

Electricity – Water for Construction Dust Control

Electricity use associated with water for construction dust control is based on the total water consumption and energy intensity for supply, distribution, and treatment of water consumed for dust control over the phased construction. Total gallons of water consumed is based on the estimated acreage of ground disturbance during grading and site preparation.[5] The California Emissions Estimator Model (CalEEMod) provides the estimated energy intensity per gallon of water for San Francisco County shown in Table 1.

As shown in Table 1, electricity use for construction of the proposed project or the project variant are the same, approximately 1,226 kWh.

Table 1. Construction Electricity Use – Water for Dust Control

	Proposed Project	Project Variant
Ground disturbance (acres per day)*	0.21	0.21
Water consumption rate per acre disturbed (gallons per acre per day)	3,020	3,020
Number of days	354	354
Total water consumption (gallons)	**226,500**	**226,500**
Energy intensity per gallon of water (kWh)	**0.005411**	**0.005411**
Total electricity use (kWh)	**1,226**	**1,226**

*Acreage factors in multiple levels of grading at the site during the excavation phase of construction. To be conservative, a total of 75 acres of ground disturbance is assumed for construction of the proposed project and the project variant based on the CalEEMod defaults for the specified mix of land uses.

Electricity – Construction Equipment[6]

Electricity demand from off-road construction equipment is estimated based on the size and type of the equipment and total hours of usage. Usage information of electric construction equipment was provided for tower cranes (179 kW each). Total hours is equal to the total number of days the tower cranes would be used (i.e., 1,054 days) multiplied by 8 work hours per day. Cutting and chopping saws, saw cutter, tile cutting saws, and dry wall stud impact guns may also be used (approximately 1 to 5 kW each), as well as welders and signal boards (approximately 18 to 20 kW each). Since equipment sizes were not provided except for tower cranes, available information was used to estimate energy use.[7,8,9]

Two tower cranes (179 kW) each would be used for the tower phase of construction over 1,054 days (8,432 hours), resulting in 3,018,656 kWh of electricity use. Including the additional electric construction equipment, the estimated total energy use during construction may increase to approximately ~~6,000,000~~ 7,170,000 kWh. Electricity use estimates are the same for the proposed project and project variant.

[5] The water application rate of 3,020 gallons per acre is from the Air & Waste Management Association's Air Pollution Engineering Manual (1992).
[6] Denney, Brad, Vice President, Webcor, e-mail correspondences with Peter Mye, SWCA, about details of preliminary construction phasing schedule and construction equipment, September and October 2017.
[7] Ramboll Environ. "Analysis of Energy Use Associated with the Proposed Golden State Warriors Project, San Francisco, California". October 19, 2015. Available at http://www.gsweventcenter.com/GSW_RTC_References/2015_1019_Ramboll_Environ.pdf. Accessed January 24, 2018.
[8] Miller Electric Mfg., LLC. "Welding Guide to Power Efficiency". Available at
[9] Young, Gregory. "The Basics of Digital Signage and Energy Consumption". Available at www.scenic.org/storage/documents/EXCERPT_The_Basics_of_Digital_Signage_and_Energy_Consumption.pdf. Accessed March 16, 2018.

Fuel – Off-road Construction Equipment

Diesel fuel usage from off-road construction equipment is estimated based on equipment usages (total equipment horsepower-hours) and is calculated using a fuel usage rate for gallons of diesel per horsepower-hour.[10] Off-road construction equipment fueled by diesel includes aerial lifts, air compressors, excavators, pavers, pumps, rollers, forklifts, tractors, loaders, and backhoes.

Construction of the proposed project or project variant would both use approximately 431,158 gallons of diesel for off-road construction equipment, as shown in Table 2.

Table 2. Construction Diesel Use – Off-road Equipment

	Proposed Project	Project Variant
Total diesel equipment use (horsepower-hours)	8,623,158	8,623,158
Gallons of diesel per horsepower-hour	0.05	0.05
Total diesel use (gallons)	431,158	431,158

Fuel – On-road Construction Trips

Energy demand associated with diesel fuel usage from on-road construction truck trips and fuel usage (such as gasoline or gasoline/hybrid) from worker commute trips is based on Vehicle Miles Traveled (VMT) and projected fuel efficiency in miles per gallon.[11,12] All vendor trucks are assumed to be medium-heavy duty, all concrete trucks are assumed to be heavy-heavy duty, and all hauling trucks are assumed to be heavy-heavy duty. Worker vehicles are assumed to be 50 percent light-duty auto, 25 percent light-duty auto type 1, and 25 percent light-duty auto type 2. In Table 3, concrete trucks are categorized in the heavy-heavy duty vendor row.

Approximately 149,829 gallons of diesel and 220,202 gallons of gasoline would be used for on-road trips during construction of the proposed project. The estimated fuel use would be the same for the project variant.

Operational Energy Demand

Energy use associated with operation of the proposed project or project variant would include on-site usage associated with buildings; electricity for off-site water treatment and distribution; and fuel from mobile sources. The methodology and estimated energy demands for each category are provided below.

Natural Gas and Electricity – Buildings

Per-building energy use estimates for the proposed project and project variant, including electricity associated with cooling, natural gas use associated with heating, and additional electricity use, were estimated using the proposed square footages and program-specific, California Code of Regulations

[10] The fuel usage rate of 0.05 gallons of diesel per horsepower-hour is based on the South Coast Air Quality Management District CEQA Air Quality Handbook, Table A9-3E.
[11] Fuel efficiency miles per gallon for construction is based on EMFAC2011.
[12] Bowie, Ted, Senior Managing Consultant, Ramboll Environ, e-mail correspondence with Amanda Tyrrell, SWCA, regarding vehicle miles traveled by vehicle type for construction of the proposed project and project variant, January 17, 2018.

Title 24 (referred to as "Title 24") 2013-compliant energy use intensities reported in the PG&E Zero Net Energy Feasibility Study.[13] The energy use intensities include site end uses, such as outdoor lighting.

As shown in Table 4, the total energy use for on-site buildings would be approximately 37,547,861 kBTU/year for the proposed project. The project variant would have a slightly higher energy use, approximately 40,039,142 kBTU/year.

Table 3. Construction Fuel Use – On-road Trips

		Proposed Project and Project Variant	
Vehicle Type	**Trip Type**	**Vehicle Miles Traveled**	**Miles Per Gallon**
Diesel, medium heavy-duty	Vendor	65,100	8.4
Diesel, heavy heavy-duty	Vendor	96,600	5.5
Diesel, heavy heavy-duty	Hauling	684,836	5.5
Total diesel use (gallons)			**149,329**
Gasoline, light-duty auto	Worker	2,123,094	21.8
Gasoline, light-duty truck type 1	Worker	1,061,547	18.8
Gasoline, light-duty truck type 2	Worker	1,061,547	16.0
Total gasoline use (gallons)			**220,202**

- **Table 4. Operational Energy Use – Buildings**

	Proposed Project	Project Variant
Natural Gas		
Heating (kBTU/year)	10,854,013	12,104,102
Electricity		
Cooling (kBTU/year)*	1,084,440	1,217,713
Additional Electricity Use (kBTU/year)	25,609,409	26,717,327
Total energy use (kBTU/year)	**37,547,861**	**40,039,142**

- * 1 ~~kBTU~~ kWh = 3.412 ~~kWh~~ kBTU

Peak energy demand in California occurs on hot summer days when the cooling load is greatest; however, in the cool San Francisco Bay climate, peak demand may occur on a cold winter evening when the heating load is greatest (where electric heat is used). Peak energy demand was estimated for both the proposed project and the project variant. Peak energy demand was estimated using the proposed square footages and program- and climate-specific American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1-2013 compliant Department of Energy reference building energy models.

As shown in Table 5, the operational peak energy demand associated with building use for the proposed project is approximately 14.3 MMBTU/hour. The project variant would have a slightly higher operational peak energy demand, approximately 15.1 MMBTU/hour.

[13] PG&E, "The Technical Feasibility of Zero Net Energy Buildings in California". December 2012. Available at https://www.energydataweb.com/cpucfiles/pdadocs/904/california_zne_technical_feasibility_report_final.pdf. Accessed January 18, 2018.

Table 5. Operational Peak Energy Use – Buildings

	Proposed Project	Project Variant
Natural Gas		
Heating (MMBTU/hour)	3.9	4.1
Electricity		
Cooling (MMBTU/hour)*	6.3	6.6
Additional Electricity Use (MMBTU/hour)	4.1	4.4
Total peak energy use (MMBTU/hour)	**14.3**	**15.1**

* 1 MMBTU = 1 million BTU

Electricity – Water Treatment and Distribution

Project water demand was estimated from square footages and projected occupancy, and code-compliant plumbing fixture types and irrigation levels using the SFPUC's preferred tool for project water use estimation, and is consistent with the Water Supply Assessment for the proposed project and project variant. Indoor and outdoor electricity intensity factors were obtained from the 2006 California Energy Commission (CEC) report, "*Refining Estimates of Water-Related Energy Use in California*".[14] These factors are reported in kWh per million gallons of water used and are specific to northern California. These intensity factors represent the electricity required to: (1) supply and convey water from source to site; (2) treat the water to usable standards; (3) distribute the water to individual users. The indoor intensity factor includes the electricity required to process resultant wastewater.[15]

The total electricity use associated with water supply, treatment, and distribution, is shown in Table 6. The proposed project would use approximately 111,430 kWh/year, and the project variant would use approximately 138,915 kWh/year.

Table 6. Operational Electricity Use – Water

	Proposed Project		Project Variant	
Use Type	**Water Demand (gallons/year)**	**Resultant Electricity Use (kWh/year)**	**Water Demand (gallons/year)**	**Resultant Electricity Use (kWh/year)**
Commercial Fixtures	422,000	2,280	229,000	1,238
Residential Fixtures	17,125,000	92,663	22,398,000	121,194
HVAC/Cooling	1,995,000	10,795	1,995,000	10,795
Landscape Irrigation	1,626,000	5,689	1,626,000	5,689
Total electricity use		**111,430**		**138,915**

[14] CEC, "Refining Estimates of Water-Related Energy Use in California". December 2006, CEC-500-2006-118. Available at http://www.energy.ca.gov/pier/project_reports/CEC-500-2006-118.html. Accessed January 18, 2018.

[15] Energy intensity factors may be conservative because they may not fully account for the energy efficiency of San Francisco's water system, which primarily uses gravity flow to convey water from the Hetch Hetchy reservoir to treatment plants in the Bay Area.

Fuel and Electricity – Mobile Sources

Energy use associated with travel demand for the proposed project or project variant includes vehicle trips generated by residents, employees, and visitors to the project site. It also includes energy use from delivery and service vehicle trips that would be generated by the proposed project or project variant. Gasoline, diesel, and natural gas usage from on-road mobile trips during operation is based on total VMT estimated using CalEEMod (used for the proposed project's and project variant's air quality analysis) and fuel efficiency projections.[16] The public transit system in San Francisco also includes electric-powered buses and trains.

All vendor trucks are assumed to be medium-heavy duty and all hauling trucks are assumed to be heavy-heavy duty. Vehicles are assumed to be a mix of light-duty auto, light-duty auto type 1, light-duty auto type 2, medium-duty vehicles, motorcycles, and motor homes. Urban, school, and other buses are assumed to be a mix of gas, diesel, and electric.

As shown in Table 7, mobile sources during operation of the proposed project would use approximately 73,660 gallons of diesel fuel and 416,115 gallons of gasoline per year, based on an estimate of 9,957,096 annual VMT. The project variant would have a slightly higher energy use based on an estimate of 10,133,358 annual VMT, approximately 74,964 gallons of diesel fuel and 423,481 gallons of gasoline per year.

ENERGY CONSERVATION

This section discusses energy conservation features associated with the proposed project and project variant per Appendix F of the CEQA Guidelines. Applicable state and local laws, regulations, and policies that govern energy supply and use are summarized, including incentives that promote energy conservation above that which is required. On-site renewable energy output is also discussed, followed by a description of the energy savings estimates from the energy conservation measures.

Regulatory Framework

At the state level, the Renewable Portfolio Standard (RPS) requires retail sellers of electricity to provide a percentage of their electricity supply from renewable sources by certain years. The CEC, California Public Utilities Commission (CPUC), and PG&E have extensive programs to implement the RPS and otherwise encourage renewable energy.

California Code of Regulations, Title 24 regulates energy efficiency and water efficiency in buildings. The CEC also regulates appliance efficiency and there are California Green Building Standards. The CPUC has required utilities to conduct energy efficiency programs for many years.

San Francisco also has a number of programs to promote energy conservation among residents and businesses. The City has adopted the Electricity Resource Plan and Green Building Code requirements, Stormwater Management and Water Conservation and Irrigation ordinances, and the Energy Conservation Ordinance, which promote energy and water use efficiency. The Environmental Protection Element of the San Francisco General Plan contains goals, objectives, and policies related to energy conservation.

[16] 3333 California Street Mixed-Use Project, Case No. 2015-014028ENV, Draft Environmental Impact Report, Appendix AQ, pdf pp. 54 and 121. Fuel efficiency data for operation is based on EMFAC2014.

Table 7. Operational Energy – Mobile Sources

		Proposed Project		Project Variant	
Vehicle Type	Fleet Mix	Vehicle Miles Traveled (annual)	Miles Per Gallon	Vehicle Miles Traveled (annual)	Miles Per Gallon
Diesel, medium heavy-duty (MHD)	3.3%	330,874	7.9	336,731	7.9
Diesel, heavy heavy-duty (HHD)*	0.9%	94,304	5.3	95,973	5.3
Diesel, urban buses (UBUS)	0.3%	29,702	4.1	30,228	4.1
Diesel, school buses (SBUS)	0.1%	9,519	7.2	9,687	7.2
Diesel, other buses (OBUS)	0.4%	42,537	8.1	43,290	8.1
Total diesel use (gallons)			**73,660**		**74,964**
Gasoline, light-duty auto (LDA)	60.3%	6,008,918	26.8	6,115,289	26.8
Gasoline, light-duty truck type 1 (LDAT1)	3.7%	368,044	22.7	374,559	22.7
Gasoline, light-duty truck type 2 (LDAT2)	19.3%	1,921,739	20.2	1,955,758	20.2
Gasoline, medium-duty vehicle (MDV)	9.1%	906,653	15.5	922,703	15.5
Gasoline, light-heavy duty truck type 1 (LHD1)	1.3%	128,337	9.6	130,609	9.6
Gasoline, light-heavy duty truck type 2 (LHD2)	0.5%	51,618	8.8	52,531	8.8
Gasoline, motorcycle (MCY)	0.6%	59,265	33.0	60,314	33.0
Gasoline, motor homes (MH)	0.1%	5,586	6.8	5,685	6.8
Total gasoline use (gallons per year)			**416,419**		**423,481**

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The City's Commuter Benefits Program, Emergency Ride Home Program, transportation demand management programs, Transportation Sustainability Fee, Jobs-Housing Linkage Program, bicycle parking requirements, low-emission car parking requirements, and car sharing requirements reduce energy use by promoting the use of sustainable transportation modes.

To address waste, the City implemented the Recycling and Compositing Ordinance, the Construction and Demolition Debris Recovery Ordinance, and Green Building Code requirements. These regulations reduce the amount of materials sent to a landfill and promote reuse of materials to conserve embodied energy[17] and reduce the energy required to produce new materials.

A component of San Francisco's larger climate strategy as it relates to energy conservation is documented through the Greenhouse Gas Compliance Checklist, which identifies applicable local and state regulations for public and private projects intended to decrease emissions of greenhouse gases and reduce energy use. These components of the City's Greenhouse Gas Reduction Strategy are coordinated at the local level through the adoption and implementation of city agency-specific Climate Action Strategies and integrated with regional efforts in cooperation with the Bay Area Air Quality Management District. The Greenhouse Gas analysis for the proposed project and project variant is provided in Section E.7 of the Initial Study.

Energy Efficiency

Construction of the proposed project and project variant would require the manufacture of new materials requiring the use of energy. The production of these materials would result in consumption of natural resources including fossil fuels. However, the reuse and recycling of existing materials after demolition of buildings would partially offset the energy needed to produce new materials. San Francisco's construction and demolition debris ordinance requires a minimum recovery rate of 65 percent of building waste. Other energy conservation strategies implemented during construction would be to use energy-efficient equipment that would connect to the existing electrical grid when feasible instead of using diesel generators, and to encourage worker carpooling and use of public transit.

During operation, residential and commercial buildings would use energy for cooling, lighting, water heating, and appliances and electronics. In an effort to decrease energy consumption of residential and commercial buildings, energy efficiency measures would be incorporated into the project design. For the proposed project and project variant, the potential energy savings from combinations of twenty different energy conservation measures were assessed using the Snapshot Efficiency tool. The Snapshot Efficiency Tool is a web-based tool for quickly understanding the potential impact of various efficiency measures.[18] The top five most effective energy conservation measures are identified for each space type in Table 8.

The percentage of energy saved after incorporation of the energy conservation measures into the project design is shown in Table 9. The proposed project would save approximately 26 percent of annual building energy use through energy conservation measures, and the project variant would save approximately 25 percent, compared to energy use without these conservation measures.

[17] Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site.

[18] Architecture at Zero, "Technical Resources, The Snapshot Efficiency Tool". Available at http://www.architectureatzero.com/technical-resources. Accessed April 9, 2018.

Table 8. Operational Energy – Conservation Measures

Proposed Project and Project Variant Conservation Measures	
Space Type	**Identified Measures***
Residential	Reduce domestic hot water consumption Reduce equipment power density Increase residential water heater efficiency Increase lighting efficiency Increase cooling efficiency
Office	Increase lighting efficiency Increase commercial boiler efficiency Reduce equipment power density Reduce domestic hot water consumption Reduce window solar heat gain coefficient
Retail	Increase lighting efficiency Increase commercial boiler efficiency Reduce equipment power density Reduce domestic hot water consumption Integrate natural ventilation strategies
Child Care	Increase lighting efficiency Reduce equipment power density Increase commercial boiler and residential water heater efficiency Reduce window solar heat gain coefficient Integrate natural ventilation strategies
Parking	Increase lighting efficiency

* Energy conservation measures are ranked from most to least impactful for each space type

Table 9. Operational Energy – Efficiency Savings

	Proposed Project			Project Variant		
Energy Use	**Without Conservation Measures (kBTU/year)**	**Conservation Measures Included (kBTU/year)**	**Estimated Savings (%)**	**Without Conservation Measures (kBTU/year)**	**Conservation Measures Included (kBTU/year)**	**Estimated Savings (%)**
Natural Gas - Heating	10,854,013	10,638,137	2	12,104,102	11,947,129	1
Electricity - Cooling	1,084,440	685,450	37	1,217,713	774,496	36
Additional Electricity Use	25,609,409	16,497,970	36	26,717,327	17,264,515	25
Total	**37,547,861**	**27,821,558**	**26**	**40,039,142**	**29,986,139**	**25**

Renewable Energy

Solar photovoltaic (PV) cells convert sunlight to electricity. PV cells are assembled into a solar module or group of PV cells. Solar modules are placed in an area or added to a larger system to generate and supply electricity for homes and businesses. A system typically includes one or more solar modules (sometimes referred to as an array), equipment to convert direct current electricity to alternating current electricity (i.e., inverters), and connecting wiring.[19] Some systems are designed with batteries to store the generated electricity for later use and/or sun tracking devices to increase the amount of solar energy collected. PV systems can be located on rooftops or mounted on racks on the ground and have a typical life span of approximately 30 years.

Solar water heating systems use energy from the sun to heat water and can replace conventional energy-intensive water heating. Solar water heating systems consist of two main parts: a solar collector and a storage tank.[20] The solar collector absorbs the sunlight. Water flows from the storage tank into small metal tubes located in the collector and is warmed by the absorber plates. The heated water then flows back to the storage tank for use. Larger systems generally consist of an array of smaller heating units, connected in parallel, to provide the desired amount of hot water.

For the proposed project and project variant, approximately 35% of the roof area would be used for on-site renewable energy production from rooftop solar. The projected renewable energy output was estimated for both rooftop PV and rooftop solar hot water based on the proposed design. PV Watts[21] was used to calculate energy production from rooftop solar photovoltaics, assuming SUNPOWER[22] panels. The T*SOL[23] tool was used to calculate the solar hot water energy production from rooftop solar tubes, assuming Ritter tubes.[24]

As shown on Table 10, the estimated renewable energy output is 4,485,641 kBTU/year (~~1,315,626~~ 1,314,666 kWh/year) for PV systems and 2,084,000 kBTU/year (610,786 kWh/year) for solar hot water heaters. The roof area allocated to solar equipment is consistent between the proposed project and the project variant; therefore, the estimated renewable energy production in the proposed case remains the same under the variant.

On-site generation is not included in the building energy use estimates before or after energy conservation measures (see Tables 4 and 9 above). On-site renewable energy generation would further reduce regional energy demand associated with the proposed project or project variant. Table 11 shows that on-site PV renewable electricity generation would save about 17 percent of annual demand on the local electric grid for the proposed project, and 16 percent for the project variant. Solar water heaters would reduce annual natural gas demand by 19 percent for the proposed project and 17 percent for the project variant.

[19] DOE (U.S. Department of Energy), "Solar Photovoltaic Technology Basics." Available online at: https://energy.gov/eere/solar/articles/solar-photovoltaic-technology-basics. Accessed January 17, 2018.
[20] DOE (U.S. Department of Energy), "Solar Water Heaters." Available online at: https://energy.gov/energysaver/solar-water-heaters. Accessed January 17, 2018.
[21] National Renewable Energy Lab. PVWatts v5.3.8. pvwatts.nrel.org.
[22] SUNPOWER: SPR-E20-435-COM SPR-E19-410-COM. Efficiency: 19%. Module area: 21.5 ft^2.
[23] Valentin Software. T*SOL Dynamic Thermal Simulation Software v5.5. www.valentinsoftware.com.
[24] Ritter CPC 14 XL (gross surface area: 28.2 ft^2)

Table 10. Operational Energy – Renewable Generation

	Proposed Project and Project Variant		
Building	Proposed Total Solar Equipment Area (square feet)	Estimated PV Energy Output (kBTU/year)	Estimated Solar Hot Water Energy Output (kBTU/year)
Center Building A	0	0	0
Center Building B	2,597	180,864	82,000
Plaza A Building	12,190	795,497	380,000
Plaza B Building	11,812	828,163	384,000
Walnut Building	19,771	1,397,159	635,000
Masonic Building	0	0	0
Euclid Building	9,036	638,342	289,000
Laurel Duplexes	6,384	394,514	207,000
Mayfair Building	3,550	251,107	107,000
Total	**65,340**	**4,485,643**	**2,084,000**

Overall, renewable generation would save about 17 percent of annual operational building energy demand for the proposed project and 16 percent for the project variant. Energy conservation measures would save an additional 26 percent of annual building energy use and the project variant would save approximately 25 percent. The building energy use estimates before conservation measures are assumed to be Title 24-2013 equivalent, and the energy use estimates after conservation represent savings compared to Title 24. With implementation of the energy conservation measures and on-site renewable energy generation, the proposed project and project variant would meet and improve upon the Title 24 Part 6 building energy efficiency standards.

Table 11. Operational Energy – Renewable Generation Energy Savings

	Proposed Project			Project Variant		
Energy Use	Without Energy Conservation Measures (kBTU/year)	Generation Included (kBTU/year)	Estimated Savings (%)	Without Energy Conservation Measures (kBTU/year)	Generation Included (kBTU/year)	Estimated Savings (%)
Natural Gas	10,854,013	8,770,013	19%	12,104,102	10,020,102	17%
Electricity	26,693,849	22,208,208	17%	27,935,040	23,449,399	16%
Total	**37,547,862**	**30,978,221**	**17%**	**40,039,142**	**33,469,501**	**16%**

CONCLUSION

Operation of the project would increase the intensity of existing energy use of the site by introducing new residential, retail/restaurant, office, and child care uses on the site, replacing the current office and child care uses. Under the project variant, there would be slightly more residential use and less retail/restaurant and child care uses and no office use. The proposed project or project variant would contribute to annual long-term increases in energy use as a result of increased vehicle trips (mobile sources) and residential, retail/restaurant, office, and child care operations. Construction activities would also result in temporary increases energy use.

Energy conservation design features to meet state and local goals for energy efficiency and renewable energy have been incorporated into the project design to reduce wasteful, inefficient, and unnecessary consumption of energy during construction and operation. The proposed project or project variant would be required to be built to Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND Gold Standard)[25] thus minimizing the amount of fuel, water, or energy used. Rooftops of the proposed new buildings and the adaptively reused office building would be developed with a mix of green roofs, solar photovoltaic systems, and/or roof-mounted solar hot water systems. The proposed project or project variant would also incorporate transportation demand management measures into its design such as car share parking, and bicycle parking and repair stations that would help to minimize the amount of transportation fuel consumed. Further, the project sponsor would be required to develop and/or reserve up to 8 percent of parking spaces for electric vehicles, which would also minimize the amount of transportation fuel consumed.

Based on compliance with the Title 24 conservation standards of the California Code of Regulations and the assessment of the projected demand for energy resources, operation of the proposed project or project variant would not have a measurable effect on regional energy supplies or on peak energy demand resulting in a need for additional capacity. Natural gas and electric service would be provided to meet the needs of the proposed project or project variant, as required by the CPUC, which obligates PG&E and the SFPUC to provide service to its existing and potential customers. PG&E and the SFPUC, as part of their future service projection planning, have incorporated the demand from the proposed project or project variant and other future development projects to determine the balance of regional energy supply and demand. Energy conservation and production measures in the proposed project would decrease overall energy consumption, decrease reliance on non-renewable energy sources, and increase reliance on renewable energy sources. The proposed project and project variant would also be consistent with San Francisco's greenhouse gas reduction strategy. Furthermore, construction energy consumption would be a temporary energy expenditure and would not occur in an inefficient or wasteful manner.

In summary, construction and operation of the proposed project or project variant would not use energy resources in an inefficient or wasteful manner. Therefore, the proposed project or project variant would have a less-than-significant impact on energy resources, and no mitigation measures are required.

[25] Leadership in Energy and Environmental Design (LEED) is a green building rating system that provides independent verification of a building or neighborhood's energy and environmental design features. LEED certification encourages energy and resource-efficient buildings, and savings from decreased utility costs. LEED for Neighborhood Development (LEED-ND) inspires and helps create better, more sustainable, well-connected neighborhoods. Certification is awarded at four levels, Certified, Silver, Gold, Platinum.

Construction Energy

Construction Electricity Use - Water for Dust Control	Proposed Project	Project Variant
Ground disturbance (acres per day)*	0.21	0.21
Water consumption rate per acre disturbed (gallons per acre per day)	3,020	3,020
Number of days	354	354
Total water consumption (gallons)	**226,500**	**226,500**
Energy intensity per gallon of water (kWh)	**0.005411**	**0.005411**
Total electricity use (kWh)	[illegible]	[illegible]

*Acreage factors in multiple levels of grading at the site

Construction Electricity Use - Off-road Equipment	Proposed Project				Project Variant			
Equipment*	**kW**	**Quantity**	**Total Hours**	**kWh**	**kW**	**Quantity**	**Total Hours**	**kWh**
Cutting and chopping saws	5	30	8,432	1,264,800	5	30	8,432	1,264,800
Tile cutting saws	5	25	8,432	1,054,000	5	25	8,432	1,054,000
Saw cutter	5	4	8,432	168,640	5	4	8,432	168,640
Dry wall stud impact guns	1	50	8,432	421,600	1	50	8,432	421,600
Tower cranes	**179**	**2**	**8,432**	**3,018,656**	**179**	**2**	**8,432**	**3,018,656**
Signal boards	19	2	**28,824**	1,072,253	19	2	**28,824**	1,072,253
Welders	20	2	**4,240**	169,600	20	2	**4,240**	169,600
[illegible]								

*We received usage information for tower cranes, signal boards, and welders, but no other equipment. Data in red was estimated conservatively, and sources are cited in the energy assessment. Total hours is equal to the total days of use multiplied by work hours per day.

Construction Diesel Use - Off-road Equipment	Proposed Project	Project Variant
Total diesel equipment use (horsepower-hours)*	8,623,158	8,623,158
Gallons of diesel per horsepower-hour	0.05	0.05
Total diesel use (gallons)	[illegible]	[illegible]

* Refer to the air quality diesel equipment list spreadsheet for horsepower, quantity, and total hours for each type

Construction Fuel Use - On-road Trips		Proposed Project		Project Variant	
Vehicle Type	**Trip Type***	**Vehicle Miles Traveled**	**Miles Per Gallon**	**Vehicle Miles Traveled**	**Miles Per Gallon**
Diesel, medium heavy-duty	Vendor	65,100	8.4	65,100	8.4
Diesel, heavy heavy-duty	Vendor	96,600	5.5	96,600	5.5
Diesel, heavy heavy-duty	Hauling	684,836	5.5	684,836	5.5
Total diesel use (gallons)		[illegible]		[illegible]	
Gasoline, light-duty auto	Worker	2,123,094	21.8	2,123,094	21.8
Gasoline, light-duty truck type 1	Worker	1,061,547	18.8	1,061,547	18.8
Gasoline, light-duty truck type 2	Worker	1,061,547	16.0	1,061,547	16.0
Total gasoline use (gallons)		[illegible]		[illegible]	

** Assumes all vendor trucks as MHDT, all concrete trucks as HHDT, and all hauling trucks as HHDT. Worker vehicles are assumed to be 50% LDA, 25% LDT1 and 25% LDT2. In the table

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Operational Energy Use - Buildings	Proposed Project	Project Variant
Natural Gas		
Heating (kBTU/year)	10,854,013	12,104,102
Electricity		
Cooling (kBTU/year)*	1,084,440	1,217,713
Additional Electricity Use (kBTU/year)	25,609,409	26,717,327
Total energy use (kBTU/year)	[illegible]	[illegible]

*1 kWh = 3.412 kBTU

Operational Peak Energy Use - Buildings	Proposed Project	Project Variant
Natural Gas		
Heating (MMBTU/hour)	3.9	4.1
Electricity		
Cooling (MMBTU/hour)*	6.3	6.6
Additional Electricity Use (MMBTU/hour)	4.1	4.4
Total peak energy use (MMBTU/hour)	[illegible]	[illegible]

*1 MMBTU = 1 million BTU

Operational Electricity Use - Water	Proposed Project		Project Variant	
Use Type	**Water Demand (gallons/year)**	**Resultant Electricity Use (kWh/year)**	**Water Demand (gallons/year)**	**Water Demand (gallons/year)**
Commercial Fixtures	422,000	2,280	229,000	1,238
Residential Fixtures	17,125,000	92,663	22,398,000	121,194
HVAC/Cooling	1,995,000	10,795	1,995,000	10,795
Landscape Irrigation	1,626,000	5,689	1,626,000	5,689
Total electricity use (kWh/year)	[illegible]		[illegible]	

Operational Fuel Use - Mobile Trips		Proposed Project		Project Variant	
Vehicle Type	**Fleet Mix**	**Vehicle Miles Traveled (annual)**	**Miles Per Gallon**	**Vehicle Miles Traveled (annual)**	**Miles Per Gallon**
Diesel, medium heavy-duty (MHD)	3.3%	330,874	7.9	336,731	7.9
Diesel, heavy heavy-duty (HHD)*	0.9%	94,304	5.3	95,973	5.3
Diesel, urban buses (UBUS)	0.3%	29,702	4.1	30,228	4.1
Diesel, school buses (SBUS)	0.1%	9,519	7.2	9,687	7.2
Diesel, other buses (OBUS)	0.4%	42,537	8.1	43,290	8.1
Total diesel use (gallons)		[illegible]		[illegible]	
Gasoline, light-duty auto (LDA)	60.3%	6,008,918	26.8	6,115,289	26.8
Gasoline, light-duty truck type 1 (LDAT1)	3.7%	368,044	22.7	374,559	22.7
Gasoline, light-duty truck type 2 (LDAT2)	19.3%	1,921,739	20.2	1,955,758	20.2
Gasoline, medium-duty vehicle (MDV)	9.1%	906,653	15.5	922,703	15.5
Gasoline, light-heavy duty truck type 1 (LHD1)	1.3%	128,337	9.6	130,609	9.6
Gasoline, light-heavy duty truck type 2 (LHD2)	0.5%	51,618	8.8	52,531	8.8
Gasoline, motorcycle (MCY)	0.6%	59,265	33.0	60,314	33.0
Gasoline, motor homes (MH)	0.1%	5,586	6.8	5,685	6.8
Total gasoline use (gallons)		[illegible]		[illegible]	

*HHD was not separated between vendor and hauling in the operational emissions analysis. All HHD miles traveled are classified as vendor for calculation purposes

Operational Energy - Conservation Measures	
Space Type	**Identified Measures***
Residential	Reduce domestic hot water consumption Reduce equipment power density Increase residential water heater efficiency Increase lighting efficiency Increase cooling efficiency
Office	Increase lighting efficiency Increase commercial boiler efficiency Reduce equipment power density Reduce domestic hot water consumption Reduce window solar heat gain coefficient
Retail	Increase lighting efficiency Increase commercial boiler efficiency Reduce equipment power density Reduce domestic hot water consumption Integrate natural ventilation strategies
Child Care	Increase lighting efficiency Reduce equipment power density Increase commercial boiler and residential water heater efficiency Reduce window solar heat gain coefficient Integrate natural ventilation strategies
Parking	Increase lighting efficiency

*Energy conservation measures are ranked from most to least impactful for each space type, and are the

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Operational Energy - Efficiency Savings	Proposed Project			Project Variant		
Energy Use	Measures Excluded (kBTU/year)	Measures Included (kBTU/year)	Estimated Savings (%)	Measures Excluded (kBTU/year)	Measures Included (kBTU/year)	Estimated Savings (%)
Natural Gas - Heating	10,854,013	10,638,137	2	12,104,102	11,947,129	1
Electricity - Cooling	1,084,440	685,450	37	1,217,713	774,496	36
Additional Electricity Use	25,609,409	16,497,970	36	26,717,327	17,264,515	25
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Operational Energy - Renewable Generation	Proposed Project and Project Variant					
Building	Proposed Total Solar Equipment Area (square feet)	Estimated PV Energy Output (kWh/year)	Estimated PV Energy Output (MMBTU/year)*	Estimated Solar Hot Water Energy Output (MMBTU/year)	Estimated PV Energy Output (kBTU/year)*	Estimated Solar Hot Water Energy Output (kBTU/year)
Center Building A	0	0	0	0	0	0
Center Building B	2,597	53,047	181	82	180,864	82,000
Plaza A Building	12,190	233,317	795	380	795,497	380,000
Plaza B Building	11,812	242,898	828	384	828,163	384,000
Walnut Building	19,771	409,783	1,397	635	1,397,159	635,000
Masonic Building	0	0	0	0	0	0
Euclid Building	9,036	187,224	638	289	638,342	289,000
Laurel Duplexes	6,384	115,710	395	207	394,514	207,000
Mayfair Building	3,550	73,649	251	107	251,107	107,000
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

*1 kWh = 0.003409510640514 5 MMBtu

Operational Energy - Renewable Generation Savings		Proposed Project			Project Variant		
Energy Use	Renewable Generation (kBTU/year)	Energy Conservation Measures Excluded (kBTU/year)	Generation Included (kBTU/year)	Estimated Savings (%)	Energy Conservation Measures Excluded (kBTU/year)	Generation Included (kBTU/year)	Estimated Savings (%)
Natural Gas	2,084,000	10,854,013	8,770,013	19%	12,104,102	10,020,102	17%
Electricity	4,485,641	26,693,849	22,208,208	17%	27,935,040	23,449,399	16%
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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PSKS
3333 California St.
CEQA Energy Calculations

Draft 2 | January 12, 2018

Job number 245654

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Document Verification

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		Name			
		Signature			
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		Name			
		Signature			

1 Energy use estimate

Per-building energy usage, including both electricity and natural gas usage, was estimated using the proposed square footages and program-specific, Title 24 2013-compliant energy use intensities (EUIs) reported in the Pacific Gas and Electric Company Zero Net Energy Feasibility Study.[1] These EUIs include site end uses, such as outdoor lighting. Energy usage was calculated for both the proposed building and the project variant.

Table 1: Estimated energy use of proposed buildings on the project site

Energy Use (kBtu/yr)	Center Bldg. A	Center Bldg. B	Plaza A Bldg.	Plaza B Bldg.	Walnut Bldg.	Masonic Bldg.	Euclid Bldg.	Laurel Duplex	Mayfair Bldg.	Sitewide Total
Heating	**1,007,732**	**2,629,271**	**1,033,594**	**1,043,977**	**985,511**	**1,001,435**	**2,084,838**	**609,505**	**485,151**	**10,854,013**
Residential	1,007,732	2,629,271	745,112	813,484	0	1,001,435	1,997,610	609,505	485,151	9,928,299
Office	0	0	0	0	371,012	0	0	0	0	371,012
Retail	0	0	288,482	230,492	494,924	0	87,228	0	0	1,101,126
Child Care	0	0	0	0	92,576	0	0	0	0	92,576
Parking	0	0	0	0	0	0	0	0	0	0
Cooling	**106,802**	**278,658**	**87,973**	**93,410**	**81,013**	**106,135**	**214,435**	**64,597**	**51,418**	**1,084,440**
Residential	106,802	278,658	78,969	86,215	0	106,135	211,712	64,597	51,418	984,507
Office	0	0	0	0	46,917	0	0	0	0	46,917
Retail	0	0	9,004	7,194	15,448	0	2,723	0	0	34,368
Child Care	0	0	0	0	18,648	0	0	0	0	18,648
Parking	0	0	0	0	0	0	0	0	0	0
Electricity	**1,381,540**	**3,965,525**	**3,116,795**	**2,986,061**	**6,246,774**	**2,047,392**	**3,980,797**	**924,212**	**960,314**	**25,609,409**
Residential	1,381,540	3,604,573	1,021,504	1,115,238	0	1,372,907	2,738,603	835,595	1,201,681	12,735,073
Office	0	0	0	0	1,042,043	0	0	0	0	1,042,043
Retail	0	0	885,432	707,446	1,519,061	0	267,728	0	0	3,379,668
Child Care	0	0	0	0	416,146	0	0	0	0	416,146
Parking	0	360,952	1,209,859	1,163,376	3,269,524	674,484	974,466	88,617	295,202	8,036,479
Total	**2,496,074**	**6,873,454**	**4,238,361**	**4,123,447**	**7,286,298**	**3,154,962**	**6,280,070**	**1,598,314**	**1,496,883**	**37,547,861**
Residential	2,496,074	6,512,502	1,845,585	2,014,938	0	2,480,477	4,947,926	1,509,697	1,201,681	23,008,879
Office	0	0	0	0	1,459,971	0	0	0	0	1,459,971
Retail	0	0	1,182,918	945,133	2,029,432	0	357,679	0	0	4,515,162
Child Care	0	0	0	0	527,371	0	0	0	0	527,371
Parking	0	360,952	1,209,859	1,163,376	3,269,524	674,484	974,466	88,617	295,202	8,036,479

Estimated building energy uses include site end uses, such as outdoor lighting.

[1] Pacific Gas and Electric Co. (2012). *The Technical Feasibility of Zero Net Energy Buildings in California.* Retrieved from: http://www.energydataweb.com/cpucfiles/pdadocs/904/california_zne_technical_feasibility_report_final.pdf.

Table 2: Estimated energy use of proposed buildings on the project site under the project variant

Energy Use (kBtu/yr)	Center Bldg. A	Center Bldg. B	Plaza A Bldg.	Plaza B Bldg.	Walnut Bldg.	Masonic Bldg.	Euclid Bldg.	Laurel Duplex	Mayfair Bldg.	Sitewide Totals
Heating	**1,007,732**	**2,629,271**	**1,033,594**	**1,043,977**	**2,208,601**	**1,001,435**	**2,084,838**	**609,505**	**485,151**	**12,104,102**
Residential	1,007,732	2,629,271	745,112	813,484	1,733,751	1,001,435	1,997,610	609,505	485,151	11,023,050
Retail	0	0	288,482	230,492	382,526	0	87,228	0	0	988,728
Child Care	0	0	0	0	92,324	0	0	0	0	92,324
Parking	0	0	0	0	0	0	0	0	0	0
Cooling	**106,802**	**278,658**	**87,973**	**93,410**	**214,285**	**106,135**	**214,435**	**64,597**	**51,418**	**1,217,713**
Residential	106,802	278,658	78,969	86,215	183,748	106,135	211,712	64,597	51,418	1,168,255
Retail	0	0	9,004	7,194	11,939	0	2,723	0	0	30,860
Child Care	0	0	0	0	18,598	0	0	0	0	18,598
Parking	0	0	0	0	0	0	0	0	0	0
Electricity	**1,381,540**	**3,965,525**	**3,116,795**	**2,986,061**	**7,394,692**	**2,047,392**	**3,980,797**	**924,212**	**960,314**	**26,717,327**
Residential	1,381,540	3,604,573	1,021,504	1,115,238	2,376,869	1,372,907	2,738,603	835,595	1,201,681	15,111,942
Retail	0	0	885,432	707,446	1,174,081	0	267,728	0	0	3,034,688
Child Care	0	0	0	0	415,013	0	0	0	0	415,013
Parking	0	360,952	1,209,859	1,163,376	3,388,729	674,484	974,466	88,617	295,202	8,155,684
Total	**2,496,074**	**6,873,454**	**4,238,361**	**4,123,447**	**9,777,578**	**3,154,962**	**6,280,070**	**1,598,314**	**1,496,883**	**40,039,142**
Residential	2,496,074	6,512,502	1,845,585	2,014,938	4,294,368	2,480,477	4,947,926	1,509,697	1,201,681	27,303,247
Retail	0	0	1,182,918	945,133	1,568,547	0	357,679	0	0	525,935
Child Care	0	0	0	0	525,395	0	0	0	0	525,935
Parking	0	360,952	1,209,859	1,163,376	3,388,729	674,484	974,466	88,617	295,202	8,155,684
Estimated building energy uses include site end uses, such as outdoor lighting.										

2 Peak energy demand estimate

Peak energy demand was estimated using the proposed square footages and program- and climate-specific ASHRAE 90.1-2013 compliant DOE reference building energy models. Peak energy use was estimated for both the proposed project and the project variant.

Table 3: Estimated peak energy demand

Peak load (MMBtu/h)	Proposed project	Project variant
Heating	3.9	4.1
Cooling	6.3	6.6
Electric	4.1	4.4
Total	**14.3**	**15.1**

3 Energy use from water

Project water demand was estimated from square footages and projected occupancy, and code-compliant plumbing fixture types and irrigation levels using the SFPUC's preferred tool for project water use estimation, and consistent with the Water Supply Assessment for this project. Indoor and outdoor electricity intensity factors were obtained from the 2006 CEC report, "Refining Estimates of Water-Related Energy Use in California"[2]. These factors are reported in the units of kWh per million gallons (MG) of water used and specific to northern California. These intensity factors represent the electricity required to: (1) supply and convey water from source to site; (2) treat the water to usable standards; (3) distribute the water to individual users. The indoor intensity factor includes the electricity required to process resultant wastewater.

Table 4: Estimated energy use from water

Use Type	**Water demand (gal/yr)**	**Resultant electricity use (kWh/yr)**
Commercial fixtures	422,000	2,280
Residential fixtures	17,125,000	92,663
HVAC/Cooling	1,995,000	10,795
Landscape Irrigation	1,626,000	5,689
Total	**21,167,000**	**111,430**

Table 5: Estimated energy use from water under project variant

Use Type	**Water demand (gal/yr)**	**Resultant electricity use (kWh/yr)**
Commercial fixtures	229,000	1,238
Residential fixtures	22,398,000	121,194
HVAC/Cooling	1,995,000	10,795
Landscape Irrigation	1,626,000	5,689

[2] "Refining Estimates of Water-Related Energy Use in California." California Energy Commission (CEC), 2006. CEC-500-2006-118. Retrieved from www.energy.ca.gov on 9 January, 2018.

Total	**26,247,000**	**138,915**

4 Waste volume estimates

Residential waste volume was estimated based on the project unit counts, while commercial waste volume was estimated based on program square footages. Program-specific waste generation and diversion rates were then applied to estimate waste volumes. The environmental impacts associated with the project waste generation was estimated using factors consistent with the CalEEMod methodology.[3]

Table 6: Waste volume estimates - Proposed project

Space type	Waste generated (cu. yds./day)	Total CO_2 (MT/yr)	CH_4 (MT/yr)	N_2O (MT/yr)	CO_2e (MT/yr)
Residential	18.3	5.2	0.3	0	12.9
Commercial	34	9.7	0.6	0	23.9
Total	**52.5**	**14.9**	**0.9**	**0**	**36.8**

Table 7: Waste volume estimates – Project variant

Space type	Waste generated (cu. yds./day)	Total CO2 (MT/yr)	CH4 (MT/yr)	N2O (MT/yr)	CO2e (MT/yr)
Residential	19.8	5.6	0.3	0	13.9
Commercial	25.5	7.2	0.4	0	17.9
Total	**45.3**	**12.8**	**0.7**	**0**	**31.8**

[3] California Air Pollution Control Officers Association (2013). *Appendix A: Calculation Details for CalEEMod.* Retrieved from: http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf.

5 Projected renewable energy output

The projected energy output was estimated for both rooftop solar photovoltaics and rooftop solar hot water based on the proposed design. PV Watts[4] was used to calculate energy production from rooftop solar photovoltaics, assuming SUNPOWER panels[5]. The T*SOL[6] tool was used to calculate the solar hot water energy production from rooftop solar tubes, assuming Ritter tubes.[7]

Table 8: Projected renewable energy production based on proposed design

Building	Proposed total solar equipment area (ft^2)	Estimated PV energy output (kWh/yr)	Estimated solar hot water energy output (MMBtu/yr)
Center Bldg. A	0	0	0
Center Bldg. B	2,597	53,047	82
Plaza A Bldg.	12,190	233,317	380
Plaza B Bldg.	11,812	242,898	384
Walnut Bldg.	19,771	409,783	635
Masonic Bldg.	0	0	0
Euclid Bldg.	9,036	187,224	289
Laurel Dup.	6,384	115,710	207
Mayfair Bldg.	3,550	73,649	107
Total	65,340	1,315,626	2,084
The proposed solar area is roughly 35% of total roof area, with 30% of total roof area photovoltaic and 5% of total roof area solar hot water. Potential renewable energy production under the project variant is the same as in the proposed project.			

The roof area allocated to solar equipment is consistent between the proposed project and the project variant; therefore, the estimated renewable energy production in the proposed case remains the same under the variant.

[4] National Renewable Energy Lab. PVWatts v5.3.8. pvwatts.nrel.org.

[5] SUNPOWER: SPR-E20-435-COM SPR-E19-410-COM. Efficiency: 19%. Module area: 21.5 ft^2.

[6] Valentin Software. T*SOL Dynamic Thermal Simulation Software v5.5. www.valentin-software.com.

[7] Ritter CPC 14 XL (Gross surface area: 28.2 ft^2)

6 Energy savings estimates from energy efficiency

Beginning with the projected energy use estimated above, the Snapshot Efficiency tool was used to assess the potential savings from combinations of twenty different energy conservation measures (ECMs). The top five most impactful ECMs were identified for each space type, as well as the resulting percent energy saved. The percent savings were applied to each of the energy consumption values reported elsewhere in this report.

Table 9: Identified energy conservation measures by space type

Use type	**Identified energy conservation measures**
Residential	Reduce Domestic Hot Water (DHW) consumption. Reduce equipment power density. Increase residential water heater efficiency. Increase lighting efficacy. Increase cooling efficiency.
Office	Increase lighting efficacy. Increase commercial boiler efficiency. Reduce equipment power density. Reduce DHW consumption. Reduce window SHGC.
Retail	Increase lighting efficacy. Increase commercial boiler efficiency. Reduce equipment power density. Reduce DHW consumption. Integrate natural ventilation strategies.
Child Care	Increase lighting efficacy. Reduce equipment power density. Increase commercial boiler and residential water heater efficiency. Reduce window SHGC. Integrate natural ventilation strategies.
Parking	Increase lighting efficacy.
ECMs are ranked from most to least impactful for each space type.	

Table 10: Total estimated project site annual energy use

Energy Conservation Measures Excluded		Energy Conservation Measures Included	
Energy Use	**Site Total (kBtu/yr)**	**Site Total (kBtu/yr)**	**Estimated savings (%)**
Heating	**10,854,013**	**10,638,137**	**2**
Residential	9,928,299	9,239,299	0
Office	371,012	330,377	11
Retail	1,101,126	922,059	16
Child Care	92,576	96,402	-4
Parking	0	0	0
Cooling	**1,084,440**	**685,450**	**37**
Residential	984,507	619,287	37
Office	46,917	23,458	50
Retail	34,368	29,829	13
Child Care	18,648	12,876	31
Parking	0	0	0
Electricity	**25,609,409**	**16,497,970**	**36**
Residential	12,735,073	8,349,612	34
Office	1,042,043	684,671	46
Retail	3,379,668	1,823,699	36
Child Care	416,146	265,273	34
Parking	8,036,479	5,374,715	33
Total	**37,547,861**	**27,821,558**	**26**
Residential	23,008,879	18,258,197	21
Office	1,459,971	1,038,506	29
Retail	4,515,162	2,775,588	39
Child Care	527,371	374,551	29
Parking	8,036,479	5,374,715	33

Table 11: Total estimated project site energy annual use under Project variant

Energy Conservation Measures Excluded		ECMs Included	
Energy Use	**Site Total (kBtu/yr)**	**Site Total (kBtu/yr)**	**Estimated savings (%)**
Heating	**12,104,102**	**11,947,129**	**1**
Residential	11,023,050	11,023,050	0
Retail	1,101,126	827,940	16
Child Care	92,324	96,139	-4
Parking	0	0	0
Cooling	**1,217,713**	**774,496**	**36**
Residential	1,168,255	734,870	37
Retail	30,860	26,784	13
Child Care	18,598	12,841	31
Parking	0	0	0
Electricity	**26,717,327**	**17,264,515**	**35**
Residential	15,111,942	9,907,980	34
Retail	3,034,688	1,637,545	46
Child Care	415,013	264,551	34
Parking	8,155,684	5,454,439	33
Total	**40,039,142**	**29,986,139**	**25**
Residential	27,303,247	21,665,900	21
Retail	4,054,276	2,492,269	39
Child Care	525,935	373,532	29
Parking	8,155,684	5,454,439	33

AGENDA ITEM
Public Utilities Commission
City and County of San Francisco

DEPARTMENT Water Enterprise AGENDA NO. **11**

MEETING DATE June 13, 2017

Approve Water Supply Assessment: Regular Calendar
Project Manager: Paula Kehoe

Approve Water Supply Assessment for the 3333 California Street Project

Summary of Proposed Commission Action:	**Approve** the Water Supply Assessment (WSA) for the proposed 3333 California Street Project, pursuant to the State of California Water Code Section 10910 *et seq.* and California Environmental Quality Act (CEQA) Section 21151.9 and CEQA Guidelines Section 15155.
Background:	Water Code Sections 10910-10915 provide a nexus between the regional land use planning process and the environmental review process. The law also reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. The core of this law is the requirement for a public water system to prepare a water supply assessment (WSA) of whether available water supplies are sufficient to serve the demand generated by projects of a specified size ("water demand projects"), as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under a range of hydrologic conditions. The WSA is required within 90 days of the time the public water system receives a request for such assessment from the lead agency preparing an environmental impact report (EIR) or negative declaration under CEQA. The Planning Department, which carries out the City's lead agency responsibilities under CEQA, is preparing an EIR for the proposed project and has identified the proposed project as a water demand project. The content of a WSA is specified by the Water Code and includes identification of any existing water supply entitlements or contracts, and detailed information about groundwater supplies. It assesses the adequacy of water supplies to serve the proposed project and cumulative demand. The WSA must be completed by the public water supplier that would serve the project and be approved by its governing body at a public meeting. Approval of a WSA is not approval of the development

APPROVAL: _____

COMMISSION SECRETARY Donna Hood

Agreement: Approve Water Supply Assessment for the 3333 California Street Project
Commission Meeting Date: June 13, 2017

	project for which the WSA is prepared. A WSA is an informational document required to be prepared for use in the City's environmental review of a project under CEQA. The attached WSA prepared by San Francisco Public Utilities Commission (SFPUC) staff analyzes the sufficiency of long-term water supplies to serve the proposed project and cumulative development and concludes that there are adequate short-term and long-term water supplies to provide water service to the Project in compliance with the State Water Code requirements.
Result of Inaction:	A delay in approving this agenda item will result in the inability of the San Francisco Planning Department to complete the environmental review for the proposed 3333 California Street Project. Under CEQA Guidelines Section 15155, the SFPUC may, within 90 days of the request for the WSA from Planning, request a reasonable extension of time to complete the WSA.
Description of Action:	Approve the WSA for the proposed 3333 California Street Project, pursuant to the State of California Water Code 10910.
Environmental Review:	Approval of the WSA is not a project under CEQA as the WSA is an informational document prepared for the CEQA process and is not an approval of the Project.
Recommendation:	SFPUC staff recommends that the Commission adopt the resolution.
Attachment:	1. Water Supply Assessment for the 3333 California Street Project

PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. _____

WHEREAS, Under the California Environmental Quality Act (CEQA) and State Water Code (Section 10910(g)(1)), the San Francisco Public Utilities Commission (SFPUC) is required to prepare and approve a Water Supply Assessment (WSA) for the 3333 California Street Project's cumulative water demands; and

WHEREAS, A WSA is an informational document that assesses the adequacy of water supplies to serve a project and is required to be prepared as part of the CEQA environmental review process; and

WHEREAS, As an informational document, approval of the WSA is not a project under CEQA and is not an approval of the 3333 California Street Project; and

WHEREAS, A WSA must be approved at a public meeting by the governing body of the public water supplier that would serve the project; and

WHEREAS, The SFPUC staff prepared a WSA for the 3333 California Street Project, which concluded that the SFPUC has adequate water supplies to meet the Project's water demands through 2040; now, therefore, be it

RESOLVED, This Commission approves the Water Supply Assessment for the 3333 California Street Project, pursuant to the State of California Water Code 10910(g).

I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of June 13, 2017.

_____

Secretary, Public Utilities Commission

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

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May 17, 2017

TO: Commissioner Anson Moran, President
Commissioner Ike Kwon, Vice President
Commissioner Ann Moller Caen
Commissioner Francesca Vietor
Commissioner Vince Courtney

THROUGH: Harlan L. Kelly, Jr., General Manager

FROM: Steven R. Ritchie, Assistant General Manager, Water

RE: Water Supply Assessment for the 3333 California Street Project

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1.0 Summary

1.1 Introduction

Under the Water Supply Assessment law (Sections 10910 through 10915 of the California Water Code), urban water suppliers like the San Francisco Public Utilities Commission (SFPUC) must furnish a Water Supply Assessment (WSA) to the city or county that has jurisdiction to approve the environmental documentation for certain qualifying projects (as defined in Water Code Section 10912 (a)) subject to the California Environmental Quality Act (CEQA). The WSA process typically relies on information contained in a water supplier's Urban Water Management Plan (UWMP), and involves answering specific questions related to the estimated water demand of the proposed project. This memo serves as the WSA for the proposed 3333 California Street Project ("proposed project"), for use in the preparation of an environmental impact report by the City and County of San Francisco Planning Department (case no. 2015.014028ENV, San Francisco Planning Department).

1.1.1 2015 Urban Water Management Plan

The SFPUC's most current UWMP is the UWMP update for 2015, which was adopted in June 2016. The water demand projections in the UWMP incorporated 2012 Land Use Allocation (LUA 2012) housing and employment growth projections from the San Francisco Planning Department.

The WSA for a qualifying project within the SFPUC's retail service area may use information from the UWMP. Therefore, ***the 2015 UWMP is incorporated via references throughout this WSA shown in bold, italicized text.*** The UWMP may be accessed at www.sfwater.org/uwmp.

1.1.2 Basis for Requiring a WSA for the Proposed Project

The proposed project has not been the subject of a previous WSA, nor has it been part of a larger project for which a WSA was completed. The proposed project qualifies for preparation of a WSA under Water Code Section 10912(a) because it is a mixed-use residential development that includes more than 500 dwelling units. The proposed project is characterized further in Section 1.2.

1.1.3 Conclusion of this WSA

In this WSA, the SFPUC concludes that there are adequate water supplies to serve the proposed project and cumulative retail water demands during normal years, single dry years, and multiple dry years over a 20-year planning horizon from 2020 through 2040. Additional information on supply sufficiency is provided in Section 4.2, Findings.

1.2 Proposed Project Description

The Prado Group, Inc. and SKS Partners, LLC are proposing to redevelop the 10.25-acre parcel at 3333 California Street in the northwest portion of San Francisco from an office and parking use to a mix of residential, retail, commercial office, child care, and parking uses. It is currently used as the University of California San Francisco (UCSF) Laurel Heights Campus and is developed with two structures, three surface parking lots, two circular garage ramp structures, internal roadways and landscaping or landscaped open space.

Overall, the proposed project would entail the removal of approximately 376,000 gross square feet (gsf) of office uses with approximately 49,999 gsf relocated to the proposed Walnut Building. The proposed project would include 558 dwelling units within 818,247 gsf of residential floor area. The proposed project would provide 49,999 gsf of commercial office floor area; 54,967 gsf of retail floor area; and a 14,620-gsf child care center use. Up to 898 vehicle parking spaces, including ten car share spaces, would be provided in multiple garages with up to three subterranean levels totaling approximately 435,767 gsf. Additionally, the proposed project would develop approximately 53 percent of the overall lot area (approximately 236,900 square feet – excluding green roofs) with a combination of public and private open spaces including: Euclid Park, Cypress Square, Mayfair Walk, and Walnut Walk.

The project sponsor is considering a variant to the proposed project, referred to as the Mixed-Use Senior Housing Variant. This variant would allow for the development of 744 dwelling units on the project site; an increase of 186 dwelling units over the number in the proposed project. The approximately 49,999 gsf of commercial office space in the proposed Walnut Building would be changed to a residential use. Overall, approximately 1,473,001 gsf of new and rehabilitated space, comprising approximately 972,167 gsf of residential floor area; approximately 47,407 gsf of ground floor retail spaces; and approximately 14,620 gsf of childcare center space would be developed under the variant. Up to 871 vehicle parking spaces, including ten car share spaces would be provided in multiple garages with up to three subterranean levels totaling approximately 438,807 gsf. Approximately 236,900 square feet of publicly accessible and private open space would be provided throughout the site. Under this variant, the footprints of the other proposed new buildings would not change.

Construction of the proposed project, or its variant, would be phased. The preliminary construction plan would include four overlapping construction phases and is subject to change. Project construction would commence in 2020 and would occur within a maximum development period of 10 years.

Further details on both the proposed project and the Mixed-Use Senior Housing Variant are provided in Attachment B. However, for the purpose of the WSA, only the Mixed-Use Senior Housing Variant is assessed for water supply as it would result in the most conservative water demand estimate and would encompass the demands estimated for the proposed project.

2.0 Water Supply

This section reviews San Francisco's existing and planned water supplies.

2.1 Regional Water System

See ***Section 3.1 of the UWMP*** for descriptions of the Regional Water System (RWS) and ***Section 6.1 of the UWMP*** for water rights held by City and County of San Francisco and the SFPUC Water System Improvement Program (WSIP).

2.2 Existing Retail Supplies

Retail water supplies from the RWS are described in ***Section 6.1 of the UWMP***.

Local groundwater supplies, including the Westside Groundwater Basin, Central Groundwater Sub Basin, and Sunol Filter Gallery Subsurface Diversions, are described in ***Section 6.2.1 of the UWMP***.

Local recycled water supplies, including the Harding Park Recycled Water Project and Pacifica Recycled Water Project, are described in ***Section 6.2.1 of the UWMP***.

2.3 Planned Retail Water Supply Sources

The San Francisco Groundwater Supply Project is described in ***Section 6.2.2 of the UWMP***.

The proposed Westside and Eastside Recycled Water Projects, as well as non-potable water supplies associated with onsite water systems implemented in compliance with San Francisco's Non-potable Water Ordinance (Health Code Chapter 12C), are also described in ***Section 6.2.2 of the UWMP***.

2.4 Summary of Current and Future Retail Water Supplies

A breakdown of water supply sources for meeting SFPUC retail water demand through 2040 in normal years is provided in ***Section 6.2.5 of the UWMP***.

2.5 Dry-Year Water Supplies

A description of dry-year supplies developed under WSIP is provided in ***Section 7.2 of the UWMP***. Other water supply reliability projects and efforts that are currently underway or completed are described in ***Section 7.4 of the UWMP***. A breakdown of water supply sources for meeting SFPUC retail water demand through 2040 in multiple dry years are provided in ***Section 7.5 of the UWMP***. For a single dry year, the retail RWS allocation and, thus, the breakdown of water supply sources would be the same as those in a normal year.

3.0 Water Demand

This section reviews the climatic and demographic factors that may affect San Francisco's water use, projected retail water demands, and the demand associated with the proposed project.

3.1 Climate

San Francisco has a Mediterranean climate. Summers are cool and winters are mild with infrequent rainfall. Temperatures in the San Francisco area average 57 degrees Fahrenheit annually, ranging from the mid-40s in winter to the upper 60s in late summer. Strong onshore flow of wind in summer keeps the air cool, generating fog through September. The warmest temperatures generally occur in September and October. Rainfall in the San Francisco area averages about 22 inches per year and is generally confined to the "wet" season from late October to early May. Except for

occasional light drizzles from thick marine stratus clouds, summers are nearly completely dry. A summary of the temperature and rainfall data for the City of San Francisco is included in Table 1.

Table 1: San Francisco Climate Summary

Month	Average Maximum Temperature (°F)	Average Minimum Temperature (°F)	Average Monthly Rainfall (inches)
January	58.0	45.7	4.36
February	60.3	47.3	4.41
March	61.4	48.1	2.98
April	62.3	49.1	1.38
May	63.2	50.9	0.68
June	64.8	52.7	0.18
July	65.6	54.3	0.02
August	66.6	55.3	0.06
September	68.1	55.0	0.19
October	67.8	53.3	1.04
November	61.2	48.1	2.85
December	58.3	45.9	4.33
Annual Average	**63.3**	**50.6**	**22.45**

Source: Western Regional Climate Center (www.wrcc.dri.edu), 1981-2010 data from two San Francisco monitoring stations (Mission Dolores/SF#047772 and Richmond/SF#047767).

3.2 Projected Growth

Projections of population growth in the retail service area through 2040 are presented in ***Section 3.2.2 of the UWMP***. The corresponding LUA 2012 projections for housing and employment in San Francisco, which are incorporated into the projected retail water demands, are provided in ***Appendix E of the UWMP***.

3.3 Projected Retail Water Demands

For the 2015 UWMP, the SFPUC developed a new set of models that incorporate socioeconomic factors to project retail demands through 2040. These models incorporate the latest housing and employment projections from LUA 2012. ***See Section 4.1 of the UWMP*** for tabulated retail water demand projections through 2040 and a description of the model methodology.

3.4 Proposed Project Water Demand

Prado Group, Inc. and SKS Partners, LLC provided a memo describing the methods and assumptions used to estimate the water demand of the proposed project, along with the resulting demand (Attachment B). The SFPUC reviewed the memo to ensure that the methodology is appropriate for the types of proposed water uses, the assumptions are valid and thoroughly documented along with verifiable data sources, and a professional standard of care was used. The SFPUC concluded that the demand estimates are reasonable. Water demand associated with the proposed project over the 20-year planning horizon is shown in the following table.

Table 2: Water Demand Based on Project Phasing

Demand of Proposed Project (mgd)	2020	2025	2030	2035	2040
Potable Demand	–	0.050	0.053	0.053	0.053
Non-potable Demand	–	0.019	0.020	0.020	0.020
Total Demand	–	0.069	0.073	0.073	0.073

mgd = million gallons per day

Notes:
Construction would occur over four overlapping phases commencing in 2020 (subject to change). Phases 1 is estimated to be completed in 2022, Phase 2 in 2023, Phase 3 in 2025, and Phase 4 in 2027.

The estimates above reflect the Mixed-Use Senior Housing Variant. Water demand estimates for the proposed project are slightly lower and are provided in Attachment B.

The San Francisco Planning Department has determined that the proposed project is encompassed within the projections presented in LUA 2012 as indicated in the letter from the Planning Department to the SFPUC (Attachment A). Therefore, the demand of the proposed project is also encompassed within the San Francisco retail water demands that are presented in ***Section 4.1 of the UWMP***, which considers retail water demand based on the LUA 2012 projections. The following table shows the demand of the proposed project relative to total retail demand.

Table 3: Proposed Project Demand Relative to Total Retail Demand

	2020	2025	2030	2035	2040
Total Retail Demand (mgd)[1]	77.5	79.0	82.3	85.9	89.9
Total Demand of Proposed Project (mgd)	–	0.069	0.073	0.073	0.073
Portion of Total Retail Demand[2]	–	0.09%	0.09%	0.08%	0.08%

Notes:
1. Retail water demands per ***Table 4-1 of the UWMP***.
2. The proposed project is accounted for in the LUA 2012 projections and subsequent retail water demand projections.

4.0 Conclusion

4.1 Comparison of Projected Supply and Demand

Section 7.5 of the UWMP compares the SFPUC's retail water supplies and demands through 2040 during normal year, single dry-, and multiple dry-year periods. See Table 4, below, which is adapted from the UWMP (Table 7-4). As explained previously in Section 3.4, water demands associated with the proposed project are already captured in the retail demand projections presented in the UWMP. The proposed project is expected to represent up to 0.09 percent of the total retail water demand.

Table 4: Projected Supply and Demand Comparison (mgd)

		Normal Year	Single Dry Year[1]	Multiple Dry Years		
				Year 1[1]	Year 2[2]	Year 3[2]
2020	Total Retail Demand[3]	77.5	77.5	77.5	77.5	77.5
	Total Retail Supply[4]	77.5	77.5	77.5	77.5	77.5
	Surplus/(Deficit)	0	0	0	0	0
2025	Total Retail Demand[3]	79.0	79.0	79.0	79.0	79.0
	Total Retail Supply[4]	79.0	79.0	79.0	79.0	79.0
	Surplus/(Deficit)	0	0	0	0	0
2030	Total Retail Demand[3]	82.3	82.3	82.3	82.3	82.3
	Total Retail Supply[4]	82.3	82.3	82.3	82.3	82.3
	Surplus/(Deficit)	0	0	0	0	0
2035	Total Retail Demand[3]	85.9	85.9	85.9	85.9	85.9
	Total Retail Supply[4]	85.9	85.9	85.9	85.9	85.9
	Surplus/(Deficit)	0	0	0	0	0
2040	Total Retail Demand[3]	89.9	89.9	89.9	89.9	89.9
	Total Retail Supply[4]	89.9	89.9	89.9	88.8	88.8
	Surplus/(Deficit)	0	0	0	(1.1)	(1.1)

Notes:
1. During a single dry year and multiple dry year 1, a system-wide shortage of 10% is in effect. Under the Water Shortage Allocation Plan (WSAP), the retail supply allocation at this stage of shortage is 36.0% of available RWS supply, or 85.9 mgd. However, due to the Phased WSIP Variant, only 81 mgd of RWS supply can be delivered. RWS supply is capped at this amount.
2. During multiple dry years 2 and 3, a system-wide shortage of 20% is in effect. Under the WSAP, the retail supply allocation at this stage of shortage is 37.5% of available RWS supply, or 79.5 mgd. RWS supply is capped at this amount.
3. Total retail demands correspond to those in ***Table 4-1 of the UWMP***, and reflect both passive and active conservation, as well as water loss.
4. Total retail supplies correspond to those in ***Table 6-7 of the UWMP***. Procedures for RWS allocations and the WSAP are described in ***Section 8.3 of the UWMP***. Groundwater and recycled water are assumed to be used before RWS supplies to meet retail demand. However, if groundwater and recycled water supplies are not available, up to 81 mgd, or the corresponding capped amount in dry years, of RWS supply could be used.

The LUA 2012 projections result in a retail demand in 2035 of 85.9 mgd, which represents a 5.0 mgd, or 6 percent, increase over the 2035 demand projected in the 2010 UWMP. The ability to meet the demand of the retail customers is in large part due to development of 10 mgd of local WSIP supplies, including conservation, groundwater, and recycled water. These supplies are anticipated to be fully implemented over the next 10 to 15 years.

If planned future water supply projects (i.e., San Francisco Groundwater Supply Project, Westside Recycled Water Project, Eastside Recycled Water Project, and onsite non-potable supplies) are not implemented, normal-year supplies may not be enough to meet projected retail demands. To balance any water supply deficits during normal years, the SFPUC may import additional water from the RWS beyond the retail allocation of 81 mgd, with mitigation implemented by the SFPUC and potential environmental surcharges if RWS deliveries exceed the 265 mgd interim supply limitation.

If dry-year supply projects (i.e., Calaveras Dam Replacement Project, Lower Crystal Springs Dam Improvements Project, Alameda Creek Recapture, Regional

Groundwater Storage and Recovery Project, and water transfers) are not implemented, existing dry year supplies may not be enough to meet projected retail demands. To balance any water supply deficits during dry years, the SFPUC may reduce system deliveries and impose customer rationing.

The SFPUC remains committed to meeting the level of service goals and objectives outlined under WSIP. In addition, the SFPUC continues to explore other future supplies, including:

- Development of additional conservation and recycling.
- Development of additional groundwater supplies.
- Securing of additional water transfer volumes.
- Increasing Tuolumne River supply.

4.2 Findings

Regarding the availability of water supplies to serve the proposed project beginning in 2022, the SFPUC finds, based on the entire record before it, as follows:

- During normal years, single dry years, and multiple dry years, the SFPUC has sufficient water supplies to serve the proposed project.
- With the addition of planned retail supplies, the SFPUC has sufficient water supplies available to serve its retail customers, including the demands of the proposed project, existing customers, and foreseeable future development.

Approval of this WSA by the Commission is not equivalent to approval of the development project for which the WSA is prepared. A WSA is an informational document required to be prepared for use in the City's environmental review of a project under CEQA. It assesses the adequacy of water supplies to serve the proposed project and cumulative demand.

Furthermore, this WSA is not a "will serve" letter and does not verify the adequacy of existing distribution system capacity to serve the proposed project. A "will serve" letter and/or hydraulic analysis must be requested separately from the SFPUC City Distribution Division to verify hydraulic capacity.

If there are any questions or concerns, please contact Steve Ritchie at (415) 934-5736 or SRitchie@sfwater.org.

Attachment A –

Communications from San Francisco Planning Department

SAN FRANCISCO
PLANNING DEPARTMENT

MEMO

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DATE: June 13, 2013

TO: SF Planning EP Planners & SFPUC Planners

FROM: Scott T. Edmondson, AICP; Aksel Olsen

RE: Project Types Represented in the Land Use Allocation

This Memorandum explains the Planning Department's Land Use Allocation (LUA) and the types of projects included in the LUA. The 2012 LUA is the most recent update and uses the Association of Bay Area Governments' (ABAG) May 2012 Jobs-Housing Connection Scenario. As this memorandum explains, the Planning Department expects that the LUA will encompass the vast majority of development proposals that project sponsors will present to the Planning Department. This memorandum also identifies possible unusual circumstances under which EP Planners and the SF PUC Planners may want to consult further with the Planning Department's Information and Analysis Group to determine whether a project is encompassed within the LUA.

ABAG's Projections of San Francisco's Economic Growth and the LUA

The LUA takes ABAG's 30-year projections of citywide household and job growth and allocates them to smaller geographic units, in this case, the traffic analysis zones of the SF Transportation Authority's Countywide Transportation Model. Thus, the LUA does not project growth but simply allocates ABAG's growth projections to subarea locations within the city. The current 2012 LUA uses ABAG's Jobs-Housing Connection Scenario projections for San Francisco and covers the period from 2010 to 2040; these projections were released in May 2012 and are represented in five-year increments.

ABAG derives its demographic and economic growth projections from assumptions about long-term demographic and economic growth.[1] ABAG maintains its own set of regional models and develops each forecast with its in-house experts and private economic consultants.[2] The forecasting is informed by the best information and assumptions available through federal and State agencies, such as the State Department of Finance, and private sources. However, ABAG develops its forecast based on local knowledge from over 50 years of forecasting and develops the forecast to reflect local conditions in contrast to more general forecasting assumptions of State or federal sources. ABAG's estimate of total citywide growth for the 30-year period is expected to best represent actual growth at the end of the 30-year period. However, projected growth for any portion of the projection period, such as growth in a one-year or a five-year period, would be expected to vary from actual growth in such periods. Within the 30-year growth projection period, higher than average growth periods could be followed by lower than average growth periods such that growth over the period would ultimately equal the projected 30-year

total. All projection methodologies make assumptions based on the best available information at the time. To minimize the effects of imprecision intrinsic to any projections methodology when used in for planning decisions, ABAG follows professional best practices and updates its projections every two years. Accordingly, the Planning Department updates its LUA every two years. The planning practice of frequently updating projections and plans allows the incorporation of new information over time to provide for the most up-to-date projections.

The SFPUC updates its Urban Water Management Plan (UWMP) every five years. The UWMP typically relies on LUA projections or similar information. But, because the LUA is updated every two years, the SFPUC may want to review the LUA issued within SFPUC's 5-year UWMP cycle; and if it varies in a significant way from the SFPUC's projections used in its UWMP, discuss with Planning whether it should make any changes in its own water supply needs assessment during an UWMP cycle.

Types of Projects Included in the LUA

The LUA translates ABAG's projected household and job growth into total expected development in San Francisco over a 30-year period. The LUA translates ABAG's household growth into residential housing units and ABAG's job growth into commercial space.[3] Thus, the LUA projections of housing units and commercial space include all project types expected from San Francisco growth, such as housing, office, retail, production-distribution-repair (PDR), visitor, and cultural-institutional-educational (CIE). The LUA does not exclude any project type or potential growth. As such, the LUA and the ABAG economic projections upon which it is based contain the best estimates available of reasonably foreseeable growth and development in San Francisco over a 30-year period.

Unusual Circumstances

The LUA can be considered to include all reasonably expected growth and development and it is frequently updated to correct for expected variations. Nevertheless, there are possible unusual circumstances under which the EP Planners or SFPUC Planners may want to request further Planning Department consultation with the Information and Analysis Group to determine if a particular project falls within the LUA. ABAG's projections and the Department's LUA take into account urban economic trends and based on that information capture all reasonably foreseeable growth in San Francisco. Limited capital and aggregate demand of any urban economy constrains growth. However, occasionally the reality or perception may arise that a project lies outside the normal growth constraints of the San Francisco economy for some reason, and therefore lies outside ABAG's projection's and the Department's current spatial allocation in its LUA.

One can envision the rare case of a project arising outside the City's economy (demand and capital) from an organization not located in San Francisco using nonprofit foundation funds or private donations to construct a large institutional project in San Francisco, such as a major hospital, a university, or an office complex. These projects would represent spending and demand beyond that normally active in the San Francisco economy, and therefore represent net additions to projected growth beyond that captured by ABAG's projections and reflected in the Department's LUA. Indicative characteristics of such projects

would include those with non-local sponsors, of large size, and for an institutional land use. Alternatively, very large project proposals from local project sponsors active in the SF economy involving a large site, land assembly, a planned unit development (PUDs), master plans, or area plan and rezoning proposals may warrant individual assessment for a range of reasons even though they are likely captured in ABAG's projections and the LUA. Such projects would be similar to recent projects such as Hunters Point/Candlestick, Park Merced, Treasure Island, Pier 70 Master Plan, Eastern Neighborhoods, or the Transit Center District Plan.

The bi-annual update of ABAG's projections and the LUA would be able to capture development associated with such projects. However, should such a project be proposed between updates, the EP Planners and SFPUC could treat its appearance as sufficient cause to request the Planning Department's assistance in determining whether to consider the project outside the latest LUA projections.

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[1] Please see ABAG's summary of its research and forecasting on its website: http://www.abag.ca.gov/planning/research/index.html

[2] ABAG describes its current Jobs-Housing Scenario policy-based forecast here: http://onebayarea.org/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Appendices_Low_Res.pdf.

[3] The LUA citywide totals only differ slightly, up to within one percent of ABAG totals (+/-). The difference is produced by LUA's complex method of translating ABAG projections into development (residential units and commercial space) and allocating total citywide growth to subarea locations. The minor difference between the LUA and ABAG citywide totals is real in absolute terms, but not in the sense that they are different projections. The one percent difference does not constitute a difference of projections. ABAG and MTC consider variation of one percent in citywide totals, plus or minus, as sufficiently representing ABAG's projections for consistency with the MTC regional projections and modeling purposes (congestion management, etc.). Even if a few versions of the LUA must be done to make minor subarea spatial allocation corrections, as long as the LUA's citywide totals are within one percent of ABAG's projections, and ABAG's projections have not changed, the LUA citywide totals have not effectively changed either. Any of those LUA versions' citywide totals fully represent the same unchanged ABAG projection totals.

Attachment B –

3333 California Street Project Demand Memo

SAN FRANCISCO
PLANNING DEPARTMENT

MEMO

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Reception:
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DATE: May 2, 2017

TO: Fan Lau, SFPUC

FROM: Chris Thomas, Environmental Planning

CC: Deborah Dwyer, Environmental Planning

RE: 3333 California Street Project Water Supply Assessment Request (Planning Department Case No. 2015-014028ENV)

The purpose of this memorandum is to request that the San Francisco Public Utilities Commission (SFPUC) prepare a Water Supply Assessment (WSA) for the proposed 3333 California Street mixed-use residential project, in compliance with CEQA Guidelines Section 15155 and Sections 10910 through 10915 of the California Water Code. As indicated in the attached request for a Water Supply Assessment, two projects are currently under consideration: the proposed project which includes 558 dwelling units and the Senior Housing Variant which includes a total of 744 dwelling units. As indicated, both developments would also include commercial office, retail, day care and open space components.

The project sponsor has provided project information intended to meet the requirements outlined in the SFPUC guidance memo dated September 6, 2016. The project is proposed to be constructed in four phases over a 10 year period. A summary of the project description, proposed average daily water demands, and supporting tables prepared by the project sponsor's consultant (based on the SFPUC Non-Potable Water Calculator Version 5.3), are attached. Non-Potable Water Calculator spreadsheets for both the proposed project and the Senior Housing Variant are also attached.

Should you have questions or need additional information from the Planning Department or the project sponsor, please contact me at 415-575-9036 or christopher.thomas@sfgov.org.

Updated April 28, 2017

Chris Thomas
SFPUC: Water Resources Division
Non-Potable Program
525 Golden Gate Ave, 10th Floor
San Francisco, CA 94102
christopher.thomas@sfgov.org
Phone: 415-575-9036

Via Email

Re: 3333 California Street
Case File No. 2015.014028ENV

Water Supply Assessment

Dear Mr. Thomas,

The proposed redevelopment project at 3333 California Street (Block 1032 and Lot 003) is currently undergoing Environmental Review (Environmental Planner Debra Dwyer). We appreciate your review of the attached submission to ensure that the SFPUC has the necessary supporting documentation for the WSA, and it is in the proper format. We have revised the information herein based on Fan Lau's initial comments.

PROJECT DESCRIPTION

The Proposed Project would redevelop the 10.25-acre parcel at 3333 California Street in the northwest portion of San Francisco from an office and parking use to a mix of residential, retail, commercial office, child care, and parking uses. It is currently used as the University of California San Francisco (UCSF) Laurel Heights Campus and is developed with two structures, three surface parking lots, two circular garage ramp structures, internal roadways and landscaping or landscaped open space.

The Proposed Project would entail the demolition of the existing one-story annex building at the corner of California and Laurel Streets (northwest corner of the site), the demolition of the existing surface parking lots and circular garage ramp structures, and the partial demolition (approximately 49 percent) of the existing office building located at the center of the project site. The remaining portion of the existing office building would be divided into two separate residential buildings, Center Building A and Center Building B, with a two-story addition atop Center Building A and a two- to three-story addition above Center Building

B. The Proposed Project would also include the construction of 13 new buildings along the California Street, Masonic Avenue, Euclid Avenue, and Laurel Street edges:

- Two (2) four- to five-story mixed use residential buildings with ground floor retail along California Street between Laurel and Walnut Streets (the Plaza A and Plaza B Buildings);
- One (1) three-story mixed use (ground floor retail and child care) with commercial office building along California Street east of Walnut Street (the Walnut Building);
- Two (2) four- to six-story mixed use buildings along Masonic and Euclid Avenues (the Masonic and Euclid Buildings);
- Seven (7) three- to four-story townhomes along Laurel Street (the Laurel Duplexes); and
- One (1) four-story residential building near the Laurel Street and Mayfair Drive intersection (the Mayfair Building).

Overall, the Proposed Project would entail the removal of approximately 376,000 gross square feet of office uses with approximately 49,999 gsf relocated to the proposed Walnut Building. Table 1 provides a summary of the proposed changes.[1] As noted below, the Proposed Project would include 558 dwelling units within 818,247 gross square feet of residential floor area. The Proposed Project would provide 49,999 gross square feet of commercial office floor area; 54,967 gross square feet of retail floor area; and a 14,620-gross-square-foot child care center use. Up to 898 vehicle parking spaces, including ten car share spaces, would be provided in multiple garages with up to three subterranean levels totaling approximately 435,767 gsf. Estimated occupancy totals for the proposed uses were calculated using the occupant density defaults from the SFPUC Nonpotable Calculator Spreadsheet, with the exception of Phase 1 and 2 residential, which was estimated at 2.25 people/unit rather than the default value of 2.01 people/unit based on unit type mix. The total estimated occupancy counts are shown in Table 3. Additionally, the Proposed Project would develop approximately 53 percent of the overall lot area (approximately 236,900 square feet – excluding green roofs) with a combination of public and private open spaces including: Euclid Park, Cypress Square, Mayfair Walk, and Walnut Walk. The Proposed Project would also widen the adjacent sidewalks to meet the requirements of the *Better Streets Plan* and include other improvements as part of a series of proposed streetscape changes.

Table 1: Project Summary

Project Features	Existing	Existing to Be Retained	New Construction	Proposed Totals
Dwelling Units	--	--	558	**558**
Number of Buildings	2	1	13	**14**
Open Space	Yes	--	236,900 square feet	**236,900 square feet**
Parking Spaces	543 [a]	543	355	**898**
Loading Spaces	5	--	6	**6**
Bicycle Spaces	15	--	659	**659**

[1] Square footages presented are approximate.

Existing Use	Existing Gross Square Footage	Existing Uses to Be Retained (gsf)	New Construction / Additions (gsf)	Proposed Project Totals (gsf)
Office				
Office to Residential	376,000 [b]	205,356 [c]	612,891 [d]	**818,247**
Office to Office		--	49,999 [e]	**49,999**
Retail	--	--	54,967 [f]	**54,967**
Child Care	--	--	14,620 [g]	**14,620**
Structured Parking [h]	93,000	93,000	342,767	**435,767**
Total gsf	***469,000***	***298,356***	***1,075,244***	***1,373,600***

Notes:

[a] Surface (331) and garage (212) parking spaces.

[b] Total includes 349,500 gsf of office uses in the existing office building (Floors 1 through 4 and Basement Level 1), 12,500 gsf of non-office uses (storage areas) on Basement Levels 1 through 3 of the existing office building, and the 14,000-gsf annex building.

[c] Existing office building would be retained and adaptively reused as two separate residential buildings, and the annex building would be demolished.

[d] Includes the additions to the adaptively reused office building and new residential uses along California Street, Masonic Avenue, Euclid Avenue, and Laurel Street.

[e] Existing office uses would be relocated to the proposed Walnut Building.

[f] New retail uses would be developed at the ground floor of the proposed Plaza A, Plaza B, Walnut, and Euclid Buildings.

[g] New child care uses would be developed in the proposed Walnut Building.

[h] The existing three-level, partially below-grade parking garage under the eastern portion of the existing office building would be reconstructed as part of the proposed California Street Garage under the proposed Plaza A, Plaza B, and Walnut Buildings as well as the adaptively-reused Center Building B. New below-grade parking would be developed under the proposed Masonic and Euclid Buildings, the proposed Laurel Duplexes, and the proposed Mayfair Building.

Table 2: Project Unit Types

PROJECT TOTALS	JR	1-BED	2-BED	3-BED	4-BED or PH	TOTAL
Plaza A	18	22	23	4	0	67
Plaza B	9	21	25	6	0	61
Walnut	0	0	0	0	0	0
Center Bldg A	0	24	11	10	6	51
Center Bldg B	0	49	51	30	9	139
Masonic	0	27	24	10	0	61
Euclid	0	50	52	33	0	135
Laurel Duplexes	0	0	2	0	12	14
Mayfair	0	13	8	9	0	30
Total	**27**	**206**	**196**	**102**	**27**	**558**
	5%	*37%*	*35%*	*18%*	*5%*	*100%*

Table 3: Proposed Project Estimated Occupancies

	Estimated Residents	Estimated Nonresidential FTE Occupancy (including visitors)	Total
Phase 1 (est 2022)	441	41	482
Phase 2 (est 2023)	428	0	428
Phase 3 (est 2025)	257	878	1,135
Phase 4 (est 2027)	88	0	88
Full Buildout	1,214	918	2,133

PROJECT DESCRIPTION: MIXED USE SENIOR HOUSING VARIANT

The project sponsor is considering a variant to the Proposed Project, referred to as the Mixed-Use Senior Housing Variant ("variant"). This variant would allow for the development of 744 dwelling units on the project site; an increase of 186 dwelling units over the number in the Proposed Project. Under this variant, the approximately 49,999 gsf of commercial office space in the proposed Walnut Building would be changed to a residential use. In this variant, the Walnut Building would be comprised of 153,920 gsf of residential use, 18,800 gsf of retail use, 180,800 gsf of below grade garage and retain the 14,620 gsf of childcare use. The total Walnut Building in the variant would be 368,140 gsf.

Overall, approximately 1,473,001 gsf of new and rehabilitated space, comprising approximately 972,167 gsf of residential floor area; approximately 47,407 gsf of ground floor retail spaces; and approximately 14,620 gsf of childcare center space would be developed under the Mixed-Use Senior Housing Variant. Up to 871 vehicle parking spaces, including ten car share spaces would be provided in multiple garages with up to three subterranean levels totaling approximately 438,807 gsf. Approximately 236,900 square feet of publicly accessible and private open space would be provided throughout the site. Under this variant the footprints of the other proposed new buildings would not change.

Table 4: Variant Project Summary

VARIANT AREAS	Bldg	Residential Gross SF	Retail Gross SF	Commercial Gross SF	Childcare Gross SF	Garage Gross SF	TOTAL GSF
	Plaza A	66,025	12,470	0	0	60,060	138,555
	Plaza B	72,220	11,850	0	0	67,820	151,890
	Walnut	153,920	18,800	0	14,620	180,800	368,140
	Center Bldg A	89,465	0	0	0	0	89,465
	Center Bldg B	230,928	0	0	0	23,227	254,155
	Masonic	87,168	0	0	0	35,986	123,154
	Euclid	178,847	4,287	0	0	51,991	235,125
	Laurel Duplexes	49,974	0	0	0	3,720	53,694
	Mayfair	43,620	0	0	0	15,203	58,823
	Total	**972,167**	**47,407**	**0**	**14,620**	**438,807**	**1,473,001**

Table 5: Variant Project Unit Types

VARIANT UNITS						
Level	JR	1-BED	2-BED	3-BED	4-BED	TOTAL
Plaza A	18	22	23	4	0	67
Plaza B	9	21	25	6	0	61
Walnut	0	185	1	0	0	186
Center Bldg A	0	24	11	10	6	51
Center Bldg B	0	49	51	30	9	139
Masonic	0	27	24	10	0	61
Euclid	0	50	52	33	0	135
Laurel Duplexes	0	0	2	0	12	14
Mayfair	0	13	8	9	0	30
Total	27	391	197	102	27	744

Table 6: Variant Estimated Occupancies

	Estimated Residents	Estimated Nonresidential FTE Occupancy (including visitors)	Total
Phase 1 (est 2022)	441	41	482
Phase 2 (est 2023)	428	0	428
Phase 3 (est 2025)	631	599	1230
Phase 4 (est 2027)	88	0	88
Full Buildout	1,588	640	2228

PROPOSED INTEGRATED WATER MANAGEMENT APPROACH

The proposed water management approach would be applicable to both the Proposed Project and its variant and is briefly described below. The Proposed Project and its variant would comply with the requirements of City and County of San Francisco ordinances related to water conservation and resources, as applicable, including the San Francisco Green Building Ordinance, the Stormwater Management Ordinance, and the Alternate Water Supplies/Reuse Ordinance, as well as the Water Efficient Irrigation, Residential Water Conservation, and Commercial Water Conservation Ordinances.

Water Conservation

The project site is served by San Francisco's water supply system. To reduce the use of potable water on a per-unit basis, the Proposed Project would provide high-efficiency fixtures and appliances in new and existing buildings. Water wise landscaping will be employed. Nonpotable demands are intended to be met by collected rainwater and greywater treated onsite. The garage is assumed to be washed down quarterly with water-efficient waterbrooms or equivalent. The site is projected to use about 1/3 less water than a comparable development that meets the stringent CALGreen Code.

Stormwater and Wastewater

The project site is served by San Francisco's combined sewer system and is subject to the City's stormwater management requirements. The Proposed Project would reduce loading on the neighborhood stormwater infrastructure by collecting rainwater for reuse. These strategies combined with a site plan targeting over 50 percent planted area, including living roofs, should result in stormwater runoff reductions beyond the 25 percent required by the Stormwater Management Ordinance. No new or enlarged off-site wastewater collection facilities are proposed.

Water + Ecology

A site of this size has the potential to enhance the ecological assets of the neighborhood and city. The Proposed Project would preserve several major trees and greatly increase the total number of trees on the project site and the adjacent sidewalks (replacing over 200 trees including 17 street trees). The proposed landscaping plans would choose native and adapted trees and plants that reduce irrigation demands while managing stormwater.

PROPOSED CONSTRUCTION SCHEDULING AND PHASING

It is the intent of the project sponsor to phase the construction of the Proposed Project or its variant. The preliminary construction plan would include four overlapping construction phases and is subject to change. Project construction would commence in 2020 and would occur within a maximum development period of 10 years as follows:

Phase 1: Masonic and Euclid Buildings

- Duration: 30 month
- Phase would include the demolition of the existing annex building and the construction of 266,015 gsf of residential uses (196 units), 4,287 gsf of retail uses, and 87,977 gsf of garage space totaling 358,279 gsf of new construction.
- Includes Walnut Walk South and eastern portion of Euclid Park (private) and related adjacent public right of way improvements.

Phase 2: Center Buildings A and B (existing office building)

- Duration: 24 months; anticipated to commence on Month 20 of Phase 1
- Phase would include the partial demolition of the existing office building and the construction of 320,393 gsf of residential uses (190 units) and 23,227 gsf of garage space totaling 343,620 gsf of construction.
- Parking for these buildings would be programmed below Center Building B, and in the Masonic/Euclid and California Street Garages. Project sponsor plans to use valet strategies within the constructed garages or within available area on the site should the California Street Garage parking not be available at the time of occupancy.

Phase 3: California Street Buildings (Plaza A, Plaza B, and Walnut Buildings)

- Duration: 36 months; anticipated to commence on Month 15 of Phase 2

- Phase would include the construction of 138,245 gsf of residential uses (128 units), 50,680 gsf of retail uses, 49,999 gsf of office uses, 14,620 gsf of childcare space, and 305,640 gsf of garage space totaling 559,184 gsf of new construction.
- Includes Walnut Walk North, Mayfair Walk, Presidio Overlook, Pine Plaza and related adjacent public right of way improvements.

Phase 4: Mayfair Building and Laurel Duplexes

- Duration: 20 months; anticipated to commence on Month 30 of Phase 3
- Phase would include the construction of 93,594 gsf of residential uses (44 units) and 18,923 gsf of garage space totaling 112,517 gsf of new construction.
- Includes western part of Euclid Park (public) and related adjacent public right of way improvements.

The preliminary construction phasing plan would also be applicable to the variant with the exception of Phase 3. Under the variant, Phase 3 would include the development of 153,920 gsf of residential uses (186 units of senior housing), substituting for 49,999 gsf of commercial office space in the Walnut Building and 7,560 gsf of retail space in the Plaza A, Plaza B, and Walnut Buildings. Under the variant, Phase 3 garage space would increase by 3,040 gsf (from 305,640 gsf for the Proposed Project to 308,680 gsf).

WATER USE ESTIMATES

The following tables summarize the potable and nonpotable water demand estimates for the Proposed Project and the Mixed-Use Senior Housing Variant and are based off the proposed uses and the preliminary construction phasing program. These estimates are preliminary and may be refined at a later time as project designs progress. The estimates include better than code average fixture flowrates (though are conservative in that they do not take the very lowest flowrate available in all cases), and include the maximum potential living roof area contemplated as a conservative case from a water supply perspective (more irrigation, less capturable rainwater). Targeted rainwater and greywater reuse would offset about 30% of the projected use according to the SFPUC calculator tool (see Attachment A for the Proposed Project and Attachment B for the Variant). The portion of nonpotable demands anticipated to be met onsite are broken out separately from potable demand in the below estimates. Estimated water demands for the garage are not large enough to alter the significant figures in the mgd totals below.

Dry year estimates assume that irrigation and hand-watering demands increase, and do not account for additional dry year conservation by residents, though that would most likely occur (and be encouraged). Estimates by year follow calculator estimates for phases complete at the end of each shown calendar year, so the 2025 estimate includes Phases 1-3, and the 2030 and later estimates include full buildout.

Existing Usage

Site water use data provided to the project team from 2012-2014 indicate that existing usage tends to average about 20,000 gpd (0.02 mgd), with peak months averaging around 26,000 gpd (0.026 mgd). It is possible that this data set does not include 100% of the current site water demands, but we believe it does.

Proposed Project

Table 7: Proposed Project Estimated Total Water Demand Based on Water Year Type

	Normal	Single dry	Multiple 2	Multiple 3	Multiple 4
Total to be met with potable water (mgd)	0.0413	0.0415	0.0417	0.0417	0.0417
Total to be met with onsite non-potable water (mgd)	0.0183	0.0195	0.0203	0.0204	0.0204
Total estimated demand of proposed project (mgd)	0.0596	0.0610	0.0619	0.0621	0.0621

Table 8: Proposed Project Estimated Total Water Demand Based on Project Phasing

Usage at End of Year	2015	2020	2025	2030	2035
Total to be met with potable water (mgd)	0	0	0.0385	0.0413	0.0413
Total to be met with onsite non-potable water (mgd)	0	0	0.0178	0.0183	0.0183
Total estimated demand of proposed project (mgd)	0	0	0.0562	0.0596	0.0596

Mixed Use Senior Housing Variant

Table 9: Variant Estimated Total Water Demand Based on Water Year Type

	Normal	Single dry	Multiple 2	Multiple 3	Multiple 4
Total to be met with potable water (mgd)	0.0531	0.0533	0.0535	0.0535	0.0535
Total to be met with onsite non-potable water (mgd)	0.0199	0.0211	0.0218	0.0219	0.0219
Total estimated demand of Variant (mgd)	0.0729	0.0744	0.0753	0.0755	0.0755

Table 10: Variant Estimated Total Water Demand Based on Project Phasing

Usage at End of Year	2015	2020	2025	2030	2035
Total to be met with potable water (mgd)	0	0	0.0502	0.0531	0.0531
Total to be met with onsite non-potable water (mgd)	0	0	0.0193	0.0199	0.0199
Total estimated demand of Variant (mgd)	0	0	0.0695	0.0729	0.0729

If you have any questions, please feel free to reach out directly to me at 415-857-9324 or dbragg@pradogroup.com.

Best Regards,

Don Bragg
Development Director, Prado Group Inc.

Attachments: Alternate Water Supply Project Compliance: Project (3 pgs.)
Alternate Water Supply Project Compliance: Variant (3 pgs.)

cc: Debra Dwyer and Jessica Range, SF Planning Department
Peter Mye, SWCA

NON-POTABLE WATER CALCULATOR

Project Summary Sheet

Project Contact: Don Bragg
415.395.0880
dbragg@pradogroup.com

Estimated Site/Building Permit Issuance Date: 12/31/2019

Total Gross Square Footage: 937,833

1. Demands and Supplies Summary

Demands Met by Non-Potable Supply for Project (gpy):	**6,675,500**	Project is 250,000 square feet in size or greater and is not elegible for a grant
Demands Met by Non-Potable Supply for Project *:	**31%**	Achieving estimated offset may require storage to store excess monthly supplies.
Project Total Annual Water Demand (gpy) *:	**21,763,290**	
If Grant Offset Criteria Met, Occurs in Year:	**2027**	

*Note: Estimates based on Tab 6 - Building Potential Summary total water demand values. Manually entered non-potable demands that exceed auto-calculated non-potable demands from Tab 6 may result in Total Annual Water demands greater than the value used in this analysis

2. Building Information Summary

	Main Project Site 1	Site 2	Site 3
Project / Building Name:	**3333 California**	**3333 California Phase 2**	**3333 California Phases 3+4**
Project Address:	3333 California St, SanFrancisco, CA	3333 California St, SanFrancisco, CA	3333 California St, SanFrancisco, CA
Assessor's Block & Lot No. / APN:	1032/003	1032/003	1032/003
Year Online:	2027	2027	2027
Building Type:	Mixres	Resident	Mixres
Total Building Size (gross square footage or GSF):	270,302	320,393	347,138
Total Lot Size (ft^2):	178,587	89,294	178,588
Number of Residential Units:	196	190	172
Impervious Surface Above Grade (ft^2):	13,000	22,500	30,688
Impervious Surface Below Grade (ft^2):	59,225	35,535	142,140
Landscaped Area (ft^2):	64,175	20,545	118,092
Site Location (Zone):	Eastern SF	Eastern SF	Eastern SF

3. Summary of Nonpotable Demands and Supplies for the Project

Non-Potable Water Supply Estimates

On-site Alternate Water Source Supplies	Annual Supply (gpy)	Annual Supply (gpy)	Annual Supply (gpy)	Total (gpy)
Rainwater:	155,119	208,329	268,584	**632,032**
Stormwater:	0	0	0	**0**
Graywater:	2,658,821	2,576,117	2,119,487	**7,354,425**
Blackwater:	0	0	0	**0**
Foundation Drainage	0	0	0	**0**
Cooling & Other Supplies	0	0	0	**0**
TOTAL:	**2,813,940**	**2,784,445**	**2,388,071**	**7,986,456**

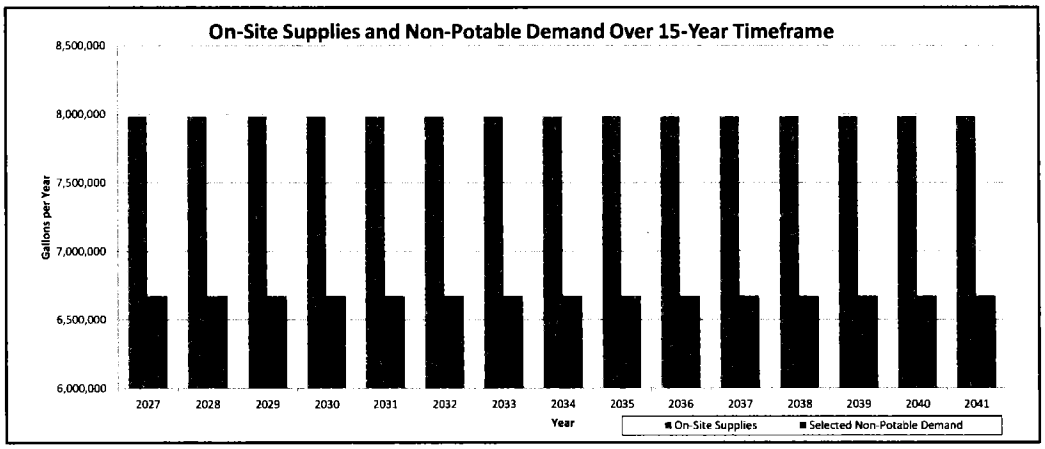
Non-Potable Applications Estimates

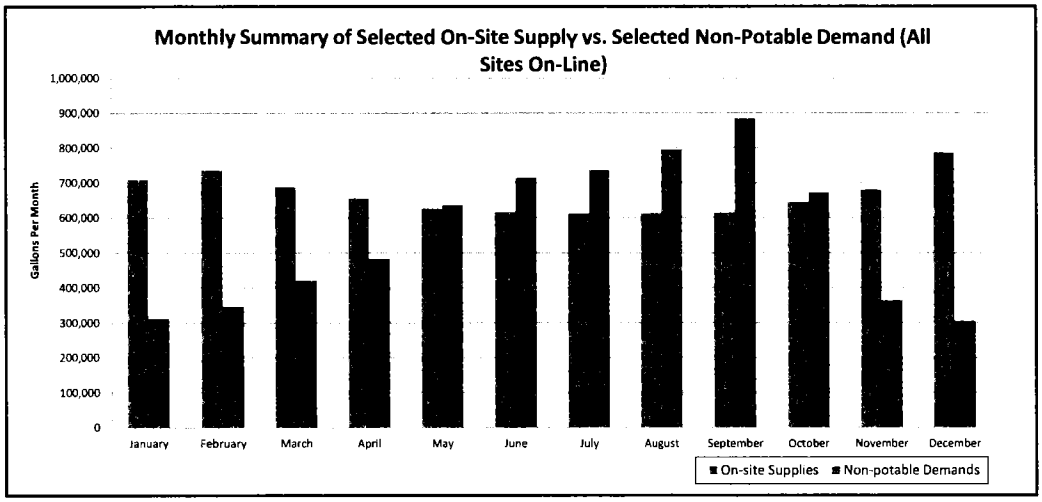
Project Specific Non-Potable Application Demands	Annual Demand (gpy)	Annual Demand (gpy)	Annual Demand (gpy)	Total (gpy)
Toilets/Urinals:	993,131	948,708	1,113,115	**3,054,954**
Irrigation:	527,048	165,008	933,479	**1,625,535**
Toilets/Urinals + Irrigation:	1,520,179	1,113,716	2,046,594	**4,680,489**
Cooling Tower:	498,750	698,250	798,000	**1,995,000**
Commercial Laundry & Other	0	0	0	**0**
Total:	**2,018,929**	**1,811,966**	**2,844,594**	**6,675,489**

4. Project Phasing

15-Year Timeframe	SITE 1: 3333 California – 3333 California St, SanFrancisco, CA		SITE 2: 3333 California Phase 2 – 3333 California St, SanFrancisco, CA		SITE 3: 3333 California Phases 3+4 – 3333 California St, SanFrancisco, CA		
	NP Offset Supplies (gpy)	Selected NP Demand (gpy)	NP Offset Supplies (gpy)	Selected NP Demand (gpy)	NP Offset Supplies (gpy)	Selected NP Demand (gpy)	Re-Used Non-Potable Supplies (gpy)
2027	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2028	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2029	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2030	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2031	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2032	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2033	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2034	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2035	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2036	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2037	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2038	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2039	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2040	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489
2041	2,813,940	2,018,929	2,784,445	1,811,966	2,388,071	2,844,594	6,675,489

This offset analysis assumes the full year of supplies is available to offset non-potable demands. Some scenarios may require storage to store excess supplies from one month in order to use those supplies in another month with unmet demands.





NON-POTABLE WATER CALCULATOR

Project Summary Sheet

Project Contact: Don Bragg
415 395 0880
dbragg@pradogroup.com

Estimated Site/Building Permit Issuance Date: 12/31/2019

Total Gross Square Footage: 1,034,194

1. Demands and Supplies Summary

Demands Met by Non-Potable Supply for Project (gpy):	7,249,500	Project is 250,000 square feet in size or greater and is not elegible for a grant
Demands Met by Non-Potable Supply for Project*:	27%	Achieving estimated offset may require storage to store excess monthly supplies.
Project Total Annual Water Demand (gpy)*:	26,617,083	
If Grant Offset Criteria Met, Occurs in Year:	2027	

*Note: Estimates based on Tab 6 - Building Potential Summary total water demand values. Manually entered non-potable demands that exceed auto-calculated non-potable demands from Tab 6 may result in Total Annual Water demands greater than the value used in this analysis

2. Building Information Summary

	Main Project Site 1	Site 2	Site 3
Project / Building Name:	3333 California	3333 California Phase 2	3333 California Phases 3+4
Project Address:	3333 California St, SanFrancisco, CA	3333 California St, SanFrancisco, CA	3333 California St, SanFrancisco, CA
Assessor's Block & Lot No. / APN:	1032/003	1032/003	1032/003
Year Online:	2027	2027	2027
Building Type:	Mixres	Resident	Mixres
Total Building Size (gross square footage or GSF):	270,302	320,393	443,499
Total Lot Size (ft^2):	178,587	89,294	178,588
Number of Residential Units:	196	190	358
Impervious Surface Above Grade (ft^2):	13,000	22,500	30,688
Impervious Surface Below Grade (ft^2):	59,225	35,535	142,140
Landscaped Area (ft^2):	64,175	20,545	118,092
Site Location (Zone):	Eastern SF	Eastern SF	Eastern SF

3. Summary of Nonpotable Demands and Supplies for the Project

Non-Potable Water Supply Estimates

On-site Alternate Water Source Supplies	Annual Supply (gpy)	Annual Supply (gpy)	Annual Supply (gpy)	Total (gpy)
Rainwater:	155,119	208,329	303,836	**667,284**
Stormwater:	0	0	0	**0**
Graywater:	2,658,821	2,576,117	4,353,731	**9,588,669**
Blackwater:	0	0	0	**0**
Foundation Drainage	0	0	0	**0**
Cooling & Other Supplies	0	0	0	**0**
TOTAL:	**2,813,940**	**2,784,445**	**4,657,567**	**10,255,953**

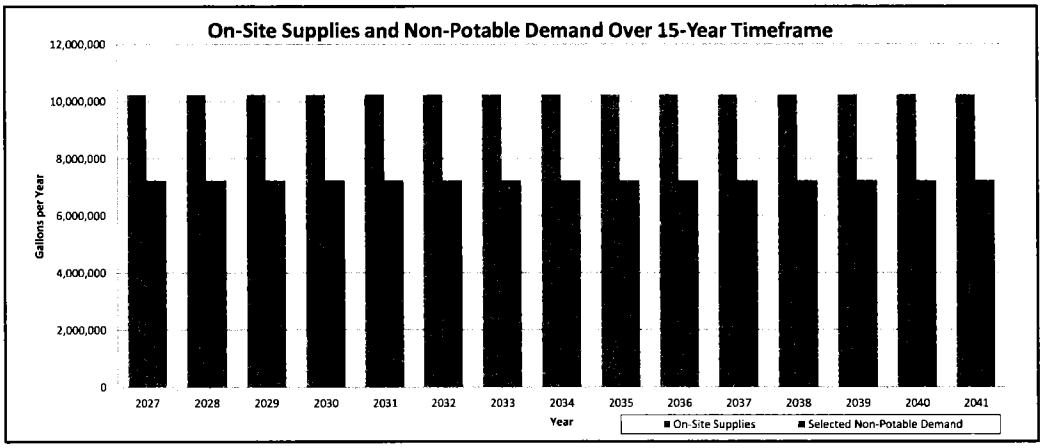
Non-Potable Applications Estimates

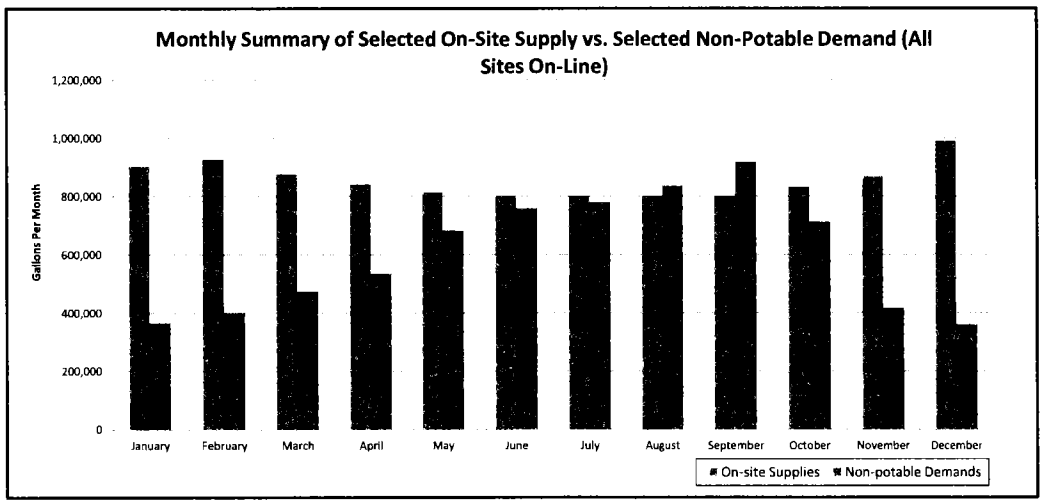
Project Specific Non-Potable Application Demands	Annual Demand (gpy)	Annual Demand (gpy)	Annual Demand (gpy)	Total (gpy)
Toilets/Urinals:	993,131	948,708	1,786,795	**3,728,634**
Irrigation:	527,048	165,008	933,479	**1,625,535**
Toilets/Urinals + Irrigation:	1,520,179	1,113,716	2,720,274	**5,354,169**
Cooling Tower:	498,750	698,250	698,250	**1,895,250**
Commercial Laundry & Other	0	0	0	**0**
Total:	**2,018,929**	**1,811,966**	**3,418,524**	**7,249,419**

4. Project Phasing

15-Year Timeframe	SITE 1: 3333 California – 3333 California St, SanFrancisco, CA		SITE 2: 3333 California Phase 2 – 3333 California St, SanFrancisco, CA		SITE 3: 3333 California Phases 3+4 – 3333 California St, SanFrancisco, CA		
	NP Offset Supplies (gpy)	Selected NP Demand (gpy)	NP Offset Supplies (gpy)	Selected NP Demand (gpy)	NP Offset Supplies (gpy)	Selected NP Demand (gpy)	Re-Used Non-Potable Supplies (gpy)
2027	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2028	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2029	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2030	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2031	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2032	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2033	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2034	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2035	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2036	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2037	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2038	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2039	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2040	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419
2041	2,813,940	2,018,929	2,784,445	1,811,966	4,657,567	3,418,524	7,249,419

This offset analysis assumes the full year of supplies is available to offset non-potable demands. Some scenarios may require storage to store excess supplies from one month in order to use those supplies in another month with unmet demands.





APPENDIX 1
RAMBOLL SUPPORTING TABLES

Table Con-1. Construction Phase Duration by Year
3333 California St AB900
San Francisco, CA

Phase	Phase Name	Start Date	End Date	Total number of work days	Construction phase duration by year[1,2]							
					2020	2021	2022	2023	2024	2025	2026	2027
1	Masonic/Euclid	3/2/2020	8/19/2022	645	34%	41%	26%	--	--	--	--	--
2	Center Building A/B	9/10/2021	8/31/2023	515	--	16%	51%	34%	--	--	--	--
3	Plaza A/Plaza B/ Walnut	12/4/2022	11/18/2025	773	--	--	3%	34%	34%	30%	--	--
4	Mayfair/Townhouse/Euclid Park	5/22/2025	1/12/2027	429	--	--	--	--	--	37%	61%	2%
			TOTAL	**2,362**								

Notes:

[1] Construction duration per year is calculated as construction duration of phase in a year/total construction duration.

[2] Total percentages in the table may not add up to 100% due to rounding.

I-FRISBIER2

Ramboll

Table Con-2. Project Off-Road Diesel Construction Equipment List
3333 California Street
San Francisco, California

Subphase[1]	Equipment Type	Number	Hours/day	Horsepower	Load Factor	Phase
Exterior	Aerial Lifts	2	8	63	0.31	All
Demolition	Air Compressors	2	5	78	0.48	All
Excavation	Crawler Tractors with Rippers	1	8	208	0.43	All
Excavation	Excavators	2	8	163	0.38	All
Excavation	Excavators with Hoe Ram	2	8	163	0.38	All
Exterior	Forklifts	1	8	89	0.20	All
Exterior	Pavers	1	8	126	0.42	Street Paving[1]
Exterior	Paving Equipment	1	8	131	0.36	Street Paving[1]
Structure	Pumps	1	8	84	0.74	Pouring Days[2]
Exterior	Rollers	1	6	81	0.38	Street Paving[1]
All	Rough Terrain Forklifts	2	8	100	0.40	All
Demolition	Skid Steer Loaders (Bobcat)	1	8	65	0.37	All
All	Sweepers/Scrubbers	1	3	64	0.46	All
Excavation	Tractors/Loaders/Backhoes	2	8	98	0.37	All

Notes:

1. Street paving occurs for one day at the completion of each construction phase.
2. There will be approximately 50 pouring days during Phase 1, 15 pouring days during Phase 2, 70 pouring days during Phase 3, and 12 pouring days during Phase 4.

Table Con-3. Construction Offroad and Onroad GHG Emissions
3333 California St AB900
San Francisco, CA

Emission Source	Phase	Total CO_2e Emissions (MT)	CO_2e Emissions by Year[1]							
			2020	2021	2022	2023	2024	2025	2026	2027
Offroad Diesel Equipment[2]	1	512	173	207	131	--	--	--	--	--
	2	259	--	41	131	87	--	--	--	--
	3	573	--	--	15	194	194	170	--	--
	4	122	--	--	--	--	--	46	74	2
Onroad Trucks and Vehicles[3]	1	763	259	309	195	--	--	--	--	--
	2	58	--	9	29	19	--	--	--	--
	3	745	--	--	19	252	252	221	--	--
	4	152	--	--	--	--	--	57	92	3
Total	All	3,182	432	567	520	552	447	494	167	5

Notes:

[1] Yearly emissions split by fraction of phase in each year.

[2] Emissions are calculated based on default CalEEMod® off-road construction equipment tiers for each piece of equipment in the emissions year modeled. A construction equipment list and hours of operation for each piece of equipment for each phase were provided by the Project Sponsor.

[3] Total number of hauling, concrete, and delivery trips and trip distances are discussed in Table Con-5.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric ton

Table Con-4. Electricity Usage and Emissions from Construction Electric Equipment
3333 California St AB900
San Francisco, California

Electricity Usage[1]

Total Electricity Usage	7,169,549	kWh

Phase	Number of Days	Electric Equipment Usage (kWh)	Usage by Year[2] (kWh)							
			2020	2021	2022	2023	2024	2025	2026	2027
1	645	1,957,815	663,482	794,003	500,331	--	--	--	--	--
2	515	1,563,217	--	245,338	792,464	525,414	--	--	--	--
3	773	2,346,343	--	--	60,831	792,977	795,149	697,385	--	--
4	429	1,302,175	--	--	--	--	--	486,145	792,156	23,873
Total	2,362	7,169,549	663,482	1,039,341	1,353,626	1,318,391	795,149	1,183,530	792,156	23,873

Phase	CO_2e Intensity Factor by Year[3] (lb CO_2e/MWh)							
	2020	2021	2022	2023	2024	2025	2026	2027
All	363	354	345	335	326	317	308	299

Phase	CO_2e Emissions by Year (MT/yr)							
	2020	2021	2022	2023	2024	2025	2026	2027
1	109	127	78	--	--	--	--	--
2	--	39	124	80	--	--	--	--
3	--	--	9.5	121	118	100	--	--
4	--	--	--	--	--	70	111	3.2
Total	109	167	212	201	118	170	111	3.2

Notes:

[1] Total electricity usage from SWCA's Energy Assessment report (July 2018).

[2] Yearly electricity usage split by fraction of phase in each year. Electricity usage and GHG emissions are same for both Project and Project Variant.

[3] See Table Ops-5 for CO_2e intensity factor calculations.

Abbreviations:

CO_2e - carbon dioxide equivalents
kWh - kilowatt hour
lb - pound
MT - metric ton
MWh - megawatt hour
yr - year

Table Con-5. Project Construction Trip Assumptions
3333 California Street
San Francisco, California

Phase	Trip Category	Total Trips[1]	Total Trip Length[2] (miles)
1	Worker	58,050	21
2		38,625	
3		69,570	
4		32,175	
1	Non-hauling	2,500	14
2		500	
3		3,500	
4		400	
1	Vendor	1,300	14
2		1,000	
3		1,500	
4		850	
1	Hauling (Hazardous Waste)	1,636	60
2		24	
3		1,631	
4		313	
1	Hauling (Non-Hazardous Waste)	3,271	17
2		48	
3		3,263	
4		626	
1		3,271	48
2		48	
3		3,263	
4		626	

Notes:

1. Trips were provided by the Project Sponsor.
2. Worker, non-hauling, and vendor trip lengths assume CalEEMod® default values. Hauling trip lengths were provided by the Project Sponsor.

Abbreviations:

CalEEMod® - California Emissions Estimator MODel

Table Con-6. Water Usage and Emissions from Construction Dust Control
3333 California St AB900
San Francisco, California

Usage Information[1]

Total water consumption	226,500	gallons
Energy intensity	0.005411	kWh/gallon
Total electricity use	1,226	kWh

Phase	Number of Days	Total Electricity (kWh)	Electricity by Year[2] (kWh)							
			2020	2021	2022	2023	2024	2025	2026	2027
1	147	509	172	206	130	--	--	--	--	--
2	20	69	--	11	35	23	--	--	--	--
3	147	509	--	--	13	172	172	151	--	--
4	40	138	--	--	--	--	--	52	84	2.5
Total	354	1,226	172	217	178	195	172	203	84	2.5

Phase	CO_2e Intensity Factor by Year[3] (lb CO_2e/MWh)							
	2020	2021	2022	2023	2024	2025	2026	2027
All	363	354	345	335	326	317	308	299

Phase	CO_2e Emissions by Year (MT/yr)							
	2020	2021	2022	2023	2024	2025	2026	2027
1	0.028	0.033	0.020	--	--	--	--	--
2	--	0.002	0.005	0.004	--	--	--	--
3	--	--	0.002	0.026	0.026	0.022	--	--
4	--	--	--	--	--	0.007	0.012	0.0003
Total	0.028	0.035	0.028	0.030	0.026	0.029	0.012	0.0003

Notes:
[1] Total water consumption and energy intensity from San Francisco Water Power Sewer's Water Supply Assessment and SWCA's Energy Assessment report.
[2] Yearly electricity usage split by fraction of phase in each year.
[3] See Table Ops-5 for CO_2e intensity factor calculations.

Abbreviations:
CO_2e - carbon dioxide equivalents
kWh - kilowatt hour
lb - pound
MT - metric ton
MWh - megawatt hour
yr - year

Table Ops-1a. Trip Rates - Existing Conditions
3333 California St AB900
San Francisco, California

Land Use Data		CalEEMod Defaults[1]						Driveway Count[2]				ITE Trips[2]		Calculated Rates[3]			
Land Use Sub-Type	Size	Weekday Trip Rate	Saturday Trip Rate	Sunday Trip Rate	Weekday Trips	Saturday Trips	Sunday Trips	AM Peak Hour	PM Peak Hour	Scaled AM Peak Hour Trips	Scaled PM Peak Hour Trips	% of Daily Trips in AM Count	% of Daily Trips in PM Count	Weekday Trip Counts	Weekday Trip Rate	Saturday Trip Rate	Sunday Trip Rate
	ksf	trips/ksf/day			trips/day			trips/hr	trips/hr	trips	trips	%	%	trips/day	trips/ksf/day		
General Office Building	352	11.03	2.46	1.05	3,883	866	370	266	296	218	243	8.2%	8.5%	2,758	7.84	1.75	0.75
Day-care Center	11.5	74.06	6.21	5.83	852	71	67			48	53	17.6%	18%	284	24.68	2.07	1.94

Notes:

[1] CalEEMod version 2016.3.2 default trip rates for San Francisco County, urban setting.

[2] AM and PM peak hour driveway counts and percent of daily trips in AM and PM count from Project Travel Demand Memorandum (Kittelson & Associates, March 2018). Scaled by land use using CalEEMod default trips.

[3] Weekday trip counts estimated by dividing AM and PM peak hour trips by ITE percent of daily trips in AM and PM trips and taking the average of the two values. Weekend trip rates estimated using ratio of CalEEMod default weekday to weekend rates.

Abbreviations:

hr - hour

ksf - thousand square feet

ITE - Institute of Transportation Engineers

Table Ops-1b. Trip Rates - Project and Project Variant
3333 California St AB900
San Francisco, California

Project[1]

Land Use Sub-Type	Size Metric	Size	Person-Trips	Adjusted Person-Trips	Vehicle Trips	Trip Rate
			(trips/day)	(trips/day)	(trips/day)	(trip/size/day)
Apartments Mid Rise	Dwelling Unit	558	5,002	2,498	1,431	2.56
Open Space	Acre	5.42	0	0	0	0
Day-Care Center	1000sqft	14.69	984	491	281	19.16
Enclosed Parking Structure	Spaces	895	0	0	0	0
General Office Building	1000sqft	49.999	905	452	259	5.18
Parking Lot	1000sqft	10.836	0	0	0	0
Strip Mall	1000sqft	54.117	12,753	6,370	3,648	67.41

Variant[1]

Land Use Sub-Type	Size Metric	Size	Person-Trips	Adjusted Person-Trips	Vehicle Trips	Trip Rate
			(trips/day)	(trips/day)	(trips/day)	(trip/size/day)
Apartments Mid Rise	Dwelling Unit	744	6,670	3,274	1,917	2.58
Open Space	Acre	5.42	0	0	0	0
Day-Care Center	1000sqft	14.65	984	483	283	19.30
Enclosed Parking Structure	Spaces	971	0	0	0	0
General Office Building	1000sqft	0	0	0	0	0
Parking Lot	1000sqft	10.836	0	0	0	0
Strip Mall	1000sqft	48.593	11,925	5,854	3,427	70.52

Notes:

[1] Project and Variant trip rates from the traffic memorandum (Kittelson & Associates, March 2018). Strip mall is assumed to include "General Retail", "Sit-Down", and "Composite" land uses. Daily person-trips are adjusted to remove double-counted internal trips, non-auto trips, and double-counted carpool trips. For emissions purposes, daily trips are assumed constant for weekdays and weekends. These factors are shown below.

Variable	Project	Variant
Total Vehicle-Trips/ Total Person-Trips	0.57	0.59
% internal, average	18.25	19.10
% external auto, average	61.10	60.68

Abbreviations:

1000sqft - thousand square feet

Table Ops-2. Existing Conditions Energy Emissions
3333 California St AB900
San Francisco, California

Energy Sector	Average Monthly Data[1]	Average Annual Usage	Usage Units	Emission Factor	Emissions Factor Units	CO_2e Emissions (MT/year)
Electricity	340	4,076	MWh	363	lbs CO_2e/MWh delivered	671
Natural Gas	1,028	12,332	MMBtu	117.77	lb CO_2e/MMBtu	659
					Total	1,330

Notes:

[1] Average monthly usage from PG&E bills July 2012 - September 2014. Data provided by Project Sponsor.

Abbreviations:

CO_2e - carbon dioxide equivalents
lb - pound
MMBTU - million British Thermal Units
MT - metric ton
MWh - megawatt-hour
PG&E - Pacific Gas and Electric

Table Ops-3. Electricity Intensity Factor Derivations
3333 California St AB900
San Francisco, California

	2014[1,2]	2015[1,3]	2016[1,4]	Average[5]	Units
CO_2 Intensity Factor per Total Energy Delivered	434.92	404.51	293.7	377.7	lbs CO_2/MWh delivered
% of Total Energy From Renewables	27%	29.5%	32.8%	29.8%	
CO_2 Intensity Factor per Total Non-Renewable Energy[6]	595.78	573.77	437	537.8	lbs CO_2/MWh delivered
Estimated Intensity Factor for Total Energy Delivered[7,8]					
2020 RPS (33%)	399.2	384.4	292.8	360.3	lbs CO_2/MWh delivered
	401.7	387.0	295.4	362.9	lbs CO_2e/MWh delivered
2030 RPS (50%)[9]	297.9	286.9	218.5	268.9	lbs CO_2/MWh delivered
	300.5	289.5	221.1	271.453	lbs CO_2e/MWh delivered
2050 RPS (80%)[10]	119.2	114.8	87.4	107.6	lbs CO_2/MWh delivered
	121.7	117.3	90.0	110.1	lbs CO_2e/MWh delivered

Notes:

[1] Total CO_2 emission factor from The Climate Registry. Available at: https://www.theclimateregistry.org/our-members/cris-public-reports/. Accessed: June 2018.

[2] Percent of total energy from eligible renewables is from the PGE 2015 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2015/PGE_CRSR_2015.pdf.

[3] Percent of total energy from eligible renewables is from the PGE 2016 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2016/PGE_CRSR_Environment.pdf.

[4] Percent of total energy from eligible renewables is from the PGE 2017 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2017/assets/PGE_CRSR_2017_Environment.pdf.

[5] This average uses the most recent three years of data.

[6] The emissions metric presented here is calculated based on the total CO_2 intensity factor divided by the percent of energy delivered from non-renewable sources.

[7] The intensity factor for total energy delivered is estimated by multiplying the percentage of energy delivered from non-renewable energy by the CO_2 emissions per total non-renewable energy metric calculated above. The estimate provided here and the energy reports issued by PGE assume that renewable energy sources do not result in any CO_2 emissions.

[8] Global Warming Potentials (GWP) are based on the IPCC Fourth Assessment Report. CH_4 and N_2O emission factors are from the CalEEMod version 2016.3.2 defaults for PGE, and are conservatively assumed not to change from these estimates. As more renewable energy is integrated into the electricity grid, these intensity factors will also decrease.

[9] Emission factor presented here is 50% projected RPS for 2030 consistent with SB 32 and SB 350. Available at: http://www.energy.ca.gov/sb350/.

[10] The projected 2050 RPS target is based on 80% RPS in 2050, consistent with the CARB Final 2017 Scoping Plan, Appendix D PATHWAYS, pg 12 (November, 2017). Available at: https://www.arb.ca.gov/cc/scopingplan/2030sp_appd_pathways_final.pdf

Abbreviations:

CARB - California Air Resources Board
CO_2 - carbon dioxide
GHG - greenhouse gases
IPCC - Intergovernmental Panel on Climate Change
lbs - pounds
MWh - megawatt-hour
RPS - Renewable Portfolio Standards
PGE - Pacific Gas & Electric
SB - Senate Bill

Table Ops-4. Stationary Source Emissions
3333 California St AB900
San Francisco, California

Stationary Source	Engine Tier	HP	Fuel Type	Operation[1]	CO_2e Emission Factor[2]	CO_2e Emissions
				hrs/yr	g/bhp-hr	MT/yr
Existing Generator	None	380	Diesel	20	523.5	4.0
Proposed Generator	Tier 2	1,073	Diesel	50	523.5	28.1

Notes:

[1] Operation of existing generator is 20 hours, based on the existing BAAQMD Permit. Operation of proposed generator is assumed to be 50 hours per year for routine maintenance and testing. This is consistent with the Maximum Allowed Testing Time from the Airborne Toxics Control Measure for Stationary Compression Ignition Engines (17 CCR 93115) for a Tier 2 engine.

[2] Generator emission factors are from CalEEMod and do not depend on engine tier.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
bhp - brake-horsepower
CO2e - carbon dioxide equivalents
g - grams
hrs - hours
MT - metric tons
yr - year

Table Ops-5. Electricity and Mobile Emission Factors
3333 California St AB900
San Francisco, California

Year	CO2e Intensity Factor	Fleet CO2e EF	Change in carbon intensity from previous year	Change in Fleet EF from previous year
	lb CO2e/MWh	metric ton/mi	%	%
2020	363	4.00E-04	--	--
2021	354	3.90E-04	-3%	-2%
2022	345	3.80E-04	-3%	-3%
2023	335	3.69E-04	-3%	-3%
2024	326	3.59E-04	-3%	-3%
2025	317	3.49E-04	-3%	-3%
2026	308	3.40E-04	-3%	-3%
2027	299	3.32E-04	-3%	-2%
2028	290	3.25E-04	-3%	-2%
2029	281	3.18E-04	-3%	-2%
2030	271	3.12E-04	-3%	-2%
2031	263	3.07E-04	-3%	-2%
2032	255	3.03E-04	-3%	-1%
2033	247	2.99E-04	-3%	-1%
2034	239	2.96E-04	-3%	-1%
2035	231	2.93E-04	-3%	-1%
2036	223	2.90E-04	-3%	-1%
2037	215	2.88E-04	-4%	-1%
2038	207	2.86E-04	-4%	-1%
2039	199	2.85E-04	-4%	-1%
2040	191	2.83E-04	-4%	0%
2041	183	2.82E-04	-4%	0%
2042	175	2.81E-04	-4%	0%
2043	167	2.81E-04	-5%	0%
2044	159	2.80E-04	-5%	0%
2045	150	2.80E-04	-5%	0%
2046	142	2.79E-04	-5%	0%
2047	134	2.79E-04	-6%	0%
2048	126	2.78E-04	-6%	0%
2049	118	2.78E-04	-6%	0%
2050	110	2.78E-04	-7%	0%
2051	110	2.78E-04	0%	0%
2052	110	2.78E-04	0%	0%
2053	110	2.78E-04	0%	0%
2054	110	2.78E-04	0%	0%
2055	110	2.78E-04	0%	0%

Year	CO2e Intensity Factor	Fleet CO2e EF	Change in carbon intensity from previous year	Change in Fleet EF from previous year
	lb CO2e/MWh	metric ton/mi	%	%
2056	110	2.78E-04	0%	0%
2057	110	2.78E-04	0%	0%

Notes:

[1] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[2] Approximation of the decrease in vehicle emission factors over time, based on San Francisco fleet-average emission factors from 2020-2050. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

Abbreviations:

CO_2e - carbon dioxide equivalents

EF - emission factor

lb - pound

mi - mile

MWh - megawatt-hour

Table Ops-6. Project Operational CO_2e Emissions by Year
3333 California St AB900
San Francisco, California

Year	CO_2e (MT/yr)[3]											
	Area	Energy		Mobile[2]	Waste	Water		Stationary Source[4]	Construction	Solar Reductions	Vegetation Reduction	Total
		Electricity[1]	Natural Gas			Treatment	Transportation					
2020	--	--	--	--	--	--	--	--	541	0	0	541
2021	--	--	--	--	--	--	--	--	733	0	0	733
2022	4	74	65	233	2	4	2	--	732	-45	0	1,071
2023	14	245	235	761	7	13	8	9	752	-56	0	1,988
2024	20	334	347	1,019	10	19	11	28	564	-55	0	2,297
2025	21	367	369	1,286	13	20	11	28	664	-256	0	2,522
2026	27	664	529	3,408	36	27	14	28	277	-252	0	4,759
2027	29	681	567	3,412	37	29	15	28	8	-290	-13	4,504
2028	29	662	568	3,339	37	29	15	28	--	-284	-13	4,410
2029	29	641	568	3,271	37	29	14	28	--	-279	-13	4,326
2030	29	620	568	3,211	37	29	14	28	--	-273	-13	4,251
2031	29	602	568	3,159	37	29	13	28	--	-268	-13	4,184
2032	29	583	568	3,112	37	29	13	28	--	-264	-13	4,123
2033	29	565	568	3,072	37	29	12	28	--	-259	-13	4,069
2034	29	546	568	3,037	37	29	12	28	--	-254	-13	4,021
2035	29	528	568	3,008	37	29	12	28	--	-249	-13	3,977
2036	29	510	568	2,982	37	29	11	28	--	-244	-13	3,937
2037	29	491	568	2,960	37	29	11	28	--	-240	-13	3,901
2038	29	473	568	2,941	37	29	10	28	--	-235	-13	3,868
2039	29	454	568	2,926	37	29	10	28	--	-230	-13	3,839
2040	29	436	568	2,913	37	29	10	28	--	-225	-13	3,812
2041	29	417	568	2,902	37	29	9	28	--	-220	-13	3,787
2042	29	399	568	2,893	37	29	9	28	--	-215	-13	3,764
2043	29	381	568	2,885	37	29	8	28	--	-211	-13	3,742
2044	29	362	568	2,879	37	29	8	28	--	-206	-13	3,722
2045	29	344	568	2,874	37	29	8	28	--	-201	-13	3,702
2046	29	325	568	2,868	37	29	7	28	--	-196	-13	3,683
2047	29	307	568	2,863	37	29	7	28	--	-191	0	3,677
2048	29	288	568	2,859	37	29	6	28	--	-187	0	3,658
2049	29	270	568	2,855	37	29	6	28	--	-182	0	3,641
2050	29	252	568	2,853	37	29	6	28	--	-177	0	3,625
2051	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2052	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2053	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2054	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2055	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2056	29	*252*	*568*	2,853	*37*	*29*	*6*	*28*	--	-177	0	3,625
2057	29	252	568	2,853	37	29	6	28	--	-177	0	3,625

Notes:

[1] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[2] Approximation of the decrease in vehicle emission factors over time, based on San Francisco fleet-average emission factors from 2020-2050. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

[3] Assume all buildings become operational as soon as phase is constructed, based on percent of operational land uses by Phase as shown in Table Ops-16. The only changes in emissions are due to transportation and electricity becoming cleaner.

[4] Assumes generator operational with phase 2

Abbreviations:

AB - Assembly Bill
CARB - California Air Resources Board
CO_2e - carbon dioxide equivalent
EMFAC - CARB Emissions Factor model
g - gram
lb - pound
mi - mile
MWh - megawatt-hour
MT - metric ton
RPS - Renewables Portfolio Standard

Table Ops-7. Project Variant Operational CO_2e Emissions by Year
3333 California St AB900
San Francisco, California

Year	CO_2e (MT/yr)[3]											
	Area	Energy		Mobile[2]	Waste	Water		Stationary Source	Construction	Solar Reductions	Vegetation Reduction	Total
		Electricity[1]	Natural Gas			Treatment	Transportation					
2020	--	--	--	--	--	--	--	--	541	0	0	541
2021	--	--	--	--	--	--	--	--	733	0	0	733
2022	3.8	68	58	238	2	3.5	2.1	--	732	-45	0	1,063
2023	14	225	209	774	6	12	7	9	752	-56	0	1,953
2024	20	304	309	1,033	8	18	11	28	564	-55	0	2,242
2025	22	346	344	1,305	11	20	11	28	664	-256	0	2,496
2026	37	702	603	3,467	31	34	18	28	277	-252	0	4,946
2027	39	716	637	3,470	32	36	19	28	8	-290	-13	4,682
2028	39	695	638	3,396	32	36	18	28	--	-284	-13	4,585
2029	39	673	638	3,326	32	36	18	28	--	-279	-13	4,498
2030	39	651	638	3,266	32	36	17	28	--	-273	-13	4,421
2031	39	632	638	3,212	32	36	17	28	--	-268	-13	4,352
2032	39	612	638	3,165	32	36	16	28	--	-264	-13	4,290
2033	39	593	638	3,125	32	36	16	28	--	-259	-13	4,235
2034	39	574	638	3,089	32	36	15	28	--	-254	-13	4,184
2035	39	554	638	3,059	32	36	15	28	--	-249	-13	4,139
2036	39	535	638	3,033	32	36	14	28	--	-244	-13	4,098
2037	39	516	638	3,010	32	36	14	28	--	-240	-13	4,060
2038	39	496	638	2,991	32	36	13	28	--	-235	-13	4,026
2039	39	477	638	2,975	32	36	13	28	--	-230	-13	3,995
2040	39	458	638	2,962	32	36	12	28	--	-225	-13	3,967
2041	39	438	638	2,951	32	36	12	28	--	-220	-13	3,941
2042	39	419	638	2,942	32	36	11	28	--	-215	-13	3,917
2043	39	399	638	2,934	32	36	10	28	--	-211	-13	3,894
2044	39	380	638	2,928	32	36	10	28	--	-206	-13	3,872
2045	39	361	638	2,923	32	36	9	28	--	-201	-13	3,852
2046	39	341	638	2,917	32	36	9	28	--	-196	-13	3,832
2047	39	322	638	2,912	32	36	8	28	--	-191	0	3,824
2048	39	303	638	2,907	32	36	8	28	--	-187	0	3,805
2049	39	283	638	2,904	32	36	7	28	--	-182	0	3,786
2050	39	264	638	2,902	32	36	7	28	--	-177	0	3,769
2051	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2052	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2053	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2054	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2055	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2056	39	*264*	*638*	2,902	*32*	*36*	*7*	*28*	--	-177	0	3,769
2057	39	264	638	2,902	32	36	7	28	--	-177	0	3,769

Notes:

[1] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[2] Approximation of the decrease in vehicle emission factors over time, based on San Francisco fleet-average emission factors from 2020-2050. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

[3] Assume all buildings become operational as soon phase is constructed, based on percent of operational land uses by Phase as shown in Table Ops-16.. The only changes in emissions are due to transportation and electricity becoming cleaner.

[4] Assumes generator operational with phase 2.

Abbreviations:

AB - Assembly Bill
CARB - California Air Resources Board
CO_2e - carbon dioxide equivalent
EMFAC - CARB Emissions Factor model
g - gram
lb - pound
mi - mile
MWh - megawatt-hour
MT - metric ton
RPS - Renewables Portfolio Standard

Table Ops-8. Energy and Water Use Values
3333 California St AB900
San Francisco, California

Scaled Building Energy Use (kBTU/year)[1]

Building Type	Project Case		Project Variant	
	Natural Gas	Electricity	Natural Gas	Electricity
Apartments	9,289,299	8,968,899	11,023,050	10,642,850
Day-Care Center	96,402	278,149	96,139	277,392
Parking Structure	0	5,374,715	0	5,454,439
General Office Building	330,377	708,129	0	0
Parking Lot	0	0	0	0
Strip Mall	922,059	1,853,528	827,940	1,664,329
Total (kBTU/yr)	**10,638,137**	**17,183,420**	**11,947,129**	**18,039,010**

Water Use and Electricity for Water Use[2]

Type	Water				Electricity to Supply, Treat, and Distribute Water			
	Project Case		Project Variant		Project		Project Variant	
	Indoor (gal)	Outdoor (gal)	Indoor (gal)	Outdoor (gal)	kWh/year	Kwh/gal	kWh/year	Kwh/gal
Commercial	422,000	0	229,000	0	2,280	0.0054	1,238	0.0054
Residential	17,125,000	0	22,398,000	0	92,663	0.0054	121,194	0.0054
HVAC/Cooling	1,995,000	0	1,995,000	0	10,795	0.0054	10,795	0.0054
Landscape/Irrigation	0	1,626,000	0	1,626,000	5,689	0.0035	5,689	0.0035
Total	**19,542,000**	**1,626,000**	**24,622,000**	**1,626,000**	**111,427**	**-**	**138,916**	**-**

Distributing Water Use for CalEEMod Land Uses[3]

Land Use Sub-Type	CalEEMod Default Indoor Water Use	Project Case				Project Variant			
	(gal/land use size/year)	Land Use	Land Use (sq ft)	Indoor (gal/year)	Outdoor (gal/year)	Land Use	Land Use (sq ft)	Indoor (gal/year)	Outdoor (gal/year)
Apartments (DU)	65,154	558	824,691	18,868,788	0	744	978,611	24,271,899	0
Open Space (Acres)	0	5.42	236,000	0	1,626,000	5.42	236,000	-	1,626,000
Day-Care Center (ksf)	42,890	14.69	14,690	50,720	0	14.65	14,650	62,087	
General Office Building (ksf)	177,734	49.999	49,999	382,990	0	0	0	0	0
Strip Mall (ksf)	74,073	54.117	54,117	239,502	0	48.593	48,593	288,014	0
Total	-	-	-	**19,542,000**	**1,626,000**	**-**	**-**	**24,622,000**	**1,626,000**

Notes:

[1] From 3333 California CEQA Energy Inputs, Arup (January 2018), Tables 10 and 11, including energy conservation measures. CEQA Energy Inputs is supporting information for the Energy Assessment.

[2] From 3333 California CEQA Energy Inputs, Arup (January 2018), Tables 4 and 5. CEQA Energy Inputs is supporting information for the Energy Assessment.

[3] Water use is distributed among land uses on a square footage basis for CalEEMod purposes. The total water use is from San Francisco Water Power Sewer's Water Supply Assessment (June 2017) which is summarized in the Energy Assessment.

Abbreviations:

DU - dwelling units
gal - gallon
kBTU - thousand British Thermal Units
sq ft - square feet

Table Ops-9. GHG Emissions Reductions from Solar Energy
3333 California St AB900
San Francisco, California

Energy Assessment Solar Data by Building and Phase[1]

Building	Proposed Total Solar Equipment Area (sqft)	Estimated PV Energy Output (kBTU/year)	Estimated Solar Hot Water Energy Output (kBTU/year)	Construction Phase
Center Building A	0	0	0	2
Center Building B	2,597	180,864	82,000	2
Plaza A Building	12,190	795,497	380,000	3
Plaza B Building	11,812	828,163	384,000	3
Walnut Building	19,771	1,397,159	635,000	3
Masonic Building	0	0	0	1
Euclid Building	9,036	638,342	289,000	1
Laurel Duplexes	6,384	394,514	207,000	4
Mayfair Building	3,550	251,107	107,000	4
Total	**65,340**	**4,485,646**	**2,084,000**	

Year-By-Year Reductions due to Solar

Year	CO_2e Intensity Factor (lb CO_2e/MWh)[2]	Solar PV Reductions (MT)	CO_2e Intensity Factor NG (lb CO_2e/kBTU)[3]	Solar Heating Reductions (MT)	Latest completed Phase[4]
2020	363	0	0.118	0	-
2021	354	0	0.118	0	-
2022	345	-29	0.118	-15	1
2023	335	-37	0.118	-20	2
2024	326	-36	0.118	-20	2
2025	317	-162	0.118	-95	3
2026	308	-157	0.118	-95	3
2027	299	-178	0.118	-111	4
2028	290	-173	0.118	-111	4
2029	281	-167	0.118	-111	4
2030	271	-162	0.118	-111	4
2031	263	-157	0.118	-111	4
2032	255	-152	0.118	-111	4
2033	247	-147	0.118	-111	4
2034	239	-143	0.118	-111	4
2035	231	-138	0.118	-111	4
2036	223	-133	0.118	-111	4
2037	215	-128	0.118	-111	4
2038	207	-123	0.118	-111	4
2039	199	-119	0.118	-111	4
2040	191	-114	0.118	-111	4
2041	183	-109	0.118	-111	4
2042	175	-104	0.118	-111	4
2043	167	-99	0.118	-111	4
2044	159	-95	0.118	-111	4
2045	150	-90	0.118	-111	4
2046	142	-85	0.118	-111	4
2047	134	-80	0.118	-111	4
2048	126	-75	0.118	-111	4
2049	118	-70	0.118	-111	4

Year	CO_2e Intensity Factor (lb CO_2e/MWh)[2]	Solar PV Reductions (MT)	CO_2e Intensity Factor NG (lb CO_2e/kBTU)[3]	Solar Heating Reductions (MT)	Latest completed Phase[4]
2050	110	-66	0.118	-111	4
2051	110	-66	0.118	-111	4
2052	110	-66	0.118	-111	4
2053	110	-66	0.118	-111	4
2054	110	-66	0.118	-111	4
2055	110	-66	0.118	-111	4
2056	110	-66	0.118	-111	4
2057	110	-66	0.118	-111	4

Notes:

[1] From SWCA's Energy Assessment (July 2018), Table 10.

[2] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[3] CO_2e intensity factor for natural gas is from CalEEMod Appendix D.

[4] The solar for each building is assumed to become active when the relevant Phase is complete.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
kBTU - thousand British Thermal Units
lb - pound
MT - metric ton
MWh - megawatt-hour
sqft - square feet

Table Ops-10. Energy Emissions Year-by-Year
3333 California St AB900
San Francisco, California

Year	CO2e Intensity Factor[1]		Project Case[2]				Project Variant[2]			
	Electricity	Natural Gas	Electricity Use[3]	Natural Gas Use[3]	Electricity Emissions	Natural Gas Emissions	Electricity Use[3]	Natural Gas Use[3]	Electricity Emissions	Natural Gas Emissions
	lb CO2e/MWh	lb CO2e/kBTU	MWh	kBTU	MT CO2e/year		MWh	kBTU	MT CO2e/year	
2020	363	0.118	0	0	0	0	0	0	0	0
2021	354	0.118	0	0	0	0	0	0	0	0
2022	345	0.118	473	1,224,705	74	65	436	1,092,913	68	58
2023	335	0.118	1,612	4,393,180	245	235	1,478	3,917,878	225	209
2024	326	0.118	2,255	6,498,974	334	347	2,055	5,791,991	304	309
2025	317	0.118	2,550	6,900,308	367	369	2,405	6,440,318	346	344
2026	308	0.118	4,754	9,905,647	664	529	5,027	11,295,228	702	603
2027	299	0.118	5,027	10,614,055	681	567	5,278	11,925,697	716	637
2028	290	0.118	5,036	10,638,137	662	568	5,287	11,947,129	695	638
2029	281	0.118	5,036	10,638,137	641	568	5,287	11,947,129	673	638
2030	271	0.118	5,036	10,638,137	620	568	5,287	11,947,129	651	638
2031	263	0.118	5,036	10,638,137	602	568	5,287	11,947,129	632	638
2032	255	0.118	5,036	10,638,137	583	568	5,287	11,947,129	612	638
2033	247	0.118	5,036	10,638,137	565	568	5,287	11,947,129	593	638
2034	239	0.118	5,036	10,638,137	546	568	5,287	11,947,129	574	638
2035	231	0.118	5,036	10,638,137	528	568	5,287	11,947,129	554	638
2036	223	0.118	5,036	10,638,137	510	568	5,287	11,947,129	535	638
2037	215	0.118	5,036	10,638,137	491	568	5,287	11,947,129	516	638
2038	207	0.118	5,036	10,638,137	473	568	5,287	11,947,129	496	638
2039	199	0.118	5,036	10,638,137	454	568	5,287	11,947,129	477	638
2040	191	0.118	5,036	10,638,137	436	568	5,287	11,947,129	458	638
2041	183	0.118	5,036	10,638,137	417	568	5,287	11,947,129	438	638
2042	175	0.118	5,036	10,638,137	399	568	5,287	11,947,129	419	638
2043	167	0.118	5,036	10,638,137	381	568	5,287	11,947,129	399	638
2044	159	0.118	5,036	10,638,137	362	568	5,287	11,947,129	380	638
2045	150	0.118	5,036	10,638,137	344	568	5,287	11,947,129	361	638
2046	142	0.118	5,036	10,638,137	325	568	5,287	11,947,129	341	638
2047	134	0.118	5,036	10,638,137	307	568	5,287	11,947,129	322	638
2048	126	0.118	5,036	10,638,137	288	568	5,287	11,947,129	303	638
2049	118	0.118	5,036	10,638,137	270	568	5,287	11,947,129	283	638
2050	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2051	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2052	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2053	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2054	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2055	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2056	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638
2057	110	0.118	5,036	10,638,137	252	568	5,287	11,947,129	264	638

Notes:

[1] Uses a linear interpretation between the electricity intensity factors derived in Table Ops-3.

[2] Does not include the benefits of solar photovoltaics or solar water heating. These are shown in Table Ops-9.

[3] While construction is underway, energy use is based on the percent of operational land uses by Phase as shown in Table Ops-16.

Abbreviations:

CO_2e - carbon dioxide equivalents
EF - emission factor
lb - pound
kBTU - thousand British Thermal Units
MT - metric ton
MWh - megawatt-hour

Table Ops-11. Wastewater Treatment Types and Electricity Intensity
3333 California St AB900
San Francisco, California

Wastewater Electricity Intensity

County	Electricity to Treat Wastewater (kWh/million gal)[1]
San Francisco	1,911

Wastewater Treatment Types[2]

County	Septic Tank	Aerobic	Anaerobic, Facultative Lagoons	Anaerobic, Combustion of Gas	Anaerobic, Cogeneration of Gas
San Francisco	10.33%	87.46%	2.21%	100%	0%

Wastewater Treatment Direct Emission Factors[3]

Wastewater Treatment Type	CO_2 Biogenic, ton/gal	CO_2 Non-Biogenic, ton/gal	CH_4, ton/gal	N_2O, ton/gal
Septic	0	0	2.50E-07	8.48E-10
Aerobic	3.90E-07	0	1.34E-09	8.48E-10
Anaerobic Facultative	3.90E-07	0	4.02E-07	8.48E-10
Digester Burn	0	0	0	0
Digester Cogen	0	0	0	0

Notes:

[1] Water Electricity Intensity from Table 9.2 of Appendix D of the CalEEMod User's Guide.

[2] Water Treatment Types from Table 9.3 of Appendix D of the CalEEMod User's Guide.

[3] Wastewater Treatment Direct Emission Factors from Table 9.4 of Appendix D of the CalEEMod User's Guide.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CH_4 - methane
CO_2 - carbon dioxide
gal - gallon
kWh - kilowatt-hours
N_2O - nitrogen oxides

Table Ops-12. Water Treatment Emissions
3333 California St AB900
San Francisco, California

Land Use	Project Case				Project Variant			
	Septic Tank Direct Emissions	Aerobic Direct Emissions	Facultative Lagoon Direct Emissions	Total Treatment Emissions	Septic Tank Direct Emissions	Aerobic Direct Emissions	Facultative Lagoon Direct Emissions	Total Treatment Emissions
	MT CO2e/year							
Apartments (DU)	11.51	10.12	4.04	25.68	14.81	13.02	5.20	33.04
Day-Care Center (ksf)	0.03	0.03	0.01	0.07	0.04	0.03	0.01	0.08
Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building (ksf)	0.23	0.21	0.08	0.52	0.00	0.00	0.00	0.00
Strip Mall (ksf)	0.15	0.13	0.05	0.33	0.18	0.15	0.06	0.39
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Space (Acres)	0.99	0.87	0.35	2.21	0.99	0.87	0.35	2.21
Total	**12.92**	**11.36**	**4.54**	**28.81**	**16.02**	**14.08**	**5.63**	**35.73**

Notes:

[1] Treatment factors are shown in Table Ops-11.

[2] Water usage is shown in Table Ops-8.

Abbreviations:

CO_2e - carbon dioxide equivalents

DU - dwelling units

ksf - thousand square feet

MT - metric tons

Table Ops-13. Water Emissions Year-by-Year
3333 California St AB900
San Francisco, California

Year	CO2e Intensity Factor	Project Case			Variant		
		Electricity Consumption[1]	Distribution Emissions	Treatment Emissions[2]	Electricity Consumption[1]	Distribution Emissions	Treatment Emissions[2]
	lb CO_2e/MWh	MWh	MT CO_2e		MWh	MT CO_2e	
2020	363	0	0	0	0	0	0
2021	354	0	0	0	0	0	0
2022	345	14	2.2	3.6	13	2.1	3.5
2023	335	50	7.6	13	48	7.4	12
2024	326	74	11	19	72	11	18
2025	317	78	11	20	79	11	20
2026	308	103	14	27	131	18	34
2027	299	111	15	29	139	19	36
2028	290	111	15	29	139	18	36
2029	281	111	14	29	139	18	36
2030	271	111	14	29	139	17	36
2031	263	111	13	29	139	17	36
2032	255	111	13	29	139	16	36
2033	247	111	12	29	139	16	36
2034	239	111	12	29	139	15	36
2035	231	111	12	29	139	15	36
2036	223	111	11	29	139	14	36
2037	215	111	11	29	139	14	36
2038	207	111	10	29	139	13	36
2039	199	111	10	29	139	13	36
2040	191	111	10	29	139	12	36
2041	183	111	9.2	29	139	12	36
2042	175	111	8.8	29	139	11	36
2043	167	111	8.4	29	139	10	36
2044	159	111	8.0	29	139	10	36
2045	150	111	7.6	29	139	9.5	36
2046	142	111	7.2	29	139	9.0	36
2047	134	111	6.8	29	139	8.5	36
2048	126	111	6.4	29	139	8.0	36
2049	118	111	6.0	29	139	7.4	36
2050	110	111	5.6	29	139	6.9	36
2051	110	111	5.6	29	139	6.9	36
2052	110	111	5.6	29	139	6.9	36
2053	110	111	5.6	29	139	6.9	36
2054	110	111	5.6	29	139	6.9	36
2055	110	111	5.6	29	139	6.9	36
2056	110	111	5.6	29	139	6.9	36
2057	110	111	5.6	29	139	6.9	36

Notes:

[1] Electricity use is calculated based on phased water use and usage factors from the Energy Assessment (SWCA, July 2018) and supporting Water Supply Assessment (San Francisco Water Power Sewer, June 2017) and CEQA Energy Inputs (Arup, 2018). While construction is underway, water use is based on the percent of operational land uses by Phase as shown in Table Ops-16. Electricity Usage Factors taken from the Energy Assessment are shown below.

Indoor (kwh/gal)	Outdoor (kwh/gal)
0.0054	0.0035

[2] Emissions from wastewater treatment are calculated in Table Ops-12.

Abbreviations:

CO_2e - carbon dioxide equivalents
lb - pounds
MT - metric tons
MWh - megawatt-hour

Table Ops-14. Waste Generation and Emissions
3333 California St AB900
San Francisco, California

Space Type	Project		Variant	
	Waste Generated	CO_2e Emissions[1]	Waste Generated	CO_2e Emissions[1]
	Cubic yards/day	MT/yr	Cubic yards/day	MT/yr
Residential	18.3	12.9	19.8	13.9
Commercial	34	23.9	25.5	17.9
Total	**52.5**	**36.8**	**45.3**	**31.8**

Land Use[2]	Total CO_2e (MT/yr)	
	Project	Variant
Apartments	13	14
Day-Care Center	3.0	4.1
Parking Structure	0	0
General Office Building	10	0
Parking Lot	0	0
Retail	11	14

Year	Total CO_2e (MT/yr)[3]	
	Project	Variant
2022	2.0	1.8
2023	6.9	6.1
2024	9.8	8.4
2025	13	11
2026	36	31
2027	37	32
2028	37	32

Notes:

[1] Total waste emissions are from CEQA Energy Inputs (ARUP, January 2018).

[2] Commercial waste generation was split by total land uses among daycare, office, and retail based on square footage.

[3] While construction is underway, waste is based on the percent of operational land uses by Phase as shown in Table Ops-16.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric tons

yr - year

Table Ops-15. GHG Emissions Sequestration from Vegetation
3333 California St AB900
San Francisco, California

Number of Net New Trees[1]	Units	Broad Species Class	Annual CO_2 accumulation per tree (MT CO_2/tree/year)[2]	Project GHG Sequestration (MT CO_2e)
162	Trees	Miscellaneous	-0.0354	-115
Number of Net New Acres[1]	**Units**	**Vegetation Land Use Subtype**	**Annual CO_2 accumulation per acre (MT CO_2/acre/year)[2]**	**Project GHG Sequestration (MT CO_2e)**
1.63	Acres	Grassland	-4.31	-140
			Total, Trees and Acres Covered	-255

Notes:

1. Number of net new trees from Project Description. Total number of trees - number of existing trees
2. From CalEEMod User's Guide Appendix A.
3. All vegetation types are assumed to have a growing period of 20 years.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric tones

Table Ops-16. Phased Land Use
3333 California St AB900
San Francisco, California

Land Use	Size Metric	Phase[1]					% Total in Phase[2]			
		Phase 1	Phase 2	Phase 3	Phase 4	All	Phase 1	Phase 2	Phase 3	Phase 4
Project Case										
Apartments	DU	196	190	128	44	558	35%	34%	23%	8%
Day-Care Center	ksf	0	0	14.69	0.00	14.69	0%	0%	100%	0%
Parking Structure	ksf	87.98	19.26	301.06	20.48	428.77	21%	4%	70%	5%
General Office Building	ksf	0	0	50.00	0.00	50	0%	0%	100%	0%
Parking Lot	ksf	3.936	2.51	3.82	0.58	10.84	36%	23%	35%	5%
Retail	ksf	4.287	0	49.83	0	54.12	8%	0%	92%	0%
Open Space	acre	1.42	1.35	2.19	0.46	5.42	26%	25%	40%	9%
Project Variant										
Apartments	DU	196	190	314	44	744	26%	26%	42%	6%
Day-Care Center	ksf	0	0	14.65	0.00	14.65	0%	0%	100%	0%
Parking Structure	ksf	87.98	19.26	307.42	20.48	435.13	20%	4%	71%	5%
General Office Building	ksf	0	0	-	0.00	0	-	-	-	-
Parking Lot	ksf	3.94	2.51	6.18	0.58	13.2	30%	19%	47%	4%
Retail	ksf	4.29	0	44.31	0	48.59	9%	0%	91%	0%
Open Space	acre	1.42	1.35	2.19	0.46	5.42	26%	25%	40%	9%

Notes:

[1] Land use totals and Phase descriptions provided by Project sponsor.

[2] Percent of total in Phase is used to quantify emissions at buildout of each Phase. Phases 1, 2, 3, and 4 are assumed to be operational in 2022, 2023, 2025, and 2027, respectively.

Abbreviations:

DU - dwelling units

ksf - thousand square feet

Table Ops-17. Area and Mobile Emissions by Phase
3333 California St AB900
San Francisco, California

Phase[1]	Operational Year	% Change in Mobile Emissions Factor[2]	Project		Variant	
			Area	Mobile	Area	Mobile
			CO_2e (MT/yr)[3]			
1	2022	--	3.8	233	3.8	238
1	2023	-2.81%	10	618	10	630
1	2024	-2.67%	10	602	10	613
1	2025	-2.82%	10	585	10	596
1	2026	-2.54%	10	570	10	580
1	2027	-2.39%	10	556	10	567
1	2028	-2.23%	10	544	10	554
2	2022	--	0	0	0	0
2	2023	-2.81%	3.3	143	3.3	144
2	2024	-2.67%	10	417	10	421
2	2025	-2.82%	10	406	10	409
2	2026	-2.54%	10	395	10	398
2	2027	-2.39%	10	386	10	389
2	2028	-2.23%	10	377	10	380
3	2022	--	0	0	0	0
3	2023	-2.81%	0	0	0	0
3	2024	-2.67%	0	0	0	0
3	2025	-2.82%	0.8	295	1.9	301
3	2026	-2.54%	6.7	2,443	17	2,488
3	2027	-2.39%	6.7	2,384	17	2,428
3	2028	-2.23%	6.7	2,331	17	2,374
4	2022	--	0	0	0	0
4	2023	-2.81%	0	0	0	0
4	2024	-2.67%	0	0	0	0
4	2025	-2.82%	0	0	0	0
4	2026	-2.54%	0	0	0	0
4	2027	-2.39%	2.2	85	2.2	86
4	2028	-2.23%	2.3	86	2.3	87

Notes:

[1] Operational year and fraction of operation in Table Ops-16.

[2] Mobile emissions change is shown in Table Ops-5.

[3] Area and mobile emissions from buildout year for each Phase are from CalEEMod outputs. Emissions from energy, water, waste, stationary sources, and reductions from solar and vegetation are shown in Tables Ops-7 and Ops-8.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric ton

yr - year

From: Holly Galbrecht
To: Zushi, Kei (CPC)
Subject: Catherine.Stefani@sfgov.org; frfbeagle@gmail.com; richhillissf@gmail.com; myrna.melgar@sfgov.org; planning@rodneyfong.com; milicent.johnson@sfgovorg; joel.koppel@sfgov.org; kathrin.moore@sfgov.org; dennis.richards@sfgov.org; commissions.secretary@sfgov...
Date: Wednesday, January 02, 2019 1:11:57 PM

Dear Kei Sushi, Senior Environmental Planner,
Here are my comments on the Draft EIR for the proposed development at 3333 California Street.

I fully support the Community Full Preservation Residential Alternative for 3333 California. 1 (AL-2)

- It preserves the Historic Characteristics of this wonderful historic site.
- It provides 558 (or 744 in the Variant) housing units.
- It builds them in three years.
- It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.
- It does not create 8,000 retail auto trips per day.
- It does not generate approximately 15,000 tons of greenhouse gases.
- It preserves both the present childcare center and the existing café.
- It matches the surrounding neighborhoods for character, style, scale and bulk.

I strongly oppose the Developers Destructive Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333 California; it threatens the quality of life; it poses threats to pedestrian safety; and it contributes to climate change. 2 (ME-1)

The Community Full Preservation Alternative will generate zero retail auto trips to 3333 California as opposed to the 8,000 retail auto trips caused by the Developers Destructive Proposal. The Community Full Preservation Alternative will protect the small, family owned businesses
in Laurel Village, Sacramento St. and Presidio Avenue. A quick walk around these neighborhoods
will clearly show the immense pressure these businesses are experiencing. More retail is unneeded and unwanted. It will destroy our local businesses.The Neighborhoods are well served by businesses at Laurel Village, Sacramento St., Trader Joe's, City Center, California St., etc.
We do not need the more than 100,000 square feet of Retail, Office, Commercial space that the Developers Destructive Proposal calls for. 3 (AL-2) 4 (ME-1)

Thank you for your consideration.

Sincerely,

Holly Galbrecht
560 Presidio Avenue, Apt. 1
San Francisco, CA 94115
hgalbrecht@gmail.com
415-409-1335

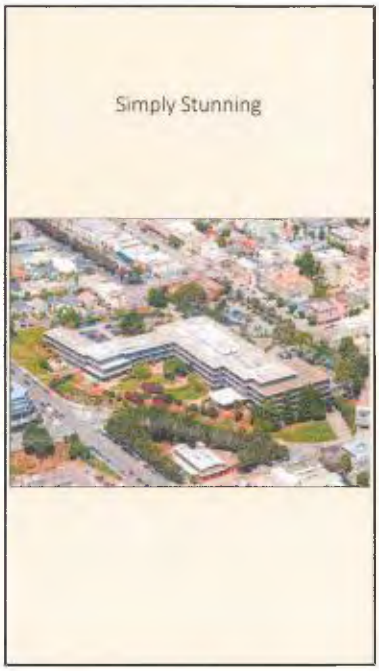
I-GIAMPAOLI

From: Ron Giampaoli
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); Richard Frisbie; richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); CPC-Commissions Secretary
Subject: 3333California Street
Date: Tuesday, January 08, 2019 2:26:39 PM

Dear planning commission my father and his partners started Cal Mart Supermarket in 1952 so I think I know the neighborhood very well .⌈i support the full preservation alternative for the project as preserving the historic site will be good for the neighborhood as it will provide housing units which we all need in San Francisco .⌈I don't like the idea of adding extra retail as we have enough already in Laurel village and nearby sacramento Street and trader joes and target nearby .⌈There is another project in the making as Children's Hospital will be closing down and there will a large project of just housing being built and they say it will be much faster compilation compared to this project then the 15 years at 3333 California St. I think this timeline of 10 to 15 years is not the way to go it should be must faster .⌈We have fought the rezoning and gathered many signatures so hope that works out for the neighborhood . Laurel village is really a special gem of the city and I hate to see it disrespected with no concern for the neighborhood .⌈Cal Mart is taking care of a lot of third generations of neighborhood customers and we want that to continue.

Thank you for taking time to read my comments Ronald Giampaoli President Cal Mart Supermarket

1 (AL-2)
2 (ME-1)
3 (PD-1)
4 (ME-1)



Good afternoon Commissioners.
I'm Linda Glick, a resident of Laurel Street.
I'd like to explain the history of the restrictions placed on the site by the Planning Commission and the community use of the green space as a park.

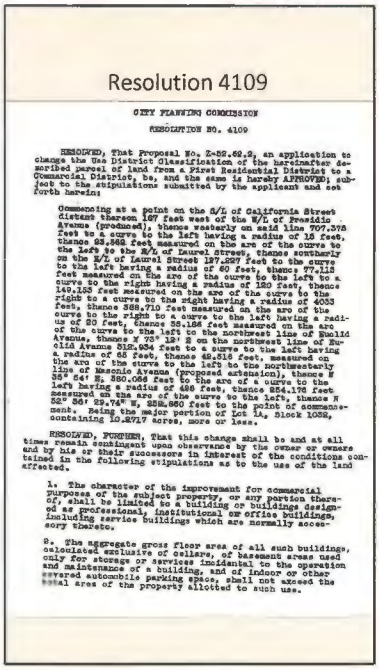
The same developer who built the Laurel Heights residential tract and Anza Vista was going to build a residential tract on this site, but he died.

7
(PP-1)

The School District acquired the property for a possible site for Lowell High School but decided to locate that elsewhere and sell this site. The District could get 50% more money from the sale if it could rezone it from First Residential to Commercial.

The District withdrew its first attempt at rezoning due to community opposition.

7
(PP-1)
cont'd



Resolution 4109

CITY PLANNING COMMISSION

RESOLUTION NO. 4109

RESOLVED, That Proposal No. Z-52.62.2, an application to change the Use District Classification of the hereinafter described parcel of land from a First Residential District to a Commercial District, be, and the same is hereby APPROVED; subject to the stipulations submitted by the applicant and set forth herein:

Commencing at a point on the S/L of California Street distant thereon 167 feet west of the W/L of Presidio Avenue (produced), thence westerly on said line 707.576 feet to a curve to the left having a radius of 15 feet, thence 23.562 feet measured on the arc of the curve to the left to the E/L of Laurel Street, thence southerly on the E/L of Laurel Street 187.257 feet to the curve to the left having a radius of 60 feet, thence 77.115 feet measured on the arc of the curve to the left to a curve to the right having a radius of 180 feet, thence 149.153 feet measured on the arc of the curve to the right to a curve to the right having a radius of 4033 feet, thence 368.710 feet measured on the arc of the curve to the right to a curve to the left having a radius of 20 feet, thence 36.184 feet measured on the arc of the curve to the left to the northwest line of Euclid Avenue, thence N 73° 12' E on the northwest line of Euclid Avenue 812.434 feet to a curve to the left having a radius of 66 feet, thence 46.516 feet, measured on the arc of the curve to the left to the northwesterly line of Masonic Avenue (proposed extension), thence N 33° 54' W, 380.086 feet to the arc of a curve to the left having a radius of 466 feet, thence 854.176 feet measured on the arc of the curve to the left, thence N 52° 56' 29.74" W, 252.860 feet to the point of commencement. Being the major portion of Lot 14, Block 1032, containing 10.2717 acres, more or less.

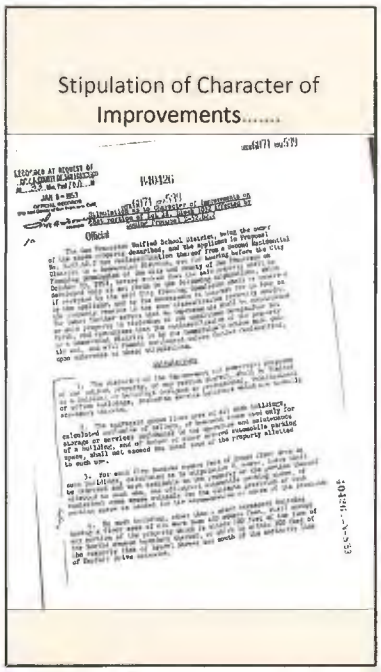
RESOLVED, FURTHER, That this change shall be and at all times remain contingent upon observance by the owner or owners and by his or their successors in interest of the conditions contained in the following stipulations as to the use of the land affected.

1. The character of the improvement for commercial purposes of the subject property, or any portion thereof, shall be limited to a building or buildings designed as professional, institutional or office buildings, including service buildings which are normally accessory thereto.

2. The aggregate gross floor area of all such buildings, calculated exclusive of cellars, of basement areas used only for storage or services incidental to the operation and maintenance of a building, and of indoor or other covered automobile parking space, shall not exceed the total area of the property allotted to such use.

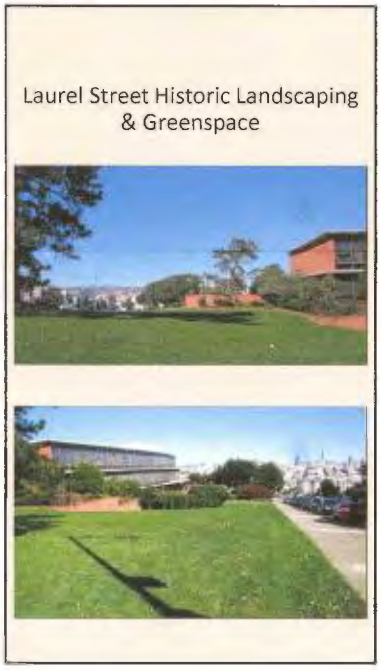
Finally a deal was struck with the community that resulted in the restrictions stated in Resolution 4109 that include 100-foot landscaped setbacks along Laurel and Euclid streets and a ban on retail uses of the site.

7 (PP-1) cont'd



Under Planning Code section 174, such Stipulations as to Character of Improvements become provisions of the Planning Code and can only be changed by the Board of Supervisors.

7
(PP-1)
cont'd

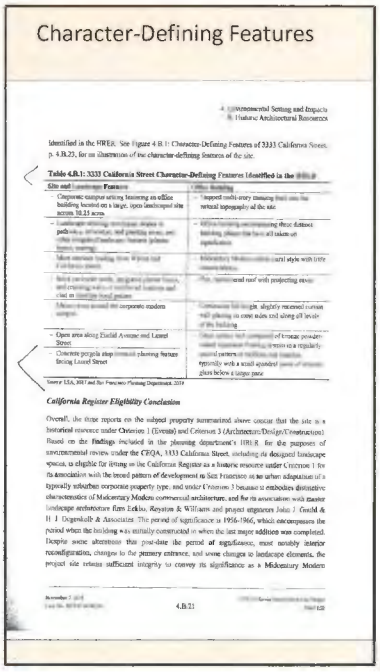


Through the years, the community has used the green landscaped spaces for recreational purposes and a lawyer has stated that the public has acquired permanent recreational rights on the green spaces. 8 (PD-5)

There is a lot of talk about preserving neighborhood character. 9 (PD-3)

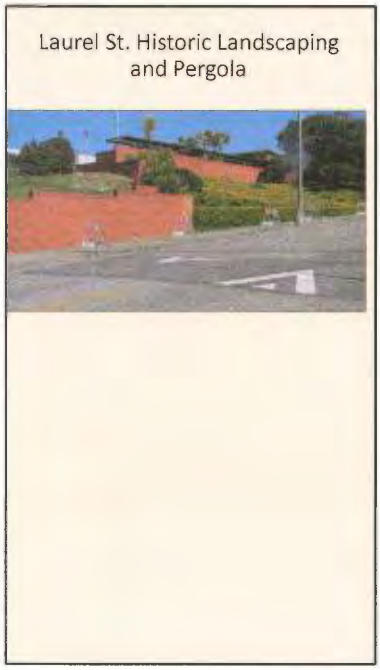
Laurel Hill has always been a place where neighbors gather; children learn sports from their parents; and a Community is formed.

These Community bonds will not be formed along meandering concrete paths.



The EIR identifies the concrete pergola atop terraced planting feature facing Laurel Street as a character defining feature of the resource. [DEIR p. 4.B.21]

10
(CR-1)



The EIR explains that as a characteristic of Midcentury Modern design, the use of patios, pergolas and interior courtyards created welcoming, transition areas where the inside and outside merged. [DEIR p. 4.B.12]

10
(CR-1)
cont'd

I, and the entire Community strongly supports our Full Preservation Alternative that protects these cherished Historic features of this important and iconic site.

11
(AL-2)

THANK YOU

Comments to the Draft Environmental Impact Report for 3333 California St. Mixed Use project

The developer's request for 15 years to construct the project is suspect. This looks like a plan to sell a new entitlement on an up zoned property. Developers all over town are selling new entitlements rather than build housing. Alternatives analyzed in the Draft EIR would be built in 3 to 5 years. The Community Preservation Alternative would be built within three years.

1 (PD-1)

I fully support the Community Full Preservation Residential Alternative for 3333.

- It preserves the Historic Characteristics of this wonderful historic site.
- It provides 558 (or 744 in the Variant) housing units.
- It builds them in three years.
- It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.
- It does not create 13,000+ retail auto trips per day.
- It does not generate approx. 15,000 tons of greenhouse gases.
- It preserves both the present childcare center and the existing café.
- It matches the surrounding neighborhoods for character, style, scale and bulk.

2 (AL-2)

I strongly oppose the Developers Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333. It threatens the quality of life; it poses threats to pedestrian safety; it contributes to climate change.

3 (ME-1)

While there are many impact areas of the Draft Environmental Impact Report that should be challenged as the assumptions used are suspect, I will focus on one:

4
(TR-8)

- **Cumulative Pedestrian Conditions (4.c.112)**

As an avid walker in San Francisco, I appreciate the effort to improve sidewalks and intersections. However improvements that are proposed will do nothing to enhance the pedestrian environment. For example the addition of a crosswalk at the eastern Mayfair/Laurel intersection will not fix today's problem that will only be worsened with the post project increased traffic. Today the crosswalk that runs north /south across the west side of Mayfair at Laurel is a death trap as people using Collins as a pass through routinely fail to stop at the intersection. Increased traffic volume will result in more injuries. The only reason that this crosswalk did not come up as dangerous is that today's residents know to pay attention. Who will warn the new residents of 3333 California?

Also the Euclid Avenue traffic circles have made pedestrian life a nightmare. Drivers cannot see across the traffic circle and are so busy trying to figure out how to navigate that pedestrians are ignored. Again, the assumption that the traffic calming will help with the increased traffic volume is fallacious.

The new bulb out on the NE corner of Euclid and Laurel has not made the intersection any safer. Drivers routinely turn right onto Laurel without coming to a full stop. The addition of one on the NW corner will not change the driving behavior. Again the increased traffic will not be mitigated by these bulb-outs.

From: David Goldbrenner <goldbren@gmail.com>
Sent: Tuesday, December 18, 2018 1:31 PM
To: PIC, PLN (CPC)
Cc: Jane Fridlyand
Subject: 3333 California Project

Dear Planning Department,

I am writing to express my concern over the 3333 California project. I recently heard about the project and attended last week's Planning Commission meeting at city hall.

I live about 6 blocks from the site with my wife and daughter, and I am deeply concerned about the size and scale of the project. It looks like the creation of a mini-city in our neighborhood. 1 (GC-1)

The developer has asked for a 7-15 year time frame. I cannot imagine having this important area and intersection under construction for this amount of time. We use the JCC frequently and we transit down California and Presidio streets constantly as well. I have a 5-year-old daughter--will she really be 20 by the time this project is finished? That is mind-boggling to me. 2 (PD-1)

We are not opposed to development of htis site but request a smaller project with a shorter construction timeframe.

We do not see how the currently proposed project, with its duration, size, traffic impact, etc can possibly be in the best interest of the neighborhood. The city's housing shortage needs to be addressed, but it shouldn't be solved by opportunistically adding unreasonable density wherever there is an available site--that is not fair or just. Increases in density need to be distributed fairly amongst the various city neighborhoods. 3 (ME-1)

Again, we are not opposed to developing this site, but the project as it stands is not reasonable and we strongly oppose it and urge you to work with the developer on a version that scales down the number of units, the retail, and the construction timeframe to 3-5 years at most. 4 (AL-3)

Thank you very much.

Sincerely,

David and Zhenya

David Goldbrenner
2947 Jackson St.
SF CA 94115

Subject: Comments on 3333 Project
Date: Friday, January 4, 2019 at 8:15:22 PM Pacific Standard Time
From: David Goldbrenner
To: Zushi, Kei (CPC), richhillissf@gmail.com, Melgar, Myrna (CPC), planning@rodneyfong.com, Johnson, Milicent (CPC), Koppel, Joel (CPC), Moore, Kathrin (CPC), Richards, Dennis (CPC), CPC-Commissions Secretary
CC: Jane Fridlyand, Stefani, Catherine (BOS), Richard Frisbie, LaurelHeights2016@gmail.com

Dear Mr. Zushi and Commissioners,

I am writing to express my deep concerns over the current proposal for 3333 California, and to express support for the Community Alternative. 1 (GC-1) 2 (AL-1)

I have lived in Pacific Heights for 7 years, the last three at my current address, along with my wife and daughter. We live on Jackson between Baker and Broderick, about six blocks from the corner of California and Presidio, one of the major intersections that would be affected by the project.

We use the JCC frequently, and are constantly using both California, Presidio, Masonic and other streets around the site to get to our destinations, both by car and bus (1, 3 and 43). We also shop at Laurel Village, Trader Joe's and other local destinations.

We are concerned that the proposed project would affect us in numerous ways, the most important of which I outline below: 3 (PD-1)

- The proposed 7-15 year time frame for the project is mind-boggling to us. Will our five year old daughter really be 20 when this is finished? Dealing with construction delays, noise, dust, traffic congestion, diesel smoke, torn up road, and other hindrances for up to 15 years as we visit the JCC, take the 1 bus from California and Presidio, etc, is deeply troubling.
- The long timeframe makes it more likely that in the case of an economic downturn, such as in 2008, the project could halt indefinitely.
- The truck traffic and other construction traffic is a threat to pedestrian safety. The congestion will force cars onto nearby side streets, affecting the whole area. 4 (TR-8)
- The size and scope of the project will have major environmental impact in terms of the amount of GHG released. 5 (GHG-3)

Instead, I strongly support the Community Alternative, which will produce the same amount of much-needed housing. It will increase the density of housing in the area, but will not have the excessive and unneeded retail, office and commercial space. It also can be completed in a reasonable timeframe, thus balancing the needs of the neighborhood and the city as a whole. 6 (AL-1)

I understand that the city needs more housing, but letting developers build small cities on any available site is not a fair or equitable way to solve the problem. I urge the commission to work with the developer to be responsive to community concerns by scaling down the proposal. 7 (ME-1)

Thank you very much for your consideration.

Sincerely,

David Goldbrenner

Zhenya Fridlyand
2947 Jackson Street
San Francisco, CA 94115
415-225-8963

From: Theodore Gordon
To: richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); Zushi, Kei (CPC); Stefani, Catherine (BOS)
Subject: Support Housing at 3333 California
Date: Monday, December 10, 2018 5:43:50 PM

Dear Planning Commissioners, Planner, and Sup. Stefani,

My name is Theo Gordon and I am a resident and voter of San Francisco. I live ten minutes from 3333 California.

I moved to San Francisco because, as so many people before me, I saw an opportunity to further myself. It has become harder and harder for people to seek opportunity in San Francisco because of the dire housing shortage. For every 8 jobs we create in the Bay Area, we build 1 unit of housing. This is why we are in a crisis. We must build more housing so that our neighbors can afford to live and work in this city and so that we are not pushing out vulnerable communities. We have to stop making excuses and we have to build housing now. 1 (ME-1)

The project at 3333 California is a chance to build 700 new units of housing. That's 700 more families and individuals who get the opportunity to live in a great neighborhood in a fantastic city. That's 700 more families and individuals who have access to good schools. 700 more families and individuals who can take the bus to work instead of destroying our environment, driving into the city from far out in the East Bay.

As you know, a small but well connected group of wealthy neighbors are trying to label an office building as historic. No such claim had ever been made about this building until the possibility of new housing came up. Let's call this what it is, a perversion of historic building protections to enrich a few, already very well off, people. It is another example in a shameful history of downzoning and redlining that was used to keep newcomers and diversity out of the northern and western parts of the city. This is NIMBYism at its worst. 2 (CR-1)

Sup. Stefani, I know that you consider yourself a progressive. Please choose the progressive option that will help bring diversity to our schools and neighborhoods, get people out of their cars, and give 700 neighbors the opportunity to call San Francisco home. 3 (ME-1)

Thank you,
Theo Gordon

From: M.E. Gwynn
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); laurelheights2016@gmail.com; richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); CPC-Commissions Secretary
Subject: 3333 California St. DEIR
Date: Monday, January 07, 2019 10:37:54 AM

Dear Mr. Zuchi,

As a long time resident and homeowner who lives on the 3300 block of California Street, I wanted to express my opinion on the DEIR done for the 3333 California development**.**

The developer's request for 15 years to construct the project is suspect. This looks like a plan to sell a new entitlement on an upzoned property. Developers all over town are selling new entitlements rather than build housing. Alternatives analyzed in the Draft EIR would be built in 3 to 5 years. The Community Preservation Alternative would be built within three years. 1 (PD-1)

The DEIR does not address the impact on the neighborhood of a 15 year construction project and all the resulting affects on the surrounding neighborhoods and thus it is incomplete and inaccurate. 2 (GC-1)

I fully support the Community Full Preservation Residential Alternative for 3333 3 (AL-2)

It preserves the Historic Characteristics of this wonderful historic site.
It provides 558 (or 744 in the Variant) housing units.
It builds them in three years.
It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.
It does not create 13,000+ retail auto trips per day.
It does not generate approx. 15,000 tons of greenhouse gases.
It preserves both the present childcare center and the existing café.
It matches the surrounding neighborhoods for character, style, scale and bulk.

I strongly oppose the Developers Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it poses threats to pedestrian safety; it contributes to climate change. 4 (ME-1)

The Community Full Preservation Alternative will generate ZERO retail auto trips to 3333 as opposed to the 12,000-15,000 retail caused the Developers Proposal. 5 (AL-2)

The Community Full Preservation Alternative will protect the small, family owned businesses in Laurel Village, Sacramento St. and Presidio Ave. A quick walk around these neighborhoods will clearly show the immense pressure these businesses are experiencing. More retail is unneeded and unwanted. It will destroy our local businesses. The Neighborhoods are well served by businesses at Laurel Village, Sacramento St., Trader Joe's, City Center, California St. etc. we do not need more, more, more. We do not need the more than 100,000 square feet of Retail, Office, Commercial space that the Developers Proposal calls for. One of the reasons the Developer destroys this historic site is to create enough space for this unneeded and unwanted Retail/Office/Commercial (ROC) nonsense. 6 (ME-1)

The CPMC development, a Community supported plan by the way, adds 270 housing units and the Developer and neighbors have agreed to have no Retail. **Why is 3333 being treated differently by forcing unneeded and unwanted ROC (Retail/Office/Commercial) against the overwhelming opposition of the surrounding residents?**

6 (ME-1) cont'd

Recent studies have shown that the City's method of calculating auto trips, and the resulting chaos and congestion is deeply flawed, to the point of being misleading.

At the time the VMT (Vehicle Miles Travelled) methodology was developed, SF CHAMP last updated Nov. 2014, the Transportation Networking Companies (TNCs) -Uber/Lyft/Chariot etc. were still in their infancy and so the VMT methodology fails to account for their incredibly disruptive impact. The TNCs average, conservatively, in excess of 170,000 trips per day in San Francisco. Studies also show that TNCs increase passenger trips by almost 10%. There are about 2,000 taxi medallions in San Francisco so TNCs do not just replace taxis they overwhelm them by orders of magnitude.

Also, implementation of the VMT methodology is not mandated until 2019 but as Planning and The Developers were unable to explain away the 13,000 Retail Auto trips generated by the existing, and still acceptable, Level of Service methodology, they implemented the VMT methodology with "refinements." In much the same way as they calculated on the "direct" GHG and totally ignored the "indirect" even though required to do so by their own criteria.

Planning calculates the Developers Destructive Proposal using VMT methodology will generate approx. 5,800 total auto trips for 3333 for Retail + Office + Residential which is a very suspect number as it is based on questionable assumptions, such as " The SF Guidelines **do not provide a specific methodology to** assess the number of trips….." Planning has therefore, with no supporting documentation or analyses, applied "appropriate refinements to the standard travel demand…." Rather amazing that these "refinements" all work in the Developers favor. Nowhere in these "refinements" have THCs been taken into account! **All of which renders the Traffic Analysis incorrect, incomplete, inaccurate, invalid.**

The Planning Department proposes to reduce the number of retail parking spaces as a mitigation measure to reduce the significant traffic impact. This is a false assumption and shows the extent to which the Developer and Planning misunderstand, or simply choose not to understand, the impact that the TNCs have.

Planning's mitigation measure is a stone age solution to a digital age problem. How will many people respond to a perceived lack of parking? They'll simply call a TNC and go anyway. **Eliminating parking won't eliminate auto trips it will actually increase auto trips.**

7 (TR-2)

The Developers Proposal surrounds 3333 with five major Loading/unloading zones for TNCs and Freight traffic. Initially the Developers promised that all the unloading would be done underground or on-site and now the site is ringed with these zones! These zones not only eliminate approx. 40 parking spaces but they will create additional traffic congestion and pollution. So we have a ring of loading zones in addition to the inevitable double parking that occurs for deliveries and drop-offs.

8 (TR-10)

I hope that you will take my comments into account when assessing the impact of the 3333 California development as currently proposed. It is unfortunate that after so much efforts at outreach that a) the community's imput has been ignored and b) that the developers have presented a proposal with last minute significant and meaningful changes (15 year construction period, street loading zones etc) , which were not shared with the community.

9 (ME-1)

Regards,

Mary E. Gwynn

3328 California St. apt. 4

From: Anne Harvey <annetharvey@hotmail.com>
Sent: Thursday, December 13, 2018 9:54 AM
To: richhillissf@gmail.com; Melgar, Myrna (CPC) <Myrna.Melgar@sfgov.org>; planning@rodneyfong.com; Johnson, Milicent (CPC) <Milicent.Johnson@sfgov.org>; Koppel, Joel (CPC) <Joel.Koppel@sfgov.org>; Moore, Kathrin (CPC) <kathrin.moore@sfgov.org>; Richards, Dennis (CPC) <dennis.richards@sfgov.org>; CPC-Commissions Secretary <commissions.secretary@sfgov.org>
Cc: Richard Frisbie <frfbeagle@gmail.com>
Subject: 3333 California Street-URGENT

I am Anne Harvey and I am writing to you on behalf of my husband, a professor emeritus at the University of San Francisco, and our two sons, physician and an economist to strongly urge the Planning Commission to grant a 15-day extension of the Due Date for comments on the DEIR for 3333 California. 1
It is a lengthy and complex document. And for some unknown reason, the Planning Department has refused to extend the time limit for written comments. As to stands now the deadline for written response to the Draft EIR is December 24, Christmas Eve.This is ridiculous, Christmas ia a time for family and friends. (GC-3)
People should not be rushing around to meet en arbitrary deadline.

We fully support the Community Full Preservation Residential Alternative for 3333 California.and if you examine the matter closely, I think you will too. In any event please let the public have additional time to have input on this matter. 2 (AL-2)

From: Anne Harvey
To: richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); CPC.3333CaliforniaEIR
Cc: Richard Frisbie
Subject: 3333 California Street EIR Insufficiency and Comments
Date: Tuesday, January 08, 2019 5:09:35 PM

Dear Commissioners,

I am writing to you to strongly urge you to reject the draft EIR as being insufficient. It fails to consider the proposal the community put forward. The community put forward a full preservation residential alternative for 3333 California Street. I strongly believe that the community proposal should be adopted. 1 (AL-2)

My family and I support all the points submitted by Richard Frisbee. My husband and two sons and I have lived in San Francisco since 1978. In fact, my younger son was born today in the hospital just down the street from this project on todays date in 1983. At the time we lived in the Western Addition and since then both of our sons have gone to school here in San Francisco and grew up here and are both young professionals. We are in full support of more housing at 3333 California. But we are aware of the incredible deficiencies of what the developer is proposing. 2 (ME-1)

Please do not rezone this area. Please adopt the neighborhood proposal as it is much better than what the developer is doing. My husband is a retired professor at the University of San Francisco and I was self employed. One of my sons is a doctor and the other is a young professional. They agree with my position. 3 (AL-2)

Anne Harvey
415-931-5678

Minutes Received at CPC Hearing 12/13/18 (*)
K. Zushi

I urge -- 12/24 DEIR deadline be extended 15 days.
On 12/5, HPC had remaining questions on neighborhood alternative.

I-HILLSON1

Over 4 decades ago, *The Chronicle* described site as having:
"pleasant green lawns and plantings that enhance the handsome low lines of the simple building designed by Edward B. Page."

DEIR doesn't mention that the cultural resource of remnant large mature trees from Laurel Hill Cemetery that were incorporated into the Firemen's Fund Building site as historic character-defining features are workhorses in mitigating GHG emissions. Planting small trees over a span of 15 years as if that would provide equivalent or reduced GHGs from thousands of VMTs associated with *NEW* retail uses to negatively impact everyone's HEALTH is concerning. 5 (GHG-1)

Historically site was designed to have commercial on California only. 6 (ME-1)

The Jordan Park Improvement Association Board opposes retail on Euclid side.

Rose H.

MR. IONIN:
I will send this to you electronically.
R

January 8, 2019

Planning Department
Attn: Kei Zushi, Senior Planner
1650 Mission St., Suite 400
San Francisco, CA 94103

Case No. 2015-014028ENV, State Clearinghouse No. 2107092053, 3333 Calif. St. DEIR Comments

Thank you for the opportunity to comment and ask questions on the DEIR.

Volume 1:
Page S.2: In order to develop 558 "dwelling" units under the proposed project or 744 "residential" units on the 10.25-acre site, "…the existing annex building, surface parking lots, and circular garage ramp structures would be demolished." Why would there need to be 13 new structures to be erected with either proposal? 1 (PD-3)

In the 896 parking spaces that are to be provided in "four below-grade parking garages and in 2-car parking garages serving the duplexes on Laurel, would there be 60 public parking spaces for the "60 existing public parking spaces" that are going to be removed? If not, what would be the total number of public parking spaces on the site at each phase of the development and at full completion? 1 (PD-3)

Page S.6, S.7, S.8: "CR-1: The proposed project or project variant would cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5 of the CEQA Guidelines." 2 (CR-4)

In re the mitigation measures stated – Documentation of Historic Resource; Measured Drawings; Historic American Buildings/Historic American Landscape Survey-Level Photographs; HABS/HALS Historical Report; Video Recordation; Softcover Book; & Interpretation of the Historical Resource: While members of the public may appreciate the above products to document the tangible items on the property, how will this be done if the project is supposedly to take 5-7 years or even up to 15 years ("…the proposed project or project variant may be developed over a 15-year timeframe" <Page 4.C.45>)? When would the historic resource materials be available considering the multiple phasing of the project? How would the public know when these become available? Who will be responsible party to get these products to the public? 2 (CR-4)

As part of the "interpretative program," would there be a new plaque for the listing on the CA Register to be placed on the property? If so where? If not, why not? Would the old plaque that marked Landmark #760 be part of the documentation (even though the landmark standards changed since then & maybe that's why the plaque was removed?)? 2 (CR-4)

For future generations, it would be nice to capture this well-known history of San Francisco's Laurel Hill Cemetery where the city's pioneers were once buried along with being one of the "Big Four" cemeteries with Calvary, Masonic and Odd Fellows cemeteries. 2 (CR-4)

If and when any of the larger remnant trees reach the end of their lifespan or are killed by the development, it would be a good gesture to the community to have parts of it available for sale and to earmark the funds to go into the urban forestry fund so that tree plantings in this area where such large trees are removed will be increased for the benefit of the community since there are not many large mature trees and to combat future added pollution in this area where traffic is getting worse and as more pollution causing activity increases. 3 (BR-1)

Also, it may be prudent to have not only other parts of the larger remnant trees donated to scientific study as the trunk of the larger trees will tell a story of the environment in the area since the Laurel Hill Cemetery days and the trunk slice at the largest diameter can be saved as a display somewhere. It would help with botanical genome study, too. This would be better than to just dump the remnants and mulch it with no scientific findings for the future. For the environmental study students, would this not be a great project? 3 (BR-1)

It is especially important to plant and keep large mature trees where there is space in light of the fact that "open space" does not mean *ON THE GROUND* but rather includes green rooftops, walls, and sidewalks where large mature trees could not thrive. Information from these older growth trees would give scientists a lot of information about climate change and other things as they occurred in this area. Rather than toss out tree cuttings as mulch only, would that the mitigation measures also provide for people to obtain samples for future historic purposes and/or scientific studies? One may not know what they have and rather than do harm first, it may be prudent to study such matters as is done under the "Precautionary Principle." 4 (PD-3) 5 (BR-1)

In addition, since the Laurel Hill Cemetery contained various rare shrubs like manzanitas, it could be that the area still contains some dormant seeds which may be good to collect for biological study. The range of these rare manzanitas and the conditions could be studied by school children. These seeds accumulate in "seed banks" and would be good to preserve for scientific research.

Page S.10: "TR-2: The proposed project or project variant would cause substantial additional VMT and/or substantially induce automobile travel." ("SIGNIFICANT") 6 (TR-5)

While it is appreciated that Mitigation Measure M-TR-2 proposes to *REDUCE* the retail parking supply as though that would reduce the number of VMTs, any added retail generally, and restaurants in particular, according to prior DEIRs for other development sites, show that retail attracts vehicles to the site such that elimination of a handful of parking spaces will not solve the inundation of vehicles – whether personally owned or for hire (car sharing) – in this area for at least ¾-mile in all directions. The retail use attracts vehicle trips. And with rideshares, there does not have to be parking to have them add to the vehicle trip count.

What formula model does Planning Department use to calculate VMTs? Does it include commercial vehicle miles travelled? What road types are included or excluded from calculations? What about VMTs from carshares? Would one-way carshare trip miles travelled be included in the calculations vs. 2-way carshare trips? Would certain passenger vehicle miles traveled be excluded from calculations? What other models were used besides the one used by Planning? Were the outcomes the same? Was the VMT calculation model used in this DEIR used for all other DEIRs in the last 3 years? If not, why not; and if so, what were the mitigation measures for those DEIRs that could be applied to this site? 7 (TR-2)

The DEIR does *NOT* account for the post-2008/2009 phenomena of TNCs / rideshares causing substantial VMTs in the area. Carshare drivers stop in the middle of the street to load and unload passengers. They drive in from across the bridge to "work" in SF. When they get a customer, they pick up the customer and drive off to another area that could be miles away – especially when the driver drives into the city from outside, the total mileage he has to drive is not included in the VMTs which starts and stops only upon the rider's total ride rather than the miles the TNC driver has racked up. The same customer may want the same driver to drive him/her back so the driver drives back in from miles away potentially to pick up this initial customer at 3333 California who only needs a ride 3 blocks away. The mitigation measure to reduce the VMTs generated by this project would be to eliminate all or much of the *retail* use which in many Planning Department DEIRs show is what generates the most VMTs. In addition, different retail uses generate more VMTs than others. Retail 8 (TR-5) 9 (TR-1)

and especially ***restaurant type use*** generates ***a lot more traffic*** because they stay open later than another use that is open only 9AM-5PM. Neighbors in this area drive or call a rideshare to get a cup of coffee even if only 2 blocks away. 9 (TR-1) cont'd

Also, documentation from University of California, Davis, and other sources, indicate that San Francisco is 92% dependent now on carshare mode (e.g. Uber, Lyft, etc.) as opposed to Muni buses. The documentation states that had these carshare modes not existed, they would walk, bike or take Muni or a taxi. The documentation also shows that there are millions of VMTs travelled by these rideshares in SF based on the total amount of fares collected by these companies. 10 (TR-2)

Here is a sample article of the impact from rideshares and VMT count:

https://www.washingtonpost.com/local/trafficandcommuting/as-ride-hailing-booms-in-dc-its-not-just-eating-into-the-taxi-market--its-increasing-vehicle-trips/2018/04/23/d1990fde-4707-11e8-827e-190efaf1f1ee_story.html?utm_term=.1f054949bc7e&noredirect=on

Moreover, here is an additional document about the impact of rideshares on VMTs. There is a statement that VMTs would be 83.5% more miles than had rideshares not existed or used. Here is the link to the September 2018 text by Henao and Marshall:
https://link.springer.com/article/10.1007%2Fs11116-018-9923-2
This is the abstract for their work:
"Ride-haling such as Uber and Lyft are changing the ways people travel. Despite widespread claims that these services help reduce driving, there is little research on this topic. This research paper uses a quasi-natural experiment in the Denver, Colorado, region to analyze basic impacts of ride-hailing on transportation efficiency in terms of deadheading, vehicle occupancy, mode replacement, and vehicle miles traveled (VMT). Realizing the difficulty in obtaining data directly from Uber and Lyft, we designed a quasi-natural experiment—by one of the authors driving for both companies—to collect primary data. This experiment uses an ethnographic and survey-based approach that allows the authors to gain access to exclusive data and real-time passenger feedback. The dataset includes actual travel attributes from 416 ride-hailing rides—Lyft, UberX, LyftLine, and UberPool—and travel behavior and socio-demographics from 311 passenger surveys. For this study, the conservative (lower end) percentage of deadheading miles from ride-hailing is 40.8%. The average vehicle occupancy is 1.4 passengers per ride, while the distance weighted vehicle occupancy is 1.3 without accounting for deadheading and 0.8 when accounting deadheading. When accounting for mode replacement and issues such as driver deadheading, we estimate that ride-hailing leads to approximately 83.5% more VMT than would have been driven had ride-hailing not existed. Although our data collection focused on the Denver region, these results provide insight into the impacts of ride-hailing."

The rideshares are stated to also impact the ridership of existing Muni buses because they cannot move when the rideshares add to the congestion and automobile delay on the streets. If the retail use was curbed, there would not be as many vehicles in the area to cause the Muni delays as well.

Part of the mitigation measure should be to curb increased vehicle counts on the residential arterial (side) streets within ½-mile of the project that are already taking on the bulk of the traffic. What are the vehicle counts projected for Laurel, Manzanita, Iris, Heather, Spruce, Parker, Commonwealth, Jordan, Palm, Euclid, Geary, and California St. from 2018 each year until the fully built out project? It is hard to say the total number of years the development is projected to take – ranges from 5-7 years (see Table AQ-1 shown later herein & from DEIR) to 15 years so what are the counts based on the time projections? 11 (TR-5) 12 (TR-14)

Page S.10: "TR-3: The proposed project or project variant would not cause major traffic hazards." ("LESS THAN SIGNIFICANT" (LTS)) 13 (TR-7)

Improvement Measure I-TR-3 says there will be parking garage attendants or other queue abatement actions but there will be bad actors who will "only for a minute" park in neighbors' driveways as they wait for parking in the garage. These queued up drivers will compete now with the rideshares that generally are in the neighborhood parked and waiting or sleeping in their vehicles for their next client. Neighbors will no longer have any street space to park because all the "temporary" parkers are taking up practically every foot of curb space. 13 (TR-7) cont'd

If double-parkers occurred at the intersection of Euclid and Laurel or farther east, there could be major collisions from being not only blinded by the sun but due to the trifurcation of Pine into Euclid, Presidio, and Masonic. This area is like an accident waiting to happen. I cross there as a pedestrian on the tiny little refuge islands and can get the breeze from cars "flying" by. The time for the signal for pedestrians to cross on a fresh green is very short there. Vehicles do not see the signals well so they continue on their turns even on a red. 14 (TR-8)

There could be major traffic hazards with a new retail on the Euclid corner which may take out people on the pedestrian islands or on the sidewalk. The retail on Euclid side should be taken out because people will spill out onto the dangerous part of the parcel putting them at risk for their safety. Rideshares will be taking up road space and on-street parking for pick-ups and drop-offs so there will be a lot of automobile delay especially with the heavy traffic from Pine (one-way westbound, Masonic (left turn westbound onto Euclid & right turn onto Euclid) and Euclid (from other cross-streets) are combined. Although the report shows the impact at "LESS THAN SIGNIFICANT" ("LTS"), the cumulative traffic issue with Trader Joe's traffic already bogging down Masonic southbound should not overburden the adjacent neighborhoods with cut-through traffic through Laurel Heights and Jordan Park. In addition, the delivery trucks travel within ½-mile of Laurel Heights to the Laurel Village Shopping Center, to the existing CPMC cafeteria and hospital to add to the overburdening of the street. 15 (TR-12)

When new businesses get to inhabit the City Center at Masonic and Geary, those traffic counts and VMTs will add to the area VMTs which should be much more than it is today. If a grocery store or another restaurant or more is inserted in the City Center, how will the traffic from that impact the Laurel Heights/Jordan Park, Geary and California St. areas? Has this been studied in the DEIR?

This point cannot possibly be considered "LTS". See **C-TR-1** (Pages S.15-S.16) "Construction of the proposed project or project variant, in combination with reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative construction-related transportation impacts." ("LTS," "None required" for mitigation)

A number of projects including the Lucky Penny, CPMC rebuild into new housing, a Presidio Avenue project, the GearyBRT closing off lanes for construction that will be coming during the same time span as 3333 California Project, the introduction of a potential Whole Foods at City Center at Masonic, the 3300-mid-block demolition-to-housing project on Geary, the new builds and other increases of unit counts on surrounding "nearby streets" are not taken into account.

Page S.11: TR-3 (continued)
Why would the owner/operator of the garage be held accountable for a situation caused by the developer's design of the project? If the project is going to attract that much vehicular traffic and problems for the garage, then the uses that attract the most vehicles that would use the garage would need to be eliminated from the project. 16 (TR-7)

Page S.12: Unsure that a new Muni line would mitigate much of the traffic or loading demand on buses when many use the rideshares. Muni ridership has declined. Perhaps more people in this area take rideshare. This means more VMTs in the area than other areas where more ridership exists on Muni. There are many lines that go by the 3333 California site but do not stop there (e.g. 38BX, 38AX, 17 (TR-9)

NX, etc.). These existing lines use Masonic to get to Bush to get downtown. Again, with other transportation modes available such as scooters, bikes, rideshares such as Uber, Lyft, Chariot, not sure how this will mitigate the impact of ridership on Muni. Will there be a 43-Masonic line ridership survey to see where they are all going first? Also, if there is less ridership on Muni overall, why not find out where the ride-hailing companies are taking their passengers and from what point to what point before putting in things that may not make any difference? Will such data be analyzed and shared with the public? 17 (TR-9) cont'd

This S.12 mitigation proposal appears to be conflict with C-TR-10 on Page S.17 that says the "project will not contribute…passenger loading impact." If there is no loading impact, again, it does not make sense to run more buses or run a new Muni line. Also, without knowing if all the future residents and users of the site will be taking Muni or using alternate forms of transportation which are now in use since 2009 when the study was done, not clear why this is also labeled "Not required" and "N/A" just like C-CR-1 (above). And if all the future visitors and residents to the site will be taking rideshare or driving – as the statistics for automobile use in the city is still fairly high with Muni ridership declining, it makes less sense to add to the 43-Masonic line or increase the frequency. Just because there are more buses being run on a line does not mean that is the basis to say the demand is there. There is already the 2-Clement line, the 1-California line and the 43-Masonic at the location. The 38-Geary is only up to 2 blocks away. Anybody west of these locations generally takes the 33-Stanyan, 44-O'shaugnessy, 28-19th Avenue or 29-Sunset lines to go in the north-south direction.

Page S.12 (***see also TR-4*** comments): The "fair share" contribution is listed not to exceed these amounts:

"Proposed Project – $182,227
Project Variant – $218,390"

However, due to the project taking at minimum 5-7 years to be completely built out or as described from the DEIR up to 15 years, these figures would be too low as the cost in future of the Muni operation and purchases increase. There should be a clause in the developer agreement to ensure that the project pays for ***future increases in cost*** to mitigate the traffic impacts to the value of the cost of the bus with projected cost of a bus in the future. The ***$182,000-$218,000 is low to mitigate impacts*** of the transit ridership by full development of this project.

TR-4 (***see also S-12*** comments): "The proposed project or project variant would result in an adverse transit capacity utilization impact for Muni route 43 Masonic during the weekday a.m. peak hour under baseline conditions."

"Mitigation Measure M-TR-4: Monitor and Provide Fair-Share Contribution to Improve 43 Masonic Capacity Based on an evaluation of the transit ridership generated by the proposed project or project variant, monitoring of transit capacity utilization for the 43 Masonic line shall be initiated when the first phase of development has been completed and occupied."

Where are the extra 3 people mentioned in the DEIR triggering the need to purchase another bus at today's cost of $940,000+ coming and going to? Why not find out where most of the 43-Masonic line riders are going to and from? Why is there not an estimation of the need for any 43 Masonic buses for the entire development completion with the purchase price of the bus being paid for those as well including estimated bus purchase cost at end of the development? Otherwise, the taxpayers end up paying for supporting Muni via more ridership fare increases and such. A developer who works in partnership with the city should pay for the additional infrastructure costs into the future if his/her development is going to be delayed for many years. Otherwise, it's cheaper to put the entire development in at the current costs of infrastructure or it will cost a lot more to the taxpayers and Muni riders in the form of fare increases. If the Muni fare increases are equivalent to the rideshare modes,

there will be even more VMTs as San Francisco is more and more dependent on rideshares especially as fares increase for the municipal bus system (Muni) and travel times increase as more vehicles clog the streets to increase travel time causing major delays so all modes get bogged down and people sit in vehicles and pollute at lower RPMs. The stopping and starting of vehicles as they cannot get around town and as signal timing is contributing to the automobile delay will increase air pollution on many streets around this project for at least ½-mile radius. One can see the automobile increase just from watching and this does not take any $100,000 "traffic study" to figure out. 17 (TR-9) cont'd 18 (AQ-3)

This point about increase in vehicular travel in this area with nobody really going anywhere efficiently should also be a point under "AIR QUALITY" (***Chapter 4E & AQ***).

Air Quality Table AQ-1 (shown below): It shows the project being done from 2020-2027. With this timeline, I think the GHGs will not be remedied with the current trees of unknown species being planted even if in greater quantities than the existing number of mature trees. The mature trees are the ones that do the heavy cleaning of the air. There should be some consideration of tree species that also will not cause harm to the existing mature trees in the area to be retained and are in good condition. 19 (GHG-1)

Table AQ-1
Project Construction Phasing
3333 California Street
San Francisco, California

Phase	Phase Name	Start Date	End Date	# of Work Days
1	Masonic/Euclid	3/2/2020	8/19/2022	645
2	Center Building A/B	9/10/2021	8/31/2023	515
3	Plaza A/Plaza B/Walnut	12/4/2022	11/18/2025	773
4	Mayfair/Townhouse/ Euclid Park	5/22/2025	1/12/2027	429

Notes:

[1] Project construction schedule provided by the Project Sponsor.

There's a comment (Page 523) that states in ***today's*** dollar value:
"Cost of a 40-foot electric bus is $967,132"

20
(TR-9)

The fair-share contribution to even add one bus is not going to be covered per the amounts shown on Page S.12 above because in the future, the bus would cost more. How was this figure calculated? If the project takes years to complete, there should be a figure that would purchase however number of buses to mitigate the impact of not having sufficient number of buses as a result of this project due to the impact to the community in the surrounding area, no?

The trigger for the needed 43-Masonic line is explained as being due to the 3 additional riders on that line. Where are these people on this line going to that it is so heavily skewed to the *northbound* 43-Masonic trips in the AM Peak Hour?

Page 248 shows 43-Masonic ridership NORTHbound & Southbound as below:

Directional Muni Line Analysis

Route by Direction	Existing Conditions								Project Trips		Existing plus Project Conditions			
	Weekday AM Peak Hour				Weekday PM Peak Hour						AM		PM	
	Ridership	Capacity	Utilization	MLP	Ridership	Capacity	Utilization	MLP	AM	PM	Ridership	Utilization	Ridership	Utilization
Northbound														
43-Masonic	318	378	84%	Geneva/Mission	140	315	44%	Masonic/Fulton	15	32	333	88%	172	55%
Subtotal	*318*	*378*	*84%*	—	*140*	*315*	*44%*	—	*15*	*32*	*333*	*88%*	*172*	*55%*
Southbound														
43-Masonic	246	378	65%	guna Honda Blvd/Clarend	215	315	68%	Masonic Ave/Golden Gave Av	37	14	283	75%	229	73%
Subtotal	*246*	*378*	*65%*	—	*215*	*315*	*68%*	—	*37*	*14*	*283*	*75%*	*229*	*73%*

Is the same model used for transportation VMTs used for calculating impact or needs for Muni? What is the margin of error to calculate the need for Muni considering the focus is on the 43-Masonic line which is at the boundary of the Census Block or Transportation Analysis Zone (TAZ)? Has any analysis been made as to whether the riders using the 43-Masonic are going across town or milling about just to travel a few blocks to the City Center on Masonic for a cup of coffee? Would it not be more accurate to find out where the riders are going? What about the impacts to the 1-California or the 2-Clement? 20 (TR-9) cont'd

Page S.13: "TR-6: The proposed project or project variant would not cause significant impacts on regional transit." ("LTS" & the mitigation = "None required")

When the streets in the area get jammed with more vehicles in the area along with potential new bus line or more Muni buses as stated in this DEIR, more road space is taken up and everybody will be waiting, including the Golden Gate Transit buses on Geary that go to Marin County. How is this analyzed in the DEIR?

S.14: "TR-9: The proposed project's or project variant's freight loading demand would be met during the peak loading hour." ("LTS") 21 (TR-10)

One of the mitigation measures states:
"Requiring deliveries to the retail and restaurant components of the proposed project or project variant to occur during early morning or late evening hours."
If any more trucks are going to weave through the Laurel Heights & Jordan Park neighborhoods during the wee morning hours or late evening, the community will not be able to get quiet enjoyment of their properties.

"Delivery to the retail and restaurant components" of the project is unclear as to when these would occur. Please clarify. Restaurants usually are open late. They would already have deliveries late. Most deliveries should be done on OFF-PEAK, *NON*-WEE-HOURS to not create a nuisance to the neighborhoods.

The DEIR mentions:
"Installing delivery supportive amenities such as lock boxes and unassisted delivery systems to allow delivery personnel access and enable off-peak hour deliveries"

If this is going to create *"Amazon-like" lockers* (package delivery lockers for mail orders) to be accessed 24/7, there will be a huge impact to more VMTs and other CEQA impacts to the neighborhood that would not ordinarily exist if restricted to when any retail is open for business. Also, should such locations ("Delivery Supportive Amenities," Page 246, "TDM") be identified on the site, they should be kept on the commercial corridor rather than on the Euclid side which is residential in nature.

Page S-15 (TR-10): "…passenger loading demand would be met during the peak loading hour and would not create hazardous conditions or significant delays for transit, bicycles or pedestrians. / "LTS" 22 (TR-9)

Based on the 12,000+ VMT for the project and with all the retail and office space being proposed, there is likely to be delays for transit as more conflicts at the intersections would arise by cutting new streets through the historic property site. There will be automobile delay to the point of gridlock in some areas. Putting retail in the Euclid building and at the corner plaza where the Muni Express buses and commuters travel at a good clip around the Euclid-Masonic intersection at all hours but especially during the AM and PM peak hours with 3-lanes of one-way traffic from Pine heading westbound is compromising safety for everybody. I do not think this should be considered "LTS" if any sort of use 23 (TR-8)

allows people to linger about this area and on the corner of this steep hill area. Also, as more projects will not have parking allowed with units on Presidio Avenue and practically every other street in the city, the rideshares will, along with all the road-dieting, bulb-outs for pedestrian safety, lane marking changes and traffic control devices cause a lot of automobile delay and could be dangerous to get *emergency access and support* into and out of the area for not only this site but for the rest of the nearby community inhabitants. 24 (TR-13)

Related to this above matter about emergency access, see Page S.15, ***TR-11*****:** "The proposed project or project variant would not result in significant impacts on emergency access to the project site or adjacent locations." ("LTS," "None required" for mitigation measures)

This also applies to S.13 ***TR-7 & TR-8*** -- bike lane on Euclid at Masonic heading westbound & to downtown. This is not safe due to slope with multiple vehicular feeders in the area. 25 (TR-8)

Page S.15: The mitigation measure to initiate early morning and late evening deliveries would seem like they would increase noise levels during these hours which are very low per your data (in the 40dBAs). When one adds large commercial truck deliveries during these very early or very late hours, the impact would be greater even if at 75db because everything else around it is so quiet. 26 (NO-3)

Page S.16 (C-TR-2): "The proposed project's or project variant's incremental effects on regional VMT would be significant, when viewed in combination with past, present, and reasonably foreseeable future projects. / S" 27 (TR-5)

The "Mitigation Measure M-TR-2: Reduce Retail Parking Supply" will make things worse and more impactful because as stated earlier, even if there is *no* parking anywhere, more rideshares, etc. will use the streets and bicycle lanes to clog up the street so that the automobile delay will be greatly increased up to at least ¾-mile of the area in all directions.

The statements in this part seem as if they should be in the freight-loading section of the study -- C-TR-9, Page S.17 – as well. If one looks at it, it also says, "Not required" and "N/A." 28 (TR-10)

S.18-S.22: Re noise issues…

The Noise Control Plan should be reviewed and approved by BOTH Planning Department *and* the Department of Building Inspection (DBI) before permit issuance that will show that the daytime and nighttime noise from the project or any variant will not be greater than 10dBAL_{eq}. 29 (NO-1)

This 3333 California DEIR does not have specifics as to how or where the construction-related equipment and vehicles will be handled in the neighborhood. Noise should be attenuated at the closest receptor as part of the mitigation of this "S" Significant Impact category. Developer and contractor may use field-erected temporary noise barriers. Other mitigation measures to employ might be noise control blankets on the buildings as they are worked on, wall off stationary equipment that are noise-makers such as compressors, generators, concrete pumps.

Not only to mitigate noise but also to reduce GHGs in the area, turn off idling vehicles such as dump trucks, delivery trucks, etc.

Staging of concrete pump trucks (they have their concrete spinning while waiting for their turn and thus have a continuous noise) should be determined as to what street and how that will work with the TR (transportation and traffic) category of impact. Who might be responsible would likely be the developer and the construction contractor(s) with notice to Planning and DBI.

Concrete pumping trucks used at night should not increase interior noise levels to surrounding sensitive receptor sites above 45 dBA from 7PM-7AM. Shift noise-making activities to daytime prior to 7PM whenever possible. 29 (NO-1)

If HVAC equipment mitigation is not reached, the Certificate of Occupancy should not be issued for parts of the development where any part of the Noise Ordinance is not met. 30 (NO-3)

The noise-monitoring report should be made available online with a link for the public to access the data to be done daily (every 15 min. or what the neighbors request) rather than on a "weekly basis" (Page S.20). 31 (NO-1)

The hotline number should be posted on a publicly accessible webpage specifically for this construction project as contractors change quickly depending on the phase and change of plans. The hotline number complaints should be handled within 24 hours. Investigational steps should be taken to determine the source of the noise, reduce or abate the noise due to the sound path. Block significant noise makers with non-noise-producing vehicles and equipment so long as they do not create additional hazards for pedestrians, bicyclists and other traffic in the area.

The routes taken (under TR), causes more noise on these residential streets. The routes should be only where large trucks not over 3 tons are allowed. Many streets in the Laurel Heights / Jordan Park area are off-limits for trucks over 3 tons and have many speed humps that would create more vibrations and banging noises when larger vehicles use them. The construction vehicles should not take the restricted streets and stick to commercial streets.

Also, shifting all the noise makers to the early morning or late evening hours will make the noise more discernable since even 70db is heard better during these hours than during the day when other noise is present to "mask" it somewhat.

See also S.15 comments and other areas where noise was brought up as an issue in this document.

Page S.33-S.34: "CR-2: Construction activities of the proposed project or project variant could cause a substantial adverse change in the significance of an archaeological resource." ("SIGNIFICANT," "Mitigation Measure M-CR-2a: Archaeological Testing, Monitoring, Data Recovery and Reporting") 32 (CR-4)

The Mitigation Measure states:
"Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA Department of Parks and Recreation [DPR] 523 series) and/or documentation for nomination to the National Register of Historic Places (National register)/California Register of Historical Resources (California register). In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above."

Would the public be able to obtain a copy of the CD or access a link to the FARR, etc. as described above? Please advise.

Page S.34: Mitigation states:
"The project sponsor shall implement an approved program for interpretation of significant archaeological resources. The project sponsor shall retain the services of a qualified archaeological

consultant from the rotational qualified archaeological consultant list maintained by the Planning Department archaeologist having expertise in California urban historical and prehistoric archaeology. The archaeological consultant shall develop a feasible, resource-specific program for post-recovery interpretation of resources. The particular program for interpretation of artifacts that are encountered within the project site will depend upon the results of the data recovery program and will be the subject of continued discussion between the ERO, consulting archaeologist, and the project sponsor. Such a program may include, but is not limited to, any of the following (as outlined in the Archaeological Research Design and Treatment Plan): lectures, exhibits, websites, video documentaries, and preservation and display of archaeological materials. To the extent feasible, the interpretive program shall be part of a larger, coordinated public interpretation strategy for the project area."

32 (CR-4) cont'd

How will the public be informed as to the availability of this program and what would be the timeline?

Page 2.8: Text in Table 2.1 "Project Summary" shows:
"Retail / None / Not Applicable / 54,117 gsf Plaza A, Plaza B, Walnut, and Euclid buildings (new construction)"

33 (ME-1)

It was stated in one meeting at the Jordan Park Improvement Association Board meeting that there would be no retail on Euclid side near Masonic Avenue but the DEIR still shows it in the plans as on Page 2.82:

The red circle says "RETAIL AT GRADE BELOW"

Also, in the Appendix, there is this picture that also still has pink-shaded RETAIL proposed on EUCLID AVE side. This retail use should be eliminated for the traffic issues & safety issues mentioned earlier. The Jordan Park Improvement Association Board opposes the retail on the Euclid Avenue side:

33 (ME-1) cont'd

In addition, on Page 2.94, the retail use shows up in Table 2.5 as part of Phase I to start in 2020 per another table that shows the phasing dates (alluded to in my comments document elsewhere):

Table 2.5: Preliminary Construction Phasing Program

Phase	Building(s)	Proposed Construction					
		Residential (gsf / units)	Retail (gsf)	Office (gsf)	Child Care (gsf)	Parking (gsf)	Total (gsf)
Phase 1 (2020-2022)	Masonic and Euclid	266,251 / 196	4,287	--	--	87,977	358,515
Phase 2 (2021-2023)	Center A and Center B	322,888 / 190	--	--	--	19,258	342,146
Phase 3 (2022-2025)	Plaza A, Plaza B, Walnut	138,370 / 128	49,830	49,999	14,690	301,060	553,949
Phase 4 (2025-2027)	Mayfair and Laurel Duplexes	97,182 / 44	--	--	--	20,478	117,660
	TOTAL	*824,691 / 558*	*54,117*	*49,999*	*14,690*	*428,773*	*1,372,270*

Source: Laurel Heights Partners, LLC and Webcor, September 2017

As an overall comment, the 49,830 square feet of retail will be a magnet for increased VMTs as indicated in past EIRs in many projects throughout the city with retail and office uses totaling 54,117 sq. ft. of retail and almost 50,000 sq. ft. of office. The city is looking for housing people and not demanding office nor retail. Retail currently exists on Geary, California, Sacramento and parts of Masonic near Geary. Retail is not lacking in this area but quality housing for all income levels may be what the city needs more today. Office "space" can be virtual via technology.

Page 4.C.7: "The project site comprises most of the area in TAZ 709, which is the area generally between Laurel / California streets, Presidio Avenue / California Street, Presidio / Euclid avenues and Laurel Street / Euclid Avenue. The project site is located close to major transit services and facilities, bicycle and pedestrian networks and facilities, and a diversity and density of land uses. A project

34 (TR-4)

located in TAZ 709 would have substantially reduced vehicle trips and shorter vehicle distance, and thus reduced VMT, compared to other areas of the region."

While the Transportation Analysis Zone (TAZ) 709 is based on census data, it *ignores the other nearby TAZs* which are not functioning in a vacuum. There should be impacts that go at least ¾- to 1-mile away based on the ***land use types*** being proposed at the site for potential workers count & resident counts. The larger TAZ 709 area being compared to a larger geographic area for VMT does not make sense except to make it so that the TAZ 709 is going to be smaller than the larger "Bay Area VMT" and make the result *not* be impactful to a significant level. Where in the DEIR does it state the margin of error for these counts? What is it? If the margin of error were incorporated, how would the results change? 34 (TR-4) cont'd

Page 4.C.77: With the conclusion from Page 4.C.7 that the project will not affect TAZ 709 in any way, it is illogical to throw in Table 4.C.19 that takes into account "other nearby TAZs (within three-quarters of a mile based on walking distance)" for the analysis when in all the other tables, *NO* "other nearby TAZs" are reflected in that data. How can one way of analysis be applied to one but not in other categories of impact?

Table 4.C.19: Parking Rate Summary

Scenario/Land Use	Size	Vehicle Parking Spaces	Existing Neighborhood Parking Rate	Proposed Parking Rate	Change from Existing
Proposed Project					
Residential	558 units	558	0.9	1	11%
Retail	54,117 gsf	198	1.55	3.66	136%
Other Non-residential (Office & Daycare)	64,689 gsf	129	1.44	1.99	38%
Project Variant					
Residential	744 units	744	0.9	1	11%
Retail	48,593 gsf	188	1.55	3.87	150%
Other Non-residential (Daycare)	14,650 gsf	29	1.44	1.98	37%

Note: The existing parking rate for residential uses reflects data for TAZ 709 and other nearby TAZs (within three-quarters of a mile based on walking distance). The existing parking rate for retail and other non-residential uses reflects data from California and Sacramento streets, as provided by the planning department. The retail land use category for the proposed project and project variant includes the proposed 60 public parking (commercial) spaces on the project site. Car-share spaces are not included in the parking rate calculation as these would be publicly accessible spaces and would not be dedicated to residents or tenants of the proposed project or project variant.

Source: Kittelson and Associates, Inc. 2018; San Francisco Planning Department, 2018

The proposed ***parking rate for the Retail Use to increase to 136%*** or **150%** depending on which alternative is chosen compared to the existing parking rate is severely out of character for this area. It is the RETAIL USE that will *drive* all the vehicles into the area (pun intended). When the parking rate increases by these percentages and there is no parking on the street nor the lots, people will crowd the vehicular lanes to entangle the neighborhood with delayed traffic to push more GHGs in the neighborhood. Also, as more people cannot park, those spaces become more expensive due to "demand" parking pricing. The winners will be the SFMTA (parking meters/parking stickers revenue) and the garage owners to increase their pricing. This will lead to unaffordable pricing in this area except for the well-heeled. Having a 136% - 150% increase in parking rate would almost keep traffic

going to and from this area all day. This cannot be truly environmentally sound and sustainable but with all the parking demand, the price of parking would soar and there could be socio-economic red-lining of the area such that only the well-to-do would be able to park or the TNC count would explode in this area. 34 (TR-4) cont'd

As none of the "other nearby TAZs" is enumerated, ***there needs to be an accurate count of all traffic on all streets*** -- within at least 1-mile of this project -- as more units and various uses get settled in the area during the development phase. What are the traffic counts for all the streets between California and Geary from Arguello Blvd on the west to Fillmore on the east side? All of these streets are part of the "other nearby TAZs" not incorporated into the study. If nothing else, there should be counts for Palm to Presidio between and including Geary and California and none of this appears in the DEIR to come to the conclusion that there's little impact to the Laurel Heights, Jordan Park, Presidio Heights areas. Without study of the "other nearby TAZs" to see the impact on each TAZ, one particular area could be overwhelmed with more VMTs and vehicle trips. Perhaps if the data for the other streets were presented, this project would reveal an immense impact beyond "significant"? The Final EIR should provide all this data that is missing from the "other nearby TAZs" and all streets in each TAZ. It is missing and thus the DEIR is not complete nor the analysis conclusion accurate without this data. Will it be provided?

Page 4.C.102: The DEIR then decides not to mention the "other nearby TAZs" in Table 4.C.32 below and decides to show only *regional* VMTs for certain uses. What this means is that in future, TAZ 709 will start to creep to the "Bay Area VMT" of double digits (12.4-17.1) because there is no chaining of miles in the analysis nor a separate "other TAZs" analysis done. Here is the table:

Table 4.C.23: Projected 2040 Average Daily Vehicle Miles Traveled – Cumulative Conditions

Land Use	Bay Area VMT		TAZ 709
	Regional Average	Regional Average minus 15%	
Households (Residential)	16.1	13.7	6.6
Employment (Office)	17.1	14.5	8.9
Visitors (Retail)	14.6	12.4	7.8

Source: San Francisco Planning Department Transportation Information Map, accessed May 25, 2018

Under other DEIR transportation or traffic analysis, the city used *NOT* the "Bay Area VMT." Why in this one? Why not do an analysis of the TAZs (I suspect about a dozen of them being impacted by this project) to see in greater detail impacts to those TAZs and calculation of VMTs. Would this be provided?

A major flaw in the DEIR for VMTs and traffic counts and parking needs is the separate unbundling of any data in regards to workers who get to the project site who live outside of San Francisco. It is not only the residents of this city who may be visiting this site. Perhaps an analysis of VMTs, parking, and other analysis to nearby TAZs should be included (only TAZ 709 analyzed in this DEIR).

Also, the traffic analysis does not take into account the time of day impacts. While most heavy traffic is in AM- and PM-peak commute hours, there are other hours of concern such as when school lets out. These periods have more traffic on the road. Where is the hourly traffic volumes for the nearby streets (Arguello to Presidio / Fillmore between California & Geary)? Using only TAZ 709 from the 2000 Census appears to show rather low VMT numbers. I think since 2000, there is higher VMT with TNCs. I also think more of the nearby TAZs should be included in the analysis to see a more accurate picture 35 (TR-1)

of what would impact the “other nearby TAZs” rather than using only TAZ 709 (now called TAZ 100521 (Laurel to Lyon Between California & Sacramento). Traffic flows over a distance and the DEIR admits at least to ¾-mile from the site. There needs to be included the “other nearby TAZs” into the calculations for impacts due to changes since appearance of TNCs, other uses, more people. 35 (TR-1) cont'd

Here are the “other nearby TAZs” located from 3333 California. All the streets in these TAZs are not studied for impacts alone with only 3333 California Project *NOR* with the “reasonably foreseeable”** projects the DEIR lists. See also the map below of the TAZs (corresponding TAZ numbers differ but area of TAZs are same): 36 (TR-12)

TAZ 100524 = Parker to Laurel between California & Euclid *(*NOT* included in the DEIR)*
TAZ 100521 = Laurel to Baker between California & Euclid/Bush *(TAZ 709 in the DEIR)*
TAZ 100513 = Laurel to Lyon between California & Sacramento *(*NOT* included in the DEIR)*
TAZ 100523 = Parker to Presidio between Euclid/Bush to Geary *(*NOT* included in the DEIR)*
TAZ 100517 = Maple to Laurel between California & Sacramento *(*NOT* included in the DEIR)*
TAZ 100525 = Arguello to Parker between California & Geary *(*NOT* included in the DEIR)*

The above TAZs include projects that are reasonably known to happen, has happened or has projects that will happen (e.g. new uses at Target City Center, new buildings on Geary, Presidio Ave, **surrounding “nearby” streets that are *NOT* analyzed for traffic impacts**. ***CEQA categories such as AIR QUALITY, VIBRATIONS, NOISE are also not analyzed for these other “nearby” streets with known projects, upcoming projects as additive to 3333 California. The data does not exist in the DEIR. It is missing***.

Why was only TAZ 709 used and none of the “other nearby TAZs” analyzed for impacts from the proposed project? Look below at *** for the list of ***“Projects for cumulative analysis”*** & there are many projects that can have impact with this development in “other nearby TAZs” than only TAZ 709. This is not accounted for in this DEIR.

Again, refer to the map of TAZs below that shows ***at least 12-13 TAZs that are within ¾-mile*** from the proposed development. The streets should all be analyzed for CEQA impacts including traffic or VMTs on these streets. If the **DEIR mentions the known other projects in the area**, every one of those will produce some impact, especially in regards to vehicle travel why are not the streets around them studied in relation to this project?

Not ***all counts of vehicles and VMTs be done to the above TAZs listed*** are included in the DEIR. Why?

Traffic Analysis Zones

Based on Traffic Analysis Zones

A traffic analysis zone (TAZ) is the unit of geography most commonly used in conventional transportation planning models. The size of a zone varies, but for a typical metropolitan planning software, a zone of under 3000 people is common. The cartographic boundary files are simplified representations of selected geographic areas from the Census Bureau's MAF/TIGER geographic database. These boundary files are specifically designed for small scale thematic mapping.

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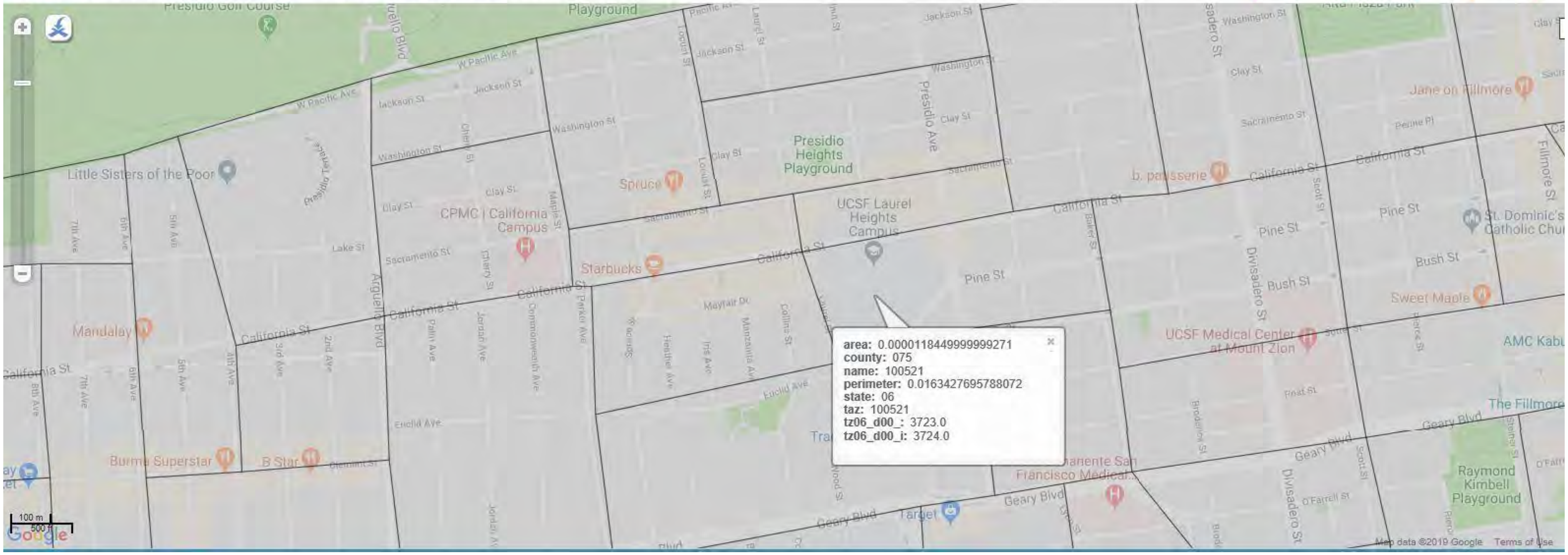


Do the developers of these other up-and-coming nearby projects want their locations to be impacted by any oversights from the 3333 California Project? Streets nearby known and upcoming projects need to be studied for cumulative impacts and it is missing from this DEIR.

Look below at Table 4.C.1 which lists *ONLY* the closest streets in the analysis. When one has a 10+ acre project, the impact with vehicles goes up along with the other projects and the streets surrounding them. NO ANALYSES has been done on the other streets.

The DEIR fails to take into consideration that the listed and other recent foreseeable projects** (and those now completed) and new projects such as that at 2675 Geary or the 3300-block of Geary Project, the new uses going into Masonic City Center, all of which can impact the residential streets "nearby" in the Laurel Heights, Jordan Park and Presidio Heights areas. Only intersections for one "Transportation Analysis Zone" (TAZ) -- No. 709 – has a vehicle count. Traffic flows to and from "other nearby TAZ" streets listed due to the "reasonably foreseeable" projects the DEIR lists and without the analysis for these other streets in the Laurel Heights, Jordan Park & Presidio Heights neighborhoods, this DEIR is not complete and thorough nor does it give an accurate VMT picture by 2040.

36 (TR-12) cont'd

Table 4.C.1 Study Intersections

Number	Intersection	Existing Traffic Control
1	Sacramento Street / Walnut Street	All Way Stop Control
2	Sacramento Street / Presidio Avenue	Signal
3	California Street / Spruce Street	Signal
4	California Street / Laurel Street	Signal
5	California Street / Walnut Street	Signal
6	California Street / Presidio Avenue	Signal
7	Mayfair Drive / Laurel Street	All Way Stop Control
8	Presidio Avenue / Masonic Avenue / Pine Street	Signal
9	Euclid Avenue / Laurel Street	All Way Stop Control
10	Masonic Avenue / Euclid Avenue	Signal
11	Presidio Avenue / Euclid Avenue / Bush Street	Signal
12	Geary Boulevard / Masonic Avenue	Signal
13	Geary Boulevard / Presidio Avenue	Signal

Source: Kittelson & Associates, Inc. 2017

Is the TAZ "bar" set to "Bay Area VMT" such that the REGIONAL bar is now the metric rather than anything at the neighborhood level? If so, would that not create a situation such that any and almost all development in future will not have and "Significant" level impacts, especially in the low-density neighborhoods?

37 (TR-4)

NOTE: In Table 4.C.1 above, Number 10 states that the "Existing Traffic Control" is only a "Signal." This is *NOT* true. There is also an uncontrolled traffic lane going eastbound on Euclid to southbound on Masonic. Pedestrians can get killed here as many vehicles turn that corner near the traffic islands.

38 (TR-8)

Take a look at the below 2 tables – one for 3333 California & the other for 1 South Van Ness:

39 (TR-4)

Table 4.C.23 shows the Average Daily VMTs for *ONLY* TAZ 709 (3333 California site & very close streets):

39 (TR-4) cont'd

Table 4.C.23: Projected 2040 Average Daily Vehicle Miles Traveled – Cumulative Conditions

Land Use	Bay Area VMT		TAZ 709
	Regional Average	Regional Average minus 15%	
Households (Residential)	16.1	13.7	6.6
Employment (Office)	17.1	14.5	8.9
Visitors (Retail)	14.6	12.4	7.8

Source: San Francisco Planning Department Transportation Information Map, accessed May 25, 2018

Table 4.2.10 shows the Average Daily VMTs for *ONLY* TAZ 578 (10 S. Van Ness Project & close streets):

Table 4.2.10: Average Daily Vehicle Miles Traveled per Capita—2040 Cumulative Conditions

Land Use	Average Daily VMT per Capita		
	San Francisco Bay Area		
	Regional Average	Regional Average minus 15%	TAZ 578
Residential (per resident)	16.1	13.7	3.1
Retail (per employee)	14.6	12.4	9.0

Notes: TAZ = transportation analysis zone; VMT = vehicle miles traveled
Source: CHS Consulting Group, *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, Case No. 2015-004568ENV, December 2017.

Comparing these 2 tables, it shows that SF has, in these last couple of *recent* DEIRs, decided to use a *REGIONAL* number rather than do street-level or neighborhood district level analyses for CEQA traffic analysis to determine level of impact. Would not using a *REGIONAL* figure in most all cases result in minor or no impacts in less populated (whether residents or visitors (retail) or employee counts) areas?

What the above 2 tables compared indicates is that the 3333 California Project and the 10 South Van Ness Project would have the same resulting impact to the neighbors because they *BOTH* fall under the *REGIONAL" average. Is this what this means? Please clarify.

Now, let us consider the 3333 California Project "VMT per capita" in Table 4.C.3 below:

Table 4.C.3: Existing Daily Vehicle Miles Traveled per Capita

Land Use	Bay Area Regional Average	Citywide Average	TAZ 709
Households (Residential)	17.2	7.9	7.3
Employment (Office)	19.1	8.8	10.1
Visitors (Retail)	14.9	5.4	8.3

Source: San Francisco Planning Department Transportation Information Map, accessed May 25, 2018

Compare Table 4.C.3 to the 10 South Van Ness Project "VMT per capita" in Table 4.2.7 below:

39 (TR-4) cont'd

Table 4.2.7: Average Daily Vehicle Miles Traveled per Capita—Existing Conditions

	Average Daily VMT per Capita		
	San Francisco Bay Area		
Land Use	Regional Average	Regional Average minus 15%	TAZ 578
Residential (per resident)	17.2	14.6	3.7
Retail (per employee)	14.9	12.6	8.9

Notes: TAZ = transportation analysis zone; VMT = vehicle miles traveled

Source: CHS Consulting Group. *10 South Van Ness Avenue Mixed-Use Residential Project Final Transportation Impact Study*, December 2017. Case No 2015-004568ENV.

While 10 South Van Ness is in a highly dense and commercialized area unlike 3333 California, it appears from the counts shown in their respective TAZs (709 for 3333 California & 578 for 10 S. Van Ness), that *BOTH* projects have no impact since their numbers are below the *REGIONAL* numbers. Using TAZ would take projects and their VMTs to be analyzed on a *REGIONAL* level rather than a local neighborhood level as it was done in the past for many other DEIRs. Who decides which method to use? Why? In what cases? Are the decisions of whether Planning applies TAZ to determine VMTs arbitrary? What would the results for the VMTs be under the older traffic analysis without using TAZ? Would the impact conclusions be different? If so, in what way? If not, why not? Please clarify.

I think using TAZs and saying any particular one TAZ as being less than the "REGIONAL" number is only going to allow for future DEIRs to have "NO IMPACT" in terms of VMTs; but the evidence on the street is that there are many more vehicles milling about and the numbers appear to be lowballed. The additional VMTs not captured outside of any one TAZ could impact "other nearby streets" in every neighborhood district with potentially bad consequences for its residents in terms of AIR QUALITY (more people, more garbage truck trips, more GHGs, more NOISE & VIBRATIONS, and SAFETY.

Now, let us look at another DEIR that was released not too long ago, ***Case No. 2013.1543E (State Clearinghouse No. 2015012059), 1979 Mission Street Mixed-Use Project, published May 4, 2016***: In this 1979 Mission DEIR, there is ****NOT**** ONE MENTION OF TAZ.

Although the DEIRs for 1979 Mission, 3333 California, 10 South Van Ness cover *varied* site particulars, the conclusion of all three is that they are ***identical*** as to having no VMT impact because of the application of a "REGIONAL" threshold. Doing so skews the impact at the neighborhood level.

The city may want to take into account again the "Precautionary Principle" that while one can create a situation that would pass muster due to having to meet a high "REGIONAL" number for VMTs before a project would be deemed having a "SIGNIFICANT" impact in re VMTs. Each project may well be contributing a lot more impacts to the environment in some or all of the CEQA categories than meets the eye. If the city continues on this path, it may be found out by 2040 that there is much more impact than what was written in these DEIRs today. Not only the community near the developments would be negatively impacted, but so might the entire city.

TAZs have been used for some decades already. If some DEIRs use TAZs but others do not, the process of choosing which to use is not transparent to the public nor would the results necessarily to come to some of the conclusions in the DEIRs.

Had the 1979 Mission Street Project DEIR (Sarah Jones, ERO) used TAZ, would the VMT numbers have changed? If so, to what? If they do change, how much of an impact would they be?

The greater number of vehicles and with ***TNCs coming in from *OUTSIDE* the city***, along with other building uses and more units having been completed in the area, there are more vehicles and people than what is being used in this DEIR for TAZ 709 from the 2000 Census as things change over 18-19 years. Why would the other TAZs not be included for each DEIR alternative and perhaps for the neighborhood community alternative in order to have an accurate, thorough and complete DEIR? 39 (TR-4) cont'd

Even with TAZs, why has Planning not used in in recent past DEIRs? Seems like not using the same method for all projects so the impacts can be manipulated. For instance, there exists DEIR Case No. 2013.1543E published on May 4, 2016 for 1979 Mission Street. It does not use TAZ. New metrics for TAZs are not going to be in place until later in 2019 wherein larger zones will be created to minimize concentration of VMT issues in a smaller area not disaggregated from the TAZ being analyzed. Why did Planning decide to use TAZ for the last couple DEIRs and not prior DEIRs? Why is there not a consistent basis of analysis for all projects?

There is also **DEIR Case No. 2015-004568ENV (State Clearinghouse No. 2017072018) published October 17, 2018 for 10 South Van Ness**. The DEIR for this project uses TAZ. It gives a "2040 Average Daily Household VMT per Capita" calculation.

In re school end times, there will be more kids and parents (pedestrians) out so what is the change to pedestrian volume around this area? Has this been factored in to VMTs, GHGs from automobile delay (idling & driving at low RPMs and stop-and-go pollution)? 40 (GHG-1)

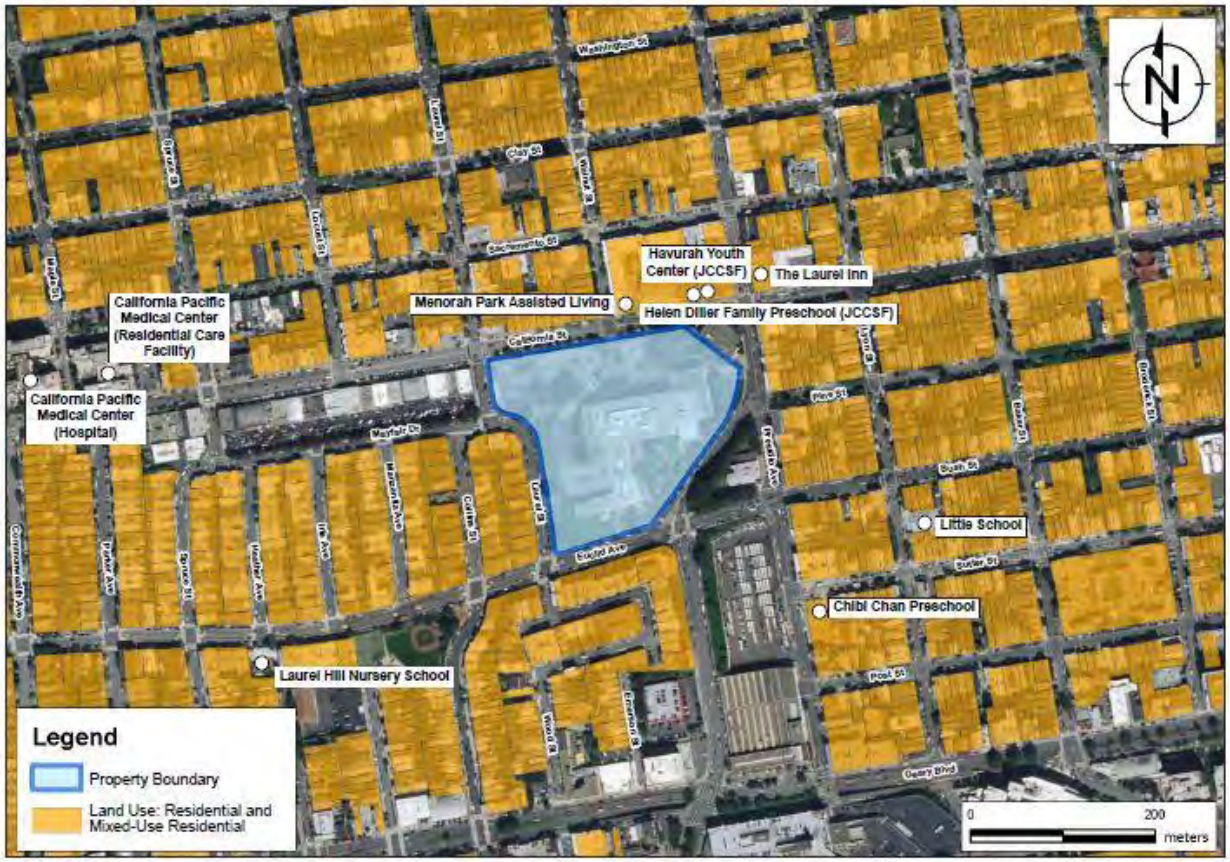
With streets clogged with more vehicles, with more pedestrians in the area, the delays can start to impact emergency services. How has the emergency response times changed? Where is the analysis for safety personnel (e.g. ambulance, fire trucks) for the development per phase and at the end of completion? 41 (TR-13)

Page 4.E.17: Under the AIR QUALITY part of the DEIR is this statement: "…The closest non-residential sensitive receptors include Laurel Hill Nursery School, San Francisco University High School – South Campus, Little School, Havurah Youth Center, the Helen Diller Family Preschool at the Jewish Community Center of San Francisco, the Menorah Park Assisted Living Senior Housing Complex, and the Chibi Chan Preschool at the Booker T. Washington Community Center…." What are the comments from these groups on this project? 42 (GC-4)

Page 4.E.30: The map of the Sensitive Receptors has the legend covering up the 150 Parker School that is just as distant as the CPMC sensitive receptor yet it is not shown on the map nor mentioned in the list of sensitive receptors on Page 4.E.17. 43 (AQ-4)

The area that is occupied by the California Pacific Medical Center (Hospital & Residential Care Facility) buildings (where the new residential replacement project is planned) is shown but not the 150 Parker School. The location of this school is covered by the white legend box.

The young children attending this pre-school would appear to be sensitive receptors. Why is the 150 Parker Avenue School not shown on the map (Page 4.E.30) below?



3333 CALIFORNIA STREET MIXED-USE PROJECT
2015-014028ENV

FIGURE 4.E.2: SENSITIVE RECEPTOR PARCELS IN THE IMMEDIATE VICINITY OF THE PROJECT SITE

Page 4.E.59: According to Fig. 4.E.8, a partial shown below, there are specific cancer risks shown. Why is there only one location denoted by the yellow square on Laurel St. to be determined to be "Offsite Resident Cancer Rick, PM2.5"? How was the information obtained to designate this parcel as such?

44 (AQ-2)

3333 CALIFORNIA STREET MIXED-USE PROJECT
2015-014028ENV

FIGURE 4.E.8: MAXIMALLY EXPOSED INDIVIDUAL SENSITIVE RECEPTOR LOCATIONS

"The cancer risks were estimated using the equation specified in Tables AQ-18 and AQ-20 in EIR Appendix F" – what other parcels were studied using this equation? Please list or provide a map showing the parcels. 44 (AQ-2) cont'd

Volume 2C: Page 267 on the sheet/Page 283 in "read mode" pdf: From the 5/11/2018 "BkF Letter" on a meeting with SFFD on 3333 California St. project. 45 (PS-1)
How would the SFFD fight a fire at the building as it stands today for the main building where the access is and the division in half of the building is proposed for this project? Why would the change be needed if the fire can be extinguished with the whole building as is?

Below is a portion of text from the "BkF Letter" for the Euclid building portion. For whatever reason, there is a hand-written comment. Are these the final specs?

- **EUCLID (Type IIIA)**
  - Address shall be off of Euclid Street
  - Aerial ladder access staging area provided along Walnut walkway between Euclid and Masonic Buildings.
  - A 26 ft. wide, 100-200 ft. long staging area is required at the Lobby
  - If the building is Construction Type I or IIIA, then a variance request may be granted to reduce aerial ladder access along the north side.
  - Install bollards (specifications to be approved by SFFD) at the end of Walnut Walk and Euclid.
  - (Note: Easement via the Laurel duplexes may be required to maintain access to the rear egress windows)
    - Fire access Through Walnut to Euclid Avenue shall be provided.

Captain Mike Patt

Table NO-8, Page 12 by RAMBOLL should say "Bush Street" rather than "Bust (sic) Street." Please correct. 46 (GC-4)

Volume 2A: 47 (TR-4)
(See also under Volume 2C.)
➔ ***DEIR LIST OF OTHER FORESEEABLE PROJECTS** (Pages 94-99)***:
3700 California Street (2017-003559ENV)
726 Presidio Avenue (2014-001576ENV) – add 4 units, remove 1 on-street parking
2670 Geary Blvd. (2014-002181ENV)
2675 Geary Blvd. (2015-007917ENV)
California Laurel Village Improvement Project
Laurel Heights/Jordan Park Traffic Calming Project
Masonic Ave. Streetscape Project
Geary Bus Rapid Transit Project

With the above cumulative projects listed in this Volume 2A of this DEIR -- of which more than one is now complete -- and with Planning Code allowing new buildings and alterations to occur with no minimum parking requirements especially along California St. and Geary Blvd. and other streets where transit or bike lanes exist, the residents in these newer buildings with more units and fewer or no parking, may be forced to add to VMTs to park their vehicles farther out into neighboring areas and add to VMT calculations. Also, they may resort to ride-sharing. These ride-share drivers are also increasing the VMT calculations as they are often trolling the neighborhoods with no passengers waiting for a call on their app for their next customer or taking up residents' on-street parking. Without ↓

on-street parking for residents currently existing in their units, how are they to get to work or take care of personal business especially when the affordability factor gets thrown into the equation? 47 (TR-4) cont'd

Retail and office components trigger the most traffic as seen in many DEIRs. It might be best to leave the retail out of this residential area on the Euclid side. Retail is already on California, Sacramento and at the Target City Center at Geary and Masonic only a couple of blocks away. This only adds to VMTs.

With 13,500+ additional vehicle trips from the retail and offices (and some from the residential) use of the proposed project, the increase in automobile delay in the area would be a major impact not only adjacent to the site but even 6 blocks away into Presidio Heights, Jordan Park, Lone Mountain areas. Traffic will eventually reach gridlock as was written in the GearyBRT EIR – and *that* EIR did *not* even have this project in its write-up so any additional heavy traffic such as in the proposal is just going to be BEYOND GRIDLOCK and it is not safe for people to not be able to get to emergencies. 48 (TR-12)

The DEIR states that the proposed project will be designated as a Special Use District (SUD). As one knows, the City has passed ordinance to have no minimum parking requirements for any units. What people fail to recognize is that parking spaces, while they attract vehicles since that is what parking is for, even if removed, with rideshare vehicles in play today as opposed to 2008/2009 when this project was known and TNCs did not exist, that does not mean that less traffic will be in this area of new retail (over 41,000 sq. ft.) and offices (49,999 sq. ft.) proposed. Retail generates significant vehicle traffic whether for deliveries or for visits. If retail is being proposed, it should all be located on California St. With the advent of the rideshares, people will double-park to drop off the visitors and more and more traffic will go through the area regardless of whether retail parking is there or if removed. The automobile delay in this area and the neighborhoods surrounding it will eventually become worse. People may as well walk, but not everybody is going to. In the areas of greater socio-economic status, most drive. This has been documented in the newspapers. 49 (TR-2)

The comparative data should be in this DEIR from 2009-2017 but the DEIR seems to put the base line for analysis at 2020 – possibly because the project is not expected to start until then. Doing so does not make a comparable to what existed from earlier years when the higher number of vehicles did not exist. Using the figures based on the vehicles today when their numbers have *already* increased makes the results of the additional vehicles negligible because the factors for comparison is based on a false comparison of what existed before (no rideshares, e.g.). If the date for the modeling does not use data from when no alternative transportation modes like rideshare existed, then one cannot make an accurate comparison as to the impact of traffic volume on the neighborhood. If one compared the 2009 and earlier years when rideshares (TNCs) did not exist to what is projected for this development, it may indeed become not an insignificant impact but a SIGNIFICANT impact. Why not use the prior years? 50 (TR-14)

Under Prop M, Priority Policy #7 (preservation of landmarks and historic buildings) and the DEIR stating various Standards for historic preservation would not be in conformance (Standards 1, 2, 5, 6, 9 & 10) such that the proposed project and variant would materially alter the historical significance of the building and site. 51 (CR-2)

As a reminder, here are the 10 standards with areas of non-conformance bolded:

> **1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.**
> **2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.**

51
(CR-2)

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

It seems that many of the above standards would be violated with the project proposal. Would there be some way this state-registered historic resource not lose its "character-defining" features that made it so? Out of all the changes proposed to the existing buildings, the one that cuts the main building in half is the most egregious in my humble opinion.

The historic use of the property after the cemetery bodies were moved and when Mayfair Heights (old name of Laurel Heights) was proposed was for residential except for commercial on California Street when Mayfair Heights was being built. The commercial was never on the tract where UCSF building is. There was no commercial on Euclid Avenue historically and it would seem that historic use should be honored and retained to prevent the additional impacts to the neighborhood from putting retail on Euclid which is the residential side of the property. A Chronicle article states that the residential area be "a high class residential district of homes, flats and apartments." It says a group comprised of "Rusalem, Bennion, Gummere, Goldman and Goldman, Lang Realty Company, Joseph and Jones" will "develop the business district…along California street." Here is the article:

CEMETERY EVACUATED

The cemetery was evacuated more than two years ago.

The purchasing syndicate will develop Laurel Hill after the war into a high class residential district of homes, flats and apartments. A second syndicate will develop the business district for 1000 feet along California street.

The second syndicate comprises Rusalem, Reunion, Gummere, Goldman and Goldman, Lang Realty Company, Joseph and Jones.

54-ACRE TRACT

The 54-acre tract, bounded by Presidio avenue, California street, Parker avenue and extending irregularly nearly to Geary street on the south, is to be developed as a unit.

The new district will be known as Mayfair Heights. The American Trust Company has been named as the principal financing agency.

51 (CR-2) cont'd

Unfortunately, since the new finished materials and details have not yet been told to the public, and since they are lacking in the DEIR, we cannot comment on them as affecting any of the CEQA categories. 52 (CEQA-3)

Volume 2B:

Page 546 of 776 (pdf page count – would help if the document had page numbers *on* the document) has a DBI violations letter dated 6/19/62 to Edwin & Joanna Roberts, 1149 Dolores St., for the location 3515-1/2 – 3519 24th St. but I do not see the connection to 3333 California St. in this DEIR. I do not understand why it is included. This should have been and be stricken from the DEIR as being irrelevant to 3333 California. 53 (GC-4)

Appendix I, Page 658 of 776 says California Historical Landmark plaque on Northeastern Corner Perimeter Wall is missing. It would be part of the history (even if not a "landmark" under present CEQA law) and may be re-created and hung up somewhere where it will not be so easily removed like when it was removed. Images of it are available on the internet. 54 (CR-4)

Volume 2C:

(See also under Volume 2A.)

The Kittelson & Associates (KIA)'s letter on Page 6 under "Task 4" says the VMT for the project will be the same as what exists today: 55 (TR-4)

"Vehicle Miles Traveled: For purposes of the VMT analysis, KIA assumes the baseline (Year 2020)

conditions VMT for the region and the Project's transportation analysis zone for each of the uses proposed by the Project and Variant will be the same as Existing."

Do not believe a true impact can be told "assuming" the baseline year of 2020. I think it skews the impact as less impactful because rideshares and ***alternative modes such as rideshares were not present in 2008/9 and earlier years vs. 2020***. The years prior to rideshares is not included in the DEIR so it skews the data and conclusions. Please provide data for vehicles in the area from earlier years starting at 2008 to present in this project area streets. It will likely show that compared to today, there are many more vehicles in this area (Arguello to Laurel, between Geary & California).

Rideshare is everywhere today so it is not like cars have disappeared just because the parking is minimized or removed. It is the type of uses for a project that attract certain number of cars. Again, not clear why the baseline year of 2020 – the year the development is supposedly to start -- is being used as the starting year for the analysis. Why is that?

55 (TR-4) cont'd

Today, the 3333 California site is offices with no residential units so there is hardly any use of the site beyond UCSF's use after 5PM. As more projects surrounding the building are built with uses that go beyond 5PM or early evening, there will be increased base level noise on all the streets in the neighborhood where it has not existed before or to a greater extent than it will once such uses get put on the site.

56 (NO-3)

In the November 15, 2018 article at the link below, it states that vehicle mode is still prevalent at over 50%, especially for those in the higher income brackets. The area of the proposed project has a large population of higher income residents and visitors and thus one would reasonably expect more cars in the area.

57 (TR-4)

http://www.sfexaminer.com/survey-private-auto-use-sf-lower-except-among-wealthier-residents/

The SF Examiner article references the SFMTA's "Travel Decision Survey" of 2017. This is anecdotal evidence that wealthier areas drive or take rideshare more so the mitigation measure to remove some parking spaces will not necessarily negate the traffic, automobile delay or VMTs and increased GHGs. There must be other mitigation measures, and that may be reduction or removal of non-residential use especially on the residential side of the parcel.

The DEIR states that the VMT will be no different at complete build-out compared to 2009 or any year through 2018. Since 2009, there were new transportation alternatives – e.g. rideshare, shared scooters (Bird, Lime, etc.) and other modes. The analyses in the DEIR is *incomplete* without this new data incorporated. The new rideshares impact all streets in the neighborhood in all directions and are mostly used in retail trips besides commuting to offices/work places. Many of my neighbors use them for these purposes but then hop into their personal automobiles for longer out-of-city trips.

On Page 21 of their letter, it states the vehicle trips estimates for the 3 different scenarios and all three are over 2,236 person-trips per day. If the restaurants were only on the California street side where there are already commercial businesses, there should be less disruption of cars in the residential areas as they can take the Muni bus or alternative modes. Also, in the DEIR, it states there will be ***13,500+ automobile trips generated per day from the site***. If every project in the city keeps adding to the overall trips made, the GHGs will increase. Each electric vehicle creates pollution to make and to make the batteries that go in them. Having electric cars replacing gasoline-powered cars does not mean that pollution is going down when the factories making the items that go into making the electric cars and enabling them to run cause pollution. This is not a sustainable practice. How many batteries are needed to keep the cars going for the number of trips that are projected to go to and from this site upon completion? How many tons of pollution come from manufacturing them? Having more cars

58 (GHG-1)

59 (TR-8)

circulating in the area would also increase the chances also for pedestrian safety to be compromised. All of the traffic does not necessarily have to be directed into and around this project site if certain uses are curtailed. 59 (TR-8) cont'd

How much analysis has been done to see how this project be impacted by the cumulative trips from the new project at CPMC, from the new uses to come to the City Center at Masonic, from increases in TNC (rideshares) in the area as new uses and buildings and more units are created in this ½-mile area near this 3333 California site? Where is this data? 60 (TR-12)

Anecdotally, below are a couple of links to tell you about jammed SF streets and traffic increase – many due to people deciding to use vehicles not available before since the introduction of "Transportation Network Companies (TNCs), aka "rideshares". 61 (TR-4)

Article re jamming SF's streets:
https://sf.streetsblog.org/2018/10/17/data-confirms-uber-and-lyft-jam-up-san-francisco/

Article re traffic increase:
https://sf.curbed.com/2018/10/16/17984366/tnc-ride-hailing-uber-lyft-sfcta-report

On Page 27 of the "KIA Letter", in Table 10, it shows clearly that people in the area are at 60%+ using automobile mode. I do not see this changing any time soon so the VMTs should be more especially with the retail restaurant sit-downs at 63.9%. For whatever reason, there is still a high percentage of automobile use – whether rideshares or privately-owned vehicles. With on-street parking diminishing and off-street parking being eliminated in many zoning districts, vehicles will still be around to circle the area to add to pollution, wear and tear on the roads, need to fix or re-pave roads and features. Even if in Volume 1 above, a new Muni line is proposed for relief of "congestion" in the area or of a bus line, there are still many who continue to drive. Even with "self-driving" cars, the VMTs do not go away.

Ramboll Environ's pollution counts show emissions based on what kind of equipment? Would not the equipment being used dictate how much pollution is put out? Are all the measurements based on equipment from the 1960s? To be more environmentally friendly, why would not other forms of construction equipment be used to mitigate the emissions? Sadly, the document states that the cancer risks will be essentially the same without and with all the construction equipment emissions coming from this project. It does not make sense as even the fire pollution wafting in from Butte County (the November 2018 "Camp Fire") incident urges everybody including non-sensitive groups to wear N-95 or better rated masks. Laurel Heights and surrounding area is one with a large population of families with small children in the neighborhood. They will be affected the most. It may be important as this cancer risk has to be mitigated. 62 (AQ-1)

General Comments:
Being that the site was the former location of the Laurel Hill Cemetery, and not all bodies were moved to Colma, would the discoveries be GPS-tagged and located on a map of the development site so that the person's remains can be identified in case there is a living relative who would like the human remains? This area also has a potential to yield new information depending on what is found so there should be somebody to catalog the findings to match it to the burial maps of the extant cemetery. Even when the bodies were removed the first run through and all were thought to be accounted for, the laborers found 189 more just after combing through the site right after all were accounted for. There are likely more because of the way the bodies were put into some of the plots. 63 (CR-4)

While the DEIR states that since any burials were done years ago, there would not be any concern over communicable diseases. However, the DEIR does *not* mention the potential of noxious odors 64 (AQ-1)

under CULTURAL RESOURCES nor under AIR QUALITY (odors). No mention of mitigation measure to deal with such odors in the DEIR. 64 (AQ-1) cont'd

Although the bodies were dead for a long time under the ground, the odors were still present even up to 70 years later when exhumed around 1937+, according to the 1950 City Planner's Report at this website http://www.sfgenealogy.org/sf/history/hcmcpr.htm :

> "Condition of remains disinterred varied from "dust" to almost perfectly embalmed bodies, the latter resulting from filling of cast-iron caskets with groundwater acting as a preservative. The superintendent of the disinterment proceedings told the author that his was an interesting job, but that in some cases it was not "pretty". The smell of death was often present, even though the remains had been laid to rest from thirty to seventy years previously."

The DEIR needs a mitigation measure for this because strong winds in this area may carry the unpleasant odors to affect a substantial number of people in the area.

Also, for HYDROLOGY/WATER, the DEIR does not have any mitigation measure for the potential groundwater contamination from disruption of found bodies which in past were embalmed in toxic chemicals toxic. What would be done if it gets into the aquifer or small underground stream that supposedly fed the Laurel Hill Cemetery and provided very clean drinkable water? It would be good for the city to ensure their "Precautionary Principle" is supported by not having anybody take action to contaminate potential clean drinking water sources for the residents of this city. 65 (HZ-1)

Recent studies and peer-reviewed publications state that certain mafic and ultramafic rocks, like serpentinite and peridotite formations would sequester CO_2 via magnesium (Mg) oxides and silicates. Air quality with increased pollution should be one of the highest priorities for the residents of the city. The property may contain certain geologic formations that sequester carbon in the Franciscan type band formation that runs from the NW to the SE of the city. The findings of such geologic formations would be a rare chance for scientists to study this peculiar formation in a large quantity as it exists in the city vs. elsewhere. The ground under the site may well be a jewel in sequestering carbon in considerable quantity. On the "Pre-cautionary Principle," perhaps some geologists should study the site as it may well prove to be a natural carbon-sequestration supersite; and rather than do more harm than good to the environment, perhaps this should be studied well in advance of construction to sort out exactly what rock formations exist under all parts of the site and in what quantities. This would be a great educational discovery to be shared with the community. The DEIR does not state such rocks are present on this property but parcels in this area have these rocks. 66 (GHG-3)

Also, the sand in this area may already contain this ultramafic soil that might be useful for propagating plants that thrive on it rather than be dumped into landfill.

Links to articles on geologic formations and their carbon-sequestration potentials:

https://www.osti.gov/biblio/900485 (This is from the federal ***Department of Energy***.)
https://www.nps.gov/goga/learn/education/geology-resources.htm (This is from the ***National Park Service***.)

HISTORIC RESOURCES portion of DEIR: 67 (CR-1)
Page 4.B.40:
"The proposed project would also retain ten mature existing trees, if viable:
two mature Coast Live Oak trees at the western entrance to the proposed Mayfair Walk;
two Cypress trees at the proposed Cypress Square; three mature Coast Redwood trees
at the eastern end of the proposed Mayfair Walk; one mature Monterey Pine tree
at the west end of the proposed Euclid Green; and two mature Coast Live Oak trees

mid-block on Laurel Street between Mayfair Drive and Euclid Avenue."

67
(CR-1)
cont'd.

Page 4.B.42:
"Overall, the proposed project or project variant would result in substantial changes to the massing and materiality of the office building such that the project site would no longer convey its historic and architectural significance as a Midcentury Modern corporate campus."

Page 4.B.44:
"For these reasons, including the removal of elements that convey the project site's history as a corporate campus, the construction of new buildings on formerly open and/or landscaped space at the project site, and the changes to the massing and materiality of the office building, the proposed project and project variant would not be in conformance with Standards 1, 2, 5, 6, 9, and 10, and would materially alter the physical characteristics of 3333 California Street that convey its historic significance and that justify its inclusion in the California Register. As such, the proposed project or project variant would cause a substantial adverse impact on 3333 California Street, a historical resource, and would be considered a significant impact under CEQA."

Under ***AESTHETICS*** category of CEQA:
From the above "Page 4.B.44" text, it is evident that the proposed project and its variant would be significant impacts to the California historic site. The site has existing mature trees that lend an aesthetic suburban quality to the neighborhood that is a respite from the highly urbanized downtown core. Though the site was built as a form of corporate campus, there is a park-like feel to this location.

Speaking of parks, this is a report from the Department of City Planning by the City Planner in 1950:
"In 1939 and 1940, considerable momentum gathered behind the idea of preserving one-tenth of Laurel Hill Cemetery as a Memorial Pioneers Park, as allowed by the removal ordinances. This was spearheaded by the historical Monuments Committee of the National Recreation Association, and backed by the California Pioneers Society and the Native Sons of the Golden West."

Back in the late 1930s, newspaper articles appeared as to the new "Memorial Park" use of the cemetery lands. Here is one headline:

Order to Evacuate Cemetery Approved

Proposal Made to Turn Laurel Hill Into Memorial Park

And the text explaining the idea of using a portion as a memorial park to the pioneers that once were buried there:

MEMORIAL PARK PROPOSED

Proposals that Laurel Hill, or a portion of it, be transformed into a memorial park will be considered later separately from the evacuation ordinance, F. P. Deering, representing the Laurel Hill Cemetery Association, was promised.

67 (CR-1) cont'd

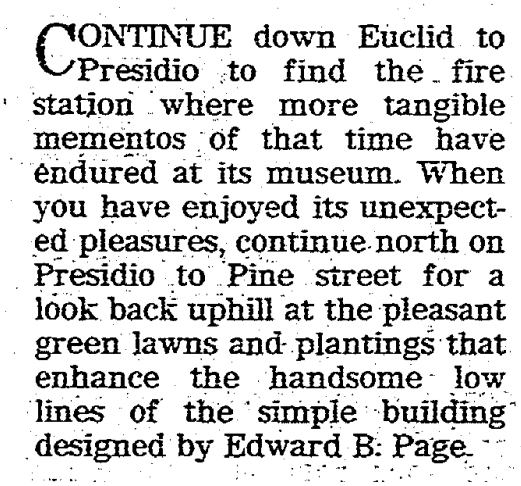
While no memorial park was created, the neighborhood residents and visitors today use this area of mature trees and open grassy areas as a park for recreation and to take in the views of the more urbanized downtown area to the east. This publicly used open space contributes to the health and well-being of the neighbors and the visitors in this area and is a healthful retreat from the pressures of urban life without having to trek farther to the Presidio National Recreation area nor to travel much farther to the next available designated park.

Small privately-owned-public-open-space (POPOs) behind walls and on rooftops are no substitute for grass on the ground, especially to dog owners who bring their pets there. The community sees this as an asset to their lifestyle in this area. 68 (PD-3)

Many mature trees are not only HISTORIC RESOURCES. They are also part of the AESTHETICS of the site – the building structures *and* the landscaping go hand-in-glove. The trees are rated in the arborist report as poor, fair or good for relocation. Yet, some of the good condition trees are potentially slated for removal. A couple of the trees were from the original Laurel Hill Cemetery and were incorporated into the Firemen's Fund Building landscaping that went with the building structure. The original trees are large and are the workhorses for carbon sequestration and GHG remediation. When large trees are cut down, they release the carbon back into the environment. The smaller tree replacements, though in more quantity than the existing count of trees, would not be sufficient to provide an equivalent environmental benefit in re carbon or GHG sequestration. Smaller trees also do not turn into the lush, mature park-like environment of this site overnight. 69 (CEQA-3) 70 (GHG-3)

It would be good to retain and enhance the health of the large Monterey Cypress that is a remnant from the days of the Laurel Hill Cemetery. Different species of trees sequester GHGs differently. The large workhorses do more carbon sequestration than a bunch of smaller trees. The DEIR goes not state what species will be planted but perhaps those that sequester more GHGs can be considered. The Presidio of San Francisco is planting clones of the largest trees from California – the redwoods. They are the giant workhorses to combat climate change. The project sponsors and the city would be sending the wrong message to its inhabitants about the value of such large trees if we keep chopping them down. Chopping down large trees also releases all the carbon back into the environment to pollute. What analyses has been done to calculate the carbon that will be released from those trees planned to be removed?

The Firemen's Fund Building is aesthetically pleasing due to its lines that appear to hug the hill. In fact, over four decades ago in The Chronicle, the reason the building is not so jarring on the slope may have to do with its "low lines": 71 (CR-1)



CONTINUE down Euclid to Presidio to find the fire station where more tangible mementos of that time have endured at its museum. When you have enjoyed its unexpected pleasures, continue north on Presidio to Pine street for a look back uphill at the pleasant green lawns and plantings that enhance the handsome low lines of the simple building designed by Edward B. Page.

71 (CR-1) cont'd

Heard about a neighborhood alternative that can give equal number of units as proposed or even as the project variant proposed. However, the neighborhood version has not been made public. Not sure if this neighborhood version would build where the original Monterey Cypress from Laurel Hill Cemetery stands or other larger trees historic to the site are located. Perhaps Planning can review it, have the Historic Preservation Commission review it, and then have the Planning Commission review it. It was not available at the December 5, 2018 Historic Preservation meeting. The alternative may meet the goals and not have such adverse impacts to the historic resource which includes not only the building but also the landscaping as that was the corporate campus use but today is used for public recreation. Today, it is used as a recreational area and childcare and office use with no retail. The retail use will change the ambiance of the existing historical neighborhood open space and non-commercial public use in a quiet residential area.

72 (AL-2)

In regards to a DEVELOPMENT AGREEMENT being entered into for this project, it seems the public cannot find out what are going into these agreements and if the mitigation and community benefits are not included in the publicly accessible DEIR/FEIR documents, then there could be problems down the road for the neighborhood.

73 (PP-1)

While the text on the website states that it exists to "strengthen the public planning process," it is unclear if the agreements really help the residents with impacts. What was the criteria used to determine what projects and this one in particular to have a development agreement?

Development Agreements – Frequently Asked Questions

What is a Development Agreement and why does the City have them?
Development agreements are contracts approved by the Planning Commission and Board of Supervisors entered into by the City and a developer to expressly define a development project's rules, regulations, commitments, and policies for a specific period of time. The purpose is to strengthen the public planning process by encouraging private participation in the achievement of comprehensive planning goals and reducing the economic costs of development. A development agreement reduces the risks associated with development, thereby enhancing the City's ability to obtain public benefits beyond those achievable through existing ordinances and regulations.

Due to the dissolution of the City's Redevelopment Agency, each agreement is now negotiated on a case-by-case basis by the Office of Economic and Workforce Development and the City Attorney's Office.

How are Development Agreements monitored by the City?
The Planning Department and OEWD are working closely with the Controller's Office City Performance Unit and other City Departments to centralize development agreement requirements and mitigations into a comprehensive system that will encourage proactive monitoring and tracking of developer and City responsibilities. Prior to this project, there was no centralized system that housed all development agreements and their requirements. In addition to this webpage, this project will produce a database that the City will use to track and monitor payments, community commitments, and other important data within the development agreements.

73 (PP-1) cont'd

Are there different types of Development Agreements?
California Government Code Section 65864-65869.5 and Chapter 56 of the San Francisco City and County Administrative Code sets forth the procedures by which a development agreement is processed and approved. There are four common categories of agreements:

1. Development Agreements - Voluntary contractual agreements between a landowner and the City concerning provisions of infrastructure, public spaces, and amenities.
2. Disposition and Development Agreements - A contract between a developer and the City that involves the sale of City-owned land to the developer.
3. Lease Disposition and Development Agreements - A contract between a developer and the City that involves the lease of City-owned land or property to the developer.
4. Owner Participation Agreements - A contract between a property owner/developer and the City to allow for development of property owned by an entity other than the City, generally the owner/developer.

This information is here:
https://oewd.org/development-agreements-%E2%80%93-frequently-asked-questions

It is best to get some of the mitigation measures lined up in the DEIR which is a *FULLY* public document rather than in "Development Agreements".

74 (TR-7)

In regards to traffic queues that arise from the garage use, why would the onus be put on the operator of the garage when in other DEIRs such as for 1979 Mission, it "shall be the responsibility of the Project Sponsor/property owner to ensure that recurring vehicle queues do not occur…"? The vehicles would be considered to be making a queue if more than one vehicle were lined up to enter the garage or exist the garage in a traffic jam. The queue should also not occur in the public right of way whether private vehicles or carshares for any longer than 3 minutes or the time it takes for the passenger to enter and exit the vehicle, whichever is less. Where the garage becomes full, there should be active management with "Lot Full" signs installed with parking occupancy sensors that show how many spaces are still left. If any queuing occurs, neighbors should contact the Planning Department to notify the property owner of the queuing issues to be abated through support from the developer's agreement to annually contribute to queue abatement costs as this will impact the neighborhood. If this is not done, the supervisor of the district will have a long line of complainers at her or his door due to the foreseeable situation that would arise with a development built to attract people in vehicles and not accommodating them so as not to jam up the streets or create queuing.

75 (TR-6)

As this project does not seem to be in a hurry to build out fully for possibly as long as 15 years, the construction traffic should be limited during AM and PM rush hours.

76 (TR-7)

In re the light and glare from the proposed windows and their impact to vehicles going and coming to the area would be a safety issue, I have not heard anything as to the remedy.

77 (PD-3)

Although non-reflective glass might be used, the current glass is reflective of the open space and greenery of its surroundings so the building blends in almost in a semi-camouflage manner. is expensive and is unknown as to its appropriateness to the existing historic building. The current building is slung low and hugs the topography but if the building gets too tall, the reflection may become too much. The current windows reflect the skyline of the city and has an effect such that the reflections of the surrounding trees and other landscape elements almost camouflage the building.

78 (WS-1)

In re ***WINDS*** (DEIR Page 1.9 <Pages 151-162 in Topic E.8 in Initial Study; EIR Appendix B)…
The wind report by RWDI (Rowan, Williams, Davies & Irwin, Inc., 600 Southgate Drive, Guelph, ON NIG 4P6, Canada) contains only general statements about how winds along Euclid and California may be such that a pedestrian would be "chilled" or that the winds would be "noticeable" but no specific speeds noted for any of the immediately surrounding or "nearby streets."

Page 4.E.2: "Wind measurements recorded on the San Francisco mainland indicate a prevailing wind direction from the west and an average annual wind speed of 10.1 miles per hour.[3]" (Footnote #3: Western Regional Climate Center, website query, Prevailing Wind Direction and Average Monthly Wind Speed (2001-2011), https://wrcc.dri.edu/Climate/comp_table_show.php?stype=wind_dir_avg and https://wrcc.dri.edu/Climate/comp_table_show.php?stype=wind_speed_avg.2001-2011, accessed May 25, 2018.)

While the "average" wind speed of 10.1 miles is quoted for the prevailing wind on the "mainland," when buildings are erected, they channel the wind through openings between them in all directions.
In fact, in RWDI's analysis report, it states:
"Winds can also accelerate between two closely spaced buildings and through a passage underneath a building or bridge. If these building/wind combinations occur for prevailing wind directions, there is a greater potential for increased winds."

Also, when the wind is blocked by a large plane that blocks the wind from going east-west, the air ekes outward onto the avenues running north-south. Further wind studies may be necessary. Just historically, this site was given up as a cemetery not only because of the developers in the 1940s and 1950s wanted to build on it but also because the wind was so fierce that the sand was blowing away and the underlying lids to the caskets got blown open – an unpleasant sight.

In addition, the speed of the wind on balconies on the buildings, the street level – public areas – should not be made so that people have a comfortable experience. I believe there is a speed that is generally acceptable as comfortable and that could be around 17 mph. Where is the data to show that the winds will be at "LESS THAN SIGNIFICANT" ("LTS") when the Initial Study and the DEIR does not have any data to back this up?

The consequence of categorizing the WIND IMPACT at "LTS" as stated in the Planning Department Memo that prefaces the DEIR Document, would be that any recommendations under "LTS" categories do not have to have measures that are actionable to remedy unlike "S" (Significant) level impacts. Thus, having the wind portion with no data to back up the claim for potential damaging effects to the neighborhood should be further studied with data for all the "nearby streets" during each phase and at the completion of all phases for the project and any variants. Inclusion of one statement about the wind conditions with reference only to a *citywide* average to say that this and any other project has no wind impact is just a guess without data. One should try to visit this site where historically it has been one of the windiest parts of the city next to Geary and Masonic. If people have a hard time standing in fair weather, this may be unsafe for the pedestrians during inclement weather. Try standing around this site from 3PM on while the "citywide" average wind speed is 10MPH. Again, this is near "regionalization" of a metric that should be local for true impact analysis.

Page 6.57 "Wind":
The statements that since a building is "upwind north" or how wind in certain areas will be "somewhat reduced" does not give specific data on wind speeds. These general statements are not backed by scientific measurements and have no modeling of any sort in the DEIR. Yet, with no scientific data to back up any of the generalized wind statements, the DEIR states that the "Wind" impact category is "LESS THAN SIGNIFICANT" ("LTS"). The consultant's (RDWI's) report also has no scientific data measurements provided) so that this part of the DEIR is not only INCOMPLETE but flawed and the conclusion of the wind impact as being "LTS" INACCURATE. Please provide data for wind analysis. Please provide mitigation measures for the areas where, per RDWI's report, the pedestrians will be "chilled" or have the winds be "noticeable" and include the specific MPH ratings for all streets adjacent and the other nearby streets within at least 1/8-mile of the site. If you had the specific scientific data from when RWDI performed the wind report please provide; also provide for current winter season wind speeds.

The wind issue is important also due to the Child Care Facility. When the children are out on the play area the wind speeds and circulation may make the area unpleasant to take part in activities. It is not only the public areas but also on the site grounds where the children who will be playing.

A November 27, 2018 *Chronicle* article talks about the sustained 40-50MPH winds from the ocean. Once the westward winds hit the hills of Laurel Heights on the upslope of Jordan Park to its west, they pick up speed:
"*Wind gusts over 60 mph forecast for San Francisco Bay Area"*
<picture deleted>
"People check out the Golden Gate Bridge during a storm on Monday, Feb. 20, 2017, in San Francisco, Calif. The National Weather Service announced flood, snow and wind advisories throughout the upper half of California. Photo: Santiago Mejia, **The Chronicle**

After a storm drizzling rain over the San Francisco Bay Area Tuesday moves out of the region, a second system is forecast to sweep in Wednesday night, delivering more rain and breezy conditions. The winds are expected to kick up late Wednesday and will gradually steer more west to northwest into Thursday.

The National Weather Service issued an advisory warning sustained winds could blow between 40 and 50 mph and isolated gusts could reach in excess of 60 mph.
"These west to northwest winds have the potential to be locally strong and damaging, particularly along the coast on Thursday afternoon and evening," the NWS warns."

What is the San Francisco's wind hazard criterion set at today? Last I heard, it was 26MPH. As Planning Code Sec. 148 for wind speed in certain SUDs (Special Use Districts) do not currently apply to this parcel, given that a SUD is being proposed, perhaps the wind criteria needs to be introduced as being applicable to this site. As taller and more buildings get established nearby, this Code Section 148 may need to be made applicable prior to the establishment of this SUD which is being sought by the developer.

People in public seating areas and in areas where they may frequent shops along California Street would not necessarily be pleased to encounter uncomfortable wind speeds whether sustained or as gusts. In order to minimize the unpleasantry of "uncomfortable" wind speeds there might be a similar adoption of comfortable wind scenarios for the site as is in the CPMC Long-range Development Plan EIR, Case No. 2005.0555E, Page 4.9-15, e.g., wherein several SUDs are mentioned for having Planning Code Sections applicable (e.g. C-3 Downtown Commercial Districts, Van Ness Avenue SUD <Sec. 243(c)(9)>, Folsom-Main Residential/Commercial SUD <Sec. 249.1>, and Downtown Residential District <Sec. 825>). Planning Code Section 148 allows for "comfort levels" such that the wind speeds do not exceed 7MPH for "public seating areas," and 11MPH for "substantial pedestrian use." Would this be something to entertain for the 3333 California site – potential SUD?

The project area is very windy not just **sustained wind** but also **gusts** due to the ocean breezes rising up slope as the wind travels eastward from the ocean. Winds should not be so fierce as to create a pedestrian to not be able to walk comfortably on California Street and Euclid Avenue. The DEIR does not have a comprehensive data in the main DEIR nor in the Appendices for the wind measurements on the streets surrounding the site with current conditions at different times of the year such as summer, winter, spring, autumn. Wind speeds per second increase considerably during the stormy season and people may not be able to stand erect without difficulty, especially for the elderly and disabled and children in the area.
When will the data for the above be available for the public?

Thank you again for the opportunity to comment on this DEIR. I look forward to the "Responses to the Comments" document. Please let me know when it is available. Thank you for your time.

Sincerely,
/s
Rose Hillson

** See → ***DEIR LIST OF OTHER FORESEEABLE PROJECTS** (Pages 94-99)***

From: William Holleran
To: Rich Hillis; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); Zushi, Kei (CPC); Stefani, Catherine (BOS)
Subject: Crucial Housing Opportunity for Families at 3333 California
Date: Monday, December 10, 2018 3:13:25 PM

Supervisor Stefani and SF Planning Commissioners,
I want to express my excitement for the potential for 500+ new units of housing at 3333 California. I am a SF Native and live/own property in the Richmond District. I strongly support this project because I'm devastated by the fact that our community is so expensive and exclusive! This is a prime example of how SF can help ease the housing crisis and do so with a minimal impact on an existing community. Excessive parking in unnecessary at this location. Many people would be happy to live in such a community and use public transit, bicycles, ride share and their own feet to get around our great city. We have no need to preserve 300 parking spaces and the existing building.

1 (ME-1)

2 (TR-11)

Thank you,
William Holleran SF Resident/Pro-Housing Advocate

From: corey johnson
To: Zushi, Kei (CPC)
Subject: 3333 California
Date: Monday, December 10, 2018 3:21:51 PM

Hi!

I'm writing about the 700+ housing units for 3333 California. This part of the city desperately needs more housing. I live close to this site (on the other side of Geary) and was very excited when I heard it was going to be replaced with housing. As someone who got lucky and bought a home in 2011 I'm protected from this housing crisis, but my friends have not been so lucky. As they start families my friends start moving away, the high cost of housing and the uncertainty of housing is the main reason they are leaving. While this new housing wouldn't solve this problem it would be a great step in the right direction. Also, because it is so close to so much retail and transportation this site is a perfect place for more housing.

1
(ME-1)

Thank You,
Corey Johnson
1825 Turk St.

From: jack kue
To: Zushi, Kei (CPC)
Subject: 3333 California Street
Date: Thursday, January 03, 2019 12:45:39 PM

Dear Planning Commission,

I am writing you to express my opposition to the current development proposal for 3333 California Street, the former Fireman's Fund / UCSF Laurel Campus. I have lived in Presidio and Pacific Heights since 1990. I am a fifth generation resident of San Francisco. I believe that this plan is not consistent with the neighborhood and will have a negative impact on the surrounding area and its residents. 1 (ME-1)

I concur with the following points raised by groups trying to limit the scale of this project:

The developer's request for 15 years to construct the project is suspect. This looks like a plan to sell a new entitlement on an up zoned property. Developers all over town are selling new entitlements rather than build housing. Alternatives analyzed in the draft EIR would be built in 3 to 5 years. The Community Preservation Alternative would be built within three years. 2 (PD-1) 3 (AL-2)

I fully support the Community Full Preservation Residential Alternative for 3333
It preserves the Historic Characteristics of this wonderful historic site.
It provides 558 (or 744 in the Variant) housing units.
It builds them in three years.
It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.
It does not create 13,000+ retail auto trips per day.
It does not generate approx. 15,000 tons of greenhouse gases.
It preserves both the present childcare center and the existing café.
It matches the surrounding neighborhoods for character, style, scale and bulk.

I strongly oppose the Developers Destructive Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it poses threats to pedestrian safety. 4 (ME-1)

The Community Full Preservation Alternative will generate ZERO retail auto trips to 3333, as opposed to the 12,000-15,000 retail caused the Developers Destructive Proposal. 5 (AL-2)

In short, I ask that any development of this site be consistent with the existing use and scope of the property, and not expanded as proposed by the current developer, which with have a highly negative impact on the surrounding neighborhoods. Such a project is inappropriate for this location. 6 (ME-1)

Sincerely,

Henry N. Kuechler IV

jkspambox@yahoo.com

From: Tina Kwok <kwoktina@me.com>
Sent: Tuesday, December 04, 2018 10:34 PM
To: andrew@tefarch.com; aaron.hyland.hpc@gmail.com; Black, Kate (CPC) <kate.black@sfgov.org>; RSEJohns@yahoo.com; ellen.hpc@ellenjohnckconsulting.com; dianematsuda@hotmail.com; jonathan.pearlman.hpc@gmail.com; CPC-Commissions Secretary <commissions.secretary@sfgov.org> **Cc:** LaurelHeights2016@gmail.com
Subject: 3333 California StreetProject

Dear Commissioners of the Historic Preservation Commission,

My name is Tina Kwok and I have been a resident in the Laurel Heights/Jordan Park and nearby neighborhoods since 1985. I currently live on Laurel Street, directly across from the 3333 California project site.

With it's "Midcentury Modern" architecture appeal, this area stands out as one of the best kept neighborhoods in San Francisco.

I am in favor of progress and the betterment of neighborhoods. I support the Neighborhood Full Preservation Alternative for the 3333 California Street project for the following reasons: 1 (AL-2)

1. It offers the same number of residential units as the developer's proposal (558 with a 744 variant).

2. It preserves the character-defining features of the historically significant landscaping as well as much of the architecture of the original design. It maintains the majority of the 185 mature trees of various significant and rare species that would continue to absorb greenhouse gases. People from the neighborhood and elsewhere regularly use this green space for recreational purposes and is very important to the community.

3. The Alternative would not have retail that would compete with the merchants at Laurel Village (and also on Sacramento Street). By using all the space for housing, some units would be large enough for middle-income families.

4. It would be built in approximately 3 years instead of the 7-15 years the project applicant wants. I am not sure if there are any neighborhoods in SF that would agree to such a long and drawn out construction timeline. Imagine the noise, pollution, traffic, quality of life for the people not only the immediate neighborhood but those who must travel through this area daily to get to wherever they have to go to.

5. I understand that the new Draft EIR Full Preservation Residential Alternative has 24 less residential units than the project. However, if some of the 44,306 sq ft of retail in this Alternative is used for 24 residential units, the Alternative would offer the same number of residential units as the proposed project. There will be retail along California Street under the Alternative and NO

retail along Euclid. The location of retail shops along Euclid is most unattractive - it is windy, hilly and steep. It is NOT a pleasant strolling area for shoppers.

1 (AL-2) cont'd

6. The project also proposes to replace the windows and there is new proposed rooftop addition. I am concerned regarding the designs of the windows and rooftops and whether they will become distinguished from the significant Midcentury Modern architectural design of the original building. The proposed buildings appear to be an unattractive mass of glass and concrete crammed into the property in order to maximize highly valued square footage.

2 (ME-1)

7. I am concerned about safety of the residents in the project and the residents and visitors to the area as there are many proposed open spaces inside the project with public access.

3 (PS-1)

Thank you for your attention.

Respectfully,

Tina Kwok

535 Laurel Street
San Francisco, CA 94118

May the long time sun shine upon you,
All love surround you,
And the light within you guide your way.

From: Tina Kwok
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); Dick Frisbie
Subject: Response to DEIR 3333 California Street
Date: Tuesday, January 08, 2019 4:40:54 PM
Attachments: 3333 California DEIR Response to PD - COMMUNITY COMMENTS, CHALLENGES, DEFICIENCIES FOR THE DEIR Rev 3.pages

Dear Mr. Zushi

I am a resident of Laurel Heights. I reside at 535 Laurel Street. Below is my response to the DEIR of 3333 California Street project. The response is actually written by Mr. Dick Frisbie and I agree with all of his findings and comments.

Please let it be noted that we are pro increase in housing in SF. The need is now, and not in 7-15 years from now. Our community has supported the Copper Penny and CPMC project, and with the 3333 California project, will be increasing housing by 1000 units in the neighborhood. Some of my concerns, as examples and not comprehensive list, is as follows:

- The amount of excavation of earth, generating air, noise pollution is unimaginable for this long period of construction. 1 (GC-1)
- The lengthy construction period 2 (PD-1)
- The traffic during peak hours from the Inner Richmond to the Financial District and back using California Street as the main route (the Express buses will definitely be affected) 3 (TR-3)
- There is a concern in the community about excavation and the water table under the land - the water table survey was done during one the of the driest periods of SF and may not reflect the true measurement 4 (GEO-1)
- Destruction of historical site, virtually with nothing preserved (by cutting through the main building) 5 (CR-2)
- Office space allocation does not really conform to the character of the neighborhood
- Additional retail competes with the already challenged retail situation on Sacramento Street. Euclid side is windy and hilly and not conducive to a pleasant shopping experience. The retailers would be set up to fail… 6 (ME-1)

These are just some of my concerns. Mr Dick Frisbie's comments are attached below and I firmly support them.

Thank you for your attention.

With Best Regards,

Tina

Tina Kwok

I-KWOK3

kwoktina@me.com

May the long time sun shine upon you,
All love surround you,
And the light within you guide your way.

From: Tina Kwok
To: Zushi, Kei (CPC)
Cc: ECN, 3333CalCompliance (ECN)
Subject: Re: Response to DEIR 3333 California Street
Date: Wednesday, January 09, 2019 11:30:01 AM
Attachments: 3333 California DEIR Response to PD - COMMUNITY COMMENTS, CHALLENGES, DEFICIENCIES FOR THE DEIR Rev 3.pdf

Dear Mr Zushi,

Attached is the document in PDF format for your view. Thank you so much for reaching out. It is my sincere hope and wish, along with the community of Laurel Heights, that we reach a "win-win" situation for the developers, the city of SF, and the residents of the neighborhood. I just cannot imagine going through 7-15 years of construction (a toddler today would be going to college 15 years from now).
There's also the possibility of the current developer using the approved plans to "sell" to other developers in the future in order to get out of the high cost of construction in the market place now. And the site can be morphed into an unforeseeable development then.

1
(PD-1)

Thank you again for your attention.

With Regards,

Tina Kwok
kwoktina@me.com

May the long time sun shine upon
you, All love surround you,
And the light within you guide your way.

From: Tina Kwok <kwoktina@me.com>
Sent: Tuesday, January 08, 2019 4:41 PM
To: Zushi, Kei (CPC) <kei.zushi@sfgov.org>
Cc: Stefani, Catherine (BOS) <catherine.stefani@sfgov.org>; Dick Frisbie <frfbeagle@gmail.com>
Subject: Response to DEIR 3333 California Street

Dear Mr. Zushi

I am a resident of Laurel Heights. I reside at 535 Laurel Street. Below is my response to the DEIR of 3333 California Street project. The response is actually written by Mr. Dick Frisbie and I agree with all of his findings and comments.

Please let it be noted that we are pro increase in housing in SF. The need is now, and not in 7-15 years from now. Our community has supported the Copper Penny and CPMC project, and with the 3333 California project, will be increasing housing by 1000 units in the neighborhood. Some of my concerns, as examples and not comprehensive list, is as follows:

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These are just some of my concerns. Mr Dick Frisbie's comments are attached below and I firmly support them.

Thank you for your attention.

With Best Regards,

Tina

Tina Kwok
kwoktina@me.com

May the long time sun shine upon you,
All love surround you,
And the light within you guide your way.

I-KWOK4

SUMMARY of DEFICIENCIES/INACCURACIES for the 3333 California DEIR

"Incorrect, Incomplete, Inaccurate"

The developer's request for 15 years to construct the project is suspect. This looks like a plan to sell a new entitlement on an up-zoned property. Developers all over town are selling new entitlements rather than build housing. Alternatives analyzed in the Draft EIR would be built in 3 to 5 years. The Community Preservation Alternative would be built within three years. 8 (PD-1)

I fully support the Community Full Preservation Residential Alternative for 3333 9 (AL-2)

It preserves the Historic Characteristics of this wonderful historic site.

It provides 558 (or 744 in the Variant) housing units.

It builds them in three years.

It does not include the massive unneeded and unwanted Retail/ Office/Commercial Complex that the Developer continues to insist upon.

It does not create 8,000 retail auto trips per day.

It does not generate approx. 15,000 tons of greenhouse gases.

It preserves both the present childcare center and the existing café.

It is compatible with the surrounding neighborhoods for character, style, scale and bulk.

I strongly oppose the Developers Destructive Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it poses threats to pedestrian safety; it contributes to climate change. 10 (ME-1)

The Community Full Preservation Alternative will generate ZERO retail auto trips to 3333 as opposed to the 8,000 retail caused the Developers Destructive Proposal. 11 (AL-2)

The Community Full Preservation Alternative Preserves and Protects Small and Family Owned Businesses

The Community Full Preservation Alternative will protect the small, family owned businesses in Laurel Village, Sacramento St. and Presidio Ave. A quick walk around these neighborhoods will clearly show the immense pressure these businesses are experiencing. More retail is unneeded and unwanted. It will destroy our local businesses.

The Neighborhoods are well served by businesses at Laurel Village, Sacramento St., Trader Joe's, City Center, California St. etc. we do not need more, more, more.

We do not need the more than 100,000 square feet of Retail, Office, Commercial space that the Developers Destructive Proposal calls for.

One of the reasons the Developer destroys this historic site is to create enough space for this unneeded and unwanted Retail/Office/Commercial (ROC) nonsense.

The CPMC development, a Community supported plan by the way, adds 270 housing units and the Developer and neighbors have agreed to have no Retail. Why is 3333 being treated differently by forcing unneeded and unwanted ROC (Retail/Office/Commercial) against the overwhelming opposition of the surrounding residents?

The Community Unanimously Opposed the Developers' Massive Retail, Office, Commercial (ROC) Complex.

In a recent Petition Drive at Laurel Village over 800 residents signed the Petition opposing the Developers Full Destruction and Massive ROC plan and supporting the Community's residential Alternative. Three people opposed it the Petition. These signatures were gathered in less than 8 hours.

In the Petition Drive the 800 signatories opposed rezoning 3333 and also opposed revoking Resolution 4109, an agreement between the City and the surrounding neighborhoods. 12 (PP-1)

"A deal is a deal "was how everyone felt.

The Community Full Preservation Alternative will already be more than twice as dense as the surrounding neighborhoods so any rezoning is uncalled for, unneeded and unwanted.

These signatures are in the hands of the District 2 Supervisor.

13
(GHG-2)

The Developers Destructive Proposal Generates Excessive Levels of Greenhouse Gases and Even More Destructive Climate Gases.

Based on current estimates, it will generate approx. 15,000 tons of Greenhouse Gases (GHG) and the many associated and far more destructive climate changing gases that accompany the primary Carbon Dioxide gas.
The Community's Full Preservation Alternative will, by comparison, generate approx. 4,100 tons of GHG.
The Community Alternative mitigates the GHG generated by more than 70 percent, providing a dramatic reduction in a time of climate change.
The GHG calculation is our best estimate. Neither Planning nor the Developer will provide the volume of concrete or weight of steel required.
The Developer claims to have built many buildings and many complexes, Planning claims to oversee thousands of such projects and yet no one can even make an educated estimate as to the concrete and steel required.
Could there be something they want to conceal from the public?
Much like they concealed the Historic nature of 3333 for over 4 years?

Planning ignores the GHG generated by the construction materials despite the requirement to address "indirect" GHG. Planning requires the GHG generated in dispensing water to control dust, etc, to be calculated but not the GHG generated in manufacturing the materials used in the construction!
Example: The GHG generated by the diesel fuel burned to deliver a load of concrete is calculated to the decimal point but the GHG generated by the concrete itself is ignored. What do the numbers show?
Assume a 30 mile round trip: the truck burns approx. 10 gallons of diesel and generates 225 lbs. of CO2. The concrete in the truck generated over 5,000 lbs. of CO2 during manufacture. So, Planning recognizes the 225bs. but claims the 5,000lbs. is irrelevant essentially ignoring 95% of the real GHG!
And using this logic throughout the Initial Study Planning concludes that GHG are "Less than Significant" and therefore need not be addressed!
Folks, you can't make this stuff up as its beyond one's imagination.
The steel, glass, etc. are all treated similarly.
Apparently if you can't see the GHG actually being emitted into the air it doesn't actually exist sothere is no need to consider it. So much for a responsible approach to Climate Change.

As noted above the Community Full Preservation Alternative generates less than one third the GHG, however Planning chooses to calculate them.
NOTE: Over 95% of the cement/concrete used in the Bay Area is totally

manufactured in the Bay Area beginning with the mining process so these GHG are being injected into our air.

13 (GHG-2) cont'd

The Community Alternative is Superior, Sooner and Safer

14 (AL-2)

We pollute less and protect the environment: the Community Alternative will ALWAYS generate less than one third the GHG generated the Developers Full Destructive Alternative:
We destroy less: we preserve the historic site.
We build less: 4 new buildings versus the Developers'11 new buildings plus creating two tall towers out of the existing main building.
One single level underground parking garage for 450 spaces versus a complex of parking garages, some of three levels, for 896 spaces;
We excavate less: 90,000cubic yards (9,000 dump truck loads) versus 288,000 cubic yards (32,000 dump truck loads);
We preserve and protect our local businesses and shops: no added unwanted and unneeded and neighborhood destroying family-owned or small retail or business;
We better protect the health and well being of everyone: no 13,000+ auto trips to pollute the air, generate the noise, put pedestrians at risk, unload trucks on the streets, etc.

The Community's Full Preservation Alternative solution will always be three times More Climate Friendly; Far Less Disruptive; Far More Family Friendly; Far Safer for Pedestrians; Far Healthier Air Quality-wise; and Provide Critical Housing at Least Three Times Faster than Developers' solution.

We fully support housing

15 (ME-1)

The Community has supported the Lucky Penny (95 units), CPMC (270 units) and now 3333 (558) units. It was the Community that spearheaded the effort that led to the approval of the Lucky Penny Project.
Over 1,000 units in a half mile radius.
So please don't offend me and misrepresent the Community's position.
We support housing and history; we oppose unneeded, unwanted and unnecessary Retail and mindless destruction of a historic site.
AND we provide housing in as much as 12 years sooner than the Developers Full Destructive Plan does.

The YIMBYs should be 100% in favor of the Community's Full Preservation plan and if they're not then they are being grossly hypocritical.

The Community Full Preservation Alternative Prevents Excessive Traffic from the Massive ROC Complex, Uber & Lyft. Etc. from Overrunning our Neighborhoods.

16 (TR-2)

Recent studies have shown that the City's method of calculating auto trips, and the resulting chaos and congestion is deeply flawed, to the point of being misleading.
At the time the VMT (Vehicle Miles Travelled) methodology was developed, SF CHAMP last updated Nov. 2014, the Transportation Networking Companies (TNCs) -Uber/Lyft/ Chariot etc. were still in their infancy and so the VMT methodology fails to account for their incredibly disruptive impact.
The TNCs average, conservatively, in excess of 170,000 trips per day in San Francisco. There are about 2,000 taxi medallions in San Francisco so TNCs do not just replace taxis they overwhelm them by orders of magnitude. Also, implementation of the VMT methodology is not mandated until 2019 but as Planning and The Developers were unable to explain away the 8,000 Retail Auto trips generated by the existing, and still acceptable, Level of Service methodology, they implemented the VMT methodology with "refinements." Planning calculates the Developers Destructive Proposal using VMT methodology will generate approx. 5,800 total auto trips for 3333 for Retail + Office + Residential which is an entirely bogus number based on questionable assumptions, such as "The SF Guidelines do not provide a specific methodology to assess the number of trips….." Planning has therefore, with no supporting documentation or analyses, applied "appropriate refinements to the standard travel demand…."
Rather amazing that these "refinements" all work in the Developers favor.
Nowhere in these "refinements" have TNCs been taken into account!

Oh, by the way, the "refinements" used were created for The Mission Rock Project at Seawall Lot 337 and Pier 48 as well as the Pier 70 Mixed Use District Project!

Seawall Lot 337 & Pier 48 summary:
Project type Mixed-use, open space, residential, commercial
Project area Approx. 28 acres
Proposed building area 1.3 – 1.7 million sf commercial; 750,000 - 1.5 million sf residential; 150,000 – 200,000 sf retail, 850,000 sf structured parking

Seawall Lot 337 & Pier 48

Pier 70 summary: "The 35acre waterfront mixed-use neighborhood will provide housing, waterfront parks, artist space, local manufacturing and rehabilitated historic buildings." Altogether the redevelopment covers 35 acres and up to 3,025 new units of housing—the exact count is still in flux, with a low end of 1,645—and its roots stretch back a decade to a 2007 port plan.

WOW! What remarkably similar projects to 3333. What "refinements" could possibly be comparable? Simply bogus.
The DEIR consistently attempts to misrepresent and mislead the public.
It is incomplete, incorrect, inaccurate and invalid and NOTHING demonstrates this better than the above.

Under their previous, Level of Service, methodology they would have calculated 8,000 retail trips alone.
I I think it safe to say that the numbers presented by Planning are simply "Developer friendly!". Their VMT methodology with "refinements" will generate fewer trips, especially since there are no criteria for calculating the impact of TNCs, but there is nothing in the legislation that remotely suggests it would generate 35% less trips!
This entire section is suspect and Planning must explain this profound discrepancy.
As noted above, nowhere are the TNCs incorporated into the calculations.

All of which renders the Traffic Analysis incorrect, incomplete, inaccurate, invalid.

The Planning Department proposes to reduce the number of retail parking spaces as a mitigation measure to reduce the significant traffic impact.
This is a false assumption and shows the extent to which the Developer and Planning misunderstand, or simply choose not to understand, the impact that the TNCs have.
Planning's mitigation measure is a stone age solution to a digital age problem.
How will many people respond to a perceived lack of parking?
They'll simply call a TNC and go anyway.
Eliminating parking won't eliminate auto trips it will actually increase auto trips.

16
(TR-2)
cont'd

A UC Davis study shows that people make MORE trips because of TNCs than if they had to use their own cars or take public transit. People now make trips they would never have made in the past – by any mode of transport. 16 (TR-2) cont'd

The VMT methodology used by the Planning Department fails to account for the impact of TNCs.

And, the use of TNCs makes the GHG situation worse. 17 (GHG-1)

Let's assume I want to go to 3333 by auto. I could personally drive 2 miles to get to the 3333 Retail/Office/Commercial complex, park, then shop or do business, the drive 2 miles home for a total of 4 miles.

Data shows that many people will now use a TNC rather than drive their own cars.

This will be even more pronounced if Parking is reduced!

So now the TNC has to come to me, assume 2 miles, and take me the 2 miles to 3333 for a total of 4 miles.

When I go home the same thing happens or an additional 4 miles for a grand total of 8 miles. Twice the GHG generated per trip!

So, not only do we have 8,000 retail auto trips, excluding the effect of TNCs (not addressed) to deal with we have many of them generating significant more GHG per trip!

Planning needs to do a comprehensive analysis using credible data and a credible methodology so that the public knows the extent of the GHG generated.

We are in a crisis with climate change and the methodology shown in the DEIR fails to address this crisis credibly.

In fact climate change is more of a threat to the future of San Francisco than housing is and it isn't being addressed accurately in the DEIR.

The Community Full Preservation Alternative Protects the Historic Site, Protects the Greenspaces, Maintains the Existing RM-1 Zoning and Resolution 4109, Maintains the Public's Permanent Right-of-Use of the Greenspaces . 18 (AL-2)

The Developers Destructive Proposal first demolishes and destroys the Historic Characteristics and nature of 3333. 19 (CR-2)

Then it virtually destroys all of Laurel Hill itself, with the exception of a small sliver at the southwest corner, by excavating the entire site to depths ranging from 15 to 40 ft. 20 (GEO-3)

The only area that isn't excavated is under a portion of the existing building!

Not sure how they missed that opportunity!

Removal of the demolition debris and the excavated soils will require approx. 28,000 dump truck loads, all of which have to pass though and pollute our neighborhoods. 21 (AQ-1)

By contrast, the Community Full Preservation Alternative generates approx. 9,000 dump truck loads, one quarter as many!
After the demolition the Developer has to then deliver all the new materials required to rebuild what they demolished plus 11 new buildings.
How many large truck loads, concrete truck loads, etc. will this require?
The Community Alternative only builds 4 new buildings so like the GHG and the debris/soil removals the Community Full Preservation Alternative requires far fewer, probably about one third, or less, as many delivery loads. 22 (AL-2)

A quick look at the turning radii of the trucks, ie. SU-30 Circulation Exhibit and WB-40 Circulation Exhibit clearly demonstrates that all the deliveries during destruction, demolition, excavation, construction and long term operations pose significant threats to traffic safety, pedestrian safety, congestion and pollution. 23 (TR-7)

In fact, as WB-40 shows large trucks cannot safely navigate 5 of the 6 major intersections surrounding the site. There are no plans to mitigate this profound situation which will essentially exist from the beginning of the project ad infinitum. Planning and the Developers have simply washed their hands of the problem a la Pontius Pilate.

The Community Full Preservation Alternative will preserve most of the mature trees at 3333, some of which date back to the time of the Laurel Hill cemetery whereas the Developers Destructive Proposal will attempt to spare approx. 4. 24 (AL-2)

The Community Full Preservation Alternative Keeps the Loading and Unloading Traffic Within the Site as Opposed to External to the Site 25 (TR-10)

The Developers Destructive Proposal surrounds 3333 with five major Loading/ unloading zones for TNCs and Freight traffic. Initially the Developers promised that all the unloading would be done underground or on-site and now the site is ringed with these zones! These zones not only eliminate approx. 40 parking spaces but they will create additional traffic congestion and pollution. So we have a ring of loading zones in addition to the inevitable double parking that occurs for deliveries and drop-offs. A perfect storm!

From: gary laufman
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); laurelheights2016@gmail.com; Richard Frisbie; richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); CPC-Commissions Secretary
Subject: 3333 California St.
Date: Tuesday, January 08, 2019 9:35:36 PM

I am in Support for the Community Alternatives. 1 (AL-2)

I am in Opposition to the Developers' Destructive Proposal. 2 (ME-1)

I am saddened by the decline of the quality of living in San Francisco.

If you're not planning to protect or improve the quality of living in SF then why do it ?

Gary Laufman

San Francisco resident for 30+ years

3251 Washington St. #301

From: Ian Lawlor
To: CPC.3333CaliforniaEIR
Subject: Written Comments - Proposed Project @ 3333 California St - Case #2015-014028ENV
Date: Thursday, December 13, 2018 12:55:17 PM

Dear Planning Department:

In connection with Laurel Heights Partners, LLC's proposed development at 3333 California St., and based on the Draft Environmental Impact Report, please consider continuing to use the site for higher education, such as an annex for the University of San Francisco. Under a scenario where the building is used for higher education, the historically significant building and its beautiful landscaping would be preserved. Architects, preservationists and developers could update the glass curtain façade and interior to serve students for the 21st century. No changes would be required to the surrounding landscape or the perfectly suitable existing surface parking lots and garage ramp structures. Most importantly, the multitude of concerns raised by nearby residents and citizens set forth in the Draft Environmental Impact Report and listed again below for the Planning Department's reference would be adequately addressed. It appears there are far too many concerns for the Planning Department to proceed with the proposed project. Therefore, please consider continuing to use the site for higher education, such as an annex for the University of San Francisco. 1 (AL-1)

Two concerned nearby residents.

Summary of several concerns raised by nearby residents and citizens of San Francisco:

1. Archaeological concerns from the excavation and other site grading activities under the project and their effect on the topography of Laurel Hill 2 (CR-3)
2. Effects of construction of the project, including excavation of contaminated soils containing petroleum, polychlorinated biphenyls, and other contaminants; excavation and effects of undiscovered human remains and contaminated soils on public health 3 (HZ-1)
3. Potential for airborne contamination from office building demolition 4 (HZ-1)
4. Effect of ground settlement on adjacent buildings 5 (GEO-1)
5. Potential for contamination from leaking underground storage tanks and the use of chemicals for water treatment, 6 (HZ-1)
6. Increased population on the project site and effects on infrastructure 7 (PH-2)
7. Construction truck traffic and safety concerns, as well as cumulative construction transportation impacts 8 (TR-6)

8. Pedestrian safety due to increased traffic — 9 (TR-8)
9. Effects of projected growth on transit infrastructure — 10 (TR-9)
10. Loss of on-street parking spaces — 11 (TR-11)
11. Issues related to traffic circulation impacts from increased congestion on streets adjacent to the project site, — 12 (TR-3)
12. Length of the construction period and overlapping construction phases and the resulting air quality impacts on nearby residents — 13 (AQ-1)
13. Wind and shadow impacts on public streets and sidewalks and on existing private open space and recreational facilities — 14 (WS-1/WS-2)
14. Lack of recreational open space in the neighborhood and how the loss of the grass lawns along Euclid Avenue and along Masonic Avenue near Presidio Avenue would contribute to demand on public parks and recreational facilities — 15 (RE-1)
15. Concerns relating to the loss of mature onsite trees, the loss of landscaped space on the project site, and the potential loss of areas that could contain rare or endangered plant seeds or rare or endangered plants relevant to the historical significance of the site — 16 (BR-1)
16. Demand on regional water supply and the potential for adverse effects on storm drain capacity or flow — 17 (UT-1)
17. Project's effects on police and fire department services — 18 (PS-1)
18. Concerns about the project's demand on energy supplies and potential effects on utility service in the project vicinity. — 19 (EN-1)

I-LEE

From: Abe Lee
To: CPC.3333CaliforniaEIR
Subject: Laurel height development project
Date: Thursday, December 13, 2018 5:14:48 PM

Dear City Hall Planning Commission,
I am a resident of Laurel Heights and only heard about the 3333 California development yesterday through concerned neighbors on Nextdoor.com (https://nextdoor.com/post/98516472?init_source=copy_link_share)

I have serious reservations about the develop as it stands.
While more residential housing is needed, I believe it must be done without straining current public neighborhood resources. Increasing dwellings by 744 units as proposed could DOUBLE our neighborhood population and the run on public parks, libraries, and other spaces can be overwhelmed. Currently, we do not even have a public meeting hall or a workable recreation center. The one in Laural Heights park is a small shack - an unusable space for neighborhood and community meetings or deliberations. 1 (PS-1)

If the developers will build that many residential buildings, it must be done by installing more usable public facilities such as libraries, reading rooms / mini-libraries, recreation center, and other spaces which will enhance all of our lives. Already the traffic in this area is heavy, and parking has become a major issue. We do not welcome more development without careful review of the impact on the existing neighborhood quality of life. 2 (TR-14)

Thank you for your consideration. Please review the conversation on the nextdoor.com feed regarding this issue.

Regards,
Abe Lee

I-LUTHRA

From: Ankur Luthra
To: CPC.3333CaliforniaEIR; Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS)
Subject: 3333 Project - concerns and comments
Date: Wednesday, January 02, 2019 8:56:46 AM

Hi Kei (and Supervisor Stefani),

I am a homeowner in SF, zip 94115. I read a lot of the 3333 project notes and have major concerns.

I strongly oppose this very harmful proposal by the developer. I have no problem with developers making money or building housing in general - but there must be a tradeoff and all things must be considered. In this case, the project is would result in destruvtive and excessive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333. It would greatly hurt the environment of the area and the quality of life. 1 (ME-1)

The developer is trying the same challenge path as the Chase Center stadium. The difference is huge here though - this is in the middle of a residential area effectively, versus the Chase center surrounded by high rise buildings mostly. Every day for 7 years maybe up to 10 years, dozens if not hundreds of construction related heavy trucks would be driving down residential streets in the area. Pine St and Bush St for example, have higher speed limits and are one way - these trucks would be barrelling down these streets, polluting them massively, dirtying all the homes, and creating huge noise pollution - for 7 YEARS or more!! - in areas where the units are mostly dwelling units and many children live and play. 2 (CEQA-4) 3 (PD-1)

I strongly oppose the project as stated. I think the site is historic and a beautiful space in the middle of the city, much like a park is. We need housing, there is no doubt, but this project is using that as a cover for the developer to build parking spaces and a retail complex which is purely for profits - we can build housing only on the existing site in 2 years with far less community and environmental impact. 4 (ME-1)

Thank you,
Ankur

From: Larry Mathews
To: CPC.3333CaliforniaEIR
Subject: Comments on Draft EIR -- 3333 California Street
Date: Thursday, December 13, 2018 3:50:52 PM

To the Planning Department:

I am writing to express my opposition to and dissatisfaction with the Draft EIR circulated for the proposed project at 3333 California Street. I have owned my home directly across the street (at 3326 California Street) for over 17 years and have always appreciated this quiet street and residential neighborhood. The signifiant and unavoidable impacts identified in the Draft EIR would severely damage the fabric of this neighborhood and the City of San Francisco: 1 (ME-1)

1. The park-like setting, with mature landscaping and a midcentury-modern building with historical significance, would be destroyed were the project to proceed in its current form. This integration of landscaping and buildings is so important to this unique site and the proposed plan would destroy this setting — all for unnecessary retail and office space. The developers have created negative and permanent impacts by destroying part of the physical beauty and historical significance of this site. 2 (CR-2)

2. There is insufficient transportation and parking to support this project, and the developers have transferred the burden to the neighborhood and neighboring streets. Furthermore, the neighborhood doesn't need and cannot support additional retail, as the significant retail vacancies in the immediate vicinity will attest. 3 (TR-11) 4 (ME-1)

3. The increase in noise and pollution caused by the increased density and changed use of the site would adversely impact the neighborhood. This is a residential neighborhood and the site cannot support the increase in noise or traffic — either during an extended construction period or with the existence of an unnecessary mixed-use project. 5 (NO-3)

The developers have been disingenuous and dishonest as they've presented this project to the community. While claiming to present a conciliatory and cooperative approach with the neighborhood, they have played "bait-and-switch" and continued to ignore our very real and practical concerns. Those of us who live in Laurel Heights welcome the addition of new housing the site — we are **not** NIMBYs — and recognize the shortage of housing in the City of San Francisco. We fully support — and have repeatedly encouraged the developers to consider — an all-residential use of the site. This would allow the developers to deliver the same number of residential units as what's in their current plan but eliminate many of the significant and adverse impacts presented in the Draft EIR. I strongly encourage the Planning Commission to require the developers to pursue an all-residential project that would directly address these negative impacts outlined in the Draft EIR. 6 (ME-1)

Thank you for your consideration.

Larry Mathews

3326 California St., #3
San Francisco, CA 94118
(415) 860-6080
larrymathews@mac.com

From: Larry Mathews
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS)
Subject: 3333 California Street Mixed-Use Project
Date: Tuesday, January 08, 2019 3:37:05 PM

Dear Mr. Zushi:

I am a longtime resident of San Francisco and have owned my home at 3326 California Street for over 18 years. I recognize the need for more housing in San Francisco and appreciate the development opportunity presented by the 10 acre site across the street from me. We bought our apartment because of the park-like setting of the UCSF site, and because of the truly residential feel of the block. After carefully reviewing the Draft EIR for 3333 California Street, and meeting with the developers and with so many of my neighbors, I urge you to reject the Draft EIR and instead encourage the developers to pursue a project more in line with the alternative presented by the Laurel Heights Improvement Association (of which I am not a member). An all-residential project would mitigate — if not completely eliminate — many of the negative issues raised in the EIR and would be a solution that would work for the developers and for the community.

1 (ME-1)

2 (AL-2)

The Community Full Preservation Residential Alternative for 3333 California Street provides the same number of housing units as proposed by the developers, but preserves the integrity and historical significance of the site and better integrates the project into the surrounding neighborhood. The neighborhood does not need additional retail or office (or the traffic or environmental problems office and retail would bring with the increased number of users); San Francisco is already over-retailed and our neighborhood has plenty of vacant commercial spaces. Furthermore, as you know, to add the retail or commercial would require a change in zoning, and I strongly believe the zoning should be kept as it is.

3 (ME-1)

I am not a NIMBY; I'm actually a YIMBY and support the addition of new housing stock in our neighborhood. But I encourage you to reject the Draft EIR and the developers' cynical plans for the neighborhood. Although the developers proclaim to be friends of the neighborhood, I suspect that any retail or office space they build will simply be sold off to other investors who might not be local or share the interests the developers claim to support. I believe the developers can make money on an all-residential project without the negative effects outlined in the Draft EIR. I encourage you to have them come back to the table to work with the community (as opposed to the staged photo-ops they've put on at community meetings) to come up with a project that will truly serve the City of San Francisco and the neighborhood I call home. The Community has presented that opportunity to the developers in the form of an all-residential project that can be efficiently and profitably built; we just need the developers to show more willingness to cooperate.

Thank you for your consideration.

Larry Mathews
larrymathews@mac.com

3326 California St. #3
San Francisco, CA 94118

From: Adam McDonough
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); Richard Frisbie
Subject: 3333 California Street DEIR
Date: Monday, January 07, 2019 10:16:41 PM

Mr. Zushi,

My name is Adam Mcdonough and I'm a 10-year resident of Laurel Heights. I'm writing to voice my opposition to the developer's proposed project at 3333 California Street, and lend my full support for the community "full preservation" alternative. I believe the DEIR is inadequate in a number of ways, including: 1 (ME-1) 2 (AL-2) 3 (GC-1) 4 (CR-2)

1. It understates the negative impacts of destroying the historical characteristics at the current site;

2. It underestimates the negative impacts of retail, office and commercial space to the local community (traffic, pollution, noise, etc.); 5 (GC-1)

3. It overstates the value of "open space" at the expense of "green space", depriving the neighborhood of a local park in return for paved walkways; 6 (PD-3)

4. It inadequately represents the negative impacts of a potential 15-year construction period to the families living in proximity to the site; 7 (PD-1)

5. It incompletely addresses the damaging effects of greenhouse gases emitted during and after the construction period; 8 (GHG-1)

The community alternative provides the same number of housing units without the excessive, bulky, towering, commercialized and paved project proposed by the developer. 9 (AL-2)

Thank you for considering my objections to the developer's proposal, as well as those of a majority of neighborhood residents. 10 (ME-1)

Adam McDonough
(415) 305-8776

December 18, 2018

City Of San Francisco – Planning Commission
Commission Chambers, Room 400, City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

Re: Case No. 2015-014028ENV
Project Title: 3333 California Street Mixed-Use Project Zoning:
Residential, Mixed, Low Density [RM-1]
Zoning District 40-X Height and Bulk District Block/Lot: Block 1032/Lot 003
Applicant/Agent: Laurel Heights Partners LHP

Dear Planning Commissioners:

The developer has not addressed the historic significance of this property. 1 (CR-2)

I support the Neighborhood Full Preservation Alternative because: 2 (AL-2)

1. It has the same number of residential units as the project (558 with a 744 variant).

2. It would retain the character-defining features of the historically significant landscaping including the beautiful Terrace designed by Eckbo, Royston & Williams, and the majority of the 185 mature trees that would continue to absorb greenhouse gases. People regularly use the green space on the site for recreational purposes and that space is very important to the community.

3. It would not have retail that would compete with the merchants at Laurel Village Shopping Center. By using all the space for housing, some units would be large enough for middle-income families.

4. It would be built in approximately three years rather than the seven to fifteen years the project applicant is proposing.

5. The new Draft EIR Full Preservation Residential Alternative has 24 less residential units than the project. I recommend that some of the 44,306 square feet of retail in this Alternative be used for 24 residential units so the Alternative has the same number of residential units as the proposed project. This Alternative would have retail along California Street but not also at Euclid, which the proposed project would have. The applicant should explain the exact type of replacement windows proposed and why the proposed new rooftop addition would distinguish it from the original building yet be compatible with Midcentury Modern design principles. 3 (AL-3)

6. The proposed project is an unattractive mass of nondescript buildings crammed onto the site with concrete pathways. 4 (ME-1)

7. There is no need to destroy this historically significant site because alternatives are available which will achieve housing production by building on the parking lots. 5 (AL-2)

Thank you for your attention to this matter.

Most sincerely,

Marie McNulty
3169 California Street, #2D
San Francisco, CA 94115

cc: LaurelHeights2016@gmail.com

From: Kevin M Meehan
To: Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); Zushi, Kei (CPC)
Subject: Support for 3333 California
Date: Sunday, December 16, 2018 11:52:31 AM

Dear Planning Commissioners and City Planners,
I am writing you to present my full support for the 3333 California project.

As a San Francisco resident and one who lives very close to 3333 California, this project is very significant for me. I have lived in San Francisco now for 2 years and love this city. I want to stay here and raise a family but I honestly don't think I can do that with the cost of living, in particular the cost of housing.

This housing project will be a small but important step in reducing pressure on key communities. We as a city need to allow housing in this neighborhoods and ALL neighborhoods in the city. For too long we have allowed richer residents to block all housing to meet their narrow interests.

I hope you show the leadership that San Francisco needs right now on housing to support this issue.

1
(ME-1)

Best Regards,

Kevin Meehan

3333 Draft EIR Comments

I fully support the Community Full Preservation Residential Alternative for 3333 California

It preserves the Historic Characteristics of this wonderful historic site.
It provides 558 (or 744 in the Variant) housing units.
It builds them in three years.
It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex envisioned by the Developer.
It does not create 8,000 retail auto trips per day.
It does not generate approx. 15,000 tons of greenhouse gases.
It preserves both the present childcare center and the existing café.
It matches the surrounding neighborhoods for character, style, scale and bulk.
It protects the small, family owned businesses in Laurel Village, Sacramento Street and Presidio Avenue.

1
(AL-2)

I strongly oppose the Developers Destructive Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it poses threats to pedestrian safety; it contributes to climate change.

2
(ME-1)

From: Liz J. Miller
To: richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Stefani, Catherine (BOS); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); Zushi, Kei (CPC)
Subject: 3333 California St. Support
Date: Wednesday, December 12, 2018 7:05:11 PM

Supervisor Stefani, Planning Commissioners, and Planner:

My name is Liz and I want more neighbors.

As a District 2 voter living relatively close to 3333 California St., I would like to voice my strong support for adding 558 to 700+ units of housing on this site. Here in San Francisco, far more jobs are being added than housing. By limiting housing, we continue to make our city unaffordable to working families and young people. 1 (ME-1)

Are parking spaces important? Yes, but they are not more important than solving this housing crisis. Is preserving architectural continuity important? Yes, but not more important than the ability of more working people to live in my neighborhood. I want more folks to be able to live close to where they work and help reduce traffic congestion. I want kids born in San Francisco today to be able to grow up and afford to live here.

This housing will take one small step in reducing pressure on communities of concern. San Francisco should allow more housing in this neighborhood.

Please feel free to contact me at 415 347 9549 or at this email address. Thank you for hearing my concerns about our housing crisis and support for more housing.

Sincerely,
Liz Miller
District 2 Voter

From: Cristina Morris <cmomorris@outlook.com>
Sent: Monday, December 10, 2018 3:58 PM
To: Johnson, Milicent (CPC) <Milicent.Johnson@sfgov.org>; Koppel, Joel (CPC) <Joel.Koppel@sfgov.org>; Richards, Dennis (CPC) <dennis.richards@sfgov.org>; richhillissf@gmail.com; Melgar, Myrna (CPC) <Myrna.Melgar@sfgov.org>; planning@rodneyfong.com <planning@rodneyfong.com>; Moore, Kathrin (CPC) <kathrin.moore@sfgov.org>; CPC-Commissions Secretary <commissions.secretary@sfgov.org>
Subject: FW: 3333 California Street

Dear Sirs/Madams,

In anticipation of your hearings regarding 3333 California Street, I am writing in support of protecting the well-established historical designation of the property, as evidenced by the August 31, 2018 letter from Julianne Polanco, State Historic Preservation Officer to the principals of the Laurel Heights Improvement Association of San Francisco. You have been provided with a copy of that letter. 1 (CR-2)

Any future development at that site should comply and honor the historic property designation in the following areas:

1. Retain the historic significance of the landscaping of the property, which has 185 mature trees. Such care of natural resources has an added environmental benefit and the green space is very important to the surrounding neighborhoods, particularly as San Francisco becomes more urbanized and "Manhattanized."

2. Use space (within the historical designation parameters) solely for housing, which allows for larger units to be built for families, consistent with the use and character of the Laurel Heights and Presidio Heights neighborhood. 2 (ME-1)

3. Consider the environmental impact of increased traffic, parking issues and the overall impact on the quality of life for the existing neighborhood as well as for those people who will eventually occupy any new units at 3333 California Street. This includes elimination or a substantial reduction of any plan to add commercial enterprises on the property. 3 (TR-14) 4 (ME-1)

Finally, a detailed economic study should be conducted to see: 5 (GC-2)

1. The impact on existing commercial areas (Sacramento Street, California Street and Masonic Street, if commercial development is allowed at 3333 California Street. The study should take into account the number of current empty commercial properties in those areas. This neighborhood may not support any further commercial development, especially given the congested corridor of Masonic and Geary (Trader Joes, Target, etc.)

2. Whether the San Francisco economy supports the number of units being proposed by the developer, as it current trends indicate that there is an over supply of housing units, young working people leaving San Francisco (and California) and an eventual downturn in the tech bubble, on which San Francisco over-relies for its economy at present.

6
(GC-1)

Thank you for your time in reading this email and for seriously considering alternative plans put forth by the Laurel Heights Improvement Association.

7
(AL-2)

Cristina Morris
Presidio Heights

Sent from Mail for Windows 10

From: Cristina Morris <cmomorris@outlook.com>
Sent: Wednesday, December 12, 2018 7:43 PM
To: Johnson, Milicent (CPC) <Milicent.Johnson@sfgov.org>; Koppel, Joel (CPC) <Joel.Koppel@sfgov.org>; Richards, Dennis (CPC) <dennis.richards@sfgov.org>; richhillissf@gmail.com; Melgar, Myrna (CPC) <Myrna.Melgar@sfgov.org>; planning@rodneyfong.com <planning@rodneyfong.com>; Moore, Kathrin (CPC) <kathrin.moore@sfgov.org>; CPC-Commissions Secretary <commissions.secretary@sfgov.org>
Subject: 3333 California Street

Dear Madams/Sirs,

I previously wrote you about 3333 California Street. In addition to the substantive concerns, please consider the following:

I strongly urge the Planning Commission to grant a 15-day extension of the Due Date for Comments on this DEIR. It is a lengthy and complex document.

1
(GC-3)

Given the holidays and the importance of the issues to the surrounding neighborhoods and the city generally, an extension would be most appreciated.

Very truly yours,

Cristina Morris

Presidio Heights

Sent from Mail for Windows 10

I-MUNNICH

From: Ed Munnich
To: Zushi, Kei (CPC)
Subject: 3333 California
Date: Thursday, December 13, 2018 11:54:30 AM

Dear Kei Zushi,

I am writing to oppose the historic designation of the current building at 3333 California, and to support the most ambitious plan, to build 700+ new housing units. It is a tremendous opportunity to make a dent in the housing crisis, and I urge you to do whatever you can to remove obstacles to it. 1 (CR-1) 2 (ME-1)

My wife and I have lived in San Francisco for 14 years, and scrapped and saved to be able buy a condo in 2012. At the time, she worked UCSF's Mt Zion campus, and I work at USF, so we focused our search for housing on the area close to 3333 California, with the plan that we could give up our car and walk or take transit to work. This area was also ideal because of the wide variety of stores and activities available within a short walk, and the excellent transit options that link it to the rest of the city. Unfortunately, even with two professional salaries, and no children, we were unable to afford anything in this area. We ended up in the Inner Richmond District, and are very happy with our neighborhood, but note that we would not be able to afford our current home, or, likely, to buy a home at all in our neighbohood today.

History is very important. But when the history of a building disrupted the city rather than enhanced it, we must not reflexively sustain the disruption. 3333 California was built at a time when San Francisco was moving towards suburban, car-centered planning, which we subsequently rejected, deeming ourselves a "transit-first city", opposing additional freeway construction, and choosing not to rebuild freeways damaged by the 1989 earthquake. The 3333 California site is historic in the sense that the Central or Embarcadero Freeways were historic--it has history, but its history disrupted the city rather than enhancing it. An absurd but relevant example is that a cloud of tobacco smoke was once part of the historic character of bars, clubs, and, indeed, City Hall; but we would not allow smoking in those locations today, merely to preserve their historic character. 3 (CR-1)

Most importantly, the history of the City is in its people. Every day, my wife and I see neighbors pushed out of our neighborhood by the high cost of housing. We are losing the most vital aspect of our history--the lifelong San Franciscans in rent-controlled housing, the young who come to the City with a dream, immigrants, diverse groups from different parts of the US, and creative people from all over who give the City its unique character. All of these people are our history, and all of them are key to a vibrant future. Critically, unlike some other projects that have been proposed, no one would be displaced by new housing at 3333 California, since not a single rent-controlled or otherwise affordable housing unit would be lost. It is a win-win for the *people* of San Francisco. 4 (PH-1)

No amount of housing that could reasonably be built at 3333 California will solve the City's housing shortage, but building housing at this site that is consistent with the density of neighboring Lower Pac Heights would help to make a dent. Since this community is so well-situated for walking and transit, people don't need cars, and not needing a car or a parking space makes otherwise unaffordable housing just a little closer to affordable for many. Moreover, with dense housing and minimal parking on this site, we would get the housing we desperately need, without adding to traffic congestion. I urge you to put the preservation of the human dimension of the City ahead of the preservation of a building that ran counter to the history of San Francisco, and runs counter the sustainable future that we strive for. 5 (ME-1)

Thank you for your consideration!

Sincerely Yours,

Ed Munnich

I-MUNNICH

568 Balboa St. #2

From: annechome <annechome@yahoo.com>
Sent: Wednesday, December 12, 2018 9:03 PM
To: CPC-Commissions Secretary <commissions.secretary@sfgov.org>; Moore, Julie (CPC) <julie.moore@sfgov.org>; Foster, Nicholas (CPC) <nicholas.foster@sfgov.org>
Subject: Grant a 15 day extension regarding 3333 California St

To: SF Planning Commission

From: Anne Neill, neighbor at 3179 California St*, CA 94115*
annechome@yahoo.com

Date: December 12,

2018 Re: 3333

California St, SF

Dear SF Planning Commission,
I am using my neighbors' letter as a template for a discussion about 3333 California St. However, I am adding my own thoughts as well. I have attended multiple presentations by the developer and I have grave concerns. The project scope is far too big, this neighborhood should not have the type of density that the developer is proposing, and we certainly don't need additional retail. With the historical significance of the building, more time is needed to take these concerns under consideration, thus my request to grant a 15-day extension to January 8, 2019. 1 (ME-1)

Please grant a 15-day extension of the 45-day comment period on the Draft EIR from December 24 to January 8, 2019, because the project construction would last for 7-15 years and there is substantial community opposition to the developer's concept. 60 days are allowed by law and have often been granted for complex projects or projects that are controversial. Last week, the SF Historic Preservation Commission expressed support for an alternative. 2 (GC-3)

Approximately 800 residents signed a petition against the rezoning requested by the developer, and he would not plan the project with the community. 3 (PP-1)

Last week, the San Francisco Historic Preservation Commission stated strong support for preserving this resource by building a residential alternative. 4 (AL-2)

The developer proposes to destroy the historically significant characteristics of the site and create a concrete jungle with three underground levels of garages for 896 parking spaces topped with nondescript buildings crowded onto the site. He wants to change the zoning to allow retail which was banned in Planning Commission Resolution 4109 to avoid adverse impacts to Laurel Village and Sacramento Street. 5 (CR-2) 6 (PP-1)

Also, the developer did not tell the community about the historic significance of the site. The neighborhood learned last year and had the building and landscaping listed on the California Register of Historical Places because they were designed to complement each other in an integrated composition. So, the landscaping is also a historical resource on this site and has been used for recreation by the public for many years. 7 (CR-1)

I support the Community Full Preservation Alternative which would have the same number of housing units as the proposed project (558) with a variant for 744 and would build new buildings on the vast parking lots along California Street in approximately 3 years rather than the 7-15 years requested by the developer. Under the community alternative, the main building would be converted to housing units rather than demolishing half of it, and there would also be a new Mayfair residential building. The existing cafe and childcare center would remain, and there is an existing pathway through the building that opens onto the Terrace and onto Masonic. **Please direct the Planning Department to evaluate this alternative with the same level of detail as they do for the alternatives in the Draft EIR.** 8 (AL-2)

Draft EIR Full Preservation Alternative C was unreasonably configured to have 26 less housing units than the project and 44,306 square feet of retail, which can be converted to housing to match the number of housing units in the proposed project. 9 (AL-3)

This is a beautiful site that should not be destroyed, and housing can be built sooner in an alternative than in the project. The 15 years the developer is requesting raises a red flag for real estate speculation.

10
(AL-1)

Also, the Draft EIR states that the proposed project would generate 10,057 auto trips per day and would cause substantial additional Vehicle Miles Traveled and/or substantially induce automobile travel. DEIR p. 4.C.74. The DEIR claims that reducing the retail on-site parking supply would mitigate this impact to less than significant. DEIR p. 4.C.80. We think this analysis is bogus.

11
(TR-4)

From: marsha nonn <mwnonnsf@gmail.com>
Sent: Thursday, December 13, 2018 1:41 PM
To: CPC-Commissions Secretary <commissions.secretary@sfgov.org>
Subject: Thursday, December 13 , 2018 Planning Dept. Hearing, RE. 3333 California Street DEIR, Case No. 2015-014028ENV

Mr. Ionin:

Unfortunately due to unforeseen circumstances, we are unable to attend today's Planning Dept's meeting regarding the subject matter.

We are residents and home owners in the Laurel Heights neighborhood and we strongly urge the Planning Commission to grant a 15-day extension of the Due Date for Comments on this DEIR. It is a lengthy and complex document. Thank you. 1 (GC-3)

Marsha and Wolfgang Nonn

From: marsha nonn
To: Zushi, Kei (CPC); Stefani, Catherine (BOS); Richards, Dennis (CPC); Koppel, Joel (CPC); CPC-Commissions Secretary; Moore, Kathrin (CPC); Milicent A. Johnson - Commissioner; Melgar, Myrna (CPC); Rich Hillis - Commission President; Rodney Fong - Commissioner
Subject: DEIR - 3333 California Street
Date: Tuesday, January 08, 2019 1:35:08 PM

Our comments on the subject DEIR are as follow:

1. We fully support the Community Full Preservation Residential Alternative proposal: 1 (AL-2)

- It preserves the Historic Characteristics of this wonderful historic site.
- It provides 558 (or 744 in the Variant) housing units.
- It builds them in three years.
- It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.
- It does not create 8,000 retail auto trips per day.
- It does not generate approx. 15,000 tons of greenhouse gases.
- It preserves both the present childcare center and the existing café.
- It is compatible with the surrounding neighborhoods for character, style, scale and bulk.

2. We vehemently oppose the Developers' destructive proposal: 2 (ME-1)

- it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333.
- It threatens the quality of life.
- It poses threats to pedestrian safety.
- It contributes to climate change.
- More retail is unneeded and unwanted. It will destroy our local businesses. We do not need the more than 100,000 square feet of retail, office, commercial space that the Developers Destructive Proposal calls for.

Marsha and Wolfgang Nonn
Laurel Heights Community Members

From: phillip paul
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); laurelheights2016@gmail.com; richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); CPC-Commissions Secretary
Subject: DEIR for 3333 California St.
Date: Monday, January 07, 2019 7:55:13 PM

Dear Mr. Zuchi,
As a resident and homeowner of over 10 years and on the 3300 block of California St., I would like to express my opinion regarding the recent DEIR produced for the development of 3333 California St.

I am deeply concerned by the developer's request for 15 years to construct the project. This length of time makes me suspect an alternate motive, such as planning a new entitlement on an up-zoned property. Developers all over San Francisco appear to be using this tactic, create entitlements rather than build housing. The draft EIR considered construction in 3 to 5 years. The Community Preservation Alternate would complete construction in 3 years. If they must have 15 years then they need to agree that there can be no entitlement up-zoning trick. 1 (PD-1)

The DEIR really does not consider the impact on the neighborhood and in this aspect is woefully incomplete. Particularly in that no consideration is given to asking the residents to live in a construction zone for 15 years with streets being blocked by cranes and cement trucks, subjected to construction dust and pollutants, with construction noise dawn-to-dusk. Three to five years of this is asking a lot,15 years is excessive particularity where everything across the street from the site and on all sides is essentially residential housing for families with children.

I fully support the Community Full Preservation Residential Alternative for 3333 California St. I support his plan because: 2 (AL-2)
- It preserves the Historic Characteristics of this unique and wonderful historic site.
- It provides 558 (or 744 in the Variant) housing units.
- It builds these units in three years.
- It does not include the Retail/Office/Commercial Complex (large and unneeded and unwanted but that the Developer continues to insist upon), and in doing so
  - avoids adding another 13,000+ retail auto trips per day to a city already overwhelmed by cars and short of parking
  - avoids forcing traffic and parking demand into the adjacent neighborhoods
  - avoids adding 15 kilotons per year of private transportation-generated pollutants to the cities environment
  - preserves both the present childcare center and the existing café.
  - better matches the character, style and scale of the surrounding residential neighborhoods

I strongly oppose the Developers Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding the 3333 California site. The 15 year construction plan poses a long-term threat to quality of life in the neighborhood surrounding the site and may well suppress the values of surrounding properties 3 (ME-1)

for over a decade.

3 (ME-1) cont'd

The Community Full Preservation Alternative will protect the small, family owned businesses in Laurel Village, Sacramento St. and Presidio Ave. A quick walk around these neighborhoods will clearly show the immense pressure these businesses are experiencing. More retail is unneeded and unwanted. It will destroy our local businesses. The Neighborhoods are well served by businesses at Laurel Village, along Sacramento St., Trader Joe's, City Center, along California St. A central reason for the developer to destroy the historic site is to add 100,000 square feet of Retail, Office, Commercial space. We do not need more empty store fronts. The retail world is struggling to survive the rise of the on-line world, adding more retail space will either sit empty or lead to a spiral of failures as the shops compete for a finite number of shoppers.

4 (AL-2)

5 (ME-1)

I fail to see how the CPMC development down the street, a Community supported plan that adds 270 housing units, found a way where the developer and neighbors agreed to have no retail. While at 3333 California, we are told the Retail/Office/Commercial is required against the overwhelming opposition of the surrounding residents.

Several recent studies have questioned the City's method of calculating auto trips, and the resulting chaos and congestion. Some have suggested the methodology is misleading. The methodology is certainly out of date (last updated in 2014) taking no account of how the Uber/Lyft/Chariot swarm alter the traffic landscape. I can see a lane on either side of California street blocked by Ubers double and triple parked. A disaster for those of us when we need to back out of our garages and a disaster for those who need the emergency vehicles that regularly use California St as a fast way across this part of town. This question is easily answered, provide the raw data and the calculations and the defined procedures that were used so that they can be independently verified. At present, the traffic analysis looks like a favor done for the developers where the neighborhood is expected to accept the high-level results blindly and just live with the results.

6 (TR-2)

The Planning Department proposes to reduce the number of retail parking spaces as a mitigation measure to reduce the significant traffic impact. This does not make sense. Are there published studies that support this idea and if so can we have the references? If the business served are to survive, eliminating parking does not eliminate auto trips it will actually increase driving time as cars cruse for a spot and it will push parking into the surrounding neighborhoods, or it will fill the streets with Ubers. All to the detriment of those that live in the neighbor. Whereas if parking is so bad as to drive away shoppers, we get the failure of the businesses. The Developers Proposal surrounds 3333 California with five major Loading/unloading zones for personnel pick-ups and loading. The Developers started by promising that all commercial loading would be done underground or on-site. Now the site is ringed with loading zones. These zones eliminate many parking spaces and create additional traffic congestion and pollution. Simply put, the traffic flow and the parking impacts do not seem to have been considered in a systematic fashion.

7 (TR-4)

8 (TR-10)

I apologize for sending this at the last minute and hope you will be able to take my comments into account when assessing the impact of the 3333 California development on our community

and neighborhood. The city is changing, my hope is that this change is managed in a smart way that keeps the city a culturally vibrant place, and a fine place to live and raise a family.

with best regards Regards,

Phillip H Paul
3328 California St. apt. 4

From: Donald Piombo <dspiombo@pacbell.net>
Sent: Wednesday, December 19, 2018 3:38 PM
To: PIC, PLN (CPC)
Subject: 3333 California Project

Hello,
I am writing in support of allowing commercial development at the 'project'. That said, I am also in support of a smaller, scaled down project, but mainly and briefly - I believe **it is irresponsible to build residential units without the infrastructure needed to support those new residents**. Restaurants, grocery and other stores, laundry, banking, clothing, etc all need to be allowed with the new development. It seems to me, that the argument of traffic caused by the residential development, is lost if I have to get in my car to shop or have dinner. 1 (ME-1)

I was born and raised in Laurel Heights, and I still own a 3 unit building on Mayfair at Laurel that my parents purchased new in 1949. I love the neighborhood, but it must evolve.

Although I am no longer a resident of Laurel Heights proper (west from Presidio/Masonic to Spruce and south from California partway to Geary), I do live nearby on Jackson near Lyon and I would love to see more commercial in our neighborhoods to support us.

Regards
Don Piombo

From: Donald Piombo
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); Melgar, Myrna (CPC); richhillissf@gmail.com
Subject: 3333 California St project
Date: Thursday, January 03, 2019 10:09:39 AM

Hello
I own property in Laurel Heights on Mayfair Dr but live nearby on Jackson and Laurel. I want to voice my concern that I believe building residential units only, with no underlying commercial support for those residents is irresponsible. I cannot imagine building 588 (or 744 alternatively) residential units with no banking, grocery, cleaners, gym, restaurants, café, shops, etc to support those people. The current 'Laurel Village' cannot support that many new residents. Those residents will get in their cars and drive to other neighborhoods - exacerbating traffic congestion. Personally, I think it's irresponsible to build that many units with no support for the residents living in them. Regards Don Piombo

1
(ME-1)

I-POLIAKIN

From: Gilda Poliakin
To: CPC.3333CaliforniaEIR
Date: Sunday, December 30, 2018 10:55:26 AM

Dear Commissioners:

I attended the December 13th meeting regarding the Environmental Impact study regarding the 3333 California Development Project. I was very impressed with the commitment and attention which each of you showed to the study of the various aspects of the proposal, and a someone who lives directly across the proposed project, I am reassured that you will carefully examine all the impacts of the proposed project.

To re-iterate the opinion of many of those who spoke on December 13th,

Intense construction: The construction period should not be allowed to take too long. The developer's estimate of a decade or more of construction is ridiculous. Traffic: Those of us who live on Presidio Avenue sometimes have to wait up to 5 minutes during morning peak periods before someone is kind enough to allow us to pull out of our garages, and the rush of cars from Pine Street onto Presidio Avenue is dangerous as it presently stands, as cars careen without regard to safety. 1 (PD-1) 2 (TR-7)

Environmental impact: Noise level, increased traffic and pollution. What is the impact on the 560 Presidio Building's structure vibrations and water-table while digging the foundation the foundations are dug and concrete poured? 3 (GC-1) 4 (NO-2) 5 (GEO-1)

Greenspace: The loss of what little green space that exists on Presidio Avenue, is a loss to all of us who have come to use it as a mini park and enjoy the views of the redwoods (which the proposed project will hide from public view). 6 (PD-3)

Transportation:
There are not enough parking spaces for the proposed number of units provided in the plan. As it now stands, street parking is impossible. 7 (TR-11)

MUNI is not able at this time to guarantee that enough buses will be supplied to take the load of 1,000 residents suddenly appearing in the Laurel Heights area. 8 (TR-9)

If Uber or Lyft cars are used, those cars picking up and dropping passengers will simply add to the already intense traffic on Euclid and Presidio Avenues as well as California Street. 9 (TR-2)

Historical building and design of proposed structures:
The design for the proposed buildings is of the utmost banality and has no relevance to the city's style. It does not reflect the style and character of either the neighborhood or of the city's tradition. One can argue that the present building has no historical value, but it does represent a style of a period which is has gained appreciation in this present century and while not being on a par of a Mies Van Der Rohe building, it makes more of a statement than the proposed ensemble of buildings which do not reflect any style. 10 (ME-1)

For all these above reasons, I urge the Commission to consider I strongly urge the Commission to consider the Community Full Preservation Residential Alternative for 3333 California. The proposed plans submitted by the developers, 11 (AL-2)

Respectfully submitted.

Gilda Poliakin
Group Travel Consultant
Mobile (US): + 1 415 279 8554
E: gildapoliakin@aol.com
560 Presidio Avenue, No. 8
San Francisco, CA 94115-USA
Website www.gildapoliakin.us

From: Brandon Ponce
To: CPC.3333CaliforniaEIR
Subject: Comments on DEIR
Date: Tuesday, January 08, 2019 10:16:39 PM

Hello,
Please include the 3637-3657 Sacramento Street Mixed Use Project in your cumulative projects analysis. 1 (CU-1)
Can you confirm receipt of this email?
Thank you,
Brandon Ponce

From: Cory Powers
To: Zushi, Kei (CPC); Stefani, Catherine (BOS)
Subject: 3333 California Street
Date: Wednesday, January 02, 2019 8:55:30 AM

I live behind Laurel Village on Spruce Street and I am very concerned about the scale and characteristics of this project. 1 (ME-1)

I completely understand the desirability of adding additional residential units to the neighborhood and I applaud the conversion to residential. I do not like the way the project looms onto California Street - the set back and brick wall of the current site are very appealing to me. I also wish it didn't cut into any of the green space at Laurel and Euclid as I have spent many a moment up there with neighbors watching Blue Angels and astrological wonders like lunar eclipses. Or just lying on the grass. I do appreciate the idea of public spaces and the walk-through's and overlooks and hope that they live up to feeling public.

However, so much of this project has the potential to really destroy the characteristics of the neighborhood. Do we really need more retail? Is the incredible charm and usefulness of the Laurel Village shopping center going to be destroyed by this? The California Street construction looks more like some of the newer SOuth of market neighborhoods than Laurel Heights/Inner Richmond.

2 (PD-1)

The numbers are very concerning. The timeline 7-15 years seems really long. Over 700 new housing units seems high for the neighborhood (isn't there a variant with less?). I really don't like the idea of adding more industry (commercial, offices etc) to a residential neighborhood. The hospital, JCC and small shops that are currently in the area provide a manageable amount of traffic as will new residences. I really don't imagine that the neighborhood can manage more than a few additional services (coffee shop, postal/mail service type amenities) to accommodate the new housing units. I hope to God there is nothing that causes the 5& 10/Ace Hardware, Cal-mart or Bryans to close! These are true neighborhood institutions that have helped create the ambiance of the neighborhood for over half a century. 1 (ME-1) cont'd

I can hardly bear the idea of a prolonged construction project on that scale depressing the neighborhood. I walk, transit and bike everywhere and cannot imagine a decade of construction to negotiate (I also frequently lock my bike up in the current Walnut street parking lot to use ZipCar that are parked there and I will really miss that!!!) 2 (PD-1)

Scale back! Concentrate on compatible housing and open space! Keep our neighborhoods unique in there character! 1 (ME-1) cont'd

Cornelia Powers, Laurel Village for over 20 years, family in the area since 1933.

Subject: DEIR to 3333 California Street Project
Date: Monday, January 7, 2019 at 3:52:06 PM Pacific Standard Time
From: aprato_otr@yahoo.com
To: Zushi, Kei (CPC)
CC: Stefani, Catherine (BOS)

Lei Sushi
Senior Environmental Planner

Dear Lei Sushi:
I am a longtime resident in the Laurel Heights area.
I strongly support the Community Full Preservation Residential Alternate for 3333 California Street Project. 1 (AL-2)

It preserves the historic characteristics of this wonderful site.
It preserves the outdoor open space frequently enjoyed by residents in the neighborhood.
It includes the 558 residential units.
It can be built in 3 years with only 4 additional new buildings.
It does not add a retail or commercial which is not needed due to the local Laurel Heights Shopping Center (4 banks, 2 supermarkets, 2 clothing stores, 2 coffee shops, a large variety store, 3 restaurants, Walgreen's drugstore). TraderJoe's and Target are one block from the building site.
This plan does not markedly increase the amount of noise, air pollution, and congestion as the Developers' Proposal.

I strongly oppose the Developers' Destructive Proposal. 2 (ME-1)

The proposed additional 11 buildings will be squeezed onto the site resulting in a dense, haphazard, claustrophobic atmosphere not in keeping with the character of the surrounding neighborhood and providing potential opportunity for crime.
The proposed higher stories with heights to 86 feet or more will create shadows to neighboring residents and are out of proportion with the surrounding area. 3 (WS-2)
The proposed 15 year length of construction time is unreasonable and it is unconscionable to expect the neighborhood to be subjected to demolition, noise,construction,air pollution, traffic and congestion for that length of time. 4 (PD-1)
This proposal will create major traffic congestion at the enter/exit, parking and loading locations. Presidio and Masonic Avenues are already bumper to bumper car jams and also at Laurel Street near California Street. 5 (TR-3)
This proposal will destroy Laurel Hill with the excessive demolition and excavation including removal of serpentine rock which has asbestos. There have been no mention. Of plans of management of this toxic substance. 6 (HZ-1)

Thank you for considering my comments and suggestions.

Sincerely,
Ann Prato

Sent from my iPad

Monday, January 7, 2019 at 3:54:45 PM Pacific Standard Time

Subject: 3333 California Street/Presidio Blvd UCSF building: Development plans
Date: Monday, January 7, 2019 at 2:01:55 PM Pacific Standard Time
From: Sandra Price
To: Zushi, Kei (CPC)
CC: Stefani, Catherine (BOS), richhillissf@gmail.com, Melgar, Myrna (CPC)

I live in the neighborhood affected by any development at 3333 California Street. I support the Community Full Preservation Residential Alternative for 3333 California because: 1 (AL-2)

- It preserves the Historic Characteristics of this wonderful historic site.
- It provides 558 (or 744 in the Variant) housing units.
- It builds them in three years.
- It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.
- It does not create 13,000+ retail auto trips per day.
- It does not generate approx. 15,000 tons of greenhouse gases.
- It preserves both the present childcare center and the existing café.
- It matches the surrounding neighborhoods for character, style, scale and bulk.

I strongly oppose the Developers Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333 California; it threatens the quality of life; it poses threats to pedestrian safety; it contributes to climate change. 2 (ME-1)

The Community Full Preservation Alternative will generate ZERO retail auto trips to 3333 as opposed to the 12,000-15,000 retail caused the Developers Destructive Proposal. 3 (AL-2)

Thank you,
Sandra Price
2101 Baker Street
San Francisco

From: Zarin Randeria <thezarin@yahoo.com>
Sent: Monday, December 03, 2018 11:57 PM
Subject: IMPORTANCE OF PRESERVING THE HISTORIC PROPERTY AT 3333 CALIFORNIA Street, San Francisco, CA

San Francisco Planning Commissioners:

As a concerned citizen of San Francisco and a resident of Laurel Heights we are very concerned about the developers totally ignoring the concerns of people who live in the neighborhood and their NON-RECOGNITION OF THE HISTORIC SIGNIFICANCE OF THIS PROPERTY. 1 (CR-1)

1. In an earlier public meeting the developers **did not even mention that 3333 California Street, San Francisco, CA, if of Historic Significance.**

2. You should support the Neighborhood Full Preservation Alternative because: 2 (AL-2)

A. It has the same number of residential units as the project (558 with a 744 variant).

B. It would retain the character-defining features of the historically significant landscaping including the beautiful Terrace designed by Eckbo, Royston & Williams and the majority of the 185 mature trees that would continue to absorb greenhouse gases.

It is important for you to know that people from our neighborhood and other neighborhoods regularly use the green space on this site for recreation playing with their dogs, having impromptu picnics and simply visit with one another. This **SPACE IS VERY IMPORTANT TO OUR COMMUNITY.**

C. We support using all the space for housing which is affordable and can accommodate the diverse population of our City. By using all the space for housing, some units would be large enough for middle-income families. We do **not need retail** space as that would compete with the merchants at Laurel Village Shopping Center.

D. Any construction to re-formulate this space needs to be built in approximately 3 years rather than the 7-15 years the project applicant wants.

3. We recommend that some of the 44,306 square feet of retail in this Alternative be used for 24 residential units so the Alternative has the same number of residential units as the proposed project. This Alternative would have retail along California Street but not also at Euclid, which the proposed project would have. Additionally, the applicant should explain the exact type of replacement windows proposed and why the proposed "new rooftop addition" that would distinguish it from the original building yet be compatible with Midcentury Modern design principles. 3 (AL-3)

4. The proposed project as designed by the developers is an unattractive mass of nondescript buildings crammed onto the site with concrete pathways and **ALMOST NO GREEN SPACE** which is vital for our City as more and more of it seems to be cement and concrete. 4 (ME-1)

5. There is **no need to destroy this historically significant site** because alternatives are available which will achieve housing production by building on the parking lots. 5 (AL-1)

Thank You!

Zarin E. Randeria
38 Lupine Avenue
San Francisco, CA 94118

From: Zarin Randeria
To: CPC-Commissions Secretary
Subject: Planning Commission Meeting on Tuesday January 8, 2019
Date: Saturday, January 05, 2019 7:08:07 PM

HAPPY NEW YEAR!

The developer's request for 15 years to construct the project is suspect. This looks like a plan to sell a new entitlement on an up-zoned property. Developers all over town are selling new entitlements rather than build housing. Alternatives analyzed in the Draft EIR would be built in 3 to 5 years. The Community Preservation Alternative would be built within three years. 1 (PD-1)

So, the FIRST question to ask at Tuesday's Meeting is WHY. Are they totally incompetent or are they blowing smoke?

I fully support the Community Full Preservation Residential Alternative for 3333 California Street, San Francisco, CA because: 2 (AL-2)

It preserves the Historic Characteristics of this wonderful historic site.

It provides 558 (or 744 in the Variant) housing units.

It builds them in three years.

It does not include the massive *unneeded* and *unwanted* Retail/Office/Commercial Complex that the Developer continues to insist upon.

It does not create 8,000 retail auto trips per day, and,

It does not generate approx. 15,000 tons of greenhouse gases.

Thank You!

Sincerely,
Zarin E. Randeria
Community Resident

From: K Roberson
To: Zushi, Kei (CPC)
Cc: frfbeagle@gmail.com; Stefani, Catherine (BOS); Laurel Heights
Subject: 3333 California Project
Date: Tuesday, January 08, 2019 12:00:27 AM

Dear Mr. Ken Zushi,

I hope this note finds you well!

I write in order to express my support for the Community Alternatives which promotes reasonable scale residential development within our quiet Victorian neighborhood and my opposition to the Developer's destructive proposal which has the possibility to allow big box retail the neighborhood where local family businesses are valued rather than undermined by large scale retail. We don't need another big box retailer such as Whole Foods/Amazon with the lovely, family owned Brian's Market and Cal-Mart less than a quarter-mile away. I would think that San Francisco, as a remarkable jewel in the Bay Area crown, would prioritize small scale, historic, and architecturally consistent development over buildings which favor massive, brutalist, concrete, steel, mirrored glass structures commonly found in Houston or Manhattan.

1 (AL-2)

2 (ME-1)

A 15 year construction schedule is equally out of proportion as well. There are three SOMA buildings, with at least 500 apartments, which were completely constructed in less than three years. These are The Paramount building, the Nema building, and the two Rincon towers. All of these projects had much more difficult site access conditions the relatively open site on Laurel Hill. San Francisco has highly competent construction firms willing and able to build 550 apartments in less than three years.

A 15 year development period has practically 0 to do with providing housing for families which might actually need it. I suspect it has much more to do with developers hedging their financial bets over fluctuating market valuations, pro-forma spreadsheets, and the ability to sell future development rights rather than to provide housing for people.

3 (PD-1)

Again, I express my support for the Community Alternatives which promotes reasonable scale residential development and my opposition to the Developer's destructive proposal which could decimating the peaceful Victorian neighborhood where we appreciate the quiet.

4 (AL-2)

Thanks for your time,

Kelly Roberson

From: s rosenberg
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS)
Subject: I oppose 3333 California development plan
Date: Tuesday, January 08, 2019 4:52:40 PM

To SF-

I strongly oppose the currently proposed project at 3333 California. I live three blocks away and greatly dread the size and scope of this project and the resulting disruption it will cause during the build as well as forever after with the enormous increase in traffic. Not to mention it doesn't at all match the neighborhood; I was actually shocked when I saw the approved design. 1 (ME-1)

I support the Community Preservation Alternative. I believe it addresses my concerns. It will provide new housing and retail but with less negative impact on the surrounding community. 2 (AL-2)

Thanks,

Stefanie Rosenberg
242 Presidio Ave

From: Laura R.
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); M.J. Thomas; Richard Frisbie
Subject: 3333 CALIFORNIA--OPPOSITION AND SUPPORT FOR ALTERNATIVE
Date: Wednesday, January 02, 2019 10:53:25 AM

Dear Mr. Zushi,

The developer's request for 15 years to construct the project is suspect. This looks like a plan to sell a new entitlement on an upzoned property. Developers all over town are selling new entitlements rather than build housing. Alternatives analyzed in the Draft EIR would be built in 3 to 5 years. The Community Preservation Alternative would be built within three years. 1 (PD-1)

I fully support the Community Full Preservation Residential Alternative for 3333 2 (AL-2)

It preserves the Historic Characteristics of this wonderful historic site.

It provides 558 (or 744 in the Variant) housing units.

It builds them in three years.

It does not include the massive unneeded and unwanted Retail/Office/Commercial Complex that the Developer continues to insist upon.

It does not create 13,000+ retail auto trips per day.

It does not generate approx. 15,000 tons of greenhouse gases.

It preserves both the present childcare center and the existing café.

It matches the surrounding neighborhoods for character, style, scale and bulk.

I strongly oppose the Developers Destructive Proposal as it brings excessive, unnecessary, unwanted and destructive noise, pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it poses threats to pedestrian safety; it contributes to climate change. 3 (ME-1)

The Community Full Preservation Alternative will generate ZERO retail auto trips to 3333 as opposed to the 12,000-15,000 retail caused the Developers Destructive Proposal. 4 (AL-2)

The Community Full Preservation Alternative will protect the small, family owned

businesses in Laurel Village, Sacramento St. and Presidio Ave. A quick walk around these neighborhoods will clearly show the immense pressure these businesses are experiencing. More retail is unneeded and unwanted. It will destroy our local businesses.

The Neighborhoods are well served by businesses at Laurel Village, Sacramento St., Trader Joe's, City Center, California St. etc. we do not need more, more, more.

We do not need the more than 100,000 square feet of Retail, Office, Commercial space that the Developers Destructive Proposal call for.

One of the reasons the Developer destroys this historic site is to create enough space for this unneeded and unwanted Retail/Office/Commercial (ROC) nonsense.

The CPMC development, a Community supported plan by the way, adds 270 housing units and the Developer and neighbors have agreed to have no Retail. Why is 3333 being treated differently by forcing unneeded and unwanted ROC (Retail/Office/Commercial) against the overwhelming opposition of the surrounding residents?

In a recent Petition Drive at Laurel Village over 800 residents signed the Petition opposing the Developers Full Destruction and Massive ROC plan and supporting the Community's residential Alternative. Three people opposed it the Petition. These signatures were gathered in less than 8 hours. In the Petition Drive the 800 signatories opposed rezoning 3333 and also opposed revoking Resolution 4109, an agreement between the City and the surrounding neighborhoods. "A deal is a deal "was how everyone felt.

The Community Full Preservation Alternative will already be more than twice as dense as the surrounding neighborhoods so any rezoning is uncalled for, unneeded and unwanted. These signatures are in the hands of the District 2 Supervisor.

The Developers Destructive Proposal is well named. Based on current estimates, it will generate approx. 15,000 tons of Greenhouse Gases (GHG) and the many associated and far more destructive climate changing gases that accompany the primary CO2.

The Community's Full Preservation Alternative will, by comparison, generate approx. 4,000 tons of GHG.

The Community Alternative mitigates the GHG generated by more than 70 percent, providing a dramatic reduction in a time of climate change.

The GHG calculation is our best estimate. Neither Planning nor the Developer will provide the volume of concrete or weight of steel required. The Developer claims to have built many buildings and many complexes, Planning claims to oversee thousands of such projects and yet no one can even make an educated estimate as to the concrete and steel required.

Could there be something they want to conceal from the public?

4 (AL-2) cont'd

5 (PP-1)

6 (GHG-2)

Much like they concealed the Historic nature of 3333 for over 4 years?

We pollute less and protect the environment: the Community Alternative will ALWAYS generate less than one third the GHG generated the Developers Full Destructive Alternative.

7
(AL-2)

We destroy less: we preserve the historic site.

We build less: 4 new buildings versus the Developers'11 new buildings plus creating two tall towers out of the existing main building.

One single level underground parking garage for 450 spaces versus a complex of parking garages, some of three levels, for 896 spaces;

We excavate less: 90,000cubic yards (9,000 dump truck loads) versus 288,000 cubic yards (32,000 dump truck loads);

We preserve and protect our local businesses and shops: no added unwanted and unneeded and neighborhood destroying family-owned or small retail or business;

We better protect the health and well being of everyone: no 13,000+ auto trips to pollute the air, generate the noise, put pedestrians at risk, unload trucks on the streets, etc. **the Community's solution will always be three times better than the Developers solution.**

The Developers Destructive Proposal not only destroys the Historic Site it destroys our climate. Concrete is a major contributor to GHG, in fact the GHG generated by the manufacture of cement and steel equals the GHG generated by traffic. **And, 95% of the cement used in the Bay Area is manufactured in the Bay Area so the GHGs are OUR GHGs.** The cement is not made somewhere else in the country it is made here.

We fully support housing:

8
(ME-1)

The Community has supported the Lucky Penny (95 units), CPMC (270 units) and now 3333 (558) units.Over 1,000 units in a half mile radius.

So please don't offend me and misrepresent the Community's position. We support housing and history; we oppose unneeded, unwanted and unnecessary Retail and mindless destruction of a historic site.

AND we provide housing in as much as 12 years sooner than the Developers Full Destruction Plan does.

The YIMBYs should be 100% in favor of the Community's Full Preservation plan and if they're not then they are being grossly hypocritical.

9
(TR-2)

Recent studies have shown that the City's method of calculating auto trips, and the resulting chaos and congestion is deeply flawed, to the point of being misleading.

At the time the VMT (Vehicle Miles Travelled) methodology was developed, SF CHAMP last updated Nov. 2014, the Transportation Networking Companies (TNCs) -Uber/Lyft/Chariot etc. were still in their infancy and so the VMT methodology fails to account for their incredibly disruptive impact. The TNCs average, conservatively, in excess of 170,000 trips per day in San Francisco. Studies also show that TNCs increase passenger trips by almost 10%.

There are about 2,000 taxi medallions in San Francisco so TNCs do not just replace taxis they overwhelm them by orders of magnitude.

Also, implementation of the VMT methodology is not mandated until 2019 but as Planning and The Developers were unable to explain away the 13,000 Retail Auto trips generated by the existing, and still acceptable, Level of Service methodology, they implemented the VMT methodology with "refinements." In much the same way as they calculated on the "direct" GHG and totally ignored the "indirect" even though required to do so by their own criteria. So, if you don't like the answer, change the question.

Planning calculates the Developers Destructive Proposal using VMT methodology will generate approx. 5,800 total auto trips for 3333 for Retail + Office + Residential which is an entirey bogus number based on questionable assumptions, such as " The SF Guidelines **do not provide a specific methodology to** assess the number of trips….." Planning has therefore, with no supporting documentation or analyses, applied "appropriate refinements to the standard travel demand…." Rather amazing that these "refinements" all work in the Developers favor.

Nowhere in these "refinements" have THCs been taken into account!

Oh, by the way, the "refinements" used were created for The Mission Rock Project at Seawall Lot 337 and Pier 48 as well as the Pier 70 Mixed Use District Project!

Seawall Lot 337 & Pier 48 summary:

Project type Mixed-use, open space, residential, commercial
Project area Approx. 28 acres
Proposed building area 1.3 – 1.7 million sf commercial; 750,000 - 1.5 million sf residential; 150,000 – 200,000 sf retail, 850,000 sf structured parking

Pier 70 summary: " The 35acre waterfront mixed-use neighborhood will provide housing, waterfront parks, artist space, local manufacturing and rehabilitated historic buildings." Altogether the redevelopment covers 35 acres and up to 3,025 new units of housing—the exact count is still in flux, with a low end of 1,645—and its roots stretch back a decade to a 2007 port plan.

WOW! What remarkably similar projects to 3333. What "refinements" could possibly be comparable. Simply bogus.

9 (TR-2) cont'd

The DEIR consistently attempts to misrepresent and mislead the public. It is incomplete, incorrect, inaccurate and invalid and NOTHING demonstrates this better than the above.

Under their previous, Level of Service, methodology they would have calculated 13,000 retail trips alone. Adding Office and Residential would generate a total of approx. 16,000 auto trips. Somehow we have miraculously reduced auto trips by almost 66%!

I think it safe to say that the numbers presented by Planning are simply bogus. VMT will generate fewer trips, especially since there are no criteria for calculating the impact of TNCs, but there is nothing in the legislation that remotely suggests it would generate 66% less trips! This entire section is suspect and Planning must explain this profound discrepancy. As noted above, nowhere are the TNCs incorporated into the calculations.

All of which renders the Traffic Analysis incorrect, incomplete, inaccurate, invalid.

The Planning Department proposes to reduce the number of retail parking spaces as a mitigation measure to reduce the significant traffic impact.This is a false assumption and shows the extent to which the Developer and Planning misunderstand, or simply choose not to understand, the impact that the TNCs

have.

Planning's mitigation measure is a stone age solution to a digital age problem. How will many people respond to a perceived lack of parking? They'll simply call a TNC and go anyway. **Eliminating parking won't eliminate auto trips it will actually increase auto trips.** A UC Davis study shows that people make MORE trips because of TNCs than if they had to use their own cars or take public transit. People now make trips they would never have made in the past – by any mode of transport. The VMT methodology used by the Planning Department fails to account for the impact of TNCs.

Not only does Retail, using the LOS methodology, contribute over 80% of the 16,000 total auto trips, all these auto trips generate GHG. And, the use of TNCs makes the GHG situation worse. Lets assume I want to go to 3333 by auto. I could personally drive 2 miles to get to the 3333 Retail/Office/Commercial complex, park, then shop or do business, the drive 2 miles home for a total of 4 miles. That's a very conservative calculation as the average trip for TAZ 709, 3333 area, states an average trip of 7.9 miles! Data shows that many more people will use a TNC rather than drive their own cars. So now the TNC has to come to me, assume 2 miles, and take me the 2 miles to 3333 for a total of 4 miles. When I go home the same thing happens or an additional 4 miles for a grand total of 8 miles. Twice the GHG generated per trip! So, not only do we have 13,000 retail auto trips to deal with we have many of them generating significant more GHG per trip! Planning needs to do a comprehensive analyses using credible data and a credible methodology so that the public knows the extent of the GHG generated. We are in a crisis with climate change and the methodology shown in the DEIR fails to address this crisis credibly. In fact climate change is more of a threat to the future of San Francisco than housing is and it isn't being addressed accurately in the DEIR.

10 (GHG-1)

The Developers Destructive Proposal first demolishes and destroys the Historic

11 (CR-2)

Characteristics and nature of 3333. Then it virtually destroys all of Laurel Hill itself, with the exception of a small sliver at the southwest corner, by excavating the entire site to depths ranging from 15 to 40 ft. The only area that isn't excavated is under a portion of the existing building! Not sure how they missed that opportunity! Removal of the demolition debris and the excavated soils will require approx. 32,000 dump truck loads, all of which have to pass though and pollute our neighborhoods. By contrast, the Community Full Preservation Alternative generates approx.. 9,000 dump truck loads, one quarter as many! After the demolition the Developer has to then deliver all the new materials required to rebuild what they demolished plus 11 new buildings. How many large truck loads, concrete truck loads, etc. will this require? The Community Alternative only builds 4 new buildings so like the GHG and the debris/soil removals the Community Full Preservation Alternative requires far fewer, probably about one third, or less, as many delivery loads. A quick look at the turning radii of the trucks, ie. SU-30 Circulation Exhibit and WB-40 Circulation Exhibit clearly demonstrates that all the deliveries during destruction, demolition, excavation, construction and long term operations pose significant threats to traffic safety, pedestrian safety, congestion and pollution.In fact, as WB-40 shows large trucks cannot safely navigate 5 of the 6 major intersections surrounding the site. There are no plans to mitigate this profound situation which will essentially exist from the beginning of the project ad infinitum. Planning and the Developers have simply washed their hands of the problem a la Pontius Pilate.

11 (CR-2) cont'd

12 (GEO-1)

13 (TR-6)

14 (TR-7)

The Community Full Preservation Alternative will preserve most of the mature trees at 3333, some of which date back to the time of the Laurel Hill cemetery whereas the Developers Destructive Proposal will attempt to spare approx. 4.

15 (AL-2)

The Developers Destructive Proposal surrounds 3333 with five major Loading/unloading zones for TNCs and Freight traffic. Initially the Developers promised that all the unloading would be done underground or on-site and now the site is ringed with these zones! These zones not only eliminate approx. 40 parking spaces but they will create additional traffic congestion and pollution. So we have a ring of loading zones in addition to the inevitable double parking that occurs for deliveries and drop-offs.

16 (TR-10)

Thank You,

Laura Rubenstein

--
Laura Rubenstein MD
office: 415-862-7135
fax: 415-900-4599
www.laurarubensteinmd.com

From: Jim Ryan
To: Zushi, Kei (CPC); Stefani, Catherine (BOS); Rich Hillis; Melgar, Myrna (CPC); Rodney Fong; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); CPC-Commissions Secretary
Subject: DEIR 3333 California Street
Date: Tuesday, January 08, 2019 8:22:06 AM

Dear Planning Commission,

We are writing as neighbors of 3333 California Street for over 30 years to respectfully request the planning commission consider the Community Full Preservation Alternative as opposed to the developers harsher proposal. 1 (AL-2)

While we support the need for housing and inevitable change, we are convinced a thoughtful approach can benefit everyone. The thought of 15 years of construction, removal of existing beneficial trees and all the ensuing disruption and environmental impacts are a heavy price to pay. We are hopeful that the planning commission can be consensus builders while still fulfilling their mission. The Community Full Preservation Alternative can be completed within 3 years. 2 (ME-1) 3 (PD-1) 4 (AL-2)

As natives of this wonderful city we look forward to this iconic space being utilized in the best possible way.

Sincerely,

Jim, Colleen, Neil, Julia and Seamus Ryan

From: Rita Sater
To: Zushi, Kei (CPC); Stefani, Catherine (BOS); richhillissf@gmail.com; Melgar, Myrna (CPC)
Subject: Re: Objection to 15-year developer development at 3333 California St
Date: Tuesday, January 08, 2019 3:13:19 PM

I am yet another citizen very concerned about and object to the current developers' development plan. I understand it is currently scheduled to take fifteen (15) years to complete. Apart from the incredibly drawn out length[Even the great wonder of the world, the Great Pyramid in Giza, supposedly took only twenty years. http://www.unmuseum.org/mob/kpyramid.htm] of such a project, the negative effects (such as dust, noise, parking, danger to children, seniors and others), such a development does not fit within the natural, historic, familial, social and aesthetic contours of our community. Not to mention the environmental risks. Wouldn't such a project be more appropriate for Geary Blvd or similar streets. The increasing closing of retail and office premises due to online shopping and work-at-home jobs makes such proposed uses doubtful even fanciful, perhaps to be replaced by even less human friendly high-tech data or A.I. centers by the time occupancy is permitted. I and other community members propose a smaller development (the "Community Full Preservation Alternative" or CFPA) that will still add lots of needed housing but take only three (3) years to complete. The CFPA does not include the massive unneeded and unwanted retail/office/commercial complex that the Destructive 3333 developer continues to insist upon. It does not create outmoded 13,000+ retail auto trips per day. It does not generate approximately 15,000 tons of greenhouse gases. The CFPA preserves both the present childcare center and the existing café., a source of deep, positive social capital in our community. It matches the surrounding neighborhoods for character, style, scale and bulk. I strongly oppose the Destructive 3333 Project as it brings excessive, long-term, unwanted and destructive noise, dust (on top of the recent lung-damaging smoke from the wildfires), other pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it diminishes community members socializing; it poses threats to pedestrian safety, especially the more fragile members of our community; it contributes to climate change; it will leave a bad taste in the mouth of those who remain in the community or are forced to leave due to illness; and worse. The Community Full Preservation Alternative will generate ZERO retail auto trips to 3333 as opposed to the 12,000-15,000 retail caused the developers' Destructive 3333 Project.

Thank you for your time and consideration of this better alternative that can be done in 12 less years with less destruction, obstruction in and around the area and yet preserve the lifestyles of surrounding neighborhoods.

1 (ME-1)
2 (PD-1)
3 (GC-1)
4 (ME-1)
5 (AL-2)
6 (ME-1)
7 (AL-2)

From: scarampi@sbcglobal.net <scarampi@sbcglobal.net>
Sent: Tuesday, January 8, 2019 4:29 PM
To: 'kei.zushi@sfgov.orfg' <kei.zushi@sfgov.orfg>
Cc: 'Catherine.Stefani@sfgov.org' <Catherine.Stefani@sfgov.org>; 'richhillissf@gmail.com' <richhillissf@gmail.com>; 'myrna.melgar@sfgov.org' <myrna.melgar@sfgov.org>
Subject: Objection to 15-year developer development project (the "Destructive 3333 Project" or D3333P) 3333 California Street, San Francisco

I understand it is currently scheduled to take fifteen (15) years to complete. Apart from the incredibly drawn out length[Even the great wonder of the world, the Great Pyramid in Giza, supposedly took only twenty years. http://www.unmuseum.org/mob/kpyramid.htm] of such a project,⌈the negative effects (such as dust, noise, parking, danger to children, seniors and others), such a development does not fit within the natural, historic, familial, social and aesthetic contours of our community. Not to mention the environmental risks.⌋⌈Wouldn't such a project be more appropriate for Geary Blvd or similar streets. The increasing closing of retail and office premises due to online shopping and work-at-home jobs makes such proposed uses doubtful even fanciful, perhaps to be replaced by even less human friendly high-tech data or A.I. centers by the time occupancy is permitted.⌋⌈I and other community members propose a smaller development (the "Community Full Preservation Alternative" or CFPA) that will still add lots of needed housing but take only three (3) years to complete. The CFPA does not include the massive unneeded and unwanted retail/office/commercial complex that the Destructive 3333 developer continues to insist upon. It does not create outmoded 13,000+ retail auto trips per day. It does not generate approximately 15,000 tons of greenhouse gases. The CFPA preserves both the present childcare center and the existing café., a source of deep, positive social capital in our community. It matches the surrounding neighborhoods for character, style, scale and bulk.⌋⌈I strongly oppose the Destructive 3333 Project as it brings excessive, long-term, unwanted and destructive noise, dust (on top of the recent lung- damaging smoke from the wildfires), other pollution, traffic and congestion to the neighborhoods surrounding 3333; it threatens the quality of life; it diminishes community members socializing; it poses threats to pedestrian safety, especially the more fragile members of our community; it contributes to climate change; it will leave a bad taste in the mouth of those who remain in the community or are forced to leave due to illness; and worse.⌋The Community Full Preservation Alternative will generate ZERO retail auto trips to 3333 as opposed to the 12,000-15,000 retail caused the developers' Destructive 3333 Project.

1 (PD-1)
2 (GC-1)
3 (ME-1)
4 (AL-2)
5 (ME-1)
6 (AL-2)

Sebastiano Scarampi, neighbor

From: SchuT
To: CPC.3333CaliforniaEIR
Cc: CalStreetROP
Subject: Re: Draft EIR townhomes
Date: Tuesday, November 20, 2018 12:29:59 PM

Thank you, Ms. Dwyer.
I really appreciate you taking the time to write back with the info I requested. Thanks. I only have the Notice of the Public Hearing on December 13th and have not really followed the twists and turns of this project.
So roughly speaking each unit in the 2-unit townhouses could approximately be on average approximately 4,200 square feet....which I guess means that the remaining 544 non-townhouse units could be on average approximately 1,400 square feet?
Please consider this email as Comment on the DEIR if possible.
Have a nice Thanksgiving.
Sincerely,
Georgia Schuttish

1
(PD-3)

Sent from my iPad

On Nov 20, 2018, at 12:03 PM, CPC.3333CaliforniaEIR <CPC.3333CaliforniaEIR@sfgov.org> wrote:

> Dear Ms. Schuttish,
>
> In response to your questions, the information about the size of the townhouses is in the Draft EIR. While the Draft EIR does not specify the square footage for each individual townhouse, Table 2.2, Characteristics of the Proposed Buildings, indicates that the gross square footage for all seven 2-unit townhouses would be 58,839 gsf. Table 2.2 is on page 2.23 of the Draft EIR.
>
> Best regards,
>
> Debra Dwyer, Principal Planner
> Environmental Planning Division
> San Francisco Planning Department
> 1650 Mission Street, Suite 400 San Francisco, CA 94103
> Direct: 415.575.9031 | www.sfplanning.org
>
> -----Original Message-----
> From: SchuT <schuttishtr@sbcglobal.net>
> Sent: Saturday, November 17, 2018 6:14 PM
> To: CPC.3333CaliforniaEIR <CPC.3333CaliforniaEIR@sfgov.org>
> Subject: Draft EIR townhomes
>
>

Dear Kei Zushi:
Has the size (square footage) of the 7 multi-story townhomes proposed for this project been determined and is it included in the DEIR? 2 (PD-3)
Thank you.
Sincerely,
Georgia Schuttish

Sent from my iPad

From: SchuT
To: Dwyer, Debra (CPC)
Cc: CalStreetROP
Subject: Re: Table 2.2 of DEIR for 3333 California Street
Date: Tuesday, November 27, 2018 2:34:00 PM

Thanks for your reply, Ms. Dwyer.
Take care.
Sincerely,
Georgia Schuttish

Sent from my iPad

> On Nov 27, 2018, at 2:22 PM, Dwyer, Debra (CPC) <debra.dwyer@sfgov.org> wrote:
>
> Dear Ms. Schuttish,
>
> In response to your further inquiry, that level of detail (square footage of each unit) is not provided in the EIR. The project plans for the conditional use authorization show the units, but do not provide the square footage of each one. The CU plans may be accessed from the Property Information Map.
>
> Best regards,
>
> Debra Dwyer, Principal Planner
> Environmental Planning Division
> San Francisco Planning Department
> 1650 Mission Street, Suite 400 San Francisco, CA 94103
> Direct: 415.575.9031 | www.sfplanning.org
> San Francisco Property Information Map
>
> -----Original Message-----
> From: Thomas Schuttish <schuttishtr@sbcglobal.net>
> Sent: Tuesday, November 27, 2018 9:00 AM
> To: Dwyer, Debra (CPC) <debra.dwyer@sfgov.org>
> Subject: Table 2.2 of DEIR for 3333 California Street
>
>
> This message is from outside the City email system. Do not open links or attachments from untrusted sources.
>
>
>
>
> Dear Ms. Dwyer:
> Good morning.
> I was finally able to find the table you referenced in your email to me on the website. Thank you for highlighting it.
> I was curious about the two Renovation Buildings: 51 units in Center Building A and 139 in Center Building B. 1
> Do you know what the square footage of these units, particularly the 3 and 4 bedroom units would be? (PD-3)
> (The average size of the units for these two buildings would be approximately 1,754 sq. feet and 1,818 sq. feet respectively….but this can't be for the studio and one-bedroom or maybe even the two bedroom units.) Thank you and have a nice day.
> Sincerely,
> Georgia Schuttish
>

From: Nathan Stoll
To: Zushi, Kei (CPC); CPC.3333CaliforniaEIR; Moore, Julie (CPC)
Subject: Re: Notice of Public Hearing and Availability of DEIR for 3333 California Street Project (2015-014028ENV)
Date: Friday, January 18, 2019 1:18:49 PM

Hi Kei, Julie, et al,

I had written Julie last summer with feedback / concerns about pedestrian safety near 3333 California project. I'm writing again because I'm concerned that I haven't heard our comments addressed -- at least not from what I've read in the report. It's possible I've missed it, as it's a long report! So apologies if so. But I didn't see pedestrian safety in the nearby streets as a known area of concern that was addressed, and what I did see mentioned that there was no impact. 1 (TR-8)

Some background: My wife and I live at the top of Pine street across from the proposed project for 3333 California. We're generally supportive of the project (worth noting, given the community groups that oppose it!). We like the extra people it will bring to the neighborhood, and businesses, and think it will help make the community more vibrant. We generally like the proposals' access pathways and retention of some of the park green space / trees and would emphasize this importance to us, and the importance to us of the space being a potentially valuable addition to the community as a gathering point if developed appropriately (today it is like a gated community, with a couple grass areas on the edges). We were unable to attend the EIR feedback process. 2 (ME-1)

We specifically are worried about pedestrian safety in the area. We believe the conditions for pedestrian in this area to already be hazardous. It's important to note that this is NOT the fault of the developer or their proposal! But, given that improvements are to be made, and the project will increase the number of pedestrians, we think it's wrong that the following conclusion was drawn: 3 (TR-8)

> "TR-7: The proposed project or project variant would not result in substantial overcrowding on public sidewalks, **create potentially hazardous conditions for pedestrians**, or otherwise interfere with pedestrian accessibility to the site and adjoining areas."

The project won't create worse conditions for pedestrians. However, the conditions *today* are hazardous, specifically at the top of Pine street at Presidio, the intersection of California and Presidio, and the intersection of Euclid/Masonic/Pine alongside the new development. I am regularly almost hit by cars flying through these intersections. Often with a stroller or dogs with me.

Some more specifics:

- (Study area 8) The intersection of Pine and Presidio is one of the most dangerous in the city for cars alone -- but even worse for pedestrians, who try to avoid it right now, as drivers coming up the hill cannot see before turning left. There is no cross walk on the other side,

because it is dangerous, but no barriers and pedestrians regularly cross here still at risk of their lives. This project WILL increase the frequency of pedestrians crossing this intersection and something should be done to improve it. Study area 11 (Bush st) has similar problems but slightly different.

- (Study area 10) The intersection of Euclid/Pine/Masonic is equally hazardous for those crossing in various ways; pedestrians crossing from the complex are blocked from view by parked cars for cars coming up the hill at high speed -- who don't slow down, as the corner is today a yield. Will the project address safety there? This is a KEY walking route to Trader Joes, which the proposed project makes into an even bigger walking path. I've nearly been hit twice in the past two months. For example, the parking should be removed well back from the cross walk so cars have visibility, and it should have speed bumps at a minimum before the yield.

- (Study area 6) The intersection of California and Presidio is WAY too short of a light & cross-walk for pedestrians, and because of the three-way nature of the light is almost impossible to get across safely, as drivers who are not used to the three-way system regularly assume it is a normal 2-way, and turn when pedestrians have a cross walk (because the light is red). The traffic that doesn't stop turning right in front of the credit union through the turn lane is even more dangerous. This should be stop sign, if it isn't removed altogether (Julie Moore told me that the muni buses need it for turning radius). Or implement a 4-way walk with no cars, like exists downtown at very busy intersections. Notably, our son attends school at the JCC, so we along with many families are regularly crossing these intersections with small children. Elderly adults are in the facility next door, and I frequently have to help elderly individuals across the street; it's impossible to get across in time.

These study areas and the pedestrian characteristics were discussed in 4.C.21, but I explicitly do NOT feel like the concerns have been mitigated / addressed. It may not be the developers responsibility to fix them, but someone needs before for the project to make them substantially worse and someone dies!

The Vision Zero studied the areas that *currently* have high risk data for pedestrian injuries. I'm asserting that the pedestrian behavior will SHIFT because of the project, because there will be people living or walking to the new retail locations and pathways, and the intersections they will use are hugely dangerous. So even though they don't have a lot of traffic now, they WILL and it will be dangerous.

* I'll add that one of the high risk areas in Vision Zero is California St between Lyon and Scott; it's high risk because all of the mapping software now routes drivers this way to avoid California and Presidio. And so they come flying through a very residential neighborhood trying to get to Bush or Pine. :(Wasn't a problem a decade ago.

3 (TR-8) cont'd

I should note that I provided some details on these concerns to Julie Moore (see thread included below) in the summer -- although some of my notes are new -- so even though I'm late on the comment period, I want to register that I had already provided the input -- and don't feel like I've heard it addressed in this report.

4 (CEQA-1)

Thanks,
Nathan

3044 Pine St

mailing address: 548 Market St #68813 SF 94104
415-683-6228, 650-776-3641 (mobile)

---------- Forwarded message ---------
From: **Moore, Julie (CPC)** <julie.moore@sfgov.org>
Date: Fri, Jun 15, 2018 at 1:34 PM
Subject: RE: 3333 California pedestrian safety concern/questions
To: Nathan Stoll <nathan@nathanstoll.com>

Hi Nathan,
I'll share your comments with the team. The sponsor originally proposed changes at the California/Presidio intersection but SFMTA did not agree with the changes due to the turning radius of Muni buses.

Julie Moore, Senior Planner
Environmental Planning Division
San Francisco Planning Department
1650 Mission Street, Suite 400 San Francisco, CA 94103
Direct: 415.575.8733 | www.sfplanning.org
San Francisco Property Information Map

From: nathanstoll@gmail.com [mailto:nathanstoll@gmail.com] **On Behalf Of** Nathan Stoll
Sent: Friday, June 15, 2018 10:55 AM
To: Moore, Julie (CPC)
Subject: Re: 3333 California pedestrian safety concern/questions
Sent: Friday, June 15, 2018 10:55 AM
To: Moore, Julie (CPC)
Subject: Re: 3333 California pedestrian safety concern/questions

Hi Julie,

Thanks for the fast reply!

I saw the proposed changes for Presidio/Pine/Masonic. I think removing the right turn lane is smart and will slow down traffic in a good way. However, Pine's traffic itself is still incredibly dangerous. The garage egress directly onto Masonic and Presidio will be incredibly dangerous given how traffic flows currently in this area. The proposal also destroys an existing open green space that has been present in the neighborhood for (as my neighbors have expressed, I don't know the exact time frame) decades, if not a half century or more.

5 (TR-7)

6 (ME-1)

Additionally, I think ignoring California and Presidio because they're not part of the direct development is very naive if that's the city's perspective. These new residents will impact ALL nearby intersections with both cars and pedestrian volume, and these are some of the most dangerous intersections in San Francisco. So just because the fire union is it's own building, does not mean the impact should not be considered. I feel similarly about the intersection of Bush and Presidio, which also has incredibly high accident and pedestrian risk today.

7 (TR-8)

I'd like to see the city take STRONG action in these neighboring streets & intersections to assure us as residents that our lives will not be put in danger by the increase in traffic, congestion, and pedestrians. Our families are at stake; we're not safe today, and this project WILL make our lives more at risk.

7 (TR-8) cont'd

Best,
Nathan

On Fri, Jun 15, 2018 at 9:32 AM, Moore, Julie (CPC) <julie.moore@sfgov.org> wrote:

Nathan,

Thank you for your comments. The Initial Study, with a detailed project description, is available online at:
http://sfmea.sfplanning.org/3333%20California%20Street%20Initial%20Study_4-25-18.pdf

Please refer to p. 64, Figure 28A for proposed changes at the Presidio/Pine/Masonic intersection. The project would remove the right turn lane from Presidio onto Masonic and create a public plaza at that corner. There is a rendering of this on p. 28. No changes are proposed for California and Presidio (the Credit Union building is not part of the project). California and Walnut will continue to be an entrance to the project site.

Transportation impacts of the project will be analyzed in the Draft Environmental Impact Report to be released this fall.

Julie Moore, Senior Planner
Environmental Planning Division
San Francisco Planning Department
1650 Mission Street, Suite 400 San Francisco, CA 94103
Direct: 415.575.8733 | www.sfplanning.org
San Francisco Property Information Map

From: Nathan Stoll [mailto:nathanstoll@gmail.com]
Sent: Thursday, June 14, 2018 9:35 PM
To: Moore, Julie (CPC)
Subject: 3333 California pedestrian safety concern/questions
Sent: Thursday, June 14, 2018 9:35 PM
To: Moore, Julie (CPC)
Subject: 3333 California pedestrian safety concern/questions

Hi Julie,

My wife and I live at the top of Pine street with our two children, and we've been watching the proposed project at 3333 California with interest -- general support -- but concerns about pedestrian safety with the likely increase in traffic.

8 (TR-8)

I know we missed the May 25th deadline for formal comments, but I'd like to understand what the project's sponsors and the city intends to do about our already very dangerous intersections at Pine & Presidio, California & Presidio, and California & Walnut. I've been nearly hit multiple times in each intersection, and witness near monthly crashes on Pine and

Presidio, where the steep hill and timed fast lights prevent cars from fully seeing pedestrians and other traffic while gunning for the light or to turn into the cross walk. There is also no cross walk at present across Presidio to the proposed development. 8 (TR-8) cont'd

We like the idea of more residents in the neighborhood, and the ability to generally add density to support more local businesses, and believe that these buildings and land are under-utilized and would be a boon to the neighborhood. But. The current situation is already dangerous, and with the new garages, cars, and residents and businesses, the situation is poised to be disastrous. 9 (ME-1) 10 (TR-8)

Please please please tell me the city has plans to improve pedestrian safety in enormous ways. I'd love to review any such plans, or provide some constructive input as a local resident.

Thanks in advance!

Best,
Nathan

On Wed, Nov 7, 2018 at 4:31 PM Zushi, Kei (CPC) <kei.zushi@sfgov.org> wrote:

Attached please find the Notice of Public Hearing and Availability of a Draft Environmental Impact Report (DEIR) for the 3333 California Street Mixed-Use Project, Case No. 2015-014028ENV. The DEIR is available to download or view at the San Francisco Planning Department website noted below. You are being provided this information as you have expressed an interest in this project in the past.

https://sf-planning.org/environmental-impact-reports-negative-declarations

The public comment period is from November 8, 2018 to 5:00 p.m. on December 24, 2018. Written comments on the DEIR should be submitted to the Planning Department at the following address:

Kei Zushi, EIR Coordinator, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA, 94103, or email: CPC.3333CaliforniaEIR@sfgov.org.

Comments on the DEIR may also be made at the Planning Commission hearing on December 13, 2018.

Please contact me if you have any questions.

Kei Zushi, Senior Planner
Environmental Planning Division

San Francisco Planning Department
1650 Mission Street, Suite 400 San Francisco, CA 94103
Direct: 415.575.9038 | www.sfplanning.org

I-STRATTON

MICHELE D. STRATTON

3110 California Street #4
San Francisco, CA 94115
Tel: 415-931-3324
mdstratton@att.net

January 8, 2019

Kei Zushi, EIR Coordinator
Planning Department
1650 Mission Street , Suite 400
San Francisco, CA 94103

Dear Mr. Kushi,

I have read the EIR and find that almost nowhere does it address the effect on people. People make their homes in the neighborhood, they raise children or retire in the area, they work nearby, and they are ignored in this report. Further, the EIR does not address the cumulative effect on people's everyday lives of all the incremental changes from construction and operation of the Project on their general wellbeing. There is a tipping point when a little more of everything—noise, air pollution, traffic, general congestion and crowding—makes a place substantially less livable. I live 1 ½ blocks east of the Project on the north side of California Street. 1 (GC-1)

A. Street view greenery and open space. The EIR fails to consider one of the most important attributes of the property and the effect of losing it-- providing a substantially green and calm oasis in an area that is densely developed and congested. 2 (PD-3)

Right now the north edge of the property along California Street is an arcade of greenery, a significant visual resource. Fifteen mature evergreen street trees (New Zealand Christmas trees) arc over the wide sidewalk for two blocks and meet the high shrubs extending above the brick wall along the property. Between the sidewalk and the brick wall (set back from the property) is a row of greenery with flowering azaleas, camellias and dietes. It is a beautiful, calm and event spacious place to walk, unlike most of California Street in the vicinity, where buildings meet the sidewalks and the street trees (pollarded sycamores) are leafless much of the year.

The Project plans to cut down these beautiful street trees and remove all the sidewalk shrubbery as well as much of the other greenery that is now visible from the street. Trees and landscaping are the first items to be removed in construction and the last to be replaced. The California streetscape will be barren for a decade or more, and to be followed eventually by struggling trees on one side of the sidewalk and 4-story buildings with busy ground floor commercial on the other. The ability to walk beneath the trees or view the general greenery of the site will be gone forever. 3 (BR-1)

The property also currently provides a swath of open grassy area along Euclid Avenue and part of Laurel Street, with views into the shrubbery and trees around the current building from Pine Street, Masonic Avenue and Presidio Avenue, as well as from Euclid and Laurel. The Project will remove most of this greenery, replacing it with 3 or 4 story buildings at street side, flanked by a few trees some of which will be planted on what is now public side walk and road. (The Project incorporates 2,000 sq ft of sidewalk and road for "street improvements" p. 176 and uses it to plant trees that otherwise should go on the property.)

The idea that open space in the interior of the Project will compensate for significant changes along the streets is false. One or two plazas surrounded by concrete and glass walls hardly substitutes for the expansiveness of the greenery at Euclid viewed by thousands of people a day or the green archway on California Street enjoyed by pedestrians and passing riders alike. This greenery is a unique visual resource in an area largely devoid of anything green, and contributes to the wellbeing of anyone in the area. (See it with a virtual walk around the site on Google maps using street view.)

Note: There is very little visible greenery nearby or within walking distance of the Project. The closest park is Alta Plaza, 8-9 blocks away. Otherwise, there is only a patch of grass in front of the Presidio Library. The Presidio Heights Playground is fully paved; and the Laurel Hill Playground, also paved and with a ball field, sits out of sight, down a steep walkway below Euclid Avenue. The mini-park on Bush is a dark, narrow lot squeezed between 3-4 story buildings, totally shaded all day long. The Presidio looks close, but it is on the other side of hill surrounded by a wall and the backs of houses. Access is through the Presidio Gate, along a busy and steep thoroughfare with no sidewalks.

4
(PD-3)

B. Noise. Already street noise is loud and annoying enough to reduce a sense of wellbeing. For Project operations, the methodology of adding noise estimates to current average noise figures is flawed and does not account for unacceptable levels or types of noise throughout the day. The mitigation measures suggested for construction noise, which will be at unacceptable levels, is inadequate.

5
(NO-5)

6
(NO-1)

It is deceptive to look at average noise levels, and then conclude that the additional noise will not be perceptible. Added noises from construction or operation of the Project may occur when ambient noise is low (early morning truck delivery), or the noise may occur when noise levels already are unacceptable (during rush hour.) Noise may be combined with vibration (heavy truck) which calls attention to the noise. Noise may be rhythmic (motor or fan) or unpleasant (car alarm, dog barking) which causes annoyance. Noise at street level may be different than 3-4 stories up, where noise reverberates from buildings across the street and is amplified. On my block the clanging of delivery truck doors and banging of pallets wakes me up at 5:30am; a pulsating motor (HVAC system?) somewhere that is imperceptible during the day keeps me awake at night.

Any rise in average noise levels may be too much. Average means there are times when the noise level is already much higher. We sense the need to talk louder, to strain to hear others. In the 8 years at my present address, I have never used the roof deck due to traffic noise. I do not invite people over open during peak hours due to the noise from California Street and Presidio Avenue, and cannot leave my windows open, even on hot days. The chart on Page D.4.20 says that adding to noise—which this Project will do—when the ambient noise in residential areas is 65bBA or higher should be discouraged. Noise measurements (Table 4.D.2) show that LT noise on California Street (R5) already is over 65dBA on average, and so are higher many time of the day.

The EIR concludes that noise from increased traffic from Project operations will not be significant, and may in fact non-existent. How can adding 10,000 vehicle trips per day not significantly increase noise levels? Ride share vehicles, the ever present UPS and FedEx trucks, and pizza and home delivery services for the new residents will add to the noise, not just through higher traffic levels, but by causing more starting-stopping sounds, doors opening and closing, horns as irritated drivers try to pass them, etc.

7
(NO-5)

Construction period noises will be unacceptable. In many construction projects, dump trucks and other big trucks travel at night, rumbling loudly when ambient noise levels finally are low, adding to the discomfort of residents. 8 (NO-1)

C. Air pollution. The air in the vicinity of the Project is already dirty and Project operations will add to the problem. Mitigation measures described for construction dust are inadequate. 9 (AQ-4) 10 (AQ-1)

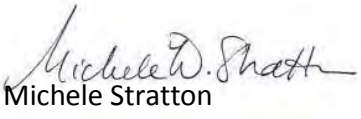
Vehicle emissions may be less today, but brake pads, tires and road wear still generate unhealthy particulates. Ever present neighborhood construction and street repair work add to dust and grime. I live 1 ½ blocks eastward and mostly downwind of the Project, and even now there are quantities of black soot/dust on my windows, window sills and balcony. My balcony, on the east side of the building sheltered from California Street and prevailing winds, cannot be used without wiping all surfaces. Then the wash rag is black. Unless I keep my windows closed and stay inside, I am breathing those same pollutants. However, the EIR concludes that Project operations and related traffic generation will not have a significant impact. I believe the traffic projections understate traffic and pollution levels that will occur when the Project is completed. The delivery vans and ride share services are increasing. This kind of traffic has more idling vehicles, more frequent stops and brake use, and more starts, all of which will increase the amount of emissions per vehicle in the vicinity of the Project. 11 (AQ-4) 12 (AQ-3)

The report recognizes construction dust as a problem, but the proposed mitigation measures will not solve it. Even with dampened dirt, dust will penetrate the neighborhood. It will be blown onto the streets and stirred up again by vehicle traffic; it will be blown off construction trucks leaving the Project and permeate the neighborhood; it will be tracked off the site and into the air on worker's shoes and clothes. A short road repair project in the neighborhood blackened my windows almost immediately, with the rainy season five months away. It will be extremely unpleasant to see and breathe construction grime and dust for seven or more years. 13 (AQ-1)

D. Conclusion. The EIR is inadequate with many flawed assumptions and analyses. 14 (GC-1)

This Project will bring a more of everything—noise, air pollution, traffic, general congestion and crowding, will reduce street side greenery and open space, and will make the area substantially less livable. The only way to reduce the negative impacts of the Project is to reduce its size, maintain more street side and street view open space, and eliminate most of the office and commercial uses with their related traffic.

Very truly yours,



Michele Stratton

cc: Planning Commissioners
Supervisor Stefani

California Street near Walnut

From: andrew sullivan
To: Rich Hillis; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); Zushi, Kei (CPC); Stefani, Catherine (BOS); Brown, Vallie (BOS)
Cc: Laura Clark
Subject: 500+ homes at 3333 California - SUPPORT
Date: Tuesday, December 11, 2018 6:02:56 PM

To the Commissioners:

I am a resident of the Haight Ashbury and a frequent user of the JCC on California Street, and I urge you to reject the proposal to delay housing at 3333 California for historic preservation reasons. This building, while interesting as an example of suburban offices, is not particularly notable in comparison to others like it (e.g. Bell Labs Holmdel), and it is not worth preserving when the alternative is to add 500 or more homes in this wealthy, well-served by transit neighborhood. 1 (ME-1)

This location is a two-block walk from the future Geary Bus Rapid Transit line and is served by the 1, 2, 3, 38/38R, and 43 lines, and it is also walking distance from shopping, jobs, and the JCC - the exact perfect location for new transit-oriented housing. In addition, it is in a wealthy neighborhood that is not at risk of any further gentrification - on the contrary, it will provide housing at a more reasonable cost than any existing property nearby, and take pressure off other neighborhoods where cost pressures continue to increase. This is exactly the type of location that should host apartments as well as green space, as planned.

Please reject all appeals and approve this project!

Thanks,
Andrew Sullivan

From: Zachary Thomas
To: Zushi, Kei (CPC)
Subject: 3333 California - Please Support Housing!
Date: Friday, December 14, 2018 6:56:21 PM

Hi! As a San Francisco resident, I hope you choose HOUSING over business offices and parking spaces when it comes to 3333 California. This housing will take one small step in reducing pressure on communities of concern, like the Fillmore or Mission. **San Francisco should allow more housing in this neighborhood!** 1 (ME-1)

Yours Truly,

ZT

--
Zachary Thomas
https://www.linkedin.com/in/thomaszi | zthomas.nc@gmail.com | zachary-i-thomas.com
Learn something new everyday! >> https://www.khanacademy.org/a/x5gd

From: Adrienne Underwood
To: richhillissf@gmail.com; Melgar, Myrna (CPC); planning@rodneyfong.com; Johnson, Milicent (CPC); Koppel, Joel (CPC); Moore, Kathrin (CPC); Richards, Dennis (CPC); Zushi, Kei (CPC); Stefani, Catherine (BOS)
Subject: More housing, less parking!
Date: Monday, December 10, 2018 5:29:30 PM

Dear Planning Commissioners, Planner, and Supervisor Stefani,

I am writing to **urge you to support new homes at 3333 California**.

As a renter in the city of San Francisco, currently living in the Sunset, I know how charming it is to live in a quiet neighborhood in the city. I also know first hand how incredibly challenging it is to find housing in this city as a young professional.

We need to do everything we can to create more housing so that people can afford to build their lives and careers in San Francisco over the long term. That starts with building housing in every neighborhood. Prioritizing buildings that don't house people, like parking, is exactly the opposite of what we need.

1
(ME-1)

Thanks for your time and consideration.

Best,
Adrienne
1719 29th Ave, San Francisco, California, 94122

December 4, 2018

City Of San Francisco – Planning Commission
Commission Chambers,
Room 400, City Hall,
1 Dr. Carlton B. Goodlett Place,
San Francisco, CA 94102-4689

Commissions.secretary@sfgov.org

Re: Case No. 2015-014028ENV
Project Title: 3333 California Street Mixed-Use Project Zoning: Residential, Mixed, Low Density [RM-1] Zoning District 40-X Height and Bulk District Block/Lot: Block 1032/Lot 003
Applicant/Agent: Laurel Heights Partners LHP

Dear Planning Commissioners:

This letter is in direct response to the Draft EIR, Volume2c: Appendices D-G, published November 7, 2018. I have read the report and I have a number of comments and concerns.

The Notice of Public Hearing was posted at the corners of the 3333 California location, but both pages failed to be posted providing informative and critical information to the public. 1 (CEQA-1)

1. Your name and email contact address and phone number
2. The Planning Department's website address in order to download the Draft EIR document assessment
3. The Notice of a Public Hearing before the Historic Preservation Commission on Wednesday December 5th at 12:30 p.m. at which the Historic Commission is to make its comments on the Draft EIR.
4. Notice to the Public that public comments to the Historic Preservations will be accepted from 11/8/2018 – 12/24/2018.

The Draft EIR states that the project would have a ***Significant and Unavoidable with Mitigation*** impact on noise because it would "expose people to or generate noise levels in excess of applicable standards or cause a substantial temporary or periodic increase in ambient noise levels." (page 4.D.36) ***The estimated construction period is 7 to 15 years.*** 2 (NO-1)

The Draft EIR states that the project would have a ***Significant and Unavoidable with Mitigation*** impact on historic architectural resources because the project "would demolish portions of the office building... and remove all of the project site's existing designed landscape elements and features, including, but not limited to, the curvilinear shapes in pathways, driveways, and planting areas; integrated landscape features, including planter boxes and seating; brick perimeter walls; and the concrete pergola and terraced planting feature facing Laurel Street." (p. 4.B.41) 3 (CR-2)

The DEIR admits that the project would be expected to generate higher Vehicle Miles Traveled than retail, office or residential average projects in the area. The DEIR compares the project with city average data but not with actually measured traffic conditions in the project area. However, the DEIR concludes that the project would have an impact on traffic that would be ***Less Than Significant with Mitigation.*** (page 4.C.74) ***The DEIR claims that reducing the retail parking supply would mitigate the Vehicle Miles Traveled impacts of the project.*** (page 4.C.80) 4 (TR-4)

The DEIR estimates that the project would generate 10,057 daily automobile trips (page 4.C.58). This is probably an understatement because another EIR for a mixed use project estimated 13,000 automobile trips generated by the retail square footage alone (approximately 54,000 square feet), and the proposed project also has 558 or 744 residential units and a 49,999 square foot new office building that would generate additional vehicle trips. 5 (TR-1)

The EIR Intersection Operations Analysis (Page 9,Task 7.2) has focused on transit timing on California Street. To say that Applicant's Proposed Project will have little or no impact on transit and traffic flow on all surrounding streets, simply is NOT true. As it is currently during the commute, Masonic Avenue is solid cars between Presidio and 6 (TR-9)

To m

Euclid during evening commute hours and that is with the right most lane on Presidio with the additional lane to Euclid; both of which are to be removed as part of Applicant's Proposed Project. As it is currently, for every southbound vehicle that stops on Presidio at the Presidio/Pine/Masonic light, three now utilize the right most lane up to Masonic or Euclid. That means that if 3 to 5 cars stop for the traffic light, 9 have driven up Masonic and no are longer sitting waiting to turn right at the light. But, if you eliminate that right most lane, those cars will have to wait for the light to change and back up to the SFFD Credit Union Building at Presidio and California. Additionally, Muni buses have a shift change and buses are coming off California onto Presidio Avenue; add one or two buses and traffic on Presidio will back up to California. The impact for anyone familiar with these intersections is clear. I just have to look out the window. The idea that you can add three total ingress/egress active driveways on Presidio next to the SFFD Credit Union ingress/egress garage driveway and then do the same on Masonic and, not overload all the surrounding streets as the Applicant's Proposed Project does by using criteria from other sites without understanding these major thoroughfares, will be disastrous. You could end up backing traffic all the way down to the financial district.

6 (TR-9) cont'd

The DEIR claims that project impacts on air quality, geology, hydrology, vegetation and other matters would be less than significant.

7 (GC-1)

During the 15-year construction period the developer is requesting, the developer would be able to apply for changes to make the project bigger, expand the retail and increase the heights and amounts of development. This suggests further entitlements and profiting from real estate speculation on the back of the neighborhoods affected by the proposed Project. The Applicant is trying to make us all believe that their proposed project is for the better good and will address the more immediate issue the City has for additional and affordable housing. It is ludicrous that it would take 15 years of construction to accomplish that. It is clear that anyone who supports the Proposed Project and the proposed construction schedule does not live within the immediate proximity of this site.

8 (PD-1)

I, along with many of my neighbors, have opposed the developer's concept from the beginning. We are in of the need for additional and affordable housing in our neighborhood. We stand against the Applicant's proposed project because it would be destructive to the neighborhood. The developer's proposal is too massive, too commercialized and out of character with the neighborhood and, since we know now about the Historic Preservation Commission's assessment about the value of the existing historic building and landscaping, we continue to wonder how the Applicant has been able to push a plan that would do so much damage to the site and the neighborhood so far down the road.

9 (ME-1)

We have objected to the destruction and removal of the existing green areas. We've asked the Applicant of the Proposed Project for an alternative preservation plan that is consistent with the design and aesthetics of the condominiums directly across the street from the Project on California Street between Laurel and Walnut (for example) without touching any of the green and landscaped areas on Masonic, Euclid or Laurel. The neighborhood has expressed its desire to have the Applicant redesign the proposed Project so preserve as much of the site as possible and complete critically needed residential housing in the shortest time possible. We've written letters to the Applicant, addressed these issues in person with the Applicant at the Developer's poster-board sessions and at the Scoping Meeting at the JCC with the Planning Department but we have yet to see a design that warrants serious consideration by the neighborhood or the City.

10 (AL-1)

I believe the Project, as proposed, will have an enormously, negative impact on the neighborhood and surrounding areas. The proposed uses and high density of the proposed project will increase traffic flow and congestion, increase noise and pollution and increase the loss of parking, etc. The proposed removal of the green spaces and mature trees and plants will unnecessarily impact the local environment and deprive the surrounding area from continued public use.

The increased noise from the Proposed Project, including construction activities, will adversely affect nearby sensitive receptors including existing residential housing units surrounding the 10-acre site, the elderly residential facility at the JCC across the street from the site and child care uses at the JCC. There is no reason or justification for relocating the Child Care Center from its current location on the existing site. We know that the existing zoning limits heights greater than 40 feet at Euclid and Masonic and no retail is permitted.

11 (ME-1)

To m

A Community Alternative Plan (hereinafter referred to as "CAP") is being created to reflect what we believe will preserve the entire Historical Building. The design will include re-purposing of the Historical Building to residential use. The "CAP" will preserve Eckbo Terrace, Children's Childcare Playground, along with the Redwood trees, and preserve all Historic Landscaping. The existing green spaces on Laurel, Euclid, Masonic and Presidio will remain intact in this redesign. The "CAP" will accomplish the Applicant's goal of providing 558-744 housing units (Variant) by a design of three or four, four-story buildings on the existing surface parking lots facing California Street; with no retail or office. As we understand it, the housing units facing California Street in the CAP will be consistent with the design and aesthetics of the condominiums directly across the street as mentioned above. The number of trees and landscaping to be removed will be substantially less in the CAP Plan. We have not seen the fully-designed CAP but we whole heartedly support the draft of a plan that we have seen because it is less destructive and can be completed and on line satisfying the immediate need for additional housing within the timeline of three to five years; not 15 years.

12
(AL-2)

Applicant's Proposed Plan does not serve any of us well. They have had every opportunity to redesign and submit an Alternative Preservation Plan and they have refused to do that. My sincerely hope is the Planning Department will want to consider the CAP which is timely and less impactful to the neighbors and the many neighborhoods and stop the negative impact that will undoubtedly occur by approval of the Applicant's Proposed Plan before this goes any farther.

Thank you.

Victoria Underwood
510 Presidio Avenue
San Francisco, CA 94115

Victoria.underwood@att.net

cc:
LaurelHeights2016@gmail.com

To m

December 12, 2018

City Of San Francisco – Planning Commission
Commission Chambers,
Room 400, City Hall,
1 Dr. Carlton B. Goodlett Place,
San Francisco, CA 94102-4689

Commissions.secretary@sfgov.org

Re: Case No. 2015- 014028ENV
Project Title: 3333 California Street Mixed- Use Project Zoning: Residential, Mixed, Low Density [RM- 1]
Zoning District 40- X Height and Bulk District Block/Lot: Block 1032/Lot 003
Applicant/Agent: Laurel Heights Partners LHP

Dear Planning Commissioners:

This letter is in follow-up to my letter dated December 4, 2018 which was submitted to the Commission via email prior to the San Francisco Historic Preservation Commission meeting on December 5, 2018.

Last week, the **San Francisco Historic Preservation Commission** expressed strong support for reviewing an alternative development plan that would **not** destroy the historic resource of the building by cutting it in half along with the removal of the surrounding landscaping including trees; referred to as the character of the defined feature of the site.

1 (AL-2)

The Commissioners expressed their strong assessment of the interconnection between the building and the landscaping as the important resource and vital to the neighborhood. They believe that this project needs the neighborhood and the developer to come together to create a win-win for all parties as the only way it can be measured as a success. The Commission stated they wished they could have reviewed the **Community Full Preservation Alternative Plan** which was discussed but not available for review by the **S.F. Historic Preservation Commission** at the December 5th meeting. The Commissioners expressed their willingness to insure the integrity of the Historic elements are maintained and to get a second look at what will be the "final" alternative development plan supported by the community and the developer when sent back to them from the Planning Commission.

Also, the developer did not tell the community about the historic significance of the site. It was revealed during last week's hearing by UCSF's former architect that they were made aware of this back **in 2010**. The neighborhood learned that last year and had the building and landscaping listed on the **California Register of Historical Places** because they were designed to complement each other in an integrated composition. So, the landscaping is also a historical resource on this site and has been used for recreation by the public since built.

2 (CR-1)

Under the community alternative, the main building would be converted into housing units rather than demolishing the smaller wing and cut through half of it. There would be, in addition to the residential units on California Street, a new Mayfair residential building. The existing cafe and childcare center would remain, and the existing pathway through the building that opens onto the Terrace and onto Masonic, would remain eliminating the need for additional public pass-through access to be constructed.

3 (AL-2)

It should be noted that the **DEIR Full Preservation Alternative C** shows 26 fewer housing units than the Project and 44,306 square feet of retail, which we already thought was planned to be converted to housing to match the number of housing units in the proposed project.

4 (AL-3)

The Community has already shown that it supports reasonable and sustainable levels of housing as seen with the CPMC project with 270 units, the Lucky Penny with 95 units. And, now, 3333 California with 558 units. 5 (ME-1)

We urge you to extend the **comment period on the Draft EIR** in order to evaluate this **Community Full Preservation Alternative Plan** and compared it to the **DEIR Full Preservation Alternative C** with the same level of detail as the alternatives in the **DEIR** because it will be less impactful on the surrounding neighborhoods and **will not** destroy the historic resource of the building and the surrounding landscaping. The **Community Full Preservation Alternative Plan** will give the City of San Francisco the housing it desires for the site in 3-5 years and builds 4 new buildings versus 14 new buildings in 7 to 15 years as proposed by the developer. 6 (AL-2)

The developer proposes to destroy the historically significant characteristics of the site and create nondescript buildings crowded onto the site. They look to changing the zoning to allow retail which was banned in **Planning Commission Resolution 4109** to avoid adverse impacts to Laurel Village and Sacramento Street. 7 (ME-1) 8 (PP-1)

We feel that this site deserves respect and that any decision made on how it's redeveloped is important enough to not rush but get right. With that in mind, I would hope that the historical cemetery plaque be returned to the site and a historical plaque with the designers and historical significance of the building and the landscaping be memorialized on the site as well since the building and landscaping are listed on the **California Register of Historical Places.** 9 (CR-4)

Thank you in advance for your time and serious consideration of the **Community Full Preservation Alternative Plan**. 10 (AL-2)

I strongly urge the Planning Commission to grant a 15-day extension of the Due Date for Comments on this DEIR. It is a lengthy and complex document. 11 (GC-3)

Thank you.

Victoria Underwood
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cc:
LaurelHeights2016@gmail.com

January 4, 2019

City Of San Francisco – Planning Commission
Commission Chambers,
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Re: Case No. 2015- 014028ENV
Project Title: 3333 California Street Mixed- Use Project Zoning: Residential, Mixed, Low Density [RM- 1]
Zoning District 40- X Height and Bulk District Block/Lot: Block 1032/Lot 003
Applicant/Agent: Laurel Heights Partners LHP

Dear Planning Commissioners:

This letter is in follow-up to my letters dated December 4, 2018 and December 12, 2018. Since I never received a confirmation receipt back from your email system that you even received them, I am including them again along with this transmittal letter (via hard copy).

I attended the Planning Commission Meeting on December 13, 2018 where DEIR comments were heard by the Commission relative to the redevelopment plans for 3333 California Street. After hearing some of the statements made by all, I offer these additional comments.

Thank you for voting for the fifteen-day extension so our plan could be submitted to you for review. Most of us are lay people and there are no classes to help us get through the on-slot of information contained in the report or to help us with understanding the full impact of what is being presented; much less its accuracy. By granting the extension, many of my neighbors who traveled to see their families during this national break have had the welcomed additional time needed to get through the DEIR materials.

We have been working hard, donating our time and money over the last four or five years because we believe what will eventually get built on the site is extremely important for our Community; not only for the future but for those of us living here now.

The Community has been portrayed as opposing additional housing but that has not been the case. The community has supported the CPMC project with 270 residential units, the Lucky Penny site with 95 units, and now 3333 California Street with 558 units. There are also additional housing units getting built in the neighborhood, but they don't get the attention these locations get because of the number of housing units are much smaller but all need to be counted and recognized for their impact on the community at large. Over 1,000 residential units in a half mile radius is a lot of development.

1
(ME-1)

I know for myself, I want to see a common-sense approach to building as we look to the future. Why destroy, remove or create hazardous conditions when you don't need to. With that in mind, "The Community Full Presentation Residential Alternative" for 3333 California Street as it is now called, **would** do the following: 2 (AL-2)

a) Preserve the Historic characteristics of the building and landscaping.
b) It would limit construction to the California Street side of the property and to Mayfair
c) It will match the surrounding architectural design in character and style consistent with those residential condominiums directly across the street on California.
d) It will allow for the retention of far more of the mature trees and landscaping
e) It will provide for 558 (or 744 in the Variant) housing units without rezoning and revoking Resolution 4109, the agreement that runs with the site between the City and the surrounding neighbors.
f) It builds the housing units in three years
g) It will keep the impact of construction on the community and environmental risks to a minimum.
h) It will preserve the present childcare center and play area and the community's access to the existing green areas bordering the site on four sides.
i) It will protect the small, family-owned businesses in Laurel Village, Sacramento Street, Presidio Avenue which are the very fabric of the neighborhood. They are already under immense pressure.

What it **won't** do:

j) It won't bring excessive, unnecessary, and unwanted traffic and congestion, noise, pollution to the neighborhoods this site touches by turning it into a mini-city and destination
k) It won't bring unneeded retail/office/commercial spaces as the developer has insisted upon
l) It won't add unneeded height to a building when we already have six floors to look at on Presidio Avenue.
m) It won't take 15 years to built and decimate the community and surrounding streets.
n) It won't be an opportunity to sell a new entitlement on an up-zoned property.

I live on the southeast corner of Presidio Avenue at California Street which provides me with views from Presidio Avenue and California south to Pine and Masonic Avenue up towards Euclid as well as up California towards Walnut. The traffic in these two intersections on any given day much less any commute is overwhelming NOW. Add tech shuttle buses, express buses on California and Pine and a Fire Department Emergency Response calls from Fire Station 10 and it's over the top. 3 (TR-3)

What the developer has proposed for these two intersections is beyond all comprehension. I was glad when one of your colleague Commissioner, Kathrin Moore, described the run up Pine and on Masonic similar to driving on the freeway and that's NOW. Finally, a reality check from someone other than a resident who lives here who experiences it every day. And, as I've stated now in at least five letters, adding ingress and egress driveways, deletion of the right most lane on to Masonic from Presidio and adding loading zones and driveways on Masonic and Euclid, a crosswalk on Presidio Avenue and bicycles and you have not only a huge traffic mess but an impasse zone and parking lot and a dangerous mess. None of this was addressed in the DEIR. 4 (TR-7)

The traffic noise along with blasting music and honking is unbelievably loud now. As I've mentioned in my prior letter addressing the DEIR, I have addressed the issue of the traffic and what affect the developer's project would do to not only the surrounding streets but our entire neighborhood as traffic unloads on to other side streets in order to alleviate their frustration. The westbound traffic on California between Presidio Avenue and Walnut can be a nightmare as cars line up on Walnut Street, around the 5 (TR-3)

corner and east on the California and from there all the way down to Presidio Avenue. An example of poor design approval and its effect on daily traffic.

The DEIR doesn't reflect the potential conditions that would result if the developer's plan is approved. I leave the auto counts, green-house gas measurements, pollution counts and other technical facts and calculations to the consultants from donations we've made to help us through this.

5
(TR-3)
cont'd

There are so many downsides to the developer's proposals and I now choose light and positive energy instead. None of the "issues" are issues under our Community Full Presentation Plan. Whether it be too many ingress-egress driveways cutting into traffic on Masonic, Euclid, Presidio Avenue, eliminating the right most lane at Presidio Avenue, introduction of retail on city blocks with almost no pedestrians because it's basically a freeway, the loss of parking and the addition of loading zones that people and mini-buses will have to back into on this "freeway" maze. The tremendous loss of quality of our lives at the advancement of noise, pollution, environment impact, loss of green spaces and trees. All of it, unnecessary and hardly a positive step forward.

When considering the future, please don't forget the neighborhoods that currently thrive and exist around this site. Repurposing isn't a bad thing when the impact is less overall. Everyone says we need more housing and that they think it's a great idea. But when I say back to them, "So you wouldn't mind 558-744 housing units being built across the street from where you live over the course of 15 years? The reply is always the same, "Oh, no I wouldn't like that at all!" We are trying to find something that works and doesn't burden the people who already live in direct proximity and work in nearby small businesses. What is really happening when you drill down past the minutia is taking a single-user site and repurposing it to accept multi-users. Nothing in that description implies destruction. We believe our plan accomplishes that and it has Community support.

The Commission is faced with making a decision on whether to go with the "Community Full Preservation Plan" or to go with some version of the developer's "Destructive Plan". We think our plan makes the most sense for all the right reasons. We believe that our plan can be approved without further studies and delays in construction to bring the needed housing on line.

Thank you for your time and serious consideration of our Community Full Preservation Plan.

6
(AL-2)

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cc:
LaurelHeights2016@gmail.com
kei.zushi@sfgov.org
Catherine.Stefani@sfgov.org

From: Tony Vega <tvega@mail.thebluebook.com>
Sent: Tuesday, January 08, 2019 9:52 AM
To: Moore, Julie (CPC) <julie.moore@sfgov.org>
Subject: In reference to 3333 California Street Mixed-Use Project, 2015-014028ENV

Good morning Ms. Moore,

I wanted to reach out in hopes that I can get a status update on this project. I believe it had an environmental meeting last year but I was wondering if this project have move forward at all since then. Just trying to get a grasp on how the application process is for these type of projects. 1 (CEQA-1)

Hope to hear from you soon,

-Tony

From: Steven Zeluck
To: CPC.3333CaliforniaEIR
Subject: 3333 California Street proposed project
Date: Saturday, November 10, 2018 8:00:24 AM

Hi Mr. Zushi,

I am a renter approximately 3 blocks from the site at 3333 California. Today I noticed a planning department sign at the site.

I have lived in the area for **26 years** at the same apartment on Sutter Street. In that time I have come to admire the beautiful trees as well as the open space at the 3333 California site. The open space and trees are extremely valuable not only for myself but for the residents of the area to provide a break from the mad whirlwind of activity that surrounds the site **on a daily basis**. And there are a pair of glorious pair of Coastal Oaks on Laurel that are probably 100 years old, as well as the towering Monterey Pine at Laurel and Euclid (that is one wise old tree.) 1 (BR-1)

I am also concerned about the livelihood of the grocers and shops in Laurel Village should your proposals be adopted. I would think the last thing they want is more competition. 2 (ME-1) I am also **very concerned** about the level of noise and traffic disturbance caused by a construction project that is planned to last **7** years. 3 (PD-1)

In short, I do not think it is at all fair to foist this proposed project onto the unsuspecting public and the current businesses. 4 (ME-1)

What I recommend is **Alternative Plan B**. That would be much less disruptive, while providing some residential units which the city needs. We (the people that live here) would also not be subjected to disruption for **7** years. 5 (AL-1)

Lastly, UCSF is this case showing an utter disregard for the neighborhood by seeking a project that will make them the most money, particularly after they have recently received $500M **bequest** to build their new hospital at Parnassus.

I will be present at the upcoming hearing on December 13.

Regards,

Steven C. Zeluck

From: john zlatunich
To: CPC.3333CaliforniaEIR
Subject: 3333 California Street Project
Date: Sunday, December 09, 2018 3:47:24 PM

Hello,

I would like to submit comments on the DEIR for 3333 California Street project. I live on Lupine and overlook Euclid Ave. In reviewing the DEIR, I would not be supportive of the current plan. Adding retail space to the area would, in my opinion, not be positive for the neighborhood. The area would benefit by residential units and some office space. No additional underground parking should be added above what is already in existence. The project height should not be increased more than one additional level from current height. Based on the DEIR, neither the planned project nor any of the alternatives satisfy these requirements. Hopefully the Planning Dept. and developer can adjust the proposal to include residential and office space only. 1 (AL-1)

Thank you for your attention to my comments.

Regards,

John Zlatunich
39 Lupine Ave.

From: john zlatunich
To: Zushi, Kei (CPC)
Cc: Stefani, Catherine (BOS); Richard Frisbie
Subject: 3333 California Priject
Date: Saturday, January 05, 2019 1:34:43 PM

Hello,

I would like to reiterate my comments submitted previously on the DEIR for 3333 California Street project. I live on Lupine and overlook Euclid Ave. In reviewing the DEIR, I would not be supportive of the current plan. Adding retail space to the area would, in my opinion, not be positive for the neighborhood. The area would benefit by residential units and some office space. No additional underground parking should be added above what is already in existence. The project height should not be increased more than one additional level from current height. Based on the DEIR, neither the planned project nor any of the alternatives satisfy these requirements. I understand the local neighborhood association has submitted an alternative plan that I would support AND would be built in approximately three years. Hopefully the Planning Dept. and developer can adjust the proposal to include residential and office space only as detailed by this or one of the other alternative plans.

1 (AL-1)

2 (AL-2)

Thank you for your attention to my comments.

Regards,

John Zlatunich
39 Lupine Ave.