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BY HAND DELIVERY

August 7, 2020

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The proposed project at 2417 Green Street “**presents unusual circumstances relating to historic resources and hazardous materials and it appears as a result of those circumstances the project may have a significant effect on the environment**”<sup>1</sup>

- Unanimous 11-0 Vote of the San Francisco Board of Supervisors (Feb. 6, 2018). (Exhibit A).

**RE: Notice of Appeal and Appeal of San Francisco Planning Department’s Final Mitigated Negative Declaration for 2417 Green Street, Case No. 2017-002545ENV**

Dear Clerk Calvillo:

Philip Kaufman (“Appellant”) hereby appeals<sup>2</sup> the San Francisco Planning Commission’s July 16, 2020 decision approving a Final Mitigated Negative Declaration (FMND), and granting discretionary review, and approving a revised project at 2417 Green Street (“Project”). (Exhibit B). The Planning Commission’s decision violates the California Environmental Quality Act (CEQA), the Slope & Seismic Hazard Zone Protection Act (“SSPA”),<sup>3</sup> and the San Francisco Existing Building Code. Mr. Kaufman appealed the Final MND (FMND) (Exhibit C) on February 5, 2020, but the Project has been revised since that time, requiring this updated appeal.

<sup>1</sup> Motion M18-012, pp. 3-4 (amended February 6, 2018) (Exhibit A).

<sup>2</sup> This appeal is filed pursuant to San Francisco Administrative Code Section 31.16.

<sup>3</sup> San Francisco Ord. 121-18; formerly, the Slope Protection Act (“SPA”).

## I. INTRODUCTION

This appeal seeks to save the historic residence of famed architect Ernest Coxhead, the father of the First Bay Tradition of architecture. The house is built on a steep hill in San Francisco, and dangerous excavation proposed by the Project developer (“Developer”) jeopardizes the safety of the historic Coxhead House and its original 1893 brick foundations. Coxhead designed the home as his personal residence and it has been deemed clearly eligible for listing on the National Register of Historic Places. It is featured in many texts on American architectural history, along with Frank Lloyd Wright’s personal residence near Chicago.

The Project will create a 3-story addition that will extend 17-feet into the shared rear-yard open space. It will involve at least 200 cubic yards of soil removal to more than double the size of the underground garage and to create a new 940 square foot accessory dwelling unit (ADU).<sup>4</sup> The Project will negatively impact light and air to the Coxhead House by blocking a central column of 16 windows designed to provide natural light and air to the center of the long, narrow home. It will undermine the very foundations of the Coxhead House with potentially catastrophic results. It will involve excavation of potentially contaminated soil on a site listed on the City’s Maher Map of potentially contaminated sites. All of these impacts must be analyzed in an Environmental Impact Report (EIR), with binding mitigation measures to minimize impacts.

The entire neighborhood has joined in opposition to the Project, and over two dozen letters were filed in opposition to the Project just at the last Planning Commission hearing alone. While the neighbors have consistently stated that they welcome improvement of the existing structure, they ask the Developer to do so within the envelope of the existing building, in a manner that will not harm the historic Coxhead House uphill, the other neighboring home downhill, or the shared rear-yard open space area. Three discretionary review applications were filed: one by internationally recognized film director Philip Kaufman, one by United States Ninth Circuit Court of Appeals Judge Carlos Bea and Louise Bea, and a third by clinical social worker Susan Byrd and biotechnology developer Mark Lambert. While the Planning Commission GRANTED discretionary review and required modifications to the Project, over the objections of Commission Vice-President Kathrin Moore, it did not require an EIR under CEQA.

When this matter last came before the Board of Supervisors on February 6, 2018, the Board was unequivocal, issuing a unanimous 11-0 ruling that the Project “**presents unusual circumstances relating to historic resources and hazardous materials and**

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<sup>4</sup> The ADU is connected to the upper floors in the Project via an elevator. This raises serious questions as to whether this is truly an ADU for a renter, or whether it will be converted to an exercise room or family room in the future. It is hard to imagine why an elevator would connect a real rented ADU to the bedrooms and living rooms of the main house.



**it appears as a result of those circumstances the project may have a significant effect on the environment.”<sup>5</sup>**

Since that time, the situation has gone from bad to worse. In response to the Board’s ruling the Planning Staff prepared a Mitigated Negative Declaration (MND). But the findings of the MND are startling, to say the least. The City’s own Final Mitigated Negative Declaration (“FMND”) states:

**“The proposed project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic ground shaking, ground failure, or landslides.”** (FMND, p. 60 (emphasis added)).

Take a moment to consider that finding– the City’s own final finding is that the Project may cause a **“risk of death.”**

The City’s FMND states, **“the project construction could compromise the structural integrity of the historic adjacent foundation at 2421 Green Street. This would be a significant impact.”** (FMND pp. 63-64). In other words, the City’s own analysis concludes that the Project may result in structural damage to the Coxhead House, and even possible **death**. Yet, the FMND’s “mitigation measure” is: “if unacceptable earth movement or evidence of structural settlement is encountered during construction ... project excavation shall be halted and the geotechnical engineer shall evaluate if additional measures are required to prevent further movement.” (FMND p. 63). But it is not explained how an earthquake, landslide, or other “unacceptable earth movement” can be “halted.” If “unacceptable earth movement” occurs, it will be too late to save the fragile and historically irreplaceable Coxhead House, and too late to prevent injury to inhabitants of the home. Dr. Lawrence Karp warns that the proposed Project will seriously undermine the historic foundations and east wall of the Coxhead House, and that no adequate protection measures have been proposed to address this existential threat regardless of strict pre-development standards (Exhibit D).

This risk is not theoretical. Planning Staff approved excavation on a home at 125 Crown Terrace in Twin Peaks, which ultimately, due to lack of proper shoring, collapsed down the steep hillside in 2013. (Exhibit E). Ironically, Mr. Durkin has retained the services of the same geologist who was retained for the Crown Terrace debacle. Mr. Kaufman is being subjected to living in the future with the constant fear that his home and family will meet a similar, catastrophic fate.

Such a finding in the City’s own CEQA document – that the Project may cause severe structural damage to a prized historic resource and may result in death -- should at the very least necessitate preparation of an environmental impact report (“EIR”). An EIR is required if there is even a “fair argument” that a project “may have” any adverse

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<sup>5</sup> Motion M18-012, pp. 3-4 (amended February 6, 2018) (Exhibit A).

environmental impact.<sup>6</sup> Impacts to human health are significant impacts under CEQA,<sup>7</sup> as are impacts to historic resources.<sup>8</sup> Yet, only Vice-President Moore voted to require an EIR. While the Planning Commission voted unanimously to grant discretionary review and require modifications to the Project, by failing to require an EIR, the Commission left unresolved the Project's significant environmental and human health impacts.

Exacerbating matters further, despite the Commission's clear concerns that the Project may undermine the foundations of the Coxhead House, the Final MND declared that the Project need not comply with the SSPA, despite the fact that the Preliminary MND determined that SSPA compliance would be required. Staff inexplicably and unlawfully removed important protections to ensure slope stability. As discussed below, there is no question that the Project must comply with the SSPA since the Project site is plainly marked on the City's maps of parcels with slopes over 25% (Exhibit F), areas of 'Earthquake-Induced Landslide' in the Seismic Hazard Zone Map, (Exhibit G), and the City's 1974 and 1987 landslide maps (Exhibit H).

Finally, despite the Board of Supervisor's concerns that the Project may involve excavation of contaminated soil due to the fact that the Project site is on the City's Maher Map, the Developer has failed to take soil samples to demonstrate compliance. The Developer continues to rely on samples taken from within the existing garage area – an area known to be "clean" due to prior addition of the garage in the 1950's.

Mr. Kaufman, the owner of the historic Coxhead House at 2421 Green Street, has lived there for thirty years and has preserved the historic building intact, as did the previous owners. We respectfully urge you to save his home by voting to follow CEQA and demand that the City prepare an Environmental Impact Report ("EIR") for the proposed Project at 2417 Green Street, consistent with the Board of Supervisors unanimous decision in February 2018. All permits for the proposed Project, which have been suspended by DBI and now have expired<sup>9</sup>, must be revoked pending proper CEQA review, which will undoubtedly require safety revisions to the plans per San Francisco's Existing and 2019 Building Codes including the SSPA, which will require completely new permit applications.

## **II. PROJECT DESCRIPTION**

A private for-profit Developer, Christopher Durkin ("Developer"), has proposed to radically alter the UNOCCUPIED structure at 2417 Green Street, and erect a much larger structure on the site ("Project") that will adversely affect the neighborhood, including the historic building located at 2421 Green Street built in 1893 by world-renowned architect Ernest Coxhead as his personal residence ("Coxhead House"). The Coxhead House is

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<sup>6</sup> *Communities for a Better Environment v. South Coast Air Quality Management Dist. (ConocoPhillips)* (2010) 48 Cal. 4th 310, 319-320.

<sup>7</sup> *Sierra Club v. Fresno*, 6 Cal. 5th 502, 518 (2018) (CEQA document must analyze "adverse effects on human health.")

<sup>8</sup> *Georgetown Pres. Soc'y v. Cty. of El Dorado*, 30 Cal. App. 5th 358, 365 (2018).

<sup>9</sup> And with them previous permits based on the suspended and expired permits.

clearly eligible for listing on the National Register of Historic Places, and is featured on numerous books on architectural history. Coxhead designed the home as his personal residence and oriented in such a manner to take advantage of natural light through many windows, including a central light column placed in the middle of the long, narrow home. The Coxhead House is on a steep slope immediately adjacent to, uphill and above the proposed Project – so steep that nearby areas of the sidewalk have stairs.

The proposed Project would construct a three-story rear addition; dramatically expanding footprint and envelope of the existing single-family dwelling. The floor area would increase from approximately 4,118 square feet to approximately 4,470 square feet and would include a one-bedroom Accessory Dwelling Unit measuring approximately 913 square feet on the first floor. The Project also proposes the excavation of the rear yard for a sunken terrace, façade alternations, and interior modifications. The Project will more than double the size of the underground garage to accommodate two cars. The Project will extend the first through third stories approximately 17 feet into the shared rear-yard open space, blocking more than 16 windows with views to and from the Coxhead House, and blocking light to the critical central column of windows, crucial to Coxhead's original design. Finally, the property is on a steep slope, and would require excavation of over 200 cubic yards of soil and rock below the Coxhead House to a depth of 13 feet below grade.<sup>10</sup>

The plans approved by the Planning Department show “lateral and subjacent support” (Civil Code §832) to 2421 Green will be severely impaired by excavation and other construction on 2417 Green allowing gravity and seismic forces to irreparably harm, damage, or even destroy 2421 Green. The developer has refused to show any stabilization, excavation, shoring, or underpinning details, and has consistently failed to obtain the necessary topographical survey, the basic start to designing the required protection measures per San Francisco Existing Building Code section 106.2.6, and San Francisco Building Code, Section 3307.1.

We urge the Board of Supervisors to reject the FMND and direct staff to prepare an EIR to properly and professionally, analyze the proposed Project's significant impacts, and to propose feasible and enforceable design and construction measures and alternatives to reduce the Project's impacts. These safeguards must be developed before Project approval and construction – not after. This is the fundamental purpose of CEQA – to “insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug.”<sup>11</sup>

Furthermore in blatant disregard to the decisions of the Board of Supervisors and Planning Commission, planning staff issued a Final MND that eliminates the safeguards of the SSPA contained in the Preliminary MND. The FMND states, **“the project has the potential to result in significant impacts related to protection of the adjacent foundation at 2421 Green Street that could become unstable as a result of the**

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<sup>10</sup> Second exemption under CEQA at p. 1-2.

<sup>11</sup> *Concerned Citizens of Costa Mesa v. 32nd Dist. Agr. Assn.*, 42 Cal. 3d 929, 935 (1986).

**project.**” (FMND p. 66). For this reason, the Planning Commission voted to GRANT discretionary review of the Project, and directed the developer to substantially redesign the Project to reduce its impacts on the Coxhead House, including eliminating excavation, ensuring that the Project would not undermine the foundation of the Coxhead House, reducing the size of the Project to reduce impacts to historical features of the Coxhead House including access via existing fenestration to light and air, and ensuring compliance with the Cow Hollow Neighborhood Design Guidelines (CHNDG). All this can be done simply by keeping the building within its present envelope.

Planning Staff ignored the Commission’s clear directives. In a document dated January 9, 2020, the Planning Staff substantially revised the PMND. Notably, while the PMND stated that the Project would be required to comply with the SSPA, the FMND mysteriously, and unlawfully, reversed this conclusion and determined that the Project is **not** subject to the SSPA, and removed or substantially revised many of the mitigation measures intended to protect the Coxhead House and ensure stability of the steep slope and its foundations. (Compare PMND (Exhibit I) to FMND (Exhibit C)). This egregious action flies in the face of the direction of the Planning Commission to revise the Project to ensure slope stability. In fact, Planning Staff did exactly the opposite – eliminating necessary crucial safeguards intended to prevent damage to the Coxhead House.

In the face of such renegade staff action, Mr. Kaufman is left with no alternative but to appeal again to the Board of Supervisors to protect this unique historic resource from potential irreparable harm, to safeguard his health and the health of his family from possible risks of injury or even **death**, as noted in the City’s own MND.

### III. PROCEDURAL HISTORY

The planning staff has twice attempted to exempt the proposed Project entirely from CEQA review. The Board of Supervisors has twice<sup>12</sup> unanimously rejected the CEQA exemptions, holding:

The proposed project at 2417 Green Street “presents unusual circumstances relating to historic resources and hazardous materials and it appears as a result of those circumstances **the project may have a significant effect on the environment.**”<sup>13</sup>

Although the Board of Supervisors did not specify the form of CEQA review required (holding only that a Categorical Exemption was not allowed), the legal standard is that an environmental impact report (“EIR”) is required if there is a “fair argument” that a project “may have” any adverse environmental impact.<sup>14</sup> This, of course, was the exact finding made by the Board of Supervisors. Despite the Board of Supervisors’ ruling, the

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<sup>12</sup> January 9, 2019, February 6, 2018.

<sup>13</sup> Motion M18-012, pp. 3-4 (amended February 6, 2018) (Exhibit A).

<sup>14</sup> *Communities for a Better Environment v. South Coast Air Quality Management Dist. (ConocoPhillips)* (2010) 48 Cal. 4th 310, 319-320.

Planning Staff first attempted to issue a third CEQA exemption, and then issued a mitigated negative declaration (“MND”) rather than an EIR. As a matter of law, an EIR is required. City staff is precluded from making factual findings that contradict the Board of Supervisors’ findings.<sup>15</sup>

On January 9, 2020, the Planning Commission voted unanimously (6-0) to GRANT discretionary review of the Project. The Commission directed the developer to substantially redesign the Project to reduce impacts to the Coxhead House, including risks to seismic stability, and impacts to the historical character of the Coxhead House. In particular, the Commission directed the developer to eliminate excavation in order to minimize risk of slope instability or landslides. Commission President Melgar stated:

“I would want to not have any excavation, not sinking the whole project by two feet. I think that’s just too big a risk. I also, quite frankly, I’m not sure that I trust that someone who had demolished the chimneys without a permit and left the structure out to be damaged by the elements will do the right thing if we allow for the expansion in the back and also to the excavation, which is a big risk. And so I would want to have, like, a lot more robust conditions for approval and something that will assure me that we’re not risking the integrity of this important structure next door...”

Commissioner Koppel stated, “I’m not going to be supportive of excavating on this project.” Commissioner Moore stated that excavation poses a risk to the uphill Coxhead House, and stated that the project should “stay within its envelope and within its footprint.” Commissioner Johnson stated that, “excavation in particular is particularly worrying, and so I think a project redesign would have to have lesser or no excavation. I think it has to respect the historic character of the house next door and try to mitigate impacts.” Commissioner Fung stated that “the excavation creates a large part of the issues with the adjacent building... what would be a starting point would be to redesign this building so that it would minimize the risk to the adjacent [building], including studying the elimination of that massive excavation.” Ultimately the Commission unanimously approved Commissioner Johnson’s motion to “redesign the project with sensitivity to the historic resource, eliminating the extra parking and ADU if additional excavation can be avoided, and then to meet with one another and talk with staff, and stronger adherence to the Cow Hollow Guidelines, including stepping the buildings with each other.”

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<sup>15</sup> Even if staff were to reach a contrary conclusion, it cannot “unring the bell” of the Board of Supervisor’s findings. At best, this would create a “fair argument” which must be resolved in an EIR. In *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, the court rejected a county’s argument that a revised initial study prepared by the county which contradicted the findings of the first initial study had not “relegated the first initial study to oblivion.” *Id.* at 154. The court stated, “We analogize such an untenable position to the unringing of a bell. The first initial study is part of the record. The fact that a revised initial study was later prepared does not make the first initial study any less a record entry nor does it diminish its significance, particularly when the revised study does not conclude that the project would not be growth inducing but instead simply proceeds on the assumption that evaluation of future housing can be deferred until such housing is proposed.” *Id.* at 154.

Despite the Commission's unanimous vote to eliminate excavation to reduce foundation movement and seismic risks to the Coxhead House, Planning staff did exactly the opposite. Instead, they altered the PMND to reverse its conclusion that the SSPA applies to the Project, and eliminated safeguards contained in the PMND and SSPA, such as independent expert review of by an appointed independent geotechnical engineer of excavation, shoring and underpinning plans.

The Developer revised the Project proposal slightly, but this new plan continues to have an ADU, continues to involve at least 200 cubic yards of excavation to enlarge the parking garage, and continues to expand the building envelope approximately 17 feet into the shared rear-yard open space. Nevertheless, on July 16, 2020, the Commission voted to GRANT discretionary review and to approve the Revised Project. Notably, the Revised Project was never reviewed in any CEQA document and is significantly different than the Project analyzed in the PMND or the FMND rendering the CEQA document worthless.

#### **IV. HISTORY OF VIOLATIONS**

The Developer has engaged in a shocking history of permit violations leading to at least five formal notices of violation (NOVs).

- On December 10, 2017, the developer removed a highly visible exterior chimney from the existing home at 2417 Green. On December 12, 2017, the Department of Building Inspection (DBI) issued a formal NOV, citing the developer for engaging in "WORK WITHOUT PERMIT" and "WORK BEYOND SCOPE OF PERMIT."
- Undeterred, the very next day, on December 13, 2017, the developer unlawfully removed a second exterior chimney at the rear of the house – leaving two gaping holes in the roof of the property. The Developer allowed rain to drench the interior of the house through the open roof throughout the rainy season, with the probable intent of dilapidating the house and creating a teardown
- On Saturday, December 16, 2017, the developer conducted demolition activities in the foundation of the property, which was unlawful due to the pending CEQA appeal, which challenges the permit allowing foundation work. DBI sent an emergency inspector to stop work that day, then DBI issued a formal NOV ordering the developer to "STOP ALL WORK" pending the resolution of the earlier CEQA appeal.
- On January 8, 2018, the City issued a Notice of Violation directing the developer to repair illegal holes made in the roof of the property.
- On January 9, 2018, the City issued a Notice of Violation Final Warning due to the developer's failure to repair the unlawful damage to the home.

- On April 13, 2018, the City Department of Building Inspection, Code Enforcement Division issued a notice of Order of Abatement that the building is UNSAFE and/or a PUBLIC NUISANCE” due to failure to remedy violations.
- On April 13, 2019, the City Department of Building Inspection, Code Enforcement Division issued a notice of Order of Abatement that the building was UNSAFE and/or a PUBLIC NUISANCE due to failure to remedy past violations.
- Most recently, this year, SFDBI issued a decision that the building was “abandoned,” which was not contested by the owner.

Professional geotechnical engineer and architect, Dr. Lawrence Karp has observed that the Developer has already excavated beneath the unreinforced red brick foundations of the Coxhead house without a proper permit, and has engaged in substantial amounts of unpermitted foundation work. (Exhibit J). Dr. Karp concludes that this work jeopardizes the Coxhead House. (Exhibit D).

In addition to these clear violations, the Developer has made slanderous attacks on Mr. Kaufman and his team. In an April 11, 2019 letter to the San Francisco Planning Department, the Developer accused registered geotechnical engineer and architect, Dr. Lawrence Karp, of making “knowing fraudulent claims” that the “project does not comply with CEQA.” The Developer accused Dr. Karp of creating, “extremely unreasonable fear and anger in his elderly client for the purpose of artificially inflating his invoices.” The Developer calls for “revocation” of Dr. Karp’s license, and even alleges that “this deception is a crime and should be investigated as financial exploitation and elder abuse.” (Exhibit K). These are shocking and slanderous accusations made against a highly respected registered professional engineer. The statements are also patently false since Dr. Karp has performed his services in this matter on a *pro bono* basis without any compensation. Such desperate and extreme statements only point out the lengths to which this Developer is willing to distort the truth to obtain his ultimate objectives of obtaining maximum profits at the expense of his neighbors.

The Board of Supervisors took note of this “rap sheet” of violations. On January 9, 2018, then-District Two Supervisor Mark Farrell stated, “I have never upheld a CEQA appeal. This is the first one.” **“There is a pattern of bad behavior here... It is shocking.”** At the same hearing, now-Mayor London Breed stated, “I was surprised that this project was still exempt under CEQA when there is a possibility that there is a contaminated site underneath that exists.” **“I’m just trying to understand how it was possible there are numerous violations specifically with this project... this seems to be a pattern with a lot of people who purchase homes in the city, violate the law, pay the penalties and are still able to move forward with their projects which sometimes unfortunately changes the character of the community.** I am just trying to understand how that continues to happen in certain cases.”

As the Supreme Court has stated, “a project proponent's prior environmental record is properly a subject of close consideration in determining the sufficiency of the proponent's promises in an EIR.”<sup>16</sup> As Mayor Breed noted, it is astounding that City staff continues to reward such a scofflaw developer. Given this history of violations, it is particularly important to have a searching review of the Project and implementation of binding mitigation measures through an independent and objective EIR.

## **V. LEGAL DISCUSSION**

### **A. SLOPE AND SEISMIC HAZARD ZONE PROTECTION ACT (“SSPA”)**

#### **1. SSPA Legal Requirements.**

The Board of Supervisors adopted the previous Slope Protection Act (“SPA”) in 2008 requiring construction of new buildings or structures and certain other construction work on properties subject to the SPA to undergo additional review for structural integrity and effect on slope stability. The legislation was strengthened in 2018 and renamed the Slope and Seismic Hazard Zone Protection Act (“SSPA”). The SSPA applies to projects proposed on a slope of 4 Horizontal to 1 Vertical (4H:1V = 25%) or greater according to the Topographic Map of San Francisco, dated July 25, 2018, **or** that “lies within the areas of ‘Earthquake-Induced Landslide’ in the Seismic Hazard Zone Map,” released by the California Department of Conservation, Division of Mines and Geology, dated November 17, 2000, or amendments thereto (SSPA, Sect. 106A.4.1.4.3), and involves grading or excavation of over 50 cubic yards of earth. All other city landslide maps are included.

Projects subject to the SSPA are subject to “heightened review” to ensure stability of San Francisco’s steep slopes and hillsides during construction. The SSPA states, “because landslides, earth movement, ground shaking, drainage issue and subsidence are likely to occur on or near steeply sloped properties,” projects subject to the SSPA must “be peer-reviewed for structural integrity and effect on hillside slope stability.” (SSPA, Sect. 106A.4.1.4.2). These are also CEQA issues.

Projects subject to the SSPA must submit reports by both a licensed geotechnical engineer and a licensed geologist identifying areas of potential slope and foundation instabilities, defining potential risks of development due to geological and geotechnical factors, and recommending appropriate pre-construction slope and foundation stability protection strategies, subject to review by the City’s Structural Advisory Committee. Permits may not be issued until the Departments of Planning and Public Works, and the Fire Department visit the site and provide written communication to the Building Official. In addition, the Structural Advisory Committee must provide a written report to the Building Official “concerning the safety and integrity of the proposed design and construction.” The Structural Advisory Committee must “consider the effect that construction activity related to the proposed project will have on the safety and stability of

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<sup>16</sup> *Laurel Heights Improvement Assoc. v. Regents of the Univ. of Calif.*, 47 Cal.3d 376, 420 (1988).



the property subject to the [SSPA] and **properties within the vicinity of such property.**" (SSPA Sect. 106A.4.1.4.4 (emphasis added)).

## **2. The 2417 Green Project is Subject to the SSPA.**

As discussed in the attached opinion of registered civil and geotechnical engineer Dr. Lawrence Karp dated July 7, 2020, the Project proposed at 2417 Green Street is clearly subject to the SSPA (Exhibit D), which is a crucial life-safety protection Ordinance not subject to waiver. There is no dispute that the Project proposed at 2417 Green Street involves far more than 50 cubic yards of earth movement. The developer's environmental evaluation states that the Project requires over 200 cubic yards of excavation. More than 1000 square feet of building is involved.

The Project site is clearly shown on the July 24, 2018 4H:1V topographical map referenced in the SSPA, and found on the Department of Building Inspection's website ([https://s3.amazonaws.com/sfplanninggis/Slopes+Poster\\_lowRes70DPI.pdf](https://s3.amazonaws.com/sfplanninggis/Slopes+Poster_lowRes70DPI.pdf)) (Exhibit F). The Project site is also on the City's 1987 map of "areas of potential landslide hazard." (Exhibit G) posted at SFDBI's Permit Approval Department. Finally, the Project site is on the 1974 "Blume map" of landslide locations (Exhibit H)<sup>17</sup>, which was a previous version of the basic protective Act. The SSPA (Ord. 121-18) incorporates all of San Francisco's maps showing areas of instability, stating twice "...or falls within certain mapped areas of the City".

Even Mr. Durkin's own geotechnical engineer, Divis Consulting, concluded that the Project is subject to the SPA and City maps. (Divis Rpt. Jan. 12, 2017) (Exhibit L).

## **3. The Planning Department's Curious and Unlawful Reversal of Opinion.**

The Preliminary MND concluded that the Project is subject to the SSPA and therefore must comply with its requirements to safeguard the slope, structural support, and adjacent properties. However, mysteriously<sup>18</sup>, the Final MND reversed this conclusion and for the first time stated that the Project is *not* subject to the SSPA. As a result, the Final MND removed most of the mitigation measures contained in the

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<sup>17</sup> Despite the fact that the older Blume map was not specifically referenced in the SSPA in 2018, the site's presence on the other maps is sufficient to confirm applicability of the SSPA.

<sup>18</sup> The Planning Department's action dated July 16, 2020 suddenly refers back to long-replaced Permit Application 2017.0428.5244 (Apr. 26, 2017). But that permit application is void. That and several other successive permit applications with revised drawings (including structural drawings), and Notices of Violation including those permit applications replacing and succeeding 2017.0428.5244, were suspended and then automatically expired under San Francisco Existing Building Code Section 105.5. This permit progression and its end outcome voids P/A 2017.0428.5244, so a new permit application with a current date has yet to be issued. In short, Permit Application 2017.0428.5244 has been void since it was superseded shortly after being filed. The current drawings referred by the Planning Department have yet to be filed with the City's Central Permit Bureau. The date of the Permit Application will be the date the Permit Application is accepted and filed.

Preliminary MND – despite the Planning Commission’s unanimous decision that additional safeguards were necessary to ensure slope stability. The PMND clearly stated at pages 59-60:

“The project site is in a landslide hazard zone and thus is subject to the additional requirements of the Slope Protection Act (San Francisco building code section 106A.4.1.4). The Slope Protection Act states that the final geotechnical report must be prepared and signed by both a licensed geologist and a licensed geotechnical engineer, which in turn shall undergo design review by a licensed geotechnical or civil engineer to verify that appropriate geological and geotechnical issues have been considered and that appropriate slope instability mitigation strategies, including drainage plans if required, are proposed.

Based on the review of the geotechnical submittal (discussed in more detail below), the building department director may also require that the project be subject to review by a three-member Structural Advisory Committee that will advise the building department on matters pertaining to the building’s design and construction. The three committee members must be selected from a list of qualified engineers submitted by the Structural Engineers Association of Northern California and approved by the building department. One member must be selected by the building department, one member shall be selected by the project sponsor, and the third member shall be selected jointly.”

The FMND deleted the above paragraphs in their entirety, and replaced them with the exact opposite conclusion below (citing suspended and expired permits):

“The project site is located within an area of potential landslide hazard zone as identified on the 1974 Blume map. In 2018, the San Francisco Building Code was amended by the Slope and Seismic Hazard Zone Protection Act (Ordinance No. 121-18) to no longer reference the Blume map. However, Building Permit Application No. 201704285244<sup>19</sup> for the building expansion is subject to the building code provisions in effect on April 28, 2017, before Ordinance No. 121-18 became effective<sup>20</sup>. On August 23, 2019, the building department documented that

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<sup>19</sup> The Planning Department’s action dated July 16, 2020 suddenly refers back to long-replaced Permit Application 2017.0428.5244 (April 26, 2017) but that permit application is void. That and several other successive permit applications with revised drawings (including structural drawings; the DRA has no associated structural drawings), and Notices of [Permit] Violation including those permit applications replacing and succeeding 2017.0428.5244 which were suspended and then automatically expired under San Francisco Existing Building Code Section 105.5. This permit progression and its end outcome voids P/A 2017.0428.5244, so a new permit application with a current date has yet to be issued. In short, Permit Application 2017.0428.5244 is void. The current drawings referred by the Planning Department have yet to be filed with San Francisco’s Central Permit Bureau; the date of the Permit Application will be the date the Permit Application is accepted and filed.

<sup>20</sup> There is no question that the SPA referenced the Blume Map in 2017. There is also no question that the Project site is on the Blume Map. Therefore, since Planning staff contends that

this project site and thus is **not** subject to the additional requirements of the Slope Protection Act (building code section 106A.4.1.4). The building department, during its review of the project's structural plans, may request the assistance of a structural design reviewer to provide additional and specialized expertise to supplement its plan review. The structural design reviewer would meet with the project sponsor's engineer of record and with building department staff as the need arises throughout the design process." (FMND p. \_\_\_\_ (emphasis added)).

Similarly, at page 62 the Preliminary MND stated:

**"Third-Party Review.** Pursuant to the Slope Protection Act, the project's geotechnical investigation report and construction documents will undergo third-party review by a licensed geotechnical engineer. Such review will verify that appropriate geological and geotechnical issues have been considered and that appropriate slope instability mitigation strategies have been proposed."

The Final MND deleted this critical safeguard entirely. Thus, even though the City's own Preliminary MND concluded that the SSPA applies to the Project, even though the Developer's own geotechnical engineer concluded that the SPA applies to the Project, even though the City's own maps conclusively demonstrate that the SSPA applies to the Project, and even though the Planning Commission voted unanimously that additional safeguards are required to ensure seismic stability, the Planning Department staff took it upon themselves to ignore the facts and conclude that the Project is miraculously not subject to the SSPA, and therefore removed almost all of the gravity and seismic stability mitigation measures contained in the Preliminary MND.

This determination must be reversed and the Project must be found to be subject to the SSPA. The SSPA is the bare minimum required to ensure that the Proposed Project does not cause irreparable harm to the Coxhead House.

## **B. CEQA**

### **1. LEGAL STANDARD**

Under CEQA, an environmental impact report ("EIR") is required rather than a mitigated negative declaration ("MND") if there is even a "fair argument" that a proposed project "may have" any adverse environmental impacts -- even if contrary evidence exists to support the agency's decision.<sup>21</sup> Put simply, **"if there is a disagreement among experts over the significance of an effect, the agency is to treat the effect as**

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the SPA rather than the newer SSPA applies to the Project, there should be no question that the Project is subject to the safeguards of the SPA. Yet, Planning staff somehow reach the exact opposite conclusion.

<sup>21</sup> 14 CCR § 15064(f)(1); *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-15.

**significant and prepare an EIR.**"<sup>22</sup> The purpose of the EIR is to analyze significant environmental impacts and to propose feasible, enforceable mitigation measures and alternatives to reduce the proposed project's impacts.

## 2. SIGNIFICANT IMPACTS

The proposed Project has many significant environmental impacts that have not been adequately mitigated, including the following:

- a. **RISK OF DEATH:** The City's own FMND states that the "The proposed project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or **death** involving rupture of a known earthquake fault, seismic ground shaking, ground failure, or landslides." (FMND, p. 60 (emphasis added)). Impacts to human health are significant impacts under CEQA.<sup>23</sup> It is beyond cavil that there is no greater threat to human health than death.
- b. **STRUCTURAL INTEGRITY:** After numerous comments from Dr. Lawrence Karp, the MND admits that **"the project construction could compromise the structural integrity of the historic adjacent foundation at 2421 Green Street. This would be a significant impact."** (FMND pp. 18, 62-63). Harm to historic resources is a significant impact under CEQA requiring review in an EIR.<sup>24</sup> Dr. Karp has reviewed the most recent Project proposal and concludes that it continues without any abatement to pose a risk to the structural integrity of the Coxhead house. (Exhibit D). Dr. Karp has prepared drawings describing how the Project would undermine the foundations of the Coxhead House. (Exhibit J). Dr. Karp has produced photographs showing illegally started excavations at 2417 Green Street. Nevertheless, the city refuses even to require the Project to comply with the SSPA. Instead, the MND merely states: "if unacceptable earth movement or evidence of structural settlement is encountered during construction, as determined by the geotechnical engineer, project excavation shall be halted and the geotechnical engineer shall evaluate if additional measures are required to prevent further movement." (FMND p. 63). The sole mitigation measure, M-GE-1, simply requires "ongoing coordination" with the Planning Department and Department of Building Inspection during construction. (FMND p. 18). This mitigation measure is plainly inadequate to reduce this impact to less than significant. The measure allows earth movement to occur first, and then the developer would possibly develop a plan after the fact to mitigate the harm. The problem with this is that by the time "unacceptable earth movement" occurs, the narrow brick Wythe foundation of the historic Coxhead House may already have suffered possibly latent catastrophic irreparable harm. CEQA prohibits such

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<sup>22</sup> *Sierra Club v. County of Sonoma*, 6 Cal.App.4th at pp. 1316–1317; *Moss v. Co. of Humboldt* (2008) 162 Cal. App. 4th 1041, 1049.

<sup>23</sup> *Sierra Club v. Fresno*, 6 Cal. 5th 502, 518 (2018) (CEQA document must analyze "adverse effects on human health.")

<sup>24</sup> *Georgetown Pres. Soc'y v. Cty. of El Dorado*, 30 Cal. App. 5th 358, 365 (2018).

"deferred" mitigation.<sup>25</sup> An EIR is required to analyze this admittedly significant impact and to develop enforceable mitigation measures prior to construction -- not after irreparable harm occurs.

- c. **VIOLATION OF SSPA:** As discussed above, the Planning Staff has erroneously concluded that the Project is not subject to the SSPA. As explained by Dr. Karp, the staff conclusion is factually wrong, and the SSPA clearly applies to the Project. Where a policy of general applicability, such as an ordinance, is adopted in order to avoid or mitigate environmental effects, a conflict with that policy in itself indicates a potentially significant impact on the environment requiring an EIR.<sup>26</sup> Any inconsistencies between a proposed project and applicable plans must be discussed in an EIR<sup>27</sup>. A Project's inconsistencies with local plans and policies constitute significant impacts under CEQA.<sup>28</sup> Since the Project fails to comply with the SSPA, which was adopted to mitigate significant risks of landslide, this creates a fair argument that the Project may have an adverse environmental impact and an EIR is required.
- d. **HISTORIC IMPACTS:** The MND admits the historical significance of the Coxhead House, as established by Architectural Historian Carol Karp, AIA. (Exhibit M). However, the sole mitigation measure is the above-mentioned M-GE-1 - to require ongoing coordination with the Planning Department and DBI during construction. As discussed above, this is clearly inadequate to prevent ground movement and irreparable structural damage to the Coxhead House given the steep slope and fragile historic foundation.

The MND ignores entirely the impact that the 3-story, 17-foot expansion will have upon access to light and air to the Coxhead House. The Project will block at least 16 windows at the Coxhead House, including the central light column, which was designed to bring light to the middle of the long, narrow house. Ms. Karp explains that this use of natural light is a key component of Coxhead's design, and its elimination will adversely affect the historical significance of the home.

The MND dismisses the fact that the massive project will block public views of the Coxhead House from Pierce and Green Streets. While the MND states that these are not the "primary views" of the Coxhead House, even if true, there is no distinction in CEQA law between primary and secondary views of historic resources. An EIR is required to analyze the project's impacts to the historic Coxhead House, and to propose feasible alternatives and mitigation measures to

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<sup>25</sup> *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309.

<sup>26</sup> *Pocket Protectors v. Sacramento* (2005) 124 Cal.App.4th 903.

<sup>27</sup> 14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist.* (2009) 176 Cal. App. 4th 889, 918.

<sup>28</sup> *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-4, 32 Cal.Rptr.3d 177; *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal.App.5th 358.

reduce the impacts. Ms. Karp concludes that the most recent Project proposal will undermine the historic qualities of the Coxhead house. (Exhibit M).

- e. **SOIL CONTAMINATION:** As discussed by certified hydrogeologist Matthew Hagemann, C. Hg., formerly director of the US EPA Western Superfund program, the Project site is on the City's Maher Map of potentially contaminated sites. (Exhibit N). The developer proposes to excavate over 200 cubic yards of potentially contaminated soil. Despite this, neither the city nor the developer has conducted any additional soil testing. The MND continues to rely on 2 "co-located" soil samples taken in 2018 from within the garage. Mr. Hagemann has testified that these samples are inadequate because the garage was rebuilt in the 1980s. Therefore, this is the one area where the soil would be expected to be clean. Instead, soil sampling is required in the areas proposed to be excavated, including the rear yard. This has not been done. Incredibly, there is still no topographical survey map of the property that would locate existing improvements at both 2417 and 2421 Green Street, contrary to San Francisco Existing Building Code section 106.2.6. An EIR is required to professionally analyze the Project and report to avoid environmental impacts. The *San Francisco Chronicle* has recently highlighted a pattern within the San Francisco Planning Department of illegally exempting from CEQA review projects proposed to be constructed on contaminated sites. (Exhibit O). The current Project is one of many similar projects allowed to evade proper CEQA review.
- f. **VIOLATION OF RESIDENTIAL DESIGN GUIDELINES:** The Project violates numerous provisions of the Cow Hollow Neighborhood Design Guidelines (CHNDG), and the San Francisco Residential Design Guidelines (SFRDG). These inconsistencies are significant impacts under CEQA requiring CEQA review. The CHNDG was approved by the Planning Commission in April 2001. With that approval, the guidelines must be implemented as part of the City's building permit review process.<sup>29</sup> The Planning Commission utilizes the CHNDG to ensure the renovation or expansion of an existing building, or the construction of a new building, is visually and physically compatible with the neighborhood character of Cow Hollow."<sup>30</sup> Importantly, the City has an obligation to verify new projects are consistent with the CHNDG when there is evidence of incompatibility.<sup>31</sup> The proposed Project is incompatible with numerous provisions of the CHNDG and the SFRDG, for example:

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<sup>29</sup> CHNDG, at p. 1.

<sup>30</sup> Id. "The character of San Francisco is defined by the visual quality of its neighborhoods. A single building out of context with its surroundings can have a remarkably disruptive effect on the visual character of a place. It affects nearby buildings, the streetscape and if repeated often enough, the image of the city as a whole."

<sup>31</sup> *Kutzke v. City of San Diego* (2017) 11 Cal.5th 1034 (City determined a proposed project was incompatible with conserving the character of the existing neighborhood and therefore inconsistent with local community plan in violation of CEQA).

1. Impact to Adjacent Buildings: The CHNDG requires new construction to relate to adjacent buildings, so that in the case of an enlargement, the form of the enlarged building should not impact adjacent buildings.<sup>32</sup> As discussed by Carol Karp, the Project will impact the Coxhead House significantly, blocking light and air that is critical to the architect's design, as well as views to and from the Coxhead House.
2. Volume and Mass: The Project would not maintain a building envelope consistent with neighboring buildings,<sup>33</sup> nor would it maintain compatible volume and mass as compared to other nearby houses on the same side of Green Street.<sup>34</sup> The Project would result in a 4,470 square-foot house on a 2,500-square-foot lot. This would result in an oversized McMansion on a particularly small, 25-foot wide, lot in Cow Hollow. Such building intensity is inconsistent with the character of the neighborhood and is a departure from existing long-held, relatively less dense construction in Cow Hollow.
3. Protection of Architecturally Significant Buildings: Special consideration applies to historically or architecturally significant buildings.<sup>35</sup> As shown above, the Coxhead House is a significant historical resource that must be protected under CEQA and several City ordinances and the Cow Hollow Guidelines.
4. Rear-Yard Open Space: The CHNDG points out that "rear yards not only serve the residences to which they are attached, but they are also in a sense public in that they contribute to the interior block open space which is shared visually by all residents of the block."<sup>36</sup> The Guidelines emphasize that any intrusions into the rear yard, "even though permitted by the Planning Code, may not be appropriate if they fail to respect the mid-block open space and have adverse impacts on adjacent buildings." The Project violates this provision by extending 17-feet into the shared rear-yard setback. Similarly, the SFRDG advises against rear yard intrusions in order to "minimize impacts on light and privacy to adjacent properties."<sup>37</sup> The Guidelines emphasize that "when expanding a building into the rear yard, the impact of that expansion on light and privacy for abutting structures **must be considered**." (*Id.* (emph. added)). The Project obliterates windows and eliminates light to the Coxhead House.
5. Invasion of Privacy: The SFRDG states that the City must consider the impact of a Project on privacy of neighbors.<sup>38</sup> Yet the Project includes a roof deck that looks directly into the owner's bedroom of the Coxhead House.

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<sup>32</sup> CHNDG., at p. 11.

<sup>33</sup> CHDG, at p.32.

<sup>34</sup> *Id.*, at p.34.

<sup>35</sup> *Id.*, at p.28.

<sup>36</sup> Cow Hollow Neighborhood Design Guidelines at p. 28.

<sup>37</sup> San Francisco Residential Design Guidelines at p. 16.

<sup>38</sup> RDG p. 17.

6. Story Poles: The CHNDG require story poles for story poles for horizontal or vertical additions that “increase the existing envelope of a residence.” “Poles shall be placed to mark the perimeter corners of the proposed addition.” (CHNDG, p. 49). Story poles are necessary to “ascertain the ultimate height and bulk of a building, its potential impacts on views, and to make informed decisions regarding a proposed project.” (*Id.*) Although the Developer erected story poles for a prior version of the Project, no story poles were erected for the current version, which is substantially different.
7. Good Neighbor: The Project would violate “good neighbor” design elements to preserve access to light and air.<sup>39</sup> As shown above, the Project would block numerous windows in the Coxhead House, restricting views, light and air and undermining its historic characteristics.

The inconsistencies with the Cow Hollow Design Guidelines and the San Francisco Residential Design Guidelines are significant impacts that require review under CEQA.<sup>40</sup>

- g. **BOARD OF SUPERVISORS RESOLUTIONS**: The MND fails even to mention the unanimous resolutions of the Board of Supervisors, finding that the proposed Project at 2417 Green Street “presents unusual circumstances relating to historic resources and hazardous materials and it appears as a result of those circumstances **the project may have a significant effect on the environment...**” (Exhibit A). Since the Board of Supervisors has found that the Project “may have a significant effect on the environment,” which is the exact legal finding to require an EIR, an EIR is required as a matter of law.

An EIR is required because eminently well-qualified experts and the Board of Supervisors have concluded that the proposed Project will have adverse impacts on the historic Coxhead House. It is crucial to implement all feasible mitigation measures and project alternatives to reduce impacts to the historic Coxhead House, including risks of catastrophic ground movement and seismic instability.

### **3. The Developer Has Taken the Official Position that a Project that Affects an Historic Building May not be Exempted from CEQA Review.**

The Developer, has taken the official legal position that a project that may adversely impact an historic building may not be exempted from CEQA review. Mr. Durkin himself filed a CEQA appeal concerning a project at 1026 Clayton Street in the Ashbury Heights neighborhood, located adjacent to Mr. Durkin’s own property. In that appeal, Mr. Durkin argued that the 1026 Clayton Project may affect an historically significant building, and that as a result, it may not be exempted from CEQA review.

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<sup>39</sup> *Id.*, at p. 31.

<sup>40</sup> *Kutzke v. City of San Diego*, 11 Cal. App. 5th 1034, 1041 (2017).



(Exhibit P). However, unlike in this case, where the Coxhead House has been deemed clearly eligible for listing on the National Register of Historic Places, 1026 Clayton is not listed as eligible on any registry.

Certainly, if Mr. Durkin believes that a project that may affect an unlisted, not truly historic building may not be exempted from CEQA review, then he must agree that a project that will adversely affect a property that is clearly eligible for the National Register of Historic Places may also not be exempted from CEQA. Mr. Durkin cannot have it both ways. He should not be allowed to argue for CEQA review when it suits his interests, but not apply the same rule to his own projects.

#### 4. INACCURATE PROJECT DESCRIPTION.

The Project has been revised substantially since the time of the FMND. No CEQA document has analyzed the current Revised Project, which is significantly different from the Project described in the FMND. Therefore, the Project description in the MND is inaccurate as it does not describe or analyze the Project that will actually be approved. As such, the MND is inadequate as an informational document and must be set aside.

A negative declaration must accurately describe the proposed project.<sup>41</sup> “An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient [CEQA document].”<sup>42</sup> The MND stated at page 64, “2417 Green Street is in NO WAY PHYSICALLY CONNECTED to 2421 Green Street.” (Emphasis in original). In fact, they are bonded together in many places. This fact is of critical importance and renders the Project description fundamentally inaccurate.

The Project described in the MND is not the Project that will be approved. In the case of *Washoe Meadows Community v. Department of Parks and Recreation*<sup>43</sup> the court explained that an unstable project description “precludes ‘informed decisionmaking and informed public participation.’” The court upheld the lower court’s ruling in favor of the petitioners, agreeing with the lower court that “for a project to be stable, the **DEIR, the FEIR, and the final approval must describe substantially the same project.**”<sup>44</sup> Here, the PMND and FMND describe an entirely different project than was ultimately approved by the Planning Commission. The Revised Project was not described or analyzed in any CEQA document. As a result, the MND fails to meet its basic requirement to accurately describe the Project that will ultimately be approved. The MND must therefore be set aside.

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<sup>41</sup> *Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180; CEQA Guidelines §15071(a).

<sup>42</sup> *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193;

*Stopthemillenniumhollywood v. City of Los Angeles* (2019) 39 Cal. App. 5th 1, 16.

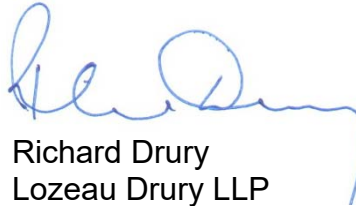
<sup>43</sup> 17 Cal.App.5th 277, 288 (2017).

<sup>44</sup> *Washoe*, 17 Cal.App.5th at 288 [emphasis added].

## **VI. CONCLUSION**

For the above reasons, we respectfully request that the Board of Supervisors reverse the approval the Mitigated Negative Declaration. An Environmental Impact Report should be required for the proposed Project. We also ask the Board to reverse the staff finding that the SSPA does not apply to the Project, and direct staff to determine that the SSPA does apply to the Project and require implementation of all the safeguards of the SSPA. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Richard Drury', with a long horizontal flourish extending to the right.

Richard Drury  
Lozeau Drury LLP

# EXHIBIT A

[Adopting Findings Reversing the Categorical Exemption Determination - 2417 Green Street]

**Motion adopting findings reversing the determination by the Planning Department that the proposed project at 2417 Green Street is categorically exempt from further environmental review.**

WHEREAS, On May 16, 2017, the Planning Department determined that the proposed project at 2417 Green Street ("Project") is exempt from environmental review under the California Environmental Quality Act ("CEQA"), the CEQA Guidelines, and San Francisco Administrative Code, Chapter 31; and

WHEREAS, The proposed Project involves alterations to an existing four-story-over-basement single-family residence with one vehicle parking space, which alterations would include excavation to add two vehicle parking spaces; a three-story rear addition; facade alterations and foundation replacement; and lowering the existing building; and

WHEREAS, On May 16, 2017, pursuant to Title 14 of the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387), the Planning Department determined that the Project is exempt from environmental review under Class 1 of the CEQA Guidelines (14 Cal. Code Reg. Section 15301), which provides an exemption for minor alterations to existing facilities including demolition of up to three single-family residences in urban areas; and

WHEREAS, On November 22, 2017, an appeal of the categorical exemption was filed by Richard Drury and Rebecca Davis of Lozeau Drury LLP on behalf of Philip Kaufman ("Appellant"); and

1 WHEREAS, By memorandum to the Clerk of the Board dated November 30, 2017, the  
2 Planning Department's Environmental Review Officer determined that the appeal was timely  
3 filed; and

4 WHEREAS, On January 9, 2018, this Board held a duly noticed public hearing to  
5 consider the appeal of the exemption determination filed by Appellant and, following the public  
6 hearing, reversed the exemption determination; and

7 WHEREAS, In reviewing the appeal of the exemption determination, this Board  
8 reviewed and considered the exemption determination, the appeal letter, the responses to the  
9 appeal documents that the Planning Department prepared, the other written records before  
10 the Board of Supervisors and all of the public testimony made in support of and opposed to  
11 the exemption determination appeal; and

12 WHEREAS, At the January 9, 2018, appeal hearing before this Board, Appellant  
13 submitted additional information in support of the appeal, including an engineering report by  
14 Lawrence B. Karp ("Karp Report"); and

15 WHEREAS, The Karp Report and other information submitted at and prior to the  
16 January 9, 2018, appeal hearing constituted substantial evidence that the Project, if approved,  
17 may result in one or more substantial adverse changes in the significance of the neighboring  
18 historic resource located at 2421 Green Street that have not been sufficiently addressed in the  
19 Categorical Exemption for the Project; and

20 WHEREAS, At and prior to the January 9, 2018, appeal hearing, Appellant and other  
21 members of the public submitted substantial evidence, including a report by certified  
22 hydrogeologist Matthew Hagemann, C. Hg., that the Project may disturb potentially  
23 contaminated soils at the Project site; and

24 WHEREAS, Following the conclusion of the public hearing, the Board of Supervisors  
25 conditionally reversed the exemption determination for the Project subject to the adoption of



1 these written findings of the Board in support of such determination based on the written  
2 record before the Board of Supervisors as well as all of the testimony at the public hearing in  
3 support of and opposed to the appeal; and

4 WHEREAS, The Board finds that the Karp Report and other information submitted at  
5 and prior to the January 9, 2018, appeal hearing constituted substantial evidence not  
6 previously identified that affect the CEQA evaluation set forth in the Categorical Exemption  
7 regarding how the Project may impair the significance of an historic resource by causing  
8 impacts to its immediate surroundings; and

9 WHEREAS, The Board further finds that the public comment provided at and prior to  
10 the January 9, 2018, hearing, including a report by certified hydrogeologist Matthew  
11 Hagemann, C. Hg., constituted substantial evidence that the Project will disturb potentially  
12 contaminated soils; and

13 WHEREAS, The written record and oral testimony in support of and opposed to the  
14 appeal and deliberation of the oral and written testimony at the public hearing before the  
15 Board of Supervisors by all parties and the public in support of and opposed to the appeal of  
16 the exemption determination is in the Clerk of the Board of Supervisors File No. 171267, and  
17 is incorporated in this motion as though set forth in its entirety; and

18 WHEREAS, This Board considered these issues, heard testimony, and shared  
19 concerns that further information and analysis was required regarding the proposed Project at  
20 2417 Green Street; now, therefore be it

21 MOVED, That In light of this information, the Board finds that there is substantial  
22 evidence in the record before the Board that the Project proposed at 2417 Green Street  
23 presents unusual circumstances relating to historic resources and hazardous materials and it  
24 appears as a result of those circumstances the project may have a significant effect on the  
25

environment and, based on the facts presented to the Board of Supervisors on the hearing on January 9, 2018, the Project is therefore not Categorically Exempt from CEQA review.

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# City and County of San Francisco

## Tails

### Motion: M18-012

City Hall  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102-4689

**File Number:** 180123

**Date Passed:** February 06, 2018

Motion adopting findings reversing the determination by the Planning Department that the proposed project at 2417 Green Street is categorically exempt from further environmental review.

February 06, 2018 Board of Supervisors - AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE

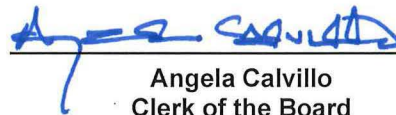
Ayes: 11 - Breed, Cohen, Fewer, Kim, Peskin, Ronen, Safai, Sheehy, Stefani, Tang and Yee

February 06, 2018 Board of Supervisors - APPROVED AS AMENDED

Ayes: 11 - Breed, Cohen, Fewer, Kim, Peskin, Ronen, Safai, Sheehy, Stefani, Tang and Yee

File No. 180123

I hereby certify that the foregoing Motion was APPROVED AS AMENDED on 2/6/2018 by the Board of Supervisors of the City and County of San Francisco.

  
Angela Calvillo  
Clerk of the Board



# EXHIBIT B



# SAN FRANCISCO PLANNING DEPARTMENT

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## Discretionary Review Action DRA-708

HEARING DATE: JULY 16, 2020

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

Reception:  
**415.558.6378**

Fax:  
**415.558.6409**

Planning  
Information:  
**415.558.6377**

*Case No.:* 2017-002545DRP-03  
*Project Address:* 2417 Green Street  
*Permit Application:* 2017.0428.5244  
*Zoning:* RH-1 (Residential, House, One-Family)  
40-X Height and Bulk District  
*Block/Lot:* 0560 / 028  
*Applicant:* Chris Durkin  
474 Euclid Avenue  
San Francisco, CA 94118  
*Dr Requestors:* Philip Kaufman  
2421 Green Street  
San Francisco, CA 94118  
Susan Byrd & Mark Lampert  
2415 Green Street  
San Francisco, CA 94118  
Carlos & Louise Bea  
2727 Pierce Street  
San Francisco, CA 94118  
*Staff Contact:* Christopher May – (415) 575-9087  
[christopher.may@sfgov.org](mailto:christopher.may@sfgov.org)

**ADOPTING FINDINGS RELATED TO TAKING DISCRETIONARY REVIEW OF RECORD NO. 2017-002545DRP-03 AND THE APPROVAL OF BUILDING PERMIT APPLICATION NO. 2017.0428.5244 PROPOSING HORIZONTAL REAR ADDITIONS, PARTIAL BASEMENT EXCAVATION AND THE CREATION OF AN ACCESSORY DWELLING UNIT WITHIN THE EXISTING 4-STORY, SINGLE-FAMILY DWELLING AT 2417 GREEN STREET WITHIN THE RH-1 (RESIDENTIAL-HOUSE, ONE-FAMILY) ZONING DISTRICT AND A 40-X HEIGHT AND BULK DISTRICT.**

### PREAMBLE

On April 28, 2017, Chris Durkin filed for Building Permit Application No. 2017.0428.5244 proposing one- and three-story horizontal rear additions, 3rd and 4th floor vertical additions, and to lower by approximately two feet all floor plates within the existing 4-story single-family dwelling at 2417 Green Street within the RH-1 (Residential-House, One-Family) Zoning District and a 40-X Height and Bulk District. The floor area would increase from approximately 4,118 square feet to approximately 5,115 square feet. The project also proposed alterations to the front façade, interior modifications including the expansion of the existing basement level garage to accommodate another off-street parking space, and the partial excavation and terracing of the rear yard.

On November 17 and 21, 2017, Philip Kaufman, Susan Byrd & Mark Lampert, and Carlos & Louise Bea (hereinafter “Discretionary Review (DR) Requestors”) filed applications with the Planning Department

(hereinafter "Department") for Discretionary Review (2017-002545DRP-03) of Building Permit Application No. 2017.0428.5244.

Following the three subsequent DR filings, the project sponsor revised the project by including a one-bedroom accessory dwelling unit (ADU) occupying the entire first floor of the project, measuring approximately 1,023 square feet.

On June 26, 2019, Environmental Planning staff issued a Preliminary Mitigated Negative Declaration, which was subsequently appealed by Richard Drury of Lozeau Drury, LLP, on behalf of the owner of 2421 Green Street, also one of the DR requestors.

At the January 9, 2020 public hearing, the Planning Commission adopted a motion upholding the MND, which included site-specific mitigation measures to ensure that any potential adverse impacts that excavation associated with the project might have on the adjacent historic resource at 2421 Green Street would be reduced to a less-than-significant level, pursuant to the California Environmental Quality Act (CEQA). After hearing and closing public comment, the Commission continued the requests for Discretionary Review and directed Planning staff to mediate between the project sponsor and the DR requestors in an attempt to negotiate a mutually-satisfactory modification to the project.

On June 15, 2020 and July 10, 2020, Planning Department staff hosted two virtual mediation meetings with the project sponsor and the DR requestors, in accordance with the Commission's direction.

On July 12, 2020, the Project Sponsor submitted revised plans resulting in a reduction in the depth of the horizontal rear addition at all four floors totaling approximately 718 square feet and a reduction in the amount of excavation totaling approximately 194 cubic yards. The revised project include a first-floor ADU measuring approximately 900 square feet, a second parking space in the basement level, but do not include the lowering of any of the existing floor plates as originally proposed.

On July 16, 2020, the San Francisco Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting on Discretionary Review Application **2017-002545DRP-03**.

The Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of the applicant, Department staff, and other interested parties.

## **ACTION**

The Commission reaffirms their January 9, 2020 upholding of the Mitigated Negative Declaration and hereby takes Discretionary Review requested in Record No. **2017-002545DRP-03** and approves Building Permit Application 2017.0428.5244, as revised in the plans dated July 12, 2020, with the conditions enumerated below:

1. The site-specific mitigation measure outlined on pages 81 and 82 of the Mitigated Negative Declaration dated January 9, 2020 shall be implemented in order to ensure that any potential adverse impacts that excavation associated with the project might have on the adjacent historic resource at 2421 Green Street will be reduced to a less-than-significant level.

**APPEAL AND EFFECTIVE DATE OF ACTION:** Any aggrieved person may appeal this Building Permit Application to the Board of Appeals only after the Department of Building Inspection (DBI) takes action (issuing or disapproving) the permit. Such appeal must be made within fifteen (15) days of DBI's action on the permit. For further information, please contact the Board of Appeals at (415) 415-575-6880, 1650 Mission Street # 304, San Francisco, CA, 94103-2481.

**Protest of Fee or Exaction:** You may protest any fee or exaction subject to Government Code Section 66000 that is imposed as a condition of approval by following the procedures set forth in Government Code Section 66020. The protest must satisfy the requirements of Government Code Section 66020(a) and must be filed within 90 days of the date of the first approval or conditional approval of the development referencing the challenged fee or exaction. For purposes of Government Code Section 66020, the date of imposition of the fee shall be the date of the earliest discretionary approval by the City of the subject development.

If the City has not previously given Notice of an earlier discretionary approval of the project, the Planning Commission's adoption of this Motion, Resolution, Discretionary Review Action or the Zoning Administrator's Variance Decision Letter constitutes the approval or conditional approval of the development and the City hereby gives **NOTICE** that the 90-day protest period under Government Code Section 66020 has begun. If the City has already given Notice that the 90-day approval period has begun for the subject development, then this document does not re-commence the 90-day approval period.

I hereby certify that the Planning Commission took Discretionary Review and approved the building permit as referenced in this action memo on July 16, 2020.



Jonas P. Ionin  
Commission Secretary

AYES: Koppel, Moore, Johnson, Fung, Diamond, Imperial, Chan

NAYS: None

ABSENT: None

ADOPTED: July 16, 2020

# EXHIBIT C



# SAN FRANCISCO PLANNING DEPARTMENT

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## Mitigated Negative Declaration

*PMND Date:* June 26, 2019; amended on January 9, 2020 (amendments to the initial study are shown as deletions in ~~striethrough~~ and additions in double underline)

*Case No.:* **2017-002545ENV**

*Project Title:* **2417 Green Street**

*BPA Nos.:* 201704285244

*Zoning:* RH-1 [Residential-House, One Family] Use District  
40-X Height and Bulk District

*Block/Lot:* 0560/028

*Lot Size:* 2,500 square feet

*Project Sponsor:* Chris Durkin, 2417 Green Street, LLC  
(415) 407-0486

*Lead Agency:* San Francisco Planning Department

*Staff Contact:* Jeanie Poling – (415) 575-9072  
jeanie.poling@sfgov.org

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Planning  
Information:  
**415.558.6377**

### PROJECT DESCRIPTION:

The project site is on the south side of Green Street on the block bound by Green, Pierce, Scott, and Vallejo streets in the Pacific Heights neighborhood. The 2,500-square-foot project site contains a vacant four-story single-family residential building constructed circa 1905. The residence encompasses the front (northern) two thirds of the lot. The property at its Green Street frontage slopes with an elevation of approximately 150 feet along the western (up slope) side to 145 feet along eastern (down-slope) side. The project would lower building floor plates by approximately 2 feet, construct one- and three-story horizontal rear additions, and construct third and fourth floor vertical additions above a portion of the existing building. The floor area would increase from approximately 4,118 square feet to approximately 5,115 square feet. A one-bedroom accessory dwelling unit measuring approximately 1,023 square feet would be added on the first floor. The project also proposes a partial excavation of the rear yard for a sunken terrace, façade alterations, interior modifications, and expansion of the existing basement level garage to accommodate one additional vehicle, for a total of two vehicle parking spaces.

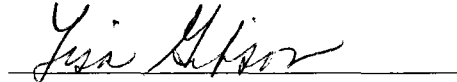
### FINDING:

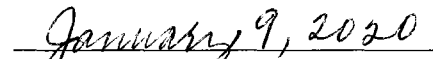
This project could not have a significant effect on the environment. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached. Mitigation measures are included in this project to avoid potentially significant effects. See pages 81–82.

Mitigated Negative Declaration  
January 9, 2020

CASE NO. 2017-002545ENV  
2417 Green Street

In the independent judgment of the Planning Department, there is no substantial evidence that the project could have a significant effect on the environment.

  
\_\_\_\_\_  
Lisa Gibson  
Environmental Review Officer

  
\_\_\_\_\_  
Date of Issuance of Final Mitigated  
Negative Declaration

cc: Chris Durkin, Christopher May, M.D.F



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# **Initial Study**

## **2417 Green Street**

### **Planning Department Case No. 2017-002545ENV**

#### **A. INTRODUCTION**

The San Francisco Planning Department (the planning department) published a categorical exemption for the proposed project on May 16, 2017. The categorical exemption was appealed and heard by the Board of Supervisors on January 9, 2018. The Board of Supervisors upheld the appeal and, on February 6, 2018, issued Motion No. M18-12, which stated, “[T]he Board finds that there is substantial evidence in the record before the Board that the Project proposed at 2417 Green Street presents unusual circumstances relating to historic resources and hazardous materials and it appears as a result of those circumstances the project may have a significant effect on the environment and, based on the facts presented to the Board of Supervisors at the hearing on January 9, 2018, the Project is therefore not Categorically Exempt from CEQA review.” Accordingly, the planning department has prepared this initial study to evaluate the potential impacts of the 2417 Green Street project. The concerns raised in the appeal and during the appeal hearing are addressed below in Sections F.3, Cultural Resources; F.15, Geology and Soils; and F.17, Hazardous Materials.

#### **B. PROJECT DESCRIPTION**

##### **Project Location**

The project site is located on the south side of Green Street on the block bound by Green, Pierce, Scott, and Vallejo streets in the Pacific Heights neighborhood (see Figure 1 on page ~~85~~ <sup>83</sup><sup>1</sup>). The 2,500-square-foot project site contains a vacant four-story, approximately 45-foot-tall, single-family residential building constructed circa 1905. The residence contains a total of approximately 4,450 square feet of space consisting of approximately 4,120 square feet of habitable space and a 337-square-foot garage, and encompasses the front (northern) two thirds of the lot. The property slopes along its Green Street frontage, with an elevation of approximately 150 feet along the western (up-slope) property line to 145 feet along the eastern (down-slope) property line. The rear of the property has been landscaped into three terraces with small (less than 3-foot-tall) retaining walls separating each terrace, descending from west to east. Each level has been backfilled to create a level patio and planting areas. The existing building has one off-street vehicle parking space that is accessed via a curb cut and driveway on Green Street. The project site is currently in a state of suspended construction, with the site having been partially excavated and some interior renovation work started.

##### **Project Characteristics**

The proposed project would lower all floor plates by approximately 2 feet, construct one- and three-story horizontal rear additions, and construct third and fourth floor vertical additions above a portion of the existing building. Project construction would also include a full structural and

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<sup>1</sup> Initial study figures can be found at the end of the document starting on page ~~83~~ <sup>85</sup>.

seismic upgrade. Existing and proposed site plans are shown on Figure 2 on page ~~85~~ 87, and proposed plans and elevations are shown on Figures 3 through 12 on pages ~~86~~ 88 through ~~96~~ 99.

The floor area would increase from approximately 4,120 square feet under existing conditions to approximately 5,120 square feet under the proposed project. A one-bedroom accessory dwelling unit measuring approximately 1,020 square feet would be added on the first floor, for a total of two residential units on the site. The project also proposes a partial excavation of the rear yard for a sunken terrace, façade alterations such as new window configurations and new windows and door, interior modifications, and expansion of the existing basement level garage to accommodate one additional vehicle, for a total of two off-street vehicle parking spaces. The size of the garage could accommodate more vehicles; however, the project sponsor intends to increase vehicular parking spaces from one to two and use the remaining space not designated for parking as storage. A new street tree would be added on the Green Street sidewalk. Table 1 summarizes the existing and proposed building characteristics.

**Table 1 – Summary of Existing and Proposed Building Characteristics**

	Existing	Proposed
Approximate Floor Area	4,120 square feet	5,120 square feet
Number of stories	4	4
Approximate Height	45 feet	45 feet
Dwelling units	1	2
Off-street vehicle parking spaces	1	2

Source: Dumican Mosey Architects, Site Permit/311 Notification Plans, revised June 6, 2018.

## Construction Schedule and Equipment

Project construction is anticipated to take approximately three to five months to complete. The project would require excavation of approximately 408 cubic yards of soil and rock to a depth of 13 feet below grade. Some project excavation below the existing building has already occurred (see Project History, below). Additional excavation would be conducted using a pneumatic pavement breaker (hand-held jackhammer) with a force rating of 90 pounds. Excavation would occur in sections for one to two weeks over a period of three to five months. No pile driving would be required as part of project construction. The foundation would be reinforced concrete with standard retaining walls around the garage and perimeter spread footings around the outside walls.

## Project History

The following bullet points provide a chronological summary of the various actions documented in the record related to the proposed project that have occurred since April 2017, when the project sponsor filed for a building permit associated with the proposed project. Text provided within quotes is verbatim as it appears in official documents and City records (building permit applications, complaints, and Board-issued California Environmental Quality Act [CEQA] findings).

- On April 28, 2017, the project sponsor filed Building Permit Application (BPA) #**201704285244** for the proposed excavation/addition project: “Horizontal addition. Expansion of existing garage in basement level, first, second, third, and fourth story horizontal rear yard addition; alterations to existing front façade; excavation and full foundation replacement; lowering existing building approximately 1’-11”; interior remodel throughout.”
- On May 16, 2017, the planning department issued a categorical exemption (planning department case number 2017-002545ENV) for the proposed excavation/addition project covered under BPA #201704285244: “Alterations to an existing four-story-over-basement, single-family residence with one vehicle parking space; excavate to add two vehicle parking spaces; three-story rear addition; facade alterations and foundation replacement; lower existing building.”<sup>2</sup>
- On May 18, 2017, the Department of Building Inspection (DBI, or the building department) issued BPA #**201705116316**: “Partial deteriorated basement wall and foundation replacement with new landscaping site wall at backyard.” DBI Info Sheet G-20 notes that foundation work does not require planning department approval, and thus did not route BPA #201705116316 to the planning department for review.
- On September 27, 2017, DBI received complaint no. 201708032: “Working beyond scope of BPA #201705116316. Doing horizontal addition.” DBI determined that the scope of work warranted review by the planning department. The planning department determined that one of the proposed retaining walls in the rear yard aligned with the proposed foundation of a proposed horizontal rear addition subject to San Francisco Planning Code section 311 neighborhood notification, which had not yet been completed.
- On September 28, 2017, DBI suspended BPA #201705116316, and on January 5, 2018, DBI closed the case, noting, “new permit has been issued to comply with complaint. DCP approved scope that was initially not reviewed by their department. kmh.”
- On October 2, 2017, the planning department opened enforcement action 2017-012992ENF in response to complaint no. 201708032.
- On October 2, 2017, the property owner submitted BPA #**201710020114**: “To comply [with] NOV201708032, administrative permit to facilitate Department of City Planning review, revision to BPA #201705116316, delete freestanding retaining wall at rear yard. No work under this permit. N/A Maher ordinance.”
- On October 10, 2017, after determining that the May 16, 2017 categorical exemption covered the excavation work, the planning department signed off on BPA #201710020114 for excavation below the existing building without the side wall of the proposed rear addition.
- On October 23, 2017, the planning department issued neighborhood notification pursuant to Planning Code section 311 for the proposed horizontal rear expansion under BPA #201704285244.

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<sup>2</sup> The currently proposed project is slightly smaller than the project analyzed in the May 16, 2017, categorical exemption.

- On October 28 and 30, 2017, three discretionary review requests were filed with the planning department (planning case nos. 2017-002545DRP, 2017-002545DRP-02, and 2017-002545DRP-03).
- On November 3, 2017, DBI issued BPA #201710020114 for legalization of the excavation work.
- On November 22, 2017, Richard Toshiyuki Drury of Lozeau Drury LLP filed an appeal of the May 16, 2017 categorical exemption with the Board of Supervisors on behalf of the adjacent property owner at 2421 Green Street, raising concerns over (1) impacts to historic resources at 2421 Green Street related to views, air, and light (2) impacts to historic resources at 2421 Green Street related to construction methodology, and (3) impacts related to the release of hazardous materials (Board of Supervisors File No. 171267). The planning department determined that the appeal was timely because the excavation permit (BPA #201710020114) was the approval action under CEQA.
- On December 12, 2017, DBI received complaint no. 201724852: “date last observed: 11-DEC-17; identity of person performing the work: Cannot confirm identity, was n; floor: roof; unit: N/A; exact location: Main Bldg; building type: Residence/Dwelling WORK W/O PERMIT; WORK BEYOND SCOPE OF PERMIT; ; additional information: Chimney has been removed from the building without a permit;”
- On December 20, 2017, DBI received complaint no. 201727021: “Front chimney is unsafe. Also refer to Complaint #201724852.” (On June 3, 2019, DBI closed the case.)
- On January 8, 2018, DBI received complaint no. 201830371: “Penetrations in roof made when chimneys were removed. Have not been sealed. Rain water entering building, also penetrations in walls at rear. A monthly fee will be assessed on NOV’S.” (On May 22, 2018, DBI determined the case abated after penetrations were sealed.)
- On January 9, 2018, the Board of Supervisors upheld the appeal of the categorical exemption issued on May 16, 2017, and on February 6, 2018, the Board issued CEQA findings that concluded:

[T]he Board finds that there is substantial evidence in the record before the Board that the Project proposed at 2417 Green Street presents unusual circumstances relating to historic resources and hazardous materials and it appears as a result of those circumstances the project may have a significant effect on the environment and, based on the facts presented to the Board of Supervisors on the hearing on January 9, 2018, the Project is therefore not Categorically Exempt from CEQA review.<sup>3</sup>

Following the Board hearing, the planning department rescinded the categorical exemption issued on May 16, 2017, and resumed environmental analysis, taking into consideration documents and oral testimony presented during the appeal period and at the appeal hearing.

- On May 8, 2018, DBI issued BPA #201804277607 for temporary shoring to comply with NOV 201727021 to shore up the remaining center brick façade.

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3 San Francisco Board of Supervisors, Motion No. M18-012, Adopting Findings Reversing the Categorical Exemption Determination – 2417 Green Street, Amended February 6, 2018, File No. 180123, available at <https://sfgov.legistar.com/View.ashx?M=F&ID=5792879&GUID=75361D57-546D-41F0-B0A3-D11B6083C3D2>.

- On June 11, 2018, DBI closed complaint no. 201727261 and noted, "Planning Department suspended two permits: 201705116316 and 201710020114."
- On June 22, 2018, the planning department issued a categorical exemption certificate for a revised building expansion project to lower all floor plates by approximately 2 feet; construct one- and three-story horizontal rear additions; construct third and fourth floor vertical additions; add an accessory dwelling unit; excavate at rear; and expand existing basement level garage to accommodate one additional vehicle (planning case no. 2017-002545ENV).
- On July 20, 2018, the representative of 2421 Green Street filed an appeal of the June 22, 2018 categorical exemption certificate, raising concerns regarding (1) impacts to historic resources at 2421 Green Street related to views, air, and light (2) impacts to historic resources at 2421 Green Street related to construction methodology, and (3) impacts related to the release of hazardous materials.
- On July 30, 2018, the planning department determined that the July 20, 2018 appeal of the June 22, 2018 categorical exemption certificate was not timely because the approval action under CEQA (i.e., the discretionary review hearing before the Planning Commission) had not yet occurred.
- On August 28, 2018, DBI opened complaint case no. 201888531, "Work being done without permits. PA# 201804277607 issued in May for temp." (DBI closed the case on September 4, 2018, stating "work being performed is approved.")
- On September 20, 2018, DBI received complaint no. 201804277607, "Beyond scope of work \$500. Tomporing shoring." (DBI closed the case on November 14, 2018, noting "work complete.")
- On September 21, 2018, DBI received complaint case no. 201893553: "date last observed: 20-SEP-18; time last observed: For the past year; identity of person performing the work: Christopher Durkin; exact location: Main Bldg; building type: Residence/Dwelling ABANDONED/DERELICT STRUCTURE; WORK W/O PERMIT; WORK BEYOND SCOPE OF PERMIT; OTHER BUILDING; additional information: The windows have been left open to the elements for over a year; there are animals, mold, asbestos; the building windows are adjacent to our home's windows." (DBI closed the case on September 25, 2018, noting "Permits for this project have been suspended and there is no work taking place on site. Permit for temp shoring 201804277607 is complete. No windows were open at time of visit. I asked to contractor to make sure site is secure.")
- On January 15, 2019, the planning department rescinded the categorical exemption issued on June 22, 2018 and began preparation of an initial study for the project.
- On January 18, 2019 DBI received complaint no. 201920322: "date last observed: 17-JAN-19; time last observed: Daily x2years; identity of person performing the work: Chris Durkin, developer; Eric ; floor: Third; exact location: Main Bldg; building type: Residence/Dwelling WATER INTRUSION; VACANT STRUCTURE; ; additional information: Windows on East side and at rear of vacant building remain open to rain and animal intrusion past 2 years. Neighbors have filed numerous complaints." (DBI closed the case on January 18, 2019 with the note, "Case closed and referred to CES by email per MH; slw.")

- On January 18, 2019, DBI received complaint no. 201920683: “vacant building.”
- On March 19, 2019, DBI received complaint no. 201937943: “Date last observed: 19-mar-19; time last observed: continual; identity of person performing the work: christopher durkin & ; floor: all storie; unit: single res; exact location: common area; building type: residence/dwelling water intrusion; abandoned/derelict structure; structural problems; work being done in dangerous manner; ; additional information: water is pouring out of vacant building making the front sidewalk slick and dangerous; \*.” (DBI closed the case on March 19, 2019, noting, “Case reviewed, to be referred to CES. mh/oh.”)

## **Project Approvals**

The proposed project requires issuance of building permits by DBI. A discretionary review hearing before the Planning Commission has been requested for BPA #201704285244, which is the building permit application that corresponds to the proposed project. The discretionary review decision would constitute the Approval Action for the Project that would establish the start of the 30-day period for the appeal of the final negative declaration to the Board of Supervisors, pursuant to section 31.04(h) of the San Francisco Administrative Code.

## **C. PROJECT SETTING**

### **Project Site and Surrounding Land Uses**

As noted above, the project site is on the south side of Green Street, within a city block bounded by Pierce Street to the east, Green Street to the north, Scott Street to the west, and Vallejo Street to the south. The immediately surrounding neighborhood is comprised primarily of two- to three-story single-family homes constructed between 1900 and the 1950s in a wide range of architectural styles. Lots on the block and in the vicinity are generally 25 feet wide by 125 feet deep, with some wider lots containing larger homes. The project block slopes upward to the southwest, generally on a greater than 20 percent slope.

The project block and immediately surrounding blocks are zoned RH-1 (Residential-House, One-Family). Nearby zoning districts include RH-3 (Residential-House, Three-Family) and RM-1 (Residential, Mixed, Low Density) zoning on blocks to the northeast, closer to the Union Street Neighborhood Commercial District (NCD). The nearest commercial district, the Union Street NCD, is two blocks to the north and two blocks to the east of the project site, and the Upper Fillmore NCD is located three blocks east and four blocks south of the project site. One block east of the project site on the opposite side of Green Street is St. Vincent de Paul Church and K-8 school. Streets in the vicinity are neighborhood residential, generally around 35-40 feet wide, and contain limited traffic. The sidewalks along the project site and block are approximately 15 feet wide. The project site is well served by public transportation. Within one-quarter mile of the project site, Muni operates the following bus lines: the 22 Fillmore, 24 Divisadero, 41 Union and 3 Jackson.

### **Cumulative Projects**

The cumulative context for land use development project effects is typically localized, within the immediate vicinity of the project site, or at the neighborhood level. Cumulative development in the project vicinity (within approximately a quarter-mile radius of the project site) includes the



projects listed in Table 2 and illustrated on Figure 13, on page ~~96~~ 98. These projects are either under construction or are projects for which the planning department has a project application on file. The areas and the projects relevant to the analysis vary, depending on the topic, as detailed in the cumulative analyses presented in subsequent sections of this document. As shown, these projects primarily include new residential uses.

**Table 2 – Projects within One-Quarter Mile of the Project Site**

Address	Planning Department Case No.	Project Description	Project Status
2301 Lombard St	2015-014040CUA	New construction of a mixed-use building with 22 dwelling units and 2,600 square feet of retail	Under construction
2346-2350 Union St	2017-007518PRJ	Addition of five new accessory dwelling units to an apartment building	Under construction
2637 Union St	2018-000739PRJ	Modification of a single-family home and addition of an accessory dwelling unit	Under planning department review
2831 Pierce St	2018-006138PRJ	Modification of a two-unit residential building. Addition of fourth floor.	Under planning department review
2582 Filbert St	2016-008605PRJ	New construction of a single-family home	Under construction
2237 Union St	2014-001423PRJ	Modification of a single-family home	Under construction
2251 Greenwich St	2014-002266PRJ	Demolition-reconstruction of Fire Station #16	Under construction
2261 Filbert St	2014-000645PRJ	Modification of a single-family home	Under construction

*Note:* Some projects listed as under construction may have been recently completed.

*Sources:* San Francisco Planning Department, 2018 Q4 Development Pipeline and San Francisco Property Information Map, reviewed in April 2019.

#### **D. COMPATIBILITY WITH EXISTING ZONING AND PLANS**

	<i>Applicable</i>	<i>Not Applicable</i>
Discuss any variances, special authorizations, or changes proposed to the planning code or zoning map, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City or region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## **San Francisco Planning Code**

The San Francisco Planning Code, which incorporates the Zoning Maps of the City and County of San Francisco (the City), governs permitted land uses, densities, and the arrangement of building structures within the city. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless (1) the proposed project conforms to the planning code, (2) allowable exceptions are granted pursuant to provisions of the planning code, or (3) amendments to the planning code are incorporated into the proposed project.

### ***Zoning and Density***

The project site is in a Residential-House, One Family (RH-1) zoning district and a 40-X height and bulk district. The RH-1 district is occupied almost entirely by single-family houses on lots 25 feet in width without side yards. Floor sizes and building styles vary but tend to be uniform within tracts developed in distinct time periods. Though built on separate lots, the structures have the appearance of small-scale row housing, rarely exceeding 35 feet in height. Front setbacks are common, and ground level open space is generous. The 40-X height/bulk district indicates a maximum height of 40 feet (with certain allowable exceptions), and “X” indicates that bulk limits are not applicable. The proposed project would be consistent with the existing planning code zoning and height and bulk designations because it would not exceed the existing zoning and density. Specifically, the building would remain a single-family residence as zoned, and would add an accessory dwelling unit, as permitted under Planning Code section 207(c)(6). Furthermore, the project would not increase the building height beyond the existing height of 45 feet, as measured pursuant to Planning Code section 260.<sup>4</sup> Thus the proposed project would be consistent with the planning code and would not require any variances, special authorizations, or changes to the planning code or zoning map.

## **Plans and Policies**

### ***San Francisco General Plan***

Development in San Francisco is subject to the San Francisco General Plan. The general plan provides general policies and objectives to guide all land use decisions in the City. Any conflicts between the proposed project and policies that relate to physical environmental issues are discussed in Section F, Evaluation of Environmental Effects. The compatibility of the proposed project with general plan policies that do not relate to physical environmental issues would be considered by decision-makers as part of their decision to approve or disapprove the proposed project. The project is a modification of a single-family home with the addition of an accessory dwelling unit. The project would be minor in scope, would not introduce incompatible land uses to the neighborhood, and would encourage housing production by adding the accessory dwelling unit. It would not otherwise conflict with any general plan policies or objectives. Thus, the project would not conflict with the San Francisco General Plan or any other adopted policy.

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4 At its highest point, the existing building is almost 45 feet tall. Since it is on an upsloping lot, the height varies along with the slope and gradually becomes shorter as the grade increases towards the rear. With the proposed alteration to the roofline, the project would result in a decrease in the building height at the front by approximately 3 feet.

### ***Proposition M – The Accountable Planning Initiative***

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added Section 101.1 to the City’s planning code to establish eight priority policies. These policies, and the corresponding sections of this document addressing the environmental issues associated with these policies, are as follows: (1) preservation and enhancement of neighborhood-serving retail uses; (2) protection of neighborhood character; (3) preservation and enhancement of affordable housing (Question 2b, Population and Housing, regarding housing displacement); (4) discouragement of commuter automobiles (Question 5a, Transportation and Circulation); (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership; (6) maximization of earthquake preparedness (Question 14a, Geology and Soils); (7) landmark and historic building preservation (Question 3a, Cultural Resources); and (8) protection of open space (Question 10a, Shadow, and Questions 11a and 11b, Recreation).

Prior to issuing a permit for any project that requires an initial study under CEQA, or for any demolition, conversion, or change of use, and prior to taking any action that requires a finding of consistency with the general plan, the City is required to find the proposed project or legislation consistent with the priority policies. The compatibility of the proposed project with general plan objectives and policies that do not relate to physical environmental issues will be considered by decision makers as part of their decision whether to approve or disapprove the proposed project. Any potential conflicts identified as part of that process would not alter the physical environmental effects of the proposed project.

### ***Regional Plans and Policies***

The principal regional planning agencies and their overarching policies and plans that guide planning in the nine-county Bay Area include the Metropolitan Transportation Commission’s and Association of Bay Area Governments’ *Plan Bay Area 2040*,<sup>5</sup> which is an integrated long-range transportation and land use plan to meet greenhouse gas reduction targets set by the California Air Resource Board, the Bay Area Air Quality Management District’s (the air district’s) *Bay Area 2017 Clean Air Plan* (2017 Clean Air Plan), the Metropolitan Transportation Commission’s *Regional Transportation Plan – Transportation 2035*, the San Francisco Regional Water Quality Control Board’s *San Francisco Basin Plan*, and the San Francisco Bay Conservation and Development Commission’s *San Francisco Bay Plan*.

Based on the location, size, and nature of the proposed project, no anticipated conflicts with regional plans would occur as a result of the proposed project.

### ***Required Approvals by Other Agencies***

See Section B, Project Description, for a list of required project approvals.

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5 Metropolitan Transportation Commission and the Association of Bay Area Governments. 2017. *Plan Bay Area 2040 Final Plan*. Available: <http://www.2040.planbayarea.org/what-is-plan-bay-area-2040>. Accessed: April 24, 2019.

## SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hydrology/Water Quality
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Wind	<input type="checkbox"/> Hazards & Hazardous Materials
<input type="checkbox"/> Population and Housing	<input type="checkbox"/> Shadow	<input type="checkbox"/> Mineral Resources
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Recreation	<input type="checkbox"/> Energy
<input type="checkbox"/> Tribal Cultural Resources	<input type="checkbox"/> Utilities/Service Systems	<input type="checkbox"/> Agriculture and Forestry Resources
<input type="checkbox"/> Transportation and Circulation	<input type="checkbox"/> Public Services	<input type="checkbox"/> Wildfire
<input type="checkbox"/> Noise	<input type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Mandatory Findings of Significance
<input type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Geology/Soils	

## E. EVALUATION OF ENVIRONMENTAL EFFECTS

All items on the initial study checklist that have been checked “Less than Significant Impact,” “No Impact,” or “Not Applicable” indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect relating to that topic. A discussion is included for those issues checked “Less than Significant Impact” and for most items checked with “No Impact” or “Not Applicable.” For all of the items checked “Not Applicable” or “No Impact” without discussion, the conclusions regarding potential significant adverse environmental effects are based upon field observation, staff experience and expertise on similar projects, and/or standard reference material available within the planning department, such as the planning department’s Transportation Impact Analysis Guidelines for Environmental Review, and the California Natural Diversity Data Base and maps, published by the California Department of Fish and Wildlife. For each checklist item, the evaluation has considered the impacts of the proposed project both individually and cumulatively.

### Analysis of Topics Raised in the Appeal of the Categorical Exemption

The following impact analyses address concerns that were raised in both appeals of the categorical exemption: Impact CR-1 (historic resources), Impact GE-1 (geology and soils), and Impact HZ-2 (hazardous materials).

### Public Resources Code Section 21099 – Aesthetics and Parking Analysis

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014.<sup>6</sup> Among other provisions, SB 743 amends CEQA by adding Public Resources

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<sup>6</sup> SB 743 is available at: [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140SB743](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743).

section 21099 regarding analysis of aesthetics and parking impacts for urban infill projects.<sup>7</sup> The CEQA Guidelines<sup>8</sup> were amended in 2019 to include a new section 15064.3 that addresses the provisions of SB 743.

Public Resources Code section 21099(d) states, “Aesthetic and parking impacts of a residential, mixed- use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.”<sup>9</sup> Accordingly, aesthetics and parking are not to be considered in determining whether a project has the potential to result in significant environmental effects for projects that meet all of the following three criteria:

- a) The project is in a transit priority area<sup>10</sup>
- b) The project is on an infill site<sup>11</sup>
- c) The project is residential, mixed-use residential, or an employment center<sup>12</sup>

The proposed project meets each of the above three criteria because it (1) is located within one-half mile of several bus transit stops that meet the definition in Public Resources Code section 21099(d) of a “major transit stop,” (2) is located on an infill site that is already developed with and surrounded by other urban development, and (3) is a residential project.<sup>13</sup> Thus, this initial study does not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.

Public Resources Code section 21099(e) states that a lead agency maintains the authority to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers, and that aesthetics impacts as addressed by the revised Public Resources Code do not include impacts on historical or cultural resources. Thus, there is no change in the planning department’s methodology related to design and historic review.

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7 Public Resources Code section 21099(d).

8 California Code of Regulations, Title 14, Division 6, Chapter 3.

9 Public Resources Code section 21099(d)(1).

10 Public Resources Code section 21099(a) defines a “transit priority area” as an area within one-half mile of an existing or planned major transit stop. A “major transit stop” is defined in section 21064.3 of the Public Resources Code as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

11 Public Resources Code section 21099(a) defines an “infill site” as a lot located within an urban area that has been previously developed, or a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

12 Public Resources Code section 21099(a) defines an “employment center” as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and located within a transit priority area.

13 San Francisco Planning Department, Transit-oriented Infill Project Eligibility Checklists for 2417 Green Street, February 1, 2019. This document (and all documents cited in this initial study unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case No. 2017-002545ENV.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>1. LAND USE AND PLANNING. Would the project:</b>					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact LU-1: The proposed project would not physically divide an established community. (Less than Significant)**

The proposed project involves modification and expansion of an existing single-family home on an established lot and the addition of one accessory dwelling unit. The project would not alter the established street grid or permanently close any streets or sidewalks. The project would not impede the passage of persons through construction of any physical barriers. Although portions of the sidewalk adjacent to the project site could be closed for periods of time during project construction (approximately three to five months), these closures would be temporary in nature. Therefore, the proposed project would not physically divide an established community and this impact would be less than significant.

**Impact LU-2: The proposed project would not cause a significant impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)**

Land use impacts could be considered significant if a proposed project conflicts with any plan, policy, or regulation adopted for the purpose of avoiding an environmental effect. However, a conflict with a plan, policy, or regulation adopted for the purpose of mitigating an environmental effect does not necessarily indicate a significant effect on the environment. The proposed project would result in an expansion of an existing (currently vacant) residential unit on the site and an addition of one accessory dwelling unit to the city housing stock and would not be expected to conflict with any applicable land use plan, policy, or regulation such that an adverse physical change would result. The project would be generally consistent with the land use policies outlined in the San Francisco General Plan, including promoting infill development, providing new housing, and concentrating more intense development near transit services. Moreover, the proposed residential use is permitted by city code and plans applicable to the area, and the project would be within the applicable bulk limits. Thus, the proposed project would not result in adverse physical changes in the environment related to conflicts with any plan, policy, or regulation adopted for the purpose of avoiding an environmental effect.

Furthermore, the proposed project would not conflict with any adopted environmental plan or policy, such as the Metropolitan Transportation Commission's and the Association of Bay Area Governments' Plan Bay Area 2040 or the air district's 2017 Clean Air Plan, which directly

addresses environmental issues and/or contains targets or standards that must be met in order to preserve or improve characteristics of the city's physical environment. See Section D, Compatibility with Existing Zoning and Plans, for a more detailed discussion of the proposed project's general consistency with applicable plans and policies. Thus, the proposed project would result in a less-than-significant impact with regard to consistency with existing plans and policies adopted for the purpose of avoiding an environmental effect.

**Impact C-LU-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the project vicinity, would result in less-than-significant cumulative land use impacts. (Less than Significant)**

The cumulative context for land use effects is typically localized, within the immediate vicinity of the project site, or at the neighborhood level. Table 2 on page 7 identifies development projects within a quarter-mile radius of the project site. All of the nearby cumulative projects would be constructed within their individual project sites and would perpetuate the existing land uses and land use pattern in the neighborhood (largely, single-family and some multi-family residential). None of these cumulative development projects would introduce incompatible uses that would adversely impact the existing character of the project vicinity. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a less-than-significant cumulative land use impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>2. POPULATION AND HOUSING. Would the project:</b>					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Impact PH-1: The proposed project would not induce substantial unplanned population growth. (Less than Significant)**

The project would enlarge one existing (currently vacant) single-family home and add one accessory dwelling unit. According to the 2017 America Communities Survey five-year estimates, Census Tract 132, where the project site is located, had a reported population of 4,044 residents. The U.S. Census population estimate for San Francisco in 2017 was 884,363 residents. Based on San

San Francisco's average household size of 2.35,<sup>14</sup> the two newly occupied dwelling units would accommodate approximately five residents. The five new residents would increase the population within the Census Tract 132 by approximately 0.012 percent and would increase the citywide population by approximately 0.0005 percent, which would not be considered substantial. Thus, population growth associated with the proposed project would not be substantial in relation to the overall population of the area, and this impact would be less than significant.

**Impact PH-2: The proposed project would not displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing. (No Impact)**

The project site is currently vacant; thus, no residents would be displaced. The project would result in construction of one net new dwelling unit on the site. Thus, there would be no impact related to displacement of people or housing units.

**Impact C-PH-1: The proposed project, cumulatively with other past, present and reasonably foreseeable future development, would not induce substantial population growth or displace substantial numbers of people or housing units. (Less than Significant)**

Table 2 on page 7 lists development projects within a quarter-mile radius of the project site. These cumulative development projects would not introduce incompatible uses that would adversely impact the existing character of the project vicinity. Moreover, projects in the City's development pipeline would result in population growth that is consistent with Association of Bay Area Governments' projections through 2040. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a less-than-significant cumulative land use impact.

The San Francisco General Plan 2014 Housing Element<sup>15</sup> anticipates continuation of the trend of residential population growth in San Francisco that has been in progress since at least 2000.<sup>16</sup> San Francisco Mayor's Executive Directive 17-02<sup>17</sup> calls for construction of "at least 5,000 units of new or rehabilitated housing every year for the foreseeable future," and for the implementation of policies to facilitate this construction. Any cumulative growth in the project area therefore is not expected to result in a cumulative demand for new housing, since this demand is already anticipated. For these reasons, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would increase the population in the area, but would not induce substantial population growth beyond that already anticipated to occur and this impact would be less than significant.

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14 U.S. Census, 2017, <https://www.census.gov/quickfacts/fact/table/sanfranciscocitycalifornia,sanfranciscocountycalifornia/HSD310217#view=wtot>, accessed January 31, 2019.

15 City of San Francisco, 2015, San Francisco General Plan 2014 Housing Element, April, [http://www.sf-planning.org/ftp/General\\_Plan/2014HousingElement-AllParts\\_ADOPTED\\_web.pdf](http://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf), accessed November 6, 2017.

16 The New York Times. Mapping the US Census 2010. Mapping the 2010 U.S. Census, San Francisco, <http://www.nytimes.com/projects/census/2010/map.html?view=PopChangeView&l=14&lat=37.77752894957491&lng=-122.41932345299993>, accessed May 2, 2018.

17 City and County of San Francisco Office of the Mayor, Executive Directive 17-02, <http://sfmayor.org/article/executive-directive-17-02>, accessed February 19, 2019.



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<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>3. CULTURAL RESOURCES. Would the project:</b>					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**Impact CR-1: The proposed project could cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5, including those resources listed in Articles 10 and 11 of the planning code. (Less than Significant with Mitigation)**

Historical resources are those properties that meet the definitions in section 21084.1 of CEQA and section 15064.5 of the CEQA Guidelines. Historical resources include properties listed in, or formally determined eligible for listing in, the California Register of Historical Resources (California Register) or in an adopted local historic register. Historical resources also include resources identified as significant in a historical resource survey, meeting one or more of the following criteria.

- Criterion 1 (Events): Is associated with events that have made a significant contribution to the broad pattern of California's history and cultural heritage;
- Criterion 2 (Persons): Is associated with the lives of persons important in our past;
- Criterion 3 (Architecture): Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Criterion 4 (Information Potential): Has yielded, or may be likely to yield, information important in prehistory or history.

Additionally, properties that are not listed but are otherwise determined to be historically significant, based on substantial evidence, would also be considered historical resources.

Potential impacts to historic resources are addressed in section 15064.5(b) of the CEQA Guidelines, which states, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the

environment.” A “substantial adverse change” is defined in the CEQA Guidelines as the “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.”<sup>18</sup> CEQA also defines “materially impaired” as work that “materially alters, in an adverse manner, those physical characteristics that convey the historical resource’s historical significance and justify its inclusion in or eligibility for inclusion in the California Register of Historical Resources or in a local register of historical resources.”<sup>19</sup>

Under CEQA Guidelines section 15064.5(b), a significant impact would occur if the project “demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance.” Under these provisions, the significance of a historical resource would be materially impaired—that is, a significant impact would occur—if the project would result in physical demolition, destruction, relocation, or alteration of the resource (which would be considered direct impacts of the project) or its immediate surroundings.

## **Project Site**

The planning department evaluated whether the building at 2417 Green Street is a historical resource as defined by CEQA. The planning department required the submittal of a historic resource evaluation and determined, based on the conclusions of that historic resource evaluation and additional independent analysis conducted by qualified planning department staff, that the existing structure on the project site is not a historical resource as defined by CEQA.<sup>20,21</sup> The following is a summary of the planning department’s findings.

The building located at 2417 Green Street was built circa 1905 and was first owned by Lonella H. Smith. Louis B. Floan was the contractor for the building, but no architect was identified. The building is a rectangular plan, three-story-over-basement, wood-frame, single-family residence with a side-facing gable roof and shingle and brick cladding. The building was altered in 1954 to insert a garage with concrete cladding, in 1972–1973 to replace the front entry porch, and at an unknown date to replace upper floor windows. While the building retains some characteristics of the First Bay Tradition style, including the simple wall surface, wood shingles, and small-scale ornamentation, it has been substantially altered such that it is not considered an outstanding example of this architectural style. Thus, the building at the project site is not a historical resource as defined by CEQA.

The planning department found that the existing building on the project site does not appear to be eligible for inclusion on the California Register either as an individual historic resource or as a contributor to a historic district. There is no information provided in the historical resource evaluation or in the planning department’s background files to indicate that the existing structure at 2417 Green Street is associated with events that have made a significant contribution to the broad

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<sup>18</sup> CEQA Guidelines, section 15064.5(b)(1).

<sup>19</sup> CEQA Guidelines, section 15064.5(b)(2).

<sup>20</sup> Tim Kelley Consulting, LLC, Historical Resource Evaluation Part 1, 2417 Green Street, San Francisco, California, April 2017.

<sup>21</sup> San Francisco Planning Department, Preservation Team Review Form, 2417 Green Street, May 10, 2017; and San Francisco Planning Department, Historic Resource Evaluation Response, 2417 Green Street, May 31, 2018.

patterns of local or regional history or the cultural heritage of California or the United States. Moreover, no significant historical figures are known to be associated with the existing building. Lastly, the property does not significantly embody the distinctive characteristics of the First Bay Tradition style, it is not the work of a master architect, and it does not possess high artistic value.

Furthermore, the existing building on the project site is not located within a California Register-eligible historic district. The historical resources evaluation found no cohesive collection of buildings in the immediate area that would indicate a possible district. The nearest historic district is the California Register-eligible Pacific Heights Historic District, which includes buildings immediately south of and 125 feet to the west of the subject building. The 2417 Green Street structure was found to not contribute to this district since the subject building and its immediate neighbors to the east are not associated with the architectural significance of the district. The district is characterized by large, formal, detached dwellings, typically designed by master architects and displaying a high level of architectural detailing and materials. The building at 2417 Green Street is builder-designed and displays a relatively vernacular style. While the properties to the west of 2417 Green Street may be eligible for inclusion in the district, the existing building on the project site was found to not contribute to the eligible Pacific Heights Historic District.

### **Adjacent Historic Resources**

The project site is located immediately adjacent to and east of an identified-eligible historic resource located at 2421 Green Street.<sup>22</sup> The rear yard of 2417 Green Street also abuts 2727 Pierce Street (City Landmark 51). Due to the proximity of two adjacent historic resources to the project site, potential direct and indirect impacts to both were analyzed and are discussed below.

### **Potential Direct Impacts to Adjacent Historic Resources**

As discussed in the planning department's Historic Resource Evaluation Response, the proposed project at 2417 Green Street would adhere to all planning department requirements with regard to rear yard setbacks and mid-block open space. It is unlikely that the proposed rear addition would cause a physical direct impact to the adjacent historic resources at 2421 Green Street or 2727 Pierce Street due to the fact that the addition would not physically attach to or require physical alterations of any components of these adjacent properties. The proposed project at 2417 Green Street would be confined to the boundary of the subject lot. The proposed rear addition would incorporate 3'-4" side setbacks at the basement level, 0'-3" side setbacks at the first floor, and 3'-10" side setbacks at the second, third, and fourth floors between the addition and the immediately adjacent historic resource at 2421 Green Street and would sit below the overall height of the historic resource at 2421 Green Street.<sup>23</sup> The size and location of the addition would not require the removal or infill of property line windows at 2421 Green Street.<sup>24</sup>

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<sup>22</sup> 2421 Green Street was identified in the planning department's 1976 Survey and given a rating of "4." The property was also discussed in *Here Today: San Francisco's Architectural Heritage*, by Roger R. Olmsted and Tom H. Watkins (page 270).

<sup>23</sup> At its highest point, the existing building is almost 45 feet tall. Since it is on an upsloping lot, the height varies along with the slope and gradually becomes shorter as the grade increases towards the rear. With the proposed alteration to the roofline, the project would result in a decrease in the building height at the front by approximately 3 feet.

<sup>24</sup> Property line windows are not protected in the San Francisco Planning Code.

During the exemption appeal, the appellant's engineer cited an elevation detail on the foundation replacement permit (BPA #201705116316) drawings that indicated a connection with the foundation of 2421 Green Street, discussed in more detail under Impact GE-1 on page 59 ~~60~~. Given the history of this project, as outlined in the Project History section above, combined with the concerns raised by the Board of Supervisors at the appeal hearing, this initial study finds that project construction could compromise the structural integrity of the historic adjacent foundation at 2421 Green Street. As noted in the CEQA findings by the Board of Supervisors during the appeal of the categorical exemption,<sup>25</sup> such an impact could be considered significant. To address this concern, the planning department coordinated with the building department during the preparation of this initial study, and had the Plan Review Services Division of the building department review the project's geotechnical investigation in advance of when they would typically do so.

**Mitigation Measure M-GE-1, Ongoing Monitoring By and Coordination with the Planning Department and the Department of Building Inspections Prior to and During the Construction Phase Regarding Compliance with Geotechnical Requirements**, provided below for ease of reference and also discussed further on pages 643-65, would obligate the project sponsor to maintain ongoing coordination with DBI and the planning department, pursuant to a required milestone schedule, prior to and over the course of project construction for the specific purposes of ensuring the security and stability of the project site and adjacent historic resources.

**Mitigation Measure M-GE-1: Ongoing Monitoring By and Coordination with the Planning Department and the Department of Building Inspections Prior to and During ~~the Construction Phase Regarding Compliance with Geotechnical Requirements~~.** Pursuant to the San Francisco Department of Building Inspection process, the project sponsor (and their design and construction team, ~~geotechnical engineer, and contractor~~, as applicable) ~~will~~ shall be subject to ongoing monitoring by and coordination requirements with the planning department and the building department regarding plan check reviews and building inspections prior to and during construction work. ~~This process will include the following requirements:~~

- ~~• Prior to commencement of construction, the project sponsor shall submit to the planning department and building department a report outlining anticipated construction milestones with corresponding (approximate) dates of reaching those milestones as well and all memoranda and/or reports anticipated to be prepared or approved at those milestones. The report shall address how all code requirements will be met, including responsible parties and the city agency providing oversight. The report shall be reviewed and approved by the planning department and the building department prior to commencement of construction.~~
- ~~• Once construction commences, the sponsor shall notify the planning department and the building department (when coordination with the building department is~~

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<sup>25</sup> San Francisco Board of Supervisors, Motion No. M18-012, Adopting Findings Reversing the Categorical Exemption Determination – 2417 Green Street, Amended February 6, 2018, File No. 180123, available at <https://sfgov.legistar.com/View.ashx?M=F&ID=5792879&GUID=75361D57-546D-41F0-B0A3-D11B6083C3D2>

~~not already included as typical part of the process) when the above milestones have been reached and their outcomes. Specifically, all memoranda and/or reports issued at times of those milestones shall be provided to the planning department and the building department.~~<sup>26</sup>

In conjunction with its submittal of structural plans, the project sponsor shall submit to the building department construction documents that identify anticipated significant construction milestones when a field report and/or memorandum by the engineer(s) of record shall be submitted to the planning and building departments. The building department shall review and determine whether to approve the list of significant reporting milestones as part of its approval of structural plans.

The engineer(s) of record shall notify the planning and building departments when milestones indicated on the construction documents have been reached, and their outcomes. Specifically, the project sponsor's engineer of record shall submit field reports and/or memoranda documenting each milestone to the planning and building departments.

Pursuant to planning department policy, any memoranda and/or reports prepared by the project sponsor and/or a consultant working for the project sponsor shall adhere to the planning department's protocols of objectivity.

Structural and geotechnical observation and inspection shall be provided onsite during construction.

With implementation of Mitigation Measure M-GE-1, potential significant impacts related to historical resources (including construction-related impacts on the adjacent historical resource at 2721 Green Street) would be reduced to a less-than-significant level.

Additionally, the rear yard of 2727 Pierce Street (City Landmark 51) that abuts the rear yard of 2417 Green Street would not be physically impacted by the proposed rear addition, which would be entirely located within the buildable area of the lot such that a planning code-compliant 25-foot rear yard is maintained. This would provide significant distance between the rear yard of 2727 Pierce Street and the proposed rear addition at 2417 Green Street such that there would be no potential for a direct impact to the landmark building.

### ***Potential Indirect Impacts to Adjacent Historic Resources***

Construction impacts to the adjacent building at 2421 Green Street are addressed under Impact NO-2 (vibration) on page 314 and Impact GE-1 (geology and soils) on page 59 60.

This section addresses the potential for the project to result in indirect impacts to the historic setting of the immediately adjacent historic resource at 2421 Green Street and the nearby 2727 Pierce Street (City Landmark 51), including impacts related to public views of the 2421 Green Street structure.

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<sup>26</sup> Pursuant to Department policy, any memoranda and/or reports prepared by project sponsor and/or a consultant working for the project sponsor shall adhere to Planning Department's protocols of objectivity.

The loss of private views does not constitute a significant impact under CEQA and is and therefore is not included in this analysis.

The current setting of the adjacent historic resources at 2421 Green Street and 2727 Pierce Street is comprised of standard city lots subject to the restrictions and requirements of the RH-1 (Residential-House, One Family) zoning district and 40-X height and bulk district. Historically, the subject block remained unified and largely undeveloped until the Casebolt House (City Landmark 51) was constructed at 2727 Pierce Street in 1867. The block was subsequently subdivided, and lots were sold for private development that ultimately resulted in the current setting, comprised of multi-level single-family residences that adhere to the slope of the land and have a strong pattern of mid-block open space.

The existing footprint of 2417 Green Street is not a precondition for 2421 Green Street or 2727 Pierce Street to convey their historic architectural designs, for which they have been found to be significant under Article 10 of the planning code and the National Register, respectively. The setting of the two historic resources has changed over time to accommodate an ever-changing urban environment. Although the 2417 Green Street project includes a rear expansion that would be visible from 2421 Green Street and from 2727 Pierce Street, this change would not physically impact either resource such that they would no longer be able to convey their architectural significance.

The designating ordinance for 2727 Pierce Street (City Landmark 51) identifies character-defining features associated with the significance of the property. These features include architectural details that collectively illustrate the property's high-style Italianate design. Features associated with the setting of the landmark (i.e., landscaping, open space, and views) are not identified in the designating ordinance as character-defining features. Although there is an extant garden at the rear of the property, it is not identified as a character-defining feature in the landmark designation report. The proposed project at 2417 Green Street would be visible from the rear yard of 2727 Pierce Street but it would not physically touch or materially impair any of the landmark's character-defining features such that it would no longer be able to convey its significance. Therefore, the proposed project at 2417 Green Street would not cause a significant adverse impact on 2727 Pierce Street.

The adjacent historic resource at 2421 Green Street is currently undergoing consideration for listing in the National Register of Historic Places for its association with the life and work of master architect Ernest Albert Coxhead and for its representation as an outstanding example of the First Bay Tradition architectural style.<sup>27</sup> Based on the information presented in the National Register nomination form, the intent of the original design of 2421 Green Street was to take advantage of the view(s) from the eastern, western, and northern elevations. While this design intent is important to understanding the original design, it is only one aspect of the overall design. Other aspects that speak to the architectural significance of 2421 Green Street include its exterior shingle

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<sup>27</sup> Carol L. Karp, *Nomination for Listing, National Register of Historic Places, Architect Ernest Coxhead's Residence & Studio, 1893, 2421 Green Street, San Francisco, California*, August 28, 2017. Submitted with November 22, 2017, CEQA Exemption Appeal, Board of Supervisors File No. 171267. Available at <https://sfgov.legistar.com/View.ashx?M=F&ID=5672392&GUID=AC8156DB-3B1C-4308-AD5D-56087798A95E>.

cladding, general form and mass, steeply pitched roof forms, and fenestration patterns. The quality of view(s) from the windows that would be blocked by the proposed project is not an aspect of historic significance and is not character-defining to the architectural significance of the building. Rather, these are private views from a private residence, some of which would be noticeably affected by the proposed project, but not to the degree that would materially impair the ability of this resource to convey its historical importance. Moreover, private views are typically not analyzed under CEQA. Additionally, the 2421 Green Street was constructed within an ever-changing urban environment that saw rapid residential development in the years following construction – specifically on adjacent lots – that resulted in the partial obstruction of these views. The site also has a “[s]outhern rear yard that captures direct sunlight nurturing a garden that backs onto neighboring gardens creating a park-like setting at the back of the house.” Although the overall setting of 2421 Green Street is described as “park-like” in the National Register Nomination Form, it is located within an urban environment of developed city lots.

The proposed project at 2417 Green Street would not physically touch or alter the exterior features of 2421 Green Street, as the project would be confined to the boundaries of the 2417 Green Street lot. The proposed rear addition would incorporate 3’-4” side setbacks at the basement level, 0’-3” side setbacks at the first floor, and 3’-10” side setbacks at the second, third, and fourth floors to allow for space between the addition and the immediately adjacent properties and would sit below the overall height of the historic resource at 2421 Green Street such that no existing windows would require physical alteration. The proposed rear addition may alter the amount of direct sunlight on the rear garden at 2421 Green Street but would not significantly diminish or alter the “park-like” setting at the rear. The proposed project would maintain a 25-foot rear yard that would adhere to the rear yard requirements of the planning code and would maintain mid-block open space consistent with residential design guidelines such that these features would continue to relate to adjacent properties. Although the proposed project would be visible from the east-facing windows of 2421 Green Street, it would not physically touch or alter any of the historic resource’s character-defining features. The 2421 Green Street property would continue to convey its historical significance. Therefore, the project at 2417 Green Street would not cause a significant adverse impact to the setting or surroundings of 2421 Green Street.

Based on massing studies provided by the project sponsor, views of the proposed project would not result in a significant impact due to a change of public views available of the adjacent 2421 Green Street structure, for the following reasons:

- The primary view of the 2421 Green Street residence from the closest public right-of-way (Green Street) is how most people experience the building and that primary view would not change.
- Views of the 2421 Green Street that would change (specifically, by blocking one of the side facades of the building) are from a block or more away. These medium- and long-range view show the building within a dense urban context, and the change in these views as a result of the proposed project would not compromise the integrity of significance or character-defining features of the historic resource.
- Most public views from sidewalks and roadways of adjacent historic resources would remain the same as under the existing conditions.

The July 20, 2018 appeal of the June 22, 2018 categorical exemption issued for the project cites a report by architect Carol Karp that states that the proposed project would adversely affect the historical significance of the adjacent historic resource at 2421 Green Street by blocking light, air, and views from the 2421 Green Street structure. Light, air, and private views are not character-defining features of 2421 Green Street, and effects on light, air, and private views are not considered impacts under CEQA; public views of the 2421 Green Street structure are discussed above and would not be affected by the proposed project in a way that would result in a significant impact.

As discussed above, the proposed addition to the existing single-family residence at 2417 Green Street would not include any physical alterations or setting impacts to the adjacent historical resources at 2421 Green Street or 2727 Pierce Street such that there would be a substantial adverse change in the significance of these resources that would no longer make them eligible for inclusion in a local, state, or national register of historical resources.

### ***Potential Impacts to Adjacent Historic District***

The project also would not have the potential to affect any adjacent historic district. The nearest historic district is the Pacific Heights Historic District, which captures buildings to the south and west of the subject building. The historic district is significant under Criterion 3 (Architecture) for its strong collection of late-Victorian (typically Queen Anne), Shingle (First Bay Region), Arts & Crafts, Classical Revival, Colonial Revival, Tudor Revival, French Provincial, and Mediterranean Revival architecture. The boundaries of the historic district are roughly Pacific, Lyon, Steiner and Green Streets and the period of significance is 1895 to 1930. Specifically, the boundaries include buildings immediately to the south of the subject property that front on Vallejo Street and buildings to the west that front on Scott Street. The subject property and the four adjacent properties to the west are not included within the boundaries of the historic district. The 2417 Green Street structure would not contribute to this district since the subject building and its immediate neighbors to the east are not associated with the architectural significance of the district. While the properties to the west of 2417 Green Street may be eligible for inclusion in the district, the subject building does not contribute to the Pacific Heights Historic District. Therefore, the proposed project would have no adverse impact to the historic district.

In conclusion, the project would not significant adverse impacts to historic resources.

### **Impact CR-2: The proposed project would not cause a substantial adverse change in the significance of an archeological resource pursuant to CEQA Guidelines section 15064.5. (Less than Significant)**

In March 2017 and in January 2019, planning department staff archeologists conducted preliminary archeological review for the project and determined that the potential for resources to be present is low based on the steepness of the project site and the fact that the existing residence was constructed by terracing into the slope, which removed several feet of near-surface soils. Additional excavation would not change this assessment as there is little potential for buried resources to be present in this setting.<sup>28</sup> Thus, the project would not cause a substantial adverse

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<sup>28</sup> Sally Salzman Morgan, Planner/Archaeologist, San Francisco Planning Department, email to Jeanie Poling regarding 2417 Green St archeological review, January 30, 2019.



change in the significance of an archeological resource and this impact would be less than significant.

**Impact CR-3: The proposed project would not disturb human remains, including those interred outside of formal cemeteries (Less than Significant)**

In March 2017 and in January 2019, planning department staff archeologists conducted preliminary archeological review for the project. There are no known human remains, including those interred outside of formal cemeteries, located in the immediate vicinity of the project site. Thus, this impact would be less than significant.

**Impact C-CR-1: The proposed project in combination with past, present, and reasonably foreseeable future projects in the vicinity would not result in cumulative impacts to historic resources. (Less than Significant)**

The analysis of cumulative impacts on historical resources considers past, present, and reasonably foreseeable future projects within a 0.25-mile radius of the project site. The planning department has identified eight environmental cases within this area associated with projects either under construction or for which entitlements have been approved. These projects are listed in Table 2 on page 7.

Those past, present, and reasonably foreseeable future projects would be constructed in a densely developed urban environment and would be minimally visible from locations outside of their immediate vicinities. These projects are geographically dispersed and sufficiently removed from the project site such that any alteration or demolition of existing buildings and new construction in these locations would not act in combination with one another to substantially change the setting of any historical resource. Thus, these projects in combination with one another would not materially alter the characteristics that qualify any of the historical resources for listing in the California Register, and would not contribute to any cumulative impacts on historical resources.

**Impact C-CR-2: The proposed project in combination with past, present, and reasonably foreseeable future projects in the vicinity would not result in cumulative impacts to archeological resources or human remains. (Less than Significant)**

Archeological resources and human remains are non-renewable resources of a finite class. All adverse effects to archeological resources erode a dwindling cultural/scientific resource base. Federal and state laws protect archeological resources in most cases, either through project redesign or by requiring that the scientific data present within an archeological resource be archeologically recovered. As discussed above, the proposed project would not have a significant impact related to archeological resources, and the project's impact, in combination with other projects in the area that would also involve ground disturbance, and that also could encounter previously recorded or unrecorded archeological resources or human remains, would not result in a cumulatively considerable significant cumulative impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>4. TRIBAL CULTURAL RESOURCES. Would the project:</b>					
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact TC-1: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074. (Less than Significant)**

CEQA section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in CEQA section 21074, tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and that are listed, or determined to be eligible for listing, on a national, state, or local register of historical resources. Pursuant to CEQA section 21080.3.1, on January 31, 2019, the planning department requested consultation with Native American tribes regarding the potential for the proposed project to affect tribal cultural resources. The planning department received no response requesting consultation from any representative of a Native American tribe during the 30-day comment period.

Based on the background research, there are not known tribal cultural resources in the project area. Moreover, the project site is not located in an archeological sensitive area; therefore, the potential for the site to contain tribal cultural resources is very low. Based on this, impacts on tribal cultural resources would be less than significant.

**Impact C-TC-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the project vicinity, would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074. (Less than Significant)**

Impacts related to tribal cultural resources are typically site-specific and generally limited to the immediate construction area. As discussed above, under TC-1, project-level impacts would be less than significant. Moreover, there are no other projects that have the potential to be affected by the proposed project. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a less-than-significant cumulative impact on tribal cultural resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>5. TRANSPORTATION AND CIRCULATION. Would the project:</b>					
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact TR-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing circulation systems; would not conflict or be inconsistent with CEQA Guideline section 15064.3(b); would not substantially increase hazards due to a design feature or incompatible uses; and would not result in an inadequate emergency access (Less than Significant)**

### **Vehicle Miles Traveled in San Francisco and Bay Area**

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development at great distance from other land uses, located in areas with poor access to non-private vehicular modes of travel, generate more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available.

Given these travel behavior factors, San Francisco has a lower vehicle miles traveled (VMT) ratio than the nine-county San Francisco Bay Area region. In addition, some areas of the city have lower VMT ratios than other areas of the city. These areas of the city can be expressed geographically through transportation analysis zones (TAZs). TAZs are used in transportation planning models for transportation analysis and other planning purposes. The zones vary in size from single city blocks in the downtown core, multiple blocks in outer neighborhoods, to even larger zones in historically industrial areas like the Hunters Point Shipyard.

The San Francisco County Transportation Authority (the transportation authority) uses the San Francisco Chained Activity Model Process (SF-CHAMP) to estimate VMT by private automobiles and taxis for different land use types. Travel behavior in SF-CHAMP is calibrated based on observed behavior from the California Household Travel Survey 2010–2012, Census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings. SF-CHAMP uses a synthetic population, which is a set of individual actors that represents the Bay Area’s actual population, who make simulated travel decisions for a complete day. The transportation authority uses tour-based analysis for office and residential uses, which examines the entire chain of trips over the course of a day, not just trips to and from the project. For retail uses, the transportation authority uses trip-based analysis, which counts VMT from individual trips to and from the project (as opposed to an entire chain of trips). A trip-based approach, as opposed to a tour-based approach, is necessary for retail projects because a tour is likely to consist of trips stopping in multiple locations, and the summarizing of tour VMT to each location would over-estimate VMT.<sup>29</sup>

For residential development, the existing regional average daily VMT per capita is 14.6.<sup>30</sup> San Francisco 2040 cumulative conditions were projected using a SF-CHAMP model run, using the same methodology as outlined above for existing conditions, but includes residential and job growth estimates and reasonably foreseeable transportation investments through 2040. For residential development, the projected 2040 regional average daily VMT per capita is 13.7.

### **Vehicle Miles Traveled Analysis**

Land use projects may cause substantial additional VMT. The following identifies thresholds of significance and screening criteria used to determine if a land use project would result in significant impacts under the VMT metric.

Per San Francisco Transportation Impact Analysis Guidelines,<sup>31</sup> for residential projects, a project would generate substantial additional VMT if it exceeds the regional household VMT per capita minus 15 percent. For office projects, a project would generate substantial additional VMT if it exceeds the regional VMT per employee minus 15 percent. As documented in the proposed

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<sup>29</sup> San Francisco Planning Department, Executive Summary: Resolution Modifying Transportation Impact Analysis, Appendix F, Attachment A, March 3, 2016.

<sup>30</sup> Includes the VMT generated by the project.

<sup>31</sup> Updated February 14, 2019. Available at <https://sfplanning.org/project/transportation-impact-analysis-guidelines-environmental-review-update#impact-analysis-guidelines>.

transportation impact guidelines, a 15 percent threshold below existing development is “both reasonably ambitious and generally achievable.”

California Office of Planning and Research’s (OPR’s) proposed transportation impact guidelines provides screening criteria to identify types, characteristics, or locations of land use projects that would not exceed these VMT thresholds of significance. OPR recommends that if a project or land use proposed as part of the project meets any of the below screening criteria, then VMT impacts are presumed to be less than significant for that land use and a detailed VMT analysis is not required. These screening criteria and how they are applied in San Francisco are described below:

- *Map-Based Screening for Residential, Office, and Retail Projects.* OPR recommends mapping areas that exhibit where VMT is less than the applicable threshold for that land use. Accordingly, the transportation authority has developed maps depicting existing VMT levels in San Francisco for residential, office, and retail land uses based on the SF-CHAMP 2012 base-year model run. The planning department uses these maps and associated data to determine whether a proposed project is located in an area of the city that is below the VMT threshold.
- *Small Projects.* OPR recommends that lead agencies may generally assume that a project would not have significant VMT impacts if the project would either: (1) generate fewer trips than the level required for studying consistency with the applicable congestion management program; or (2) where the applicable congestion management program does not provide such a level, fewer than 100 vehicle trips per day. The transportation authority’s 2015 San Francisco Congestion Management Program does not include a trip threshold for studying consistency. Therefore, the planning department uses the 100 vehicle trip per day screening criterion as a level at which projects generally would not generate a substantial increase in VMT.
- *Proximity to Transit Stations.* OPR recommends that residential, retail, and office projects, as well as projects that are a mix of these uses, proposed within 0.5 miles of an existing major transit stop (as defined by CEQA Guidelines section 21064.3) or an existing stop along a high quality transit corridor (as defined by CEQA Guidelines section 21155) would not result in a substantial increase in VMT. However, this presumption would not apply if the project would: (1) have a floor area ratio of less than 0.75; (2) include more parking for use by residents, customers, or employees of the project than required or allowed, without a conditional use; or (3) is inconsistent with the applicable sustainable communities strategy.

The existing average daily VMT per capita for the transportation analysis zone the project site is located in, TAZ 794, is below the existing regional average daily VMT. In TAZ 794, the average daily VMT per capita for residential uses is 6.9, which is 47 percent below the existing regional average daily VMT per capita for residential uses of 14.6. Therefore, the project site is located within an area of the city where the existing VMT is more than 15 percent below the regional VMT, and the proposed project would not generate substantial additional VMT. Future 2040 average daily VMT per capita for TAZ 794 is 6.7; this is 49 percent below the future 2040 regional average daily VMT per capita of 13.7. Furthermore, the project meets the proximity to transit stations screening criterion, which also indicates that the proposed project use would not cause substantial additional VMT.

## Project Travel Demand

Localized trip generation of the proposed project was calculated using a trip-based analysis and information in the 2002 Transportation Impact Analysis Guidelines for Environmental Review developed by the San Francisco Planning Department.<sup>32</sup>

The proposed project would expand an existing (currently vacant) single-family residence and add an accessory dwelling unit. It is anticipated that the project would result in an additional five residents who would add approximately 18 daily person-trips, 10 daily auto trips, and two PM peak-hour auto trips.<sup>33</sup>

During the three- to five-month project construction period, trucks would travel to and from the project site. It is not anticipated that any construction-related lane closure would be required; however, if required, a lane closure permit would be secured to accommodate this work scope. Lane and sidewalk closures are subject to review and approval by San Francisco Public Works and the Transportation Advisory Staff Committee, which consists of representatives from the Fire Department, Police Department, MTA Traffic Engineering Division, and San Francisco Public Works. Due to its temporary duration and limited scope, project-related construction impacts on traffic generally would not be considered significant.

No transit lines run along Green Street in front of the project site; the nearest transit lines to the project site are the 41 Union line that runs along Union Street, one block north of the project site, and the 22 Fillmore line that runs along Fillmore Street, a block and a half east of the project site. Pedestrian use is typical of a residential neighborhood. The project would not generate a significant number of additional trips and would not change transit, bicycle, or pedestrian conditions in the project vicinity. During project construction, truck traffic and any construction activities would be noticeable to transit users, bicycle riders, and pedestrians in the project vicinity; however, construction-related impacts would be less than significant due to their temporary duration and limited scope.

The project is an infill site as defined under CEQA Guideline section 15064.3(b); thus, as discussed above under Public Resources Code section 21099, parking is not considered in determining whether a project has the potential to result in significant environmental effects.<sup>34</sup> The project involves alterations to an existing single-family home and the addition of an accessory dwelling unit. All physical changes would be on the project site and not in the public right-of-way (other than the addition of a street tree). Thus, the project would not substantially increase hazards due to a design feature or incompatible uses and would not result in inadequate emergency access. Furthermore, the project would not conflict with any plans, programs, or ordinances addressing circulation systems because the project would not modify any roadways in a way that could affect circulation.

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32 In February 2019, the Planning Department published an update to the 2002 *Transportation Impact Analysis Guidelines for Environmental Review*. The guidelines updated some of the transportation significance criteria and methodology but would not change the less-than-significant impact conclusions herein.

33 San Francisco Planning Department, Transportation Calculations for 2417 Green Street, February 1, 2019.

34 San Francisco Planning Department, Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation Analysis, 2417 Green Street, February 1, 2019.

In conclusion, project impacts related to transportation and circulation are less than significant.

**Impact C-TR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the project vicinity, would result in less-than-significant cumulative impacts related to transportation and circulation. (Less Than Significant)**

Construction of the proposed project could overlap with construction of nearby cumulative development projects. For the purposes of transportation analysis, the cumulative setting includes development projects within a quarter-mile radius of the project site, as identified in Table 2 on page 7. None of these cumulative development projects would introduce incompatible uses that would adversely impact transportation and circulation in the project vicinity or combine with construction of the proposed project to result in cumulative construction-related impacts. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a less-than-significant cumulative impacts related to transportation and circulation.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>6. NOISE. Would the project result in:</b>					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not within the vicinity of an airstrip or airport. Therefore, topic 6c is not applicable.

**Impact NO-1: During project construction, the proposed project would not generate substantial temporary noise levels in excess of established standards. (Less than Significant)**

The construction period for the proposed project would last approximately three to five months and would generally consist of excavation, structural and seismic upgrades, interior renovations, and exterior work. Excavation and building construction would temporarily increase noise that could be considered an annoyance by occupants of nearby properties. The amount of construction noise generated at any one time would vary depending on the types of construction activities

underway, numbers and types of pieces of heavy equipment and duration of use of each, distance between noise source and listener, and presence or absence of barriers (including subsurface barriers) between the noise source and the receptors. Table 3 identifies typical noise levels from construction equipment. There would be times when noise could interfere with indoor activities in nearby residences and other businesses near the project site.

**Table 3 – Typical Noise Levels from Construction Equipment**

<b>Construction Equipment</b>	<b>Noise Level (dBA, Leq at 50 feet)</b>	<b>Noise Level (dBA, Leq at 100 feet)</b>
Jackhammer (Pavement Breaker) <sup>1</sup>	<b>88</b>	<b>82</b>
Hoe ram	<b>90</b>	<b>94</b>
Drill rig truck	79	73
Loader	79	73
Dozer	82	76
Excavator	81	75
Grader	85	79
Dump truck	76	70
Flatbed truck	74	68
Concrete truck	81	75
Forklift (gas-powered)	83	77
Generator	81	75
Compressor	78	72
San Francisco Noise Ordinance Limit	86	80

Source: Federal Highway Administration, Roadway Construction Noise Model User Guide, 2006.

**Notes:**

Leq noise levels are calculated assuming a 100 percent usage factor at full load (i.e., Lmax noise level 100 percent) for the one-hour measurement period. Noise levels in **bold** exceed the Noise Ordinance limit, but as indicated in note 1, two of the exceedances are exempt from this limit.

1. Exempt from the ordinance noise limit of 86 dBA at 50 feet or 80 dBA at 100 feet.

In San Francisco, construction noise is regulated by the San Francisco Noise Ordinance (San Francisco Police Code article 29). The ordinance requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a distance of 100 feet from the source. To comply with the Noise Ordinance, impact tools (e.g., jackhammers, hoe rams, impact wrenches) must have manufacturer-recommended and City-approved mufflers for both intake and exhaust. Furthermore, section 2908 of the police code prohibits construction work between 8:00 p.m. and 7:00 a.m. if noise would exceed the ambient noise level by 5 dBA at the project property line, unless a special permit is authorized by the Director of the Department of Public Works or the Director of Building Inspection.

As discussed above under Project History, some project excavation below the existing building has already occurred. Additional excavation would be conducted using a pneumatic pavement breaker (hand-held jackhammer). Excavation would occur in sections for one to two weeks over a period of three to five months. No nighttime construction would occur for the proposed project and no



pile driving would be necessary. The project would be required to comply with regulations set forth in the Noise Ordinance.

Because the project would not use heavy equipment, and would comply with noise regulations, and because noise associated with construction activities would be temporary and intermittent, construction noise impacts would be less than significant.

**Impact NO-2: During construction, the proposed project would not generate excessive groundborne vibration. (Less than Significant)**

Excavation and building construction would temporarily increase noise and produce groundborne vibration in the project vicinity. Construction equipment would generate vibration that could be considered an annoyance by occupants of nearby properties.

The project would require excavation of approximately 408 cubic yards of soil and rock to a depth of 13 feet below grade. As discussed under Project Description, above, some project excavation below the existing building has already occurred. Additional excavation would be conducted in sections for one to two weeks over a period of three to five months using a hand-held jackhammer with a force rating of 90 pounds. A vibration assessment was conducted for the proposed project.<sup>35</sup> The vibration assessment determined that if the jackhammer were operating 3 feet from any adjacent residence, the estimated ground vibration would be within the range of 0.05 to 0.25 inches per second. A conservative limit of 0.5 inches per second is suggested by the U.S. Bureau of Mines to help prevent minor cosmetic damage to buildings (i.e., 'hairline' cracking of gypsum board or plaster finishes). The estimated ground vibration of 0.05 to 0.25 inches per second is below the conservative threshold of 0.5 inches per second; thus, project construction would not result in vibration that has the potential to cause a significant impact and construction-related vibration impacts of the proposed project would be less than significant.

Construction impacts on adjacent foundations are addressed under Impact GE-1 (geology and soils) on page ~~59~~ 60.

**Impact NO-3: During project operation, the proposed project would not generate excessive groundborne vibration or noise levels. (Less than Significant)**

The project site is in an urbanized area with ambient noise levels typical of those in San Francisco's residential neighborhoods. The primary source of ambient noise in the project vicinity is traffic flow. San Francisco traffic noise modeling indicates that existing noise levels at the project site range from 55 to 60 Ldn.<sup>36</sup>

The project proposes alterations to an existing dwelling unit and the addition of a new accessory dwelling unit. Vehicular traffic makes the greatest contribution to ambient noise levels throughout most of San Francisco. Based on published scientific acoustic studies, the traffic volumes in a given

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<sup>35</sup> Charles M. Salter Associates Inc., 2417 Green Street Vibration Assessment, June 15, 2018.

<sup>36</sup> San Francisco Planning Department, Traffic Noise Model, May 3, 2017. Ldn is the average equivalent sound level over a 24-hour period, with a penalty added for noise during the nighttime hours of 10:00 p.m. to 07:00 a.m. During the nighttime period, 10 decibels is added to reflect the impact of the noise.

location would need to approximately double to produce an increase in ambient noise levels noticeable to most people.<sup>37</sup> Implementation of the proposed project would increase the number of daily vehicle trips to and from the project site by approximately 10 trips,<sup>38</sup> which would represent a negligible increase in existing traffic volumes on the surrounding streets and would not cause a noticeable increase in the ambient noise level in the project vicinity.

The proposed project would not require an emergency generator but may include small-scale mechanical equipment, specifically an HVAC system, that could produce operational noise. These operations would be subject to section 2909 of the City's Noise Ordinance (Article 29 of the San Francisco Police Code). Given its size and scale, the stationary equipment at the proposed two-unit residential building is unlikely to generate noise that exceeds established standards or results in a substantial permanent increase in ambient noise levels. Thus, operational noise and vibration impacts would be less than significant.

**Impact C-NO-1: The implementation of the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a significant cumulative noise or vibration impacts. (Less than Significant)**

### **Cumulative Construction Noise**

The projects listed in Table 2 on page 7 are located one or more blocks away from the project site and therefore would be unlikely to combine in a way that would result in cumulative noise impacts. Moreover, construction noise from the proposed project and other nearby projects would be temporary and intermittent. Thus, project noise effects would not combine with past, present and reasonably foreseeable future projects to result in cumulative construction noise impacts.

### **Cumulative Vibration**

Vibration effects associated with construction the projects listed in Table 2 would be far enough away from the project site such that they would not combine to result in cumulative vibration impacts. Thus, cumulative construction vibration impacts are less than significant.

### **Cumulative Operational Noise**

Past and present development in the project vicinity may result in permanent increases in ambient noise levels from traffic and temporary and periodic increases from repeated and ongoing episodes of major construction. Recently approved and reasonably foreseeable nearby projects listed in Table 2, including the proposed project, would be expected to result in continuing increases in traffic volumes and associated traffic noise, but traffic would be distributed along local roadways and would not result in a doubling of traffic volumes along nearby streets. Moreover, the proposed project's mechanical equipment and mechanical equipment from reasonably foreseeable cumulative projects would be required to comply with the Noise Ordinance. Therefore, in combination with reasonably foreseeable cumulative projects, the proposed project would not

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<sup>37</sup> FHWA. Highway Traffic Noise Analysis and Abatement Guidance, [https://www.fhwa.dot.gov/environment/noise/regulations\\_and\\_guidance/analysis\\_and\\_abatement\\_guidance/revguidance.pdf](https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf), accessed May 11, 2018.

<sup>38</sup> San Francisco Planning Department, Transportation Calculations for 2417 Green Street, February 1, 2019.

make a considerable contribution to any significant noise impacts during project operation, and cumulative operational noise impacts would be less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>7. AIR QUALITY. Would the project:</b>					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Overview

The Bay Area Air Quality Management District (air district) is the regional agency with jurisdiction over the nine-county San Francisco Bay Area Air Basin (air basin), which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa counties and portions of Sonoma and Solano counties. The air district is responsible for attaining and maintaining federal and state air quality standards in the air basin, as established by the federal Clean Air Act and the California Clean Air Act, respectively. Specifically, the air district has the responsibility to monitor ambient air pollutant levels throughout the air basin and to develop and implement strategies to attain the applicable federal and state standards. The federal and state Clean Air Acts require plans to be developed for areas that do not meet air quality standards, generally. The most recent air quality plan, the 2017 Clean Air Plan, was adopted by the air district on April 19, 2017. The 2017 Clean Air Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, in accordance with the requirements of the state Clean Air Act to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases in a single, integrated plan; and establish emission control measures to be adopted or implemented. The 2017 Clean Air Plan contains the following primary goals:

- Protect air quality and health at the regional and local scale: Attain all state and national air quality standards, and eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Protect the climate: Reduce Bay Area greenhouse gas emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The 2017 Clean Air Plan is the most current applicable air quality plan for the air basin. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of an air quality plan.

### ***Criteria Air Pollutants***

In accordance with the state and federal Clean Air Acts, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead. These air pollutants are termed criteria air pollutants because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. In general, the air basin experiences low concentrations of most pollutants when compared to federal or state standards. The air basin is designated as either in attainment<sup>39</sup> or unclassified for most criteria air pollutants with the exception of ozone, PM<sub>2.5</sub>, and PM<sub>10</sub>, for which these pollutants are designated as non-attainment for either the state or federal standards. By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size to, by itself, result in non-attainment of air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality impacts. If a project's contribution to cumulative air quality impacts is considerable, then the project's impact on air quality would be considered significant.<sup>40</sup>

Land use projects may contribute to regional criteria air pollutants during the construction and operational phases of a project. Table 4 identifies air quality significance thresholds followed by a discussion of each threshold. Projects that would result in criteria air pollutant emissions below these significance thresholds would not violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the air basin.

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39 "Attainment" status refers to those regions that are meeting federal and/or state standards for a specified criteria pollutant. "Non-attainment" refers to regions that do not meet federal and/or state standards for a specified criteria pollutant. "Unclassified" refers to regions where there is not enough data to determine the region's attainment status for a specified criteria air pollutant.

40 Bay Area Air Quality Management District, CEQA Air Quality Guidelines, page 2-1, May, 2017, [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed November 15, 2017.

**Table 4 – Criteria Air Pollutant Significance Thresholds**

<b>Pollutant</b>	<b>Construction Thresholds</b>	<b>Operational Thresholds</b>	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (exhaust)	82	15
PM <sub>2.5</sub>	54 (exhaust)	54	10
Fugitive dust	Construction Dust Ordinance or other best management practices	Not applicable	

Source: Bay Area Air Quality Management District, CEQA Air Quality Guidelines, May 2017, page 2-1.

**Ozone Precursors.** As discussed previously, the air basin is currently designated as non-attainment for ozone and particulate matter. Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>). The potential for a project to result in a cumulatively considerable net increase in criteria air pollutants, which may contribute to an existing or projected air quality violation, are based on the state and federal Clean Air Acts emissions limits for stationary sources. To ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, air district regulation 2, rule 2 requires that any new source that emits criteria air pollutants above a specified emissions limit must offset those emissions. For ozone precursors ROG and NO<sub>x</sub>, the offset emissions level is an annual average of 10 tons per year (or 54 pounds (lbs.) per day).<sup>41</sup> These levels represent emissions below which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

Although this regulation applies to new or modified stationary sources, land use development projects result in ROG and NO<sub>x</sub> emissions as a result of increases in vehicle trips, architectural coating, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of land use projects and those projects that result in emissions below these thresholds would not be considered to contribute to an existing or projected air quality violation or result in a considerable net increase in ROG and NO<sub>x</sub> emissions. Due to the temporary nature of construction activities, only the average daily thresholds are applicable to construction phase emissions.

**Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>).**<sup>42</sup> The air district has not established an offset limit for PM<sub>2.5</sub>. However, the emissions limit in the federal New Source Review for stationary sources in nonattainment areas is an appropriate significance threshold. For PM<sub>10</sub> and PM<sub>2.5</sub>, the emissions limit under New Source Review is 15 tons per year (82 lbs. per day) and 10 tons per year (54 lbs. per day), respectively. These emissions limits represent levels below which a source is not expected

<sup>41</sup> Bay Area Air Quality Management District 2009, Revised Draft Options and Justification Report, CEQA Thresholds of Significance, page 17, [http://sfmea.sfplanning.org/2014.0653E\\_Revised\\_FND.pdf](http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf), accessed February 19, 2019.

<sup>42</sup> PM<sub>10</sub> is often termed “coarse” particulate matter and is made of particulates that are 10 microns in diameter or smaller. PM<sub>2.5</sub>, termed “fine” particulate matter, is composed of particles that are 2.5 microns or less in diameter.

to have an impact on air quality.<sup>43</sup> Similar to ozone precursor thresholds identified above, land use development projects typically result in particulate matter emissions as a result of increases in vehicle trips, space heating and natural gas combustion, landscape maintenance, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of a land use project. Again, because construction activities are temporary in nature, only the average daily thresholds are applicable to construction-phase emissions.

**Fugitive Dust.** Fugitive dust emissions are typically generated during construction phases. Studies have shown that the application of best management practices at construction sites significantly control fugitive dust<sup>44</sup> and individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.<sup>45</sup> The air district has identified a number of best management practices to control fugitive dust emissions from construction activities.<sup>46</sup> The City's Construction Dust Control Ordinance (ordinance 176-08, effective July 30, 2008) requires a number of measures to control fugitive dust and the best management practices employed in compliance with the ordinance are an effective strategy for controlling construction-related fugitive dust.

**Other Criteria Pollutants.** Regional concentrations of CO in the Bay Area have not exceeded the state standards in the past 11 years and SO<sub>2</sub> concentrations have never exceeded the standards. The primary source of CO emissions from development projects is vehicle traffic. Construction-related SO<sub>2</sub> emissions represent a negligible portion of the total basin-wide emissions and construction-related CO emissions represent less than five percent of the Bay Area total basin-wide CO emissions. As discussed previously, the Bay Area is in attainment for both CO and SO<sub>2</sub>. Furthermore, the air district has demonstrated, based on modeling, that to exceed the California ambient air quality standard of 9.0 ppm (parts per million) (8-hour average) or 20.0 ppm (1-hour average) for CO, project traffic in addition to existing traffic would need to exceed 44,000 vehicles per hour at affected intersections (or 24,000 vehicles per hour where vertical and/or horizontal mixing is limited). Therefore, given the Bay Area's attainment status and the limited CO and SO<sub>2</sub> emissions that could result from development projects, development projects would not result in a cumulatively considerable net increase in CO or SO<sub>2</sub> emissions, and quantitative analysis is not required.

### **Local Health Risks and Hazards**

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long-duration) and acute (i.e., severe but short-term) adverse effects to human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and mortality. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

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<sup>43</sup> Ibid. Footnote 63, page 16.

<sup>44</sup> Western Regional Air Partnership, 2006, WRAP Fugitive Dust Handbook, September 7, [http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook\\_Rev\\_06.pdf](http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf), accessed May 11, 2018.

<sup>45</sup> Bay Area Air Quality Management District, CEQA Air Quality Guidelines, page D-47, May, 2017.

<sup>46</sup> Ibid.

Unlike criteria air pollutants, TACs do not have ambient air quality standards but are regulated by the air district using a risk-based approach to determine which sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis in which human health exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, to provide quantitative estimates of health risks.<sup>47</sup>

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than that for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would be exposed to air pollution 24 hours per day, seven days a week, for 30 years.<sup>48</sup> Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

Exposures to fine particulate matter (PM<sub>2.5</sub>) are strongly associated with mortality, respiratory diseases, and lung development in children, and other endpoints such as hospitalization for cardiopulmonary disease.<sup>49</sup> In addition to PM<sub>2.5</sub>, diesel particulate matter is also of concern. The California Air Resources Board (California air board) identified diesel particulate matter as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans.<sup>50</sup> The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TAC routinely measured in the region.

In an effort to identify areas of San Francisco most adversely affected by sources of TACs, San Francisco partnered with the air district to conduct a citywide health risk assessment based on an inventory and assessment of air pollution and exposures from mobile, stationary, and area sources within San Francisco. Areas with poor air quality, termed the "Air Pollutant Exposure Zone," were identified based on health-protective criteria that consider estimated cancer risk, exposures to fine particulate matter, proximity to freeways, and locations with particularly vulnerable populations. The project site is not located within the Air Pollutant Exposure Zone. Each of the Air Pollutant Zone criteria is discussed below.

**Excess Cancer Risk.** The Air Pollution Exposure Zone includes areas where modeled cancer risk exceeds 100 incidents per million persons exposed. This criterion is based on United States Environmental Protection Agency (U.S. EPA) guidance for conducting air toxic analyses and

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<sup>47</sup> In general, a health risk assessment is required if the air district concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The applicant is then subject to a health risk assessment for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more toxic air contaminants.

<sup>48</sup> California Office of Environmental Health Hazard Assessment, 2015, Air Toxics Hot Spot Program Risk Assessment Guidelines, Pg. 4-44, 8-6, February, <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>.

<sup>49</sup> San Francisco Department of Public Health, 2014, Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review.

<sup>50</sup> California Air Resources Board (ARB), Fact Sheet, The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines, October, 1998.

making risk management decisions at the facility and community-scale level.<sup>51</sup> As described by the air district, the U.S. EPA considers a cancer risk of 100 per million to be within the “acceptable” range of cancer risk. Furthermore, in the 1989 preamble to the benzene National Emissions Standards for Hazardous Air Pollutants rulemaking,<sup>52</sup> the U.S. EPA states that it “...strives to provide maximum feasible protection against risks to health from hazardous air pollutants by (1) protecting the greatest number of persons possible to an individual lifetime risk level no higher than approximately one in one million and (2) limiting to no higher than approximately one in ten thousand (100 in one million) the estimated risk that a person living near a plant would have if he or she were exposed to the maximum pollutant concentrations for 70 years.” The 100 per one million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on air district regional modeling.<sup>53</sup>

***Fine Particulate Matter.*** U.S. EPA staff’s 2011 review of the federal PM<sub>2.5</sub> standard concluded that the then current federal annual PM<sub>2.5</sub> standard of 15 µg/m<sup>3</sup> (micrograms per cubic meter) should be revised to a level within the range of 13 to 11 µg/m<sup>3</sup>, with evidence strongly supporting a standard within the range of 12 to 11 µg/m<sup>3</sup>.<sup>54</sup> The Air Pollutant Exposure Zone for San Francisco is based on the health protective PM<sub>2.5</sub> standard of 11 µg/m<sup>3</sup>, as supported by the U.S. EPA’s assessment, although lowered to 10 µg/m<sup>3</sup> to account for uncertainty in accurately predicting air pollutant concentrations using emissions modeling programs.

***Proximity to Freeways.*** According to the California air board, studies have shown an association between the proximity of sensitive land uses to freeways and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children. Siting sensitive uses in close proximity to freeways increases both exposure to air pollution and the potential for adverse health effects. As evidence shows that sensitive uses in an area within a 500-foot buffer of any freeway are at an increased health risk from air pollution,<sup>55</sup> parcels that are within 500 feet of freeways are included in the Air Pollutant Exposure Zone.

***Health Vulnerable Locations.*** Based on the air district’s evaluation of health vulnerability in the Bay Area, those ZIP codes (94102, 94103, 94105, 94124, and 94130) in the worst quintile of Bay Area health vulnerability scores as a result of air pollution-related causes were afforded additional protection by lowering the standards for identifying parcels in the Air Pollutant Exposure Zone to: (1) an excess cancer risk greater than 90 per one million persons exposed, and/or (2) PM<sub>2.5</sub> concentrations in excess of 9 µg/m<sup>3</sup>.<sup>56</sup>

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51 Ibid. Footnote 63, page 67.

52 54 Federal Register 38044, September 14, 1989.

53 Bay Area Air Quality Management District, 2017, Clean Air Plan, page D-43.

54 U.S. EPA, Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards. “Particulate Matter Policy Assessment,” April, 2011, <https://www3.epa.gov/ttn/naaqs/standards/pm/data/20110419pmpafinal.pdf>, accessed February 19, 2019.

55 California Air Resources Board, 2005 Air Quality and Land Use Handbook: A Community Health Perspective. April, <http://www.arb.ca.gov/ch/landuse.htm>.

56 San Francisco Planning Department and San Francisco Department of Public Health, Air Pollutant Exposure Zone Map (Memo and Map), April 9, 2014. These documents are part of San Francisco Board of Supervisors File No. 14806, Ordinance No. 224-14; Amendment to Health Code Article 38.



The above citywide health risk modeling was also used as the basis in approving amendments to the San Francisco Building and Health Codes, referred to as the Enhanced Ventilation Required for Urban Infill Sensitive Use Developments or Health Code Article 38 (ordinance 224-14, effective December 8, 2014) (article 38). The purpose of article 38 is to protect the public health and welfare by establishing an Air Pollutant Exposure Zone and imposing an enhanced ventilation requirement for all urban infill sensitive use development within the Air Pollutant Exposure Zone. In addition, projects within the Air Pollutant Exposure Zone require special consideration to determine whether the project's activities would add a substantial amount of emissions to areas already adversely affected by poor air quality.

**Impact AQ-1: The project would not conflict with, or obstruct implementation of, the 2017 Clean Air Plan. (Less than Significant)**

The most recently adopted air quality plan for the air basin is the 2017 Clean Air Plan. The 2017 Clean Air Plan is a road map that demonstrates how the San Francisco Bay Area will achieve compliance with the state ozone standards as expeditiously as practicable and how the region will reduce the transport of ozone and ozone precursors to neighboring air basins. In determining consistency with the plan, this analysis considers whether the project would: (1) support the primary goals of the plan, (2) include applicable control measures from the plan, and (3) avoid disrupting or hindering implementation of control measures identified in the plan.

The primary goals of the plan are to (1) protect air quality and health at the regional and local scale; (2) eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and (3) protect the climate by reducing greenhouse gas emissions. To meet the primary goals, the plan recommends specific control measures and actions. These control measures are grouped into various categories and include stationary and area source measures, mobile source measures, transportation control measures, land use measures, and energy and climate measures. The plan recognizes that to a great extent, community design dictates individual travel mode, and that a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and greenhouse gases from motor vehicles is to channel future Bay Area growth into vibrant urban communities where goods and services are close at hand, and people have a range of viable transportation options. To this end, the plan includes 85 control measures aimed at reducing air pollution in the air basin.

The measures applicable to the proposed project site are in the transportation sector (bicycle parking requirement), energy efficiency sector (water and energy conservation requirements), waste reduction sector (mandatory recycling and composting and demolition debris recycling requirements) and environment/conservation sector (tree planting requirements, construction site runoff prevention best management practices, and the use of low-emission building materials). The proposed project's impact with respect to greenhouse gases are discussed in Section F.8, Greenhouse Gas Emissions, which demonstrates that the proposed project would comply with the applicable provisions of the City's greenhouse gas reduction strategy.

The compact development of the proposed project and high availability of viable transportation options ensure that residents could bicycle, walk, and ride transit to and from the project site instead of taking trips via private automobile. These features ensure that the project would avoid

substantial growth in automobile trips and vehicle miles traveled. The proposed project's anticipated 10 daily vehicle trips would result in a negligible increase in air pollutant emissions. Furthermore, the proposed project would be generally consistent with the San Francisco General Plan, as discussed in Section D above under Plans and Policies. Transportation control measures that are identified in the 2017 Clean Air Plan are implemented by the San Francisco General Plan and the planning code, for example, through the city's Transit First Policy, bicycle parking requirements, and transit impact development fees. Compliance with these requirements would ensure the project includes relevant transportation control measures specified in the 2017 Clean Air Plan. Therefore, the proposed project would include applicable control measures identified in the 2017 Clean Air Plan to meet the 2017 Clean Air Plan's primary goals.

Examples of a project that could cause the disruption or delay of 2017 Clean Air Plan control measures are projects that would preclude the extension of a transit line or bike path, or projects that propose excessive parking beyond parking requirements. The proposed project would expand an existing, vacant single-family home and add an accessory dwelling unit in a dense, walkable urban area near a concentration of regional and local transit service. It would not preclude the extension of a transit line or a bike path or any other transit improvement, and thus would not disrupt or hinder implementation of control measures identified in the 2017 Clean Air Plan.

For the reasons described above, the proposed project would not interfere with implementation of the 2017 Clean Air Plan, and because the proposed project would be consistent with the applicable air quality plan that demonstrates how the region will improve ambient air quality and achieve the state and federal ambient air quality standards, this impact would be less than significant.

### **Construction Air Quality Impacts**

Project-related air quality impacts fall into two categories: short-term impacts from construction and long-term impacts from project operation. The following addresses construction-related air quality impacts resulting from the proposed project.

#### **Impact AQ-2: The project's construction activities would generate fugitive dust and criteria air pollutants but would not result in a cumulatively considerable net increase in criteria air pollutants. (Less than Significant)**

Construction activities (short-term) typically result in emissions of ozone precursors and fine particulate matter in the form of dust (fugitive dust) and exhaust (e.g., vehicle tailpipe emissions). Emissions of ozone precursors and fine particulate matter are primarily a result of the combustion of fuel from on-road and off-road vehicles. However, ROGs are also emitted from activities that involve painting, other types of architectural coatings, or asphalt paving. The proposed project would expand an existing single-family home and add an accessory dwelling unit. During the project's approximately three- to five-month construction period, construction activities would have the potential to result in emissions of ozone precursors and fine particulate matter, as discussed below.

## ***Fugitive Dust***

Project-related demolition, excavation, grading, and other construction activities may cause wind-blown dust that could contribute particulate matter into the local atmosphere. Depending on exposure, adverse health effects can occur due to this particulate matter in general and also due to specific contaminants such as lead or asbestos that may be constituents of soil. Although there are federal standards for air pollutants and implementation of state and regional air quality control plans, air pollutants continue to have impacts on human health throughout the country. California has found that particulate matter exposure can cause health effects at lower levels than national standards. The current health burden of particulate matter demands that, where possible, public agencies take feasible available actions to reduce sources of particulate matter exposure. According to the California air board, reducing PM<sub>2.5</sub> concentrations to state and federal standards of 12 µg/m<sup>3</sup> in the San Francisco Bay Area would prevent between 200 and 1,300 premature deaths.<sup>57</sup>

In response, the San Francisco Board of Supervisors approved the Construction Dust Control Ordinance (ordinance 176-08, effective July 30, 2008) with the intent of reducing the quantity of dust generated during site preparation, demolition and construction work in order to protect the health of the general public and of onsite workers, minimize public nuisance complaints, and to avoid orders to stop work by the Department of Building Inspection.

The Construction Dust Control Ordinance requires that all site preparation work, demolition, or other construction activities within San Francisco that have the potential to create dust or to expose or disturb more than 10 cubic yards or 500 square feet of soil comply with specified dust control measures whether or not the activity requires a permit from the Department of Building Inspection. The Director of the Department of Building Inspection may waive this requirement for activities on sites less than one half-acre that are unlikely to result in any visible wind-blown dust.

In compliance with the Construction Dust Control Ordinance, the project sponsor and the contractor responsible for construction activities at the project site would be required to use the following practices to control construction dust on the site or other practices that result in equivalent dust control that are acceptable to the director. Dust suppression activities may include watering all active construction areas sufficiently to prevent dust from becoming airborne; increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. During excavation and dirt-moving activities, contractors shall wet sweep or vacuum the streets, sidewalks, paths, and intersections where work is in progress at the end of the workday. Inactive stockpiles (where no disturbance occurs for more than seven days) greater than 10 cubic yards or 500 square feet of excavated material, backfill material, import material, gravel, sand, road base, and soil shall be covered with a 10 mil (0.01 inch) polyethylene plastic (or equivalent) tarp, braced down, or use other equivalent soil stabilization techniques. San Francisco ordinance 175-91 restricts the use of potable water for soil compaction and dust control activities undertaken in conjunction with any construction or demolition project occurring within the boundaries of San Francisco, unless permission is obtained from the San Francisco Public Utilities Commission. Non-potable water must be used for soil compaction and dust control activities during project construction and

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<sup>57</sup> ARB, Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California, Staff Report, Table 4c, October 24, 2008.

demolition. The San Francisco Public Utilities Commission operates a recycled water truck-fill station at the Southeast Water Pollution Control Plant that provides recycled water for these activities at no charge.

Compliance with the regulations and procedures set forth by the Dust Control Ordinance would ensure that fugitive dust generated by the project's construction activities would not result in a cumulatively considerable net increase in criteria air pollutants.

### **Criteria Air Pollutants**

As discussed above, construction activities would result in emissions of criteria air pollutants from the use of off- and on-road vehicles and equipment. To assist lead agencies in determining whether short-term construction-related air pollutant emissions require further analysis as to whether the project may exceed the criteria air pollutant significance thresholds shown in Table 4 on page 34 35, the air district, in its *CEQA Air Quality Guidelines* (May 2017), developed screening criteria. If a proposed project meets the screening criteria, then construction of the project would result in less-than-significant criteria air pollutant impacts. A project that exceeds the screening criteria may require a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds. The *CEQA Air Quality Guidelines* note that the screening levels are generally representative of new development on greenfield<sup>58</sup> sites without any form of mitigation measures taken into consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

The proposed project would expand an existing single-family home and add an accessory dwelling unit. The size of proposed construction activities would be well below the criteria air pollutant screening sizes identified in the air district's *CEQA Air Quality Guidelines*. Thus, quantification of construction-related criteria air pollutant emissions is not required, and the proposed project's construction activities would result in a less-than-significant criteria air pollutant impact.

In conclusion, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard.

### **Impact AQ-3: The project's construction activities would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)**

As discussed above, the project site is not within an Air Pollutant Exposure Zone. During project construction, emissions would be temporary and variable in nature and would not be expected to expose sensitive receptors to substantial air pollutants. Furthermore, the project would be required to comply with California regulations limiting idling to no more than five minutes.<sup>59</sup> Thus, the proposed project would not generate toxic air contaminants, including diesel particulate matter,

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58 A greenfield site refers to agricultural or forest land or an undeveloped site earmarked for commercial, residential, or industrial projects.

59 California Code of Regulations, Title 13, Division 3, § 2485 (on-road) and § 2449(d)(2) (off-road).

exposing sensitive receptors to substantial air pollutant concentrations, and this impact would be less than significant.

### **Operational Air Quality Impacts**

Land use projects typically result in emissions of criteria air pollutants and toxic air contaminants primarily from an increase in motor vehicle trips. However, land use projects may also result in criteria air pollutants and toxic air contaminants from combustion of natural gas, landscape maintenance, use of consumer products, and architectural coating. The following addresses air quality impacts resulting from operation of the proposed project.

#### **Impact AQ-4: Project operations would not result in a cumulatively considerable net increase in criteria air pollutants and would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)**

As discussed above in Impact AQ-2, the air district, in its *CEQA Air Quality Guidelines* (May 2017), has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency or applicant does not need to perform a detailed air quality assessment.

The proposed project would expand an existing single-family home and add an accessory dwelling unit. The proposed project would be well below the criteria air pollutant screening sizes for construction and operation of low- and mid-rise apartments identified in the air district's CEQA Air Quality Guidelines. Thus, the proposed project would not result in a cumulatively considerable net increase in criteria air pollutants.

Vehicle trips are the primary source of toxic air contaminants that could result in health risk impacts to sensitive receptors (i.e., people exposed to the toxic air contaminants). The proposed project's estimated 10 daily vehicle trips would be well below the 10,000 vehicle-per-day 'minor, low-impact' source of toxic air contaminants that the Bay Area Air Quality Management District estimates could pose a significant health risk. Also, as noted above, the proposed project would not require an emergency generator. Therefore, the proposed project would not exposure sensitive receptors to substantial pollutant concentrations, and this impact is less than significant.

#### **Impact AQ-5: The proposed project would not create objectionable odors that would affect a substantial number of people. (Less than Significant)**

Typical odor sources of concern include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing facilities, fiberglass manufacturing facilities, auto body shops, rendering plants, and coffee roasting facilities. During construction, diesel exhaust from construction equipment would generate some odors; however, construction-related odors would be temporary and would not persist upon project completion. The proposed project's new residential use would not be a significant source of new odors. Therefore, odor impacts would be less than significant.

## Cumulative Air Quality Impacts

**Impact C-AQ-1: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area would not contribute to cumulative air quality impacts. (Less than Significant)**

As discussed above, regional air pollution is by its very nature largely a cumulative impact. Emissions from past, present, and future projects contribute to the region's adverse air quality on a cumulative basis. No single project by itself would be sufficient in size to result in regional nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative adverse air quality impacts.<sup>60</sup> The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. Therefore, because the proposed project's construction (Impact AQ-2) and operational (Impact AQ-4) emissions would not exceed the project-level thresholds for criteria air pollutants, the proposed project would not be considered to result in a cumulatively considerable contribution to regional air quality impacts. Furthermore, as discussed above, the project site is not located in an area that already experiences poor air quality and project operations would not contribute to substantial pollutant concentrations or other emissions. Thus, cumulative air quality impacts would be less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>8. GREENHOUSE GAS EMISSIONS. Would the project:</b>					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

<sup>60</sup> Bay Area Air Quality Management District, CEQA Air Quality Guidelines, page 2-1, May 2017.

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. Accordingly, San Francisco has prepared Strategies to Address Greenhouse Gas Emissions<sup>61</sup> which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy in compliance with the CEQA Guidelines. These GHG reduction actions have resulted in a 28 percent reduction in GHG emissions in 2015 compared to 1990 levels,<sup>62</sup> exceeding the year 2020 reduction goals outlined in the air district's 2017 Clean Air Plan, Executive Order S-3-05, and Assembly Bill 32 (also known as the Global Warming Solutions Act).<sup>63</sup>

Given that the City has met the state and region's 2020 GHG reduction targets and San Francisco's GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under order S-3-05,<sup>64</sup> order B-30-15,<sup>65,66</sup> and Senate Bill 32,<sup>67,68</sup> the City's GHG reduction goals are consistent with order S-3-05, order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan. Therefore, proposed projects that are consistent with the City's GHG reduction strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans or result in significant GHG emissions, and would therefore not exceed San Francisco's applicable GHG threshold of significance.

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61 San Francisco Planning Department, 2017, Strategies to Address Greenhouse Gas Emissions in San Francisco, 2017, <https://sfplanning.org/project/greenhouse-gas-reduction-strategies>, accessed February 19, 2019.

62 San Francisco Department of the Environment, San Francisco's Carbon Footprint, <https://sfenvironment.org/carbon-footprint>, accessed July 19, 2017.

63 Executive Order S-3-05, Assembly Bill 32, and the air district's 2017 Clean Air Plan (continuing the trajectory set in the 2010 Clean Air Plan) set a target of reducing GHG emissions to below 1990 levels by year 2020.

64 Office of the Governor, Executive Order S-3-05, 2005, <http://www.pcl.org/projects/2008symposium/proceedings/Coatsworth12.pdf>, accessed March 16, 2016. Executive Order S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 million metric tons of carbon dioxide equivalents (MTCO<sub>2</sub>E)); by 2020, reduce emissions to 1990 levels (approximately 427 million MTCO<sub>2</sub>E); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO<sub>2</sub>E). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

65 Office of the Governor, Executive Order B-30-15, April 29, 2015. <https://www.gov.ca.gov/news.php?id=18938>, accessed November 15, 2017. Executive Order B-30-15, issued on April 29, 2015, sets forth a target of reducing GHG emissions to 40 percent below 1990 levels by 2030 (estimated at 2.9 million MTCO<sub>2</sub>E).

66 San Francisco's GHG reduction goals are codified in section 902 of the Environment Code and include: (i) by 2008, determine City GHG emissions for year 1990; (ii) by 2017, reduce GHG emissions by 25 percent below 1990 levels; (iii) by 2025, reduce GHG emissions by 40 percent below 1990 levels; and by 2050, reduce GHG emissions by 80 percent below 1990 levels.

67 Senate Bill 32 amends California Health and Safety Code Division 25.5 (also known as the California Global Warming Solutions Act of 2006) by adding section 38566, which directs that statewide greenhouse gas emissions to be reduced by 40 percent below 1990 levels by 2030.

68 Senate Bill 32 was paired with Assembly Bill 197, which would modify the structure of the State Air Resources Board; institute requirements for the disclosure of greenhouse gas emissions criteria pollutants, and toxic air contaminants; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of greenhouse gas emissions.

The following analysis of the proposed project's impact on climate change focuses on the project's contribution to cumulatively significant GHG emissions. Because no individual project could emit GHGs at a level that could result in a significant impact on the global climate, this analysis is in a cumulative context, and this section does not include an individual project-specific impact statement.

**Impact C-GG-1: The proposed project would generate greenhouse gas emissions, but not at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)**

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct operational emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers; energy required to pump, treat, and convey water; and emissions associated with waste removal, disposal, and landfill operations.

The proposed project involves the expansion of an existing single-family home and the addition of an accessory dwelling unit. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and residential operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions. The proposed project would be subject to regulations adopted to reduce GHG emissions as identified in the GHG reduction strategy. As discussed below, compliance with the applicable regulations would reduce the project's GHG emissions related to transportation, energy efficiency, waste reduction, and conservation.

Compliance with the City's bicycle parking requirements would reduce the proposed project's transportation-related emissions by reducing GHG emissions from single-occupancy vehicles and promoting the use of alternative transportation modes with zero GHG emissions. The City's energy efficiency requirements that are applicable to the project include residential water conservation measures (showerhead and faucet replacement) and residential energy conservation measures (attic insulation).

The City's waste-reduction requirements that are applicable to the project include mandatory recycling and composting and construction and demolition debris recycling. Compliance with these measures would reduce the amount of materials sent to a landfill, thus reducing GHGs emitted by landfill operations, and promoting the reuse of materials, which conserves their embodied energy<sup>69</sup> and reduces the energy required to produce new materials. In the environment/conservation sector, the project would comply with the City's street tree planting requirements (which increase carbon sequestration), wood-burning device restrictions (which

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<sup>69</sup> Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site.



reduce emissions of GHGs and black carbon), and use low-emitting finishes (which limits the release of volatile organic compounds<sup>70</sup>).

Thus, the proposed project was determined to be consistent with San Francisco's GHG reduction strategy.<sup>71</sup> These regulations have proven effective, as San Francisco's GHG emissions have measurably decreased when compared to 1990 emissions levels, demonstrating that the City has met and exceeded Executive Order S-3-05, Assembly Bill 32, and the 2017 Clean Air Plan GHG reduction goals for the year 2020. Furthermore, the City has met its 2017 GHG reduction goal of reducing GHG emissions to 25 percent below 1990 levels by 2017. Other existing regulations, such as those implemented through Assembly Bill 32, will continue to reduce a proposed project's contribution to climate change. In addition, San Francisco's local GHG reduction targets are consistent with the long-term GHG reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan. Therefore, because the proposed project is consistent with the City's GHG reduction strategy, it is also consistent with the GHG reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan, would not conflict with these plans, and would therefore not exceed San Francisco's applicable GHG threshold of significance. As such, the proposed project would result in a less-than-significant impact with respect to GHG emissions.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>9. WIND. Would the project:</b>					
a) Create wind hazards in publicly accessible areas of substantial pedestrian use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact WI-1: The proposed project would not create wind hazards in publicly accessible areas of substantial pedestrian use. (Less than Significant)**

In San Francisco, average winds speeds are the highest in the summer and lowest in winter. However, the strongest peak wind speeds occur in winter. The highest average wind speeds occur in mid-afternoon and the lowest in the early morning. Based on over 40 years of recordkeeping, the highest mean hourly wind speeds (approximately 20 mph) occur midafternoon in July, while the lowest mean hourly wind speeds (in the range of 6 to 9 mph) occur throughout the day in November. Meteorological data collected at the old San Francisco Federal Building at 50 United

<sup>70</sup> While not a GHG, volatile organic compounds are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing volatile organic compound emissions would reduce the anticipated local effects of global warming.

<sup>71</sup> San Francisco Planning Department, Greenhouse Gas Analysis: Compliance Checklist for 2417 Green Street, January 31, 2019.

Nations Plaza over a six-year period<sup>72</sup> show that westerly<sup>73</sup> through northwesterly winds are the most frequent and strongest winds during all seasons. Of the 16 primary wind directions, four have the greatest frequency of occurrence: these are northwest, west-northwest, west, and southwest (referred to as prevailing winds).

Analysis of the Federal Building wind data shows that during the hours from 6:00 a.m. to 8:00 p.m., about 70 percent of the winds blow from five adjacent directions of the 16 directions as follows: northwest (10 percent of all winds), west-northwest (14 percent of all winds), west (35 percent of all winds), west-southwest (accounting for 2 percent of all winds), and southwest (9 percent of all winds). In San Francisco, over 90 percent of all measured winds with speeds over 13 mph blow from these five directions. The other 10 percent of winds over 13 mph are from storms and can come from any other direction.

Section 148 of the San Francisco Planning Code establishes wind comfort and wind hazard criteria used to evaluate new development in four areas of the city. Section 148 provides that any new building or addition in these areas of the city that would cause wind speeds to exceed the hazard level of 26-mph-equivalent wind speed (as defined in the planning code) more than one hour of any year must be modified to meet this criterion. (The 26 mph standard accounts for short-term—three-minute averaged—wind observations at 36 mph as equivalent to the frequency of an hourly averaged wind of 26 mph. As noted above, winds over 34 mph make it difficult for a person to maintain balance, and gusts can blow a person over.) While the proposed project is not subject to section 148, the planning department uses the wind hazard criterion as the CEQA significance threshold to determine whether a proposed project would substantially alter ground-level winds in public areas in an adverse manner.

Building structures near or greater than 100 feet in height could create pedestrian level conditions such that the wind hazard criterion of 26-mph-equivalent wind speed for a single hour of the year would be exceeded. There is no threshold height that triggers the need for wind-tunnel testing to determine whether the building design would result in street-level winds that exceed the standard. It is generally understood, however, from many prior wind-tunnel tests on a variety of projects throughout San Francisco that most, if not all, buildings under 80 feet do not result in adverse wind effects at street level, barring unusual circumstances.

The proposed project would construct one- and three-story horizontal rear additions, and third and fourth floor vertical additions that would not exceed the existing approximately 45-foot-tall building. Because the project elements would all be well below 100 feet tall and because the project site is not located near any other tall buildings, the project would not alter wind in a manner that creates wind hazards in publicly accessible areas. Therefore, impacts related to wind hazards in publicly accessible areas of substantial pedestrian use would be less than significant.

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72 Arens, E. et al., "Developing the San Francisco Wind Ordinance and its Guidelines for Compliance," Building and Environment, Vol. 24, No. 4, pages 297-303, 1989.

73 Wind directions are reported as directions from which the winds blow.

**Impact C-WI-1: The proposed project, in combination with other past, present, and reasonably foreseeable projects, would not result in cumulatively considerable impacts related to wind. (Less than Significant)**

As discussed above, the proposed modification to the building would be less than 100 feet tall and would not alter wind in a manner that substantially affects public areas. For this reason, the project would not combine with cumulative development projects to create or contribute to a cumulative wind impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>10. SHADOW. Would the project:</b>					
a) Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact SH-1: The proposed project would not create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space. (Less than Significant)**

In an urban environment, shadow is a function of the height, size, and massing of buildings and other elements of the built environment, and the angle of the sun. The angle of the sun varies due to the time of day (from rotation of the earth) and the change in seasons (due to the earth's elliptical orbit around the sun and the earth's tilted axis). Morning and afternoon shadows are typically longer because the sun is lower in the sky. The longer mid-day shadows are cast during the winter, when the mid-day sun is lowest in the sky, and the shorter mid-day shadows are cast during the summer, when the mid-day sun is higher in the sky. At the time of the summer solstice (which falls on approximately June 21 of every year), the mid-day sun is highest in the sky, and the longest day and shortest night occur on this date. Conversely, the shortest day and longest night occur on the winter solstice (which falls on approximately December 21 of every year). The vernal and fall equinoxes (when day and night are equal in length) represent the halfway point between solstices.

San Francisco Planning Code section 295, which was adopted in response to Proposition K (passed November 1984), mandates that new structures above 40 feet in height that would cast additional shadows on properties under the jurisdiction of, or designated to be acquired by, the Recreation and Parks Department cannot be approved by the Planning Commission (based on recommendation from the Recreation and Park Commission) if the shadow "will have any adverse impact on the use" of the park, unless the impact is determined to be insignificant. The proposed project would expand an existing four-story 45-foot-tall single-family home and add one accessory dwelling unit but would not have the potential to cast new shadow on nearby parks or open spaces. Section 295(a)(4) exempts "structures of the same height and in the same location as structures in place on June 6, 1984." In any event, a 43-foot shadow fan illustrates that project would not cast

shadow on Recreation & Parks land or publicly accessible open space.<sup>74</sup> The park and recreational facilities closest to the project site are the 11.9-acre Alta Plaza located four blocks south of the project site, and the 1,480-acre Presidio of San Francisco, located five blocks west of the project site. Given the distance between the project site and these parks, as well as the existing and proposed height of the building (approximately 45 feet tall), the proposed project would not result in new shadow on nearby publicly accessible open spaces.

The proposed project would shade portions of streets, sidewalks, and private properties in the project vicinity at various times of the day throughout the year. Shadows on streets and sidewalks would not exceed levels commonly expected in urban areas and would be considered a less-than-significant effect under CEQA. Although occupants of nearby properties may regard the increase in shadow as undesirable, the limited increase in shading of private properties as a result of the proposed project would not be considered a significant impact under CEQA. For these reasons, the proposed project would not create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space.

**Impact C-SH-1: The proposed project, in combination with other past, present, and reasonably foreseeable projects, would not result in cumulatively considerable impacts related to shadow. (Less than Significant)**

As discussed above, the proposed building would not result in any net new shadow on any publicly accessible open spaces, and thus would not combine with cumulative development projects to create or contribute to a cumulative shadow impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>11. RECREATION. Would the project:</b>					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>74</sup> San Francisco Planning Department, 2417 Green Street Shadow fan modeled from proposed 43-foot tall building, May 30, 2019. At its highest point, the existing building is almost 45 feet tall. Since it is on an upsloping lot, the height varies along with the slope and gradually becomes shorter as the grade increases towards the rear. With the proposed alteration to the roofline, the project would result in a decrease in the building height at the front by approximately 3 feet.

**Impact RE-1: The proposed project would not increase the use of existing parks and recreational facilities, would not deteriorate any such facilities, and would not require the expansion of such facilities. (Less than Significant)**

As noted above, the park and recreational facilities closest to the project site are the 11.9-acre Alta Plaza located four blocks south of the project site, and the 1,480-acre Presidio of San Francisco, located five blocks west of the project site. The project site would provide passive recreational uses onsite for the residents through the approximately 600-square-foot backyard. In addition, residents of the proposed units would be within walking distance of the above-noted open spaces.

The projected five new permanent residents on the project site would not substantially increase demand for, or use of, neighborhood parks or recreational facilities such that substantial physical deterioration would be expected. Also, the new residents would not require the construction of new recreational facilities or the expansion of existing facilities. For these reasons, the proposed project would have a less-than-significant impact on recreational facilities and resources.

**Impact C-RE-1: The proposed project, in combination with past, present and reasonably foreseeable future projects, would not result in cumulative impacts on recreational facilities or resources. (Less than Significant)**

Cumulative residential development in the project vicinity would result in an intensification of land uses and a cumulative increase in the demand for recreational facilities and resources in the project vicinity and in the city overall. The City has accounted for such growth in the 2014 update of the Recreation and Open Space Element of the San Francisco General Plan.<sup>75</sup> In addition, San Francisco voters passed two bond measures, in 2008 and 2012, to fund the acquisition, planning, and renovation of City recreational resources. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact on recreational facilities or resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>12. UTILITIES AND SERVICE SYSTEMS.</b>					
<b>Would the project:</b>					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>75</sup> San Francisco Planning Department, San Francisco General Plan, Recreation and Open Space Element, April 2014, pp. 20-36, [http://www.sf-planning.org/ftp/General\\_Plan/Recreation\\_OpenSpace\\_Element\\_ADOPTED.pdf](http://www.sf-planning.org/ftp/General_Plan/Recreation_OpenSpace_Element_ADOPTED.pdf), accessed May 20, 2016.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact UT-1: Implementation of the proposed project would not exceed the wastewater treatment capacity of the provider that would serve the project and would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities. (Less than Significant)**

Most of San Francisco, including the project site, is served by a combined wastewater system. Under such a system, sewage and stormwater flows are captured by a single collection system and the combined flows are treated through the same wastewater treatment plants. The San Francisco Public Utilities Commission (SFPUC) provides and operates water supply and wastewater treatment facilities for the city. Pacific Gas and Electric Company provides electricity and natural gas to the project site, and various private companies provide telecommunications facilities.

The proposed project would add an estimated five new residents to the currently vacant project site; this would result in an incremental increase in the demand for water and wastewater treatment, but not in excess of amounts expected and provided for in the project area by the SFPUC. Further, the proposed project would incorporate water-conserving design features, such as low-flush toilets and showerheads, which would reduce both water demand and wastewater production. Wastewater and water lines that serve the project site have sufficient capacity to serve the population added to the area by the project. The SFPUC's treatment facilities have adequate capacity to serve the growth anticipated in the general plan. The project would not cause collection treatment capacity of the sewer system in the city to be exceeded.

The project would result in an incremental increase in the demand for electricity, natural gas, and telecommunications, which is not in excess of amounts expected and provided for in the project area by utility service providers.

For the reasons discussed above, the utilities demand associated with the project-related residential population increase would not exceed the service capacity of the existing providers and would not require the construction of new facilities or expansion of existing facilities. Therefore, this impact would be less than significant.

**Impact UT-2: Sufficient water supplies are available to serve the proposed project and reasonably foreseeable future development in normal, dry, and multiple dry years; therefore, the proposed project would not require or result in the relocation or construction of new or expanded water facilities the construction or relocation of which could cause significant environmental effects.**

Water would be supplied to the proposed project from the SFPUC's Hetch-Hetchy regional water supply system. Under sections 10910 through 10915 of the California Water Code, urban water suppliers like the SFPUC must prepare water supply assessments for certain large "water demand" projects, as defined in CEQA Guidelines section 15155.<sup>76</sup> The proposed project does not qualify as a "water-demand" project as defined by CEQA Guidelines section 15155(a)(1); therefore, a water supply assessment has not been prepared for the project. However, the SFPUC estimates that a typical development project in San Francisco comprised of either 100 dwelling units, 100,000 square feet of commercial use, 50,000 square feet of office, 100 hotel rooms, or 130,000 square feet of PDR use would generate demand for approximately 10,000 gallons of water per day, which is the equivalent of 0.011 percent of the total water demand anticipated for San Francisco in 2040 of 89.9 million gallons per day.<sup>77</sup> Because it would expand an existing single-family home and add one accessory dwelling unit, the proposed project would generate less than 0.011 percent of water demand for the city as a whole in 2040, which would constitute a negligible increase in anticipated water demand.

The SFPUC uses population growth projections provided by the planning department to develop the water demand projections contained in the urban water management plan. As discussed in Section F.2, Population and Housing, above, the proposed project would be encompassed within planned growth in San Francisco and is therefore also accounted for in the water demand projections contained in the urban water management plan. Because the proposed project would comprise a small fraction of future water demand that has been accounted for in the city's urban water management plan, sufficient water supplies would be available to serve the proposed project in normal, dry, and multiple dry years, and the project would not require or result in the relocation or construction of new or expanded water supply facilities the construction or relocation of which

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76 Pursuant to CEQA Guidelines section 15155(1), "a water-demand project" means: (A) A residential development of more than 500 dwelling units; (B) A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; (C) A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor area; (D) A hotel or motel, or both, having more than 500 rooms, (e) an industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; (F) a mixed-use project that includes one or more of the projects specified in subdivisions (a)(1)(A), (a)(1)(B), (a)(1)(C), (a)(1)(D), (a)(1)(E), and (a)(1)(G) of this section; (G) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

77 San Francisco Public Utilities Commission, 2015 Urban Water Management Plan for the City and County of San Francisco, June 2016. This document is available at <https://sfwater.org/index.aspx?page=75>

could cause significant environmental effects. This impact would be less than significant, and no mitigation measures are necessary.

**Impact UT-3: The proposed project would not generate solid waste in excess of state or local standards, would not impair the attainment of solid waste reduction goals, and would comply with statutes, regulations, and reduction goals concerning solid waste. (Less than Significant)**

In September 2015, the City entered into a landfill disposal agreement with Recology, Inc. for disposal of all solid waste collected in San Francisco, at the Recology Hay Road Landfill in Solano County, through September 2024 or until 3.4 million tons have been disposed, whichever occurs first. The City would have an option to renew the agreement for a period of six years or until an additional 1.6 million tons have been disposed, whichever occurs first.<sup>78</sup> The Recology Hay Road Landfill is permitted to accept up to 2,400 tons per day of solid waste. At that maximum permitted rate, the landfill has the capacity to accommodate solid waste until approximately 2034. Under existing conditions, the landfill receives an average of approximately 1,850 tons per day from all sources, with approximately 1,200 tons per day from San Francisco, which includes residential and commercial waste and demolition and construction debris that cannot be reused or recycled<sup>79</sup> (see discussion below). At the current rate of disposal, the landfill closure has operating capacity until 2041. The City's contract with the Recology Hay Road Landfill will extend until 2031 or when the City has disposed 5 million tons of solid waste, whichever occurs first. At that point, the City would either further extend the landfill contract or find and entitle an alternative landfill site.

The project's population is part of the population growth taken into account in the San Francisco General Plan 2014 Housing Element Update, as discussed under Section F.2, Population and Housing, and therefore can be assumed to have been taken into account in waste management planning. Further, the project would be required to implement the City's Mandatory Recycling and Composting Ordinance (No. 100-09), the objective of which is to minimize the City's landfill trash generation. In compliance with this ordinance, the project would be required to provide convenient facilities for the separation of recyclables, compostables and landfill trash for its users. Occupants of the project site would be required to separate disposed material.

Project construction also would generate demolition and construction waste. The City's Construction and Demolition Debris Recovery Ordinance prohibits construction and demolition material from being taken to landfill or placed in the garbage. All mixed debris must be transported by a registered hauler to a registered facility to be processed for recycling, and source separated material must be taken to a facility that recycles or reuses those materials. As discussed above, the City has access to adequate landfill capacity at least through 2031 and potentially through 2041 and anticipates that an adequate alternative site will be identified at that point. On this basis, the City has adequate solid waste capacity to serve the proposed project, and the project's impact with respect to landfill capacity would be less than significant.

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<sup>78</sup> San Francisco Planning Department, Agreement for Disposal of San Francisco Municipal Solid Waste at Recology Hay Road Landfill in Solano County, Final Negative Declaration, Planning Department Case No. 2014.0653, May 21, 2015, [http://sfmea.sfplanning.org/2014.0653E\\_Revised\\_FND.pdf](http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf), accessed February 19, 2019.

<sup>79</sup> CalRecycle, 2010, Jurisdiction diversion/disposal rate detail. <http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionDetail.aspx?JurisdictionID=438&Year=2010>, accessed October 23, 2017.



**Impact C-UT-1: The proposed project, in combination with past, present and reasonably foreseeable future projects, would not result in cumulative impacts on utilities and service systems. (Less than Significant)**

Cumulative development in the project vicinity would incrementally increase demand for utilities and service systems within the city, but not beyond levels anticipated and planned for by the City's public service providers. The SFPUC has accounted for the anticipated growth in its wastewater service projections. The City also has implemented various programs to minimize generation of solid waste disposed to landfills from all projects, as discussed above. All development projects in the city, including development that contributes to demand for utility service in the immediate vicinity of the proposed project, as well as projects throughout the city that contribute to water demand and the demand for wastewater treatment and for solid waste disposal, are required to comply with the City's water conservation, wastewater minimization, and solid waste reduction ordinances and policies.

As explained in Impact UT-2 above, no single development project alone in San Francisco would require the development of new or expanded water supply facilities. The analysis provided in Impact UT-2 considers whether the proposed project in combination with both existing development and projected growth through 2040 would require new or expanded water supply facilities, the construction or relocation of which could have significant cumulative impacts on the environment. Therefore, no separate cumulative analysis is required.

Compliance with City ordinances would reduce the effects of cumulative demand for utility capacity and services such that service capacities would not be exceeded. In addition, electricity, natural gas, and telecommunications companies provide adequate services for the proposed project in combination with reasonably foreseeable future project; therefore, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, has been accounted for in these plans and would not result in a cumulative utilities and service systems impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>13. PUBLIC SERVICES. Would the project:</b>					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services such as fire protection, police protection, schools, parks, or other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact PS-1: The proposed project would increase demand for police and fire protection services but would not require construction of new or physically altered facilities, associated with the provision of such services, that could cause significant environmental impacts. (Less than Significant)**

The project site receives police protection services from the San Francisco Police Department. The Northern Police Station, located at 1125 Fillmore Street, approximately a mile south of the project site, serves the project site.<sup>80</sup> The station underwent seismic, structural, electrical and plumbing improvements in 2016 and no expansions of the station are proposed. Fire Station 16, located at 2251 Greenwich Street, is about a quarter mile northeast of the project site is being replaced and is currently under construction. The next closest fire station that currently provides first responder service to the project site is Fire Station 38 at 2150 California Street, about a mile southeast of the project site. A new public safety building, which serves as citywide police and fire headquarters, was completed in 2016. There are no current plans to construct or expand additional police or fire stations that serve the project area.

The project would add an estimated five residents to the project site. The project would comply with the regulations of the 2016 California Fire Code, which includes requirements for fire protection systems, such as the provision of smoke alarms and fire extinguishers, adequate building access, and emergency response systems.

For these reasons, the proposed project would not require the construction or alteration of a police or fire station or affect response times, service ratios, or other performance objectives related to police and fire protection services, and these impacts would be less than significant.

**Impact PS-2: The proposed project would not result in a substantial increased demand for school facilities and would not require new or expanded school facilities. (Less than Significant)**

The proposed project would add an estimated five new residents, which may include school-aged children who might attend schools operated by the San Francisco Unified School District (SFUSD). SFUSD ongoing enrollment forecasting allows the district to plan for additional expansion of its facilities if determined necessary. Given the SFUSD's overall capacity of almost 64,000 students,<sup>81</sup> the increase of one or two students associated with the project would not substantially change the demand for schools, nor would the project result in the need for construction of new school facilities. The impact would be less than significant.

**Impact PS-3: The proposed project would not substantially increase the demand for other government services, and would not necessitate the need for new or physically altered government facilities to meet service performance objectives. (Less than Significant)**

The proposed project would increase the population of the city by approximately five residents. Population increase in the area from development of the proposed project would be nominal

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<sup>80</sup> San Francisco Police Department, <http://sanfranciscopolice.org/police-district-maps>, accessed April 30, 2018.

<sup>81</sup> San Francisco Unified School District. Growing Population, Growing Schools. SPUR Forum Presentation, Slide 14. August 31, 2016, [https://www.spur.org/sites/default/files/events\\_pdfs/SPUR%20Forum\\_August%2031%202016.pptx\\_.pdf](https://www.spur.org/sites/default/files/events_pdfs/SPUR%20Forum_August%2031%202016.pptx_.pdf), accessed May 23, 2018.

compared to population growth for the city overall. The project area is adequately served by government facilities. The population of the proposed project would not generate the need for new or physically altered government facilities. Therefore, the proposed project would have a less-than-significant impact on governmental facilities.

In addition, the proposed project, in combination with the other residential and mixed-use projects proposed in the area, would incrementally increase demand for public services, which include fire and police protection, school services, and other governmental services. The Fire Department, the Police Department, other City agencies, and SFUSD have accounted for such growth in providing other public services to the residents of San Francisco. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to public services.

**Impact C-PS-1: The proposed project, in combination with past, present and reasonably foreseeable future projects, would not result in cumulative impacts on public services. (Less than Significant)**

The proposed project, in combination with other residential projects proposed in the area, would incrementally increase the demand for public services, which include fire and police protection, and other governmental services. The Fire Department, the Police Department, and other city agencies have accounted for such growth in providing other public services to the residents of San Francisco. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to public services.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>14. BIOLOGICAL RESOURCES. Would the project:</b>					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact BI-1: The proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any special-status species. Would not interfere with the movement of species, and would not conflict with the City's tree ordinance. (Less than Significant)**

The project site is located in a developed area of San Francisco. It provides no habitat for special status plants or wildlife and does not include any riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and the United States Fish and Wildlife Service, or any state or federally protected wetlands. No trees are proposed for removal as part of the proposed project, and the proposed project does not fall within any local, regional or state habitat conservation plan areas. The project would not remove any trees protected by the City's Urban Forestry Ordinance (Public Works Code section 801 et seq.) and would plant a new street tree, in compliance with the public works code. Therefore, project-related biological impacts of the proposed project would be less than significant.

**Impact C-BI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative impact related to biological resources. (Less than Significant)**

As with the proposed project, nearby cumulative development projects would also be subject to federal, state, and local regulations related to biological resources. As with the proposed project, compliance with these ordinances would reduce the effects of development projects to less-than-significant levels.

The proposed project would not modify any natural habitat and would have no impact on any candidate, sensitive, or special-status species, any riparian habitat, or other sensitive natural community; and/or would not conflict with any local policy or ordinance protecting biological resources or an approved conservation plan. For these reasons, the proposed project would not have the potential to combine with past, present, and reasonably foreseeable future projects in the project vicinity to result in a significant cumulative impact related to biological resources. Therefore, there would be no cumulative impacts on biological resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>15. GEOLOGY AND SOILS. Would the project:</b>					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project would connect to San Francisco's sewer and stormwater collection and treatment system. It would not use a septic water disposal system. Therefore, Topic 15e is not applicable to the project.

**Impact GE-1: The proposed project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic ground shaking, ground failure, or landslides. (Less than Significant with Mitigation)**

## **San Francisco Permit Review Process**

To ensure that the potential for adverse effects related to geology and soils is adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Code (state building code, California Code of Regulations, Title 24); the San Francisco Building Code (local building code), which is the state building code plus local amendments that supplement the state code, including the building department's administrative bulletins and information sheets.

The project site is located within an area of potential landslide hazard zone as identified on the 1974 Blume map. In 2018, the San Francisco Building Code was amended by the Slope and Seismic Hazard Zone Protection Act (Ordinance No. 121-18) to no longer reference the Blume map. However, Building Permit Application No. 201704285244 for the building expansion is subject to the building code provisions in effect on April 28, 2017, before Ordinance No. 121-18 became effective. On August 23, 2019, the building department documented that this project site and thus is not subject to the additional requirements of the Slope Protection Act (building code section 106A.4.1.4).<sup>82,83,84</sup> The building department, during its review of the project's structural plans, may request the assistance of a structural design reviewer to provide additional and specialized expertise to supplement its plan review. The structural design reviewer would meet with the project sponsor's engineer of record and with building department staff as the need arises throughout the design process. The Slope Protection Act states that the final geotechnical report must be prepared and signed by both a licensed geologist and a licensed geotechnical engineer, which in turn shall undergo design review by a licensed geotechnical or civil engineer to verify that appropriate geological and geotechnical issues have been considered and that appropriate slope instability mitigation strategies, including drainage plans if required, are proposed.

~~Based on the review of the geotechnical submittal (discussed in more detail below), the building department director may also require that the project be subject to review by a three member Structural Advisory Committee that will advise the building department on matters pertaining to the building's design and construction. The three committee members must be selected from a list~~

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<sup>82</sup> ~~The project site is located within an area of potential landslide hazard as identified on the 1974 Blume map. In 2018, the San Francisco Building Code was amended by the Slope and Seismic Hazard Zone Protection Act (Ordinance No. 121-18) to no longer reference the Blume map. However, Building Permit Application 201704285244 for the building expansion was submitted before Ordinance No. 121-18 became effective, and thus the project is subject to DBI regulations in place before Ordinance No. 121-18 became effective.~~

<sup>83</sup> Cyril Yu, Supervisor, Permit Services, San Francisco Department of Building Inspection, email to Jeanie Poling regarding 2417 Green St PMND appeal, August 23, 2019.

<sup>84</sup> San Francisco Planning Department, 2417 Green St on Blume Map, August 28, 2019.

~~of qualified engineers submitted by the Structural Engineers Association of Northern California and approved by the building department. One member must be selected by the building department, one member shall be selected by the project sponsor, and the third member shall be selected jointly.~~

## **Existing Subsurface Conditions**

The analysis in this section relies on the information and findings provided in the geotechnical investigation conducted for the proposed project.<sup>85</sup> The geotechnical investigation includes a review of available geologic and geotechnical data for the site vicinity, an engineering analysis of the proposed project in the context of geologic and geotechnical site conditions, subsurface exploration including soil borings, and preparation of project-specific design and construction recommendations.

In February 2017 (prior to excavation), two soil borings were taken in the back yard, at the location of the proposed building expansion. The borings encountered 2.6 to 2.7 feet of soft to medium stiff sandy clay with gravel and debris (fill), overlying 1 to 2 feet of very stiff sandy clay with gravel (residual soil) overlying friable to weak sandstone at 3.75 to 4.25 feet below ground surface. One dynamic penetration test/hand auger taken within the building encountered 0.5 feet of medium dense gravel (fill) overlying friable to weak sandstone at 1 foot below ground surface. Groundwater was not observed during field investigations. In April 2019, the geotechnical engineer and geologist visited the site to observe the partial excavation in the existing garage and two exploratory foundation pits along existing exterior foundations.

While groundwater was not observed during the field investigation, groundwater levels vary seasonally depending on factors such as landscaping activities and seasonal rainfall. Groundwater is typically encountered at the interface between geologic contacts (i.e., between the soil and bedrock) and within sand lenses in the native clays. Seasonal springs may be encountered in the sands above the native clays.

## **Proposed Excavation and Foundation Construction Activities**

Based on soil samples taken, the geotechnical report anticipates that the majority of site grading would consist of cuts in undocumented fill, native clays and bedrock, and that the foundation subgrade would consist of bedrock. The geotechnical report concludes that the site can be developed as planned, provided the recommendations presented in the geotechnical report are incorporated into the project plans and specifications and are implemented during construction. The geotechnical engineer anticipates that the proposed building alterations would be supported on shallow foundations bearing on bedrock. Depending on the final development plans, excavation of up to 10 feet below the ground level of the adjacent site to the west (2421 Green Street) would be required to construct the proposed basement expansion. It is anticipated that this excavation would be kept about 2 to 3 feet from the property line. Where the excavation would abut an adjacent building, and the adjacent foundations bear on soil, the foundation adjacent to the excavation would be shored using at-rest pressures and adding any surcharge loads; however, it

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<sup>85</sup> Divis Consulting, Inc., Geotechnical Report and Geologic Hazard Study, 2417 Green Street, San Francisco, California, April 25, 2019.

is anticipated that adjacent foundations bear on bedrock. Excavation may be performed in non-sequential sections with a maximum length (along the adjacent property line) of 5 feet.

### **Preliminary Building Department Review of the Proposed Project**

The July 20, 2018 appeal of the June 22, 2018 categorical exemption for the proposed project and subsequent correspondence from the 2421 Green Street representative cited multiple concerns by engineer Lawrence Karp concerning BPA#201705116316 (for the garage expansion and foundation replacement) and BPA #201710020114 (to legalize the excavation work). The Board of Supervisors upheld the appeal and noted,

The Karp Report and other information submitted at and prior to the January 9, 2018, appeal hearing constituted substantial evidence that the Project, if approved, may result in one or more substantial adverse changes in the significance of the neighboring historic resource located at 2421 Green Street that have not been sufficiently addressed in the Categorical Exemption for the Project...The Board finds that the Karp Report and other information submitted at and prior to the January 9, 2018, appeal hearing constituted substantial evidence not previously identified that affect the CEQA evaluation set forth in the Categorical Exemption regarding how the Project may impair the significance of an historic resource by causing impacts to its immediate surroundings.<sup>86</sup>

To address these concerns raised in the appeal and in response to the CEQA findings by the Board of Supervisors, the planning department coordinated with the building department to obtain preliminary review of the geotechnical report and geologic hazard study prepared for the proposed project. The building department's Plan Review Services Division staff reviewed a 2017 geotechnical investigation and made recommendations to revise the report; these recommendations are reflected in the geotechnical report dated April 25, 2019.<sup>87</sup> The Plan Review Services Division staff reviewed the revised report and found that the report generally meets the standards for professional practice of geotechnical engineering.<sup>88</sup>

Pursuant to City code requirements, the project sponsor will be required to undertake the following actions:

- **Final Structural Plan Development.** The sponsor's geotechnical engineer will be required to consult with the design team during the development of the structural plans and will review the structural plans and calculations, shoring plans, and civil plans as required by the Department of Building Inspection, and submittals by the foundation contractor. The

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<sup>86</sup> San Francisco Board of Supervisors, Motion No. M18-012, Adopting Findings Reversing the Categorical Exemption Determination – 2417 Green Street, Amended February 6, 2018, File No. 180123, available at <https://sfgov.legistar.com/View.ashx?M=F&ID=5792879&GUID=75361D57-546D-41F0-B0A3-D11B6083C3D2>.

<sup>87</sup> Divis Consulting, Inc., Geotechnical Report and Geologic Hazard Study, 2417 Green Street, San Francisco, California, April 25, 2019.

<sup>88</sup> Stephan Leung, G.E., Plan Review Services Division, San Francisco Department of Building Inspection, Preliminary Review of Geotechnical Report for 2417 Green Street, San Francisco, Block/Lot: 0560/028, DBI Permit Numbers: 2017-0428-5244, May 16, 2019.



final building design will be required to comply with all recommendations of the geotechnical engineer as well as DBI requirements.

- **Control of Groundwater.** The final design will include measures to intercept groundwater where it may impact the proposed construction, using methods such as drainage behind retaining walls, under-slab-drainage, French drains and area drains, and waterproofing. Any required waterproofing system will be designed and inspected by the architect and/or engineer of record and shall be reviewed and approved by the building department. If groundwater, or evidence of groundwater, is encountered during construction, the contractor will notify the geotechnical consultant to evaluate whether additional measures are required to control the flow of groundwater at the site. Where collected, groundwater will be discharged to a suitable collection point.
- ~~**Third Party Review.** Pursuant to the Slope Protection Act, the project's geotechnical investigation report and construction documents will undergo third party review by a licensed geotechnical engineer. Such review will verify that appropriate geological and geotechnical issues have been considered and that appropriate slope instability mitigation strategies have been proposed.~~
- **Unexpected Conditions During Construction.** If the contractor encounters any adjacent foundations not shown on the project documents or unexpected materials during excavation, project excavation will be halted, and the project geotechnical engineer will be contacted immediately to provide additional consultation on site due to different site conditions. The geotechnical engineer's recommendation shall be reviewed and approved by DBI staff prior to resuming of construction activities.
- **Construction Monitoring.** The contractor will notify the geotechnical engineer and the building department five days prior to any excavation, and the geotechnical engineer shall periodically be present during excavation to observe the actual soil/rock conditions and to evaluate the stability of the cut. The contractor shall establish survey points on the shoring and on adjacent buildings and streets within twice the height of the proposed excavation prior to the start of excavation and where access permits and shall submit the proposed survey points to the building department for review and approval. These survey points shall be used to monitor the vertical and horizontal movements of the shoring and surrounding structures and streets during construction. The contractor shall survey and take photographs of the adjacent buildings prior to the start of excavation and immediately after its completion. If unacceptable earth movement or evidence of structural settlement is encountered during construction, as determined by the geotechnical engineer, project excavation shall be halted and the geotechnical engineer shall evaluate if additional measures are required to prevent further movement. In this event, the geotechnical engineer shall notify the building department that unacceptable earth movement has occurred and of the additional measures proposed to prevent further movement.

Given the history of this project, as outlined in the Project History section, above, combined with the concerns raised by the Board of Supervisors at the appeal hearing, this initial study finds that project construction could compromise the structural integrity of the adjacent foundation at 2421

Green Street. This would be a significant impact. Implementation of **Mitigation Measure M-GE-1, Ongoing Monitoring By and Coordination with the Planning Department and the Department of Building Inspections Prior to and During the Construction Phase Regarding Compliance with Geotechnical Requirements**, would reduce this impact to a less-than-significant level. The mitigation measure would ensure ongoing monitoring by and coordination between the project sponsor's team, the planning department, and the department of building inspection regarding geotechnical issues that could arise during the course of plan review and project construction.

**Mitigation Measure M-GE-1: Ongoing Monitoring by and Coordination with the Planning Department and the Department of Building Inspections Prior to and During the Construction Phase Regarding Compliance with Geotechnical Requirements.** Pursuant to the San Francisco Department of Building Inspection process, the project sponsor (and their design and construction team, ~~geotechnical engineer, and contractor,~~ as applicable) ~~will~~ shall be subject to ongoing monitoring by and coordination requirements with the planning department and the building department regarding plan check reviews and building inspections prior to and during construction work. ~~This process will include the following requirements:~~

In conjunction with its submittal of structural plans, the project sponsor shall submit to the building department construction documents that identify anticipated significant construction milestones when a field report and/or memorandum by engineer(s) of record shall be submitted to the planning and building departments. The building department shall review and determine whether to approve the list of significant reporting milestones as part of its approval of structural plans.

The engineer(s) of record shall notify the planning and building departments when milestones indicated on the construction documents have been reached, and their outcomes. Specifically, the project sponsor's engineer of record shall submit field reports and/or memoranda documenting each milestone to the planning and building departments.

Pursuant to planning department policy, any memoranda and/or reports prepared by project sponsor and/or a consultant working for the project sponsor shall adhere to the planning department's protocols of objectivity.

Structural and geotechnical observation and inspection shall be provided onsite during construction.

- ~~• Prior to commencement of construction, the project sponsor shall submit to the planning department and building department a report outlining anticipated construction milestones with corresponding (approximate) dates of reaching those milestones as well and all memoranda and/or reports anticipated to be prepared or approved at those milestones. The report shall address how all code requirements will be met, including responsible parties and the city agency providing oversight.~~

~~The report shall be reviewed and approved by the planning department and the building department prior to commencement of construction.~~

- ~~• Once construction commences, the sponsor shall notify the planning department and the building department (when coordination with the building department is not already included as typical part of the process) when the above milestones have been reached and their outcomes. Specifically, all memoranda and/or reports issued at times of those milestones shall be provided to the planning department and the building department.<sup>89</sup>~~

Compliance with Mitigation Measure M-GE-1 would ensure the security and stability of the project site and adjacent properties. Furthermore, as addressed under Impact CR-1, compliance with this mitigation measure would avoid any potential impacts to historic resources.

### **Other Geotechnical Issues Raised in the Exemption Appeal**

The July 20, 2018 appeal of the June 22, 2018 categorical exemption states, among other assertions, that no topographic and boundary survey has been performed for the proposed project, and that without land survey data, it would be impossible for the project sponsor to provide protection of adjacent properties. Project approval by the planning department concerns consistency with the planning code and does not require a survey or final structural plans.

The July 20, 2018 appeal of the June 22, 2018 categorical exemption also states that the brick foundation of 2421 Green Street would be damaged by the project:

Fundamentally, all that is needed to know is that the drawings (e.g. Detail 3, Sheet S4.1) show a critical new foundation on 2417 Green that crosses the property line to be anchored in the 125 year old brick foundation.

A subsequent letter from Lawrence B. Karp dated January 17, 2019, also states that the proposed project cannot be accomplished without construction that would “compromise the lateral and subjacent support” of 2421 Green Street. The letter further states that Detail 3 on Sheet S4.1 of BPA #201705116316 (the foundation replacement permit) shows a connection with the adjacent foundation (see red arrow on Figure 14). The project sponsor subsequently clarified that the lines on the plans are call outs for longitudinal reinforcement in the wall footing and do not show a connection to the adjacent foundation. The sponsor’s letter of clarification further states, “For the avoidance of any further misunderstanding by any city department or board, the proposed project at 2417 Green Street is in NO WAY PHYSICALLY CONNECTED to 2421 Green Street and does not require any work whatsoever to be performed at 2421 Green Street.”<sup>90</sup> DBI staff reviewed this plan sheet and concurred with the project sponsor that “[t]here is no physical connections between the new footings and the neighbor’s existing masonry footings.”<sup>91</sup> Nevertheless, the foundation

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<sup>89</sup> Pursuant to Department policy, any memoranda and/or reports prepared by project sponsor and/or a consultant working for the project sponsor shall adhere to Planning Department’s protocols of objectivity.

<sup>90</sup> Christopher F. Durkin, P.E., Clarification Letter, 2417 Green Street – Exposing of Fraud in Reports prepared by Larry Karp, April 11, 2019.

<sup>91</sup> Stephen Leung, Department of Building Inspection, email to Tania Sheyner, Planner Department. June 13, 2019.

replacement permit (BPA #201705116316) has been suspended and would be superseded by the building expansion permit (BPA #201704285244).

**Impact GE-2: The proposed project would not result in substantial loss of topsoil or erosion. (Less than Significant)**

The 2,500-square-foot project site is covered with a building and a landscaped backyard. Grading and excavation would expose topsoil and could potentially result in erosion. Construction-related activities would be required to comply with San Francisco Public Works Code section 146, which requires all land-disturbing activities to implement and maintain best management practices to minimize surface runoff, erosion and sedimentation to prevent construction site runoff discharges into the City's combined stormwater/sewer system.<sup>92</sup> The project site's relatively small landscaped area and compliance with section 146's best management practices during construction activities would ensure that the project would not result in the loss of topsoil or erosion. This impact would be less than significant.

**Impact GE-3: The proposed project would not be located on a geologic unit that is unstable, or that could become unstable as a result of the project, and would not result in landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant with Mitigation)**

As discussed under Impact GE-1, the project site is located within a landslide hazard zone and, thus, may be subject to landslide hazard. This hazard potential would be highest during site excavation and construction, which would last between three and five months, and the project has the potential to result in significant impacts related to protection of the adjacent foundation at 2421 Green Street that could become unstable as a result of the project. As discussed above under Impact GE-1, oversight by DBI and implementation of Mitigation Measure M-GE-1 would ensure the security and stability of the project site and adjacent properties, and would reduce to less than significant any potential impacts related to earthquake fault, seismic ground shaking, ground failure, or landslide. Compliance with this mitigation measure would also reduce to less-than-significant any effects related to landslide, lateral spreading, subsidence, liquefaction, or collapse.

**Impact GE-4: The proposed project would not create substantial risks to life or property as a result of being located on expansive soil. (Less than Significant)**

Soils located beneath fully developed urban areas are generally not highly susceptible to the effects of expansive soils, which are characterized by their ability to undergo significant volume change (i.e., to shrink and swell) due to variations in moisture content. The presence of expansive soils is typically associated with high clay content. Expansive soils can damage structures and buried utilities and increase maintenance requirements. Section 1803 of the state building code states that in areas likely to have expansive soil, the building official shall require soil tests to determine where such soils do exist, and if so, the geotechnical report must include recommendations and special design and construction provisions for foundations of structures on expansive soils, as necessary.

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92 Ordinance No. 260-13, Public Works Code - Control of Construction Site Runoff, November 5, 2013.

Subsurface exploration at the project site identified undocumented artificial fill overlying residual soils resting on friable to weak sandstone bedrock.<sup>93</sup> Because soils with high clay content were not encountered, the project site is unlikely to contain expansive soil, and impacts related to expansive soils would be less than significant.

**Impact GE-5: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant)**

Paleontological resources, or fossils, are the remains, imprints, or traces of mammals, plants, and invertebrates from a previous geological period. Such fossil remains as well as the geological formations that contain them are also considered a paleontological resource. Together, they represent a limited, non-renewable scientific and educational resource. The potential to affect fossils varies with the depth of disturbance, construction activities, and previous disturbance.

Ground-disturbing activities would occur to a depth of 13 feet and be confined to the sandy clay and Franciscan Complex bedrock underlying the site. These geologic units are considered to have low potential to contain significant fossils or paleontological resources.<sup>94</sup> Thus, the project site has a low potential to contain significant fossils due to the geologic units that would be affected by project construction. Thus, the proposed project would result in less-than-significant impacts to a unique paleontological resource or site.

A unique geologic or physical feature embodies distinctive characteristics of any regional or local geologic principles, provides a key piece of information important to geologic history, contains minerals not known to occur elsewhere in the county, and/or is used as a teaching tool. No unique geologic features exist at the project site; therefore, no impacts on unique geological features would occur.

**Impact C-GE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not have a substantial cumulative impact on geology and soils. (Less than Significant)**

Environmental impacts related to geology and soils are generally site-specific. Nearby cumulative development projects identified in Table 2 on page 7 would be subject to the same seismic safety standards and design review procedures applicable to the proposed project. Compliance with the seismic safety standards and the design review procedures would ensure that the effects from nearby cumulative development projects would be reduced to less-than-significant levels. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to geology and soils.

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<sup>93</sup> Divis Consulting, Inc., Geotechnical Investigation Report for 2417 Green Street, April 25, 2019.

<sup>94</sup> California Academy of Sciences Invertebrate, Zoology, and Geology Fossil Collection Database, <http://researcharchive.calacademy.org/research/izg/fossil/index.asp?xAction=ShowForm&PageStyle=Single&PageSize=0&OrderBy=AccessionNo&County=san+francisco&RecStyle=Full>, accessed June 6, 2018.

**Impact C-GE-2: The project, in combination with cumulative projects, would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant)**

Paleontological impacts are generally site specific and highly localized. Therefore, the potential for the proposed project to combine with reasonably foreseeable future projects and create a cumulative impact related to paleontological resources would be low. Therefore, the proposed project would have a less-than-significant cumulative impact on paleontological resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>16. HYDROLOGY AND WATER QUALITY.</b>					
<b>Would the project:</b>					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site does not contain any streams or water courses, and the proposed project would not alter the course of a stream or river or alter the existing drainage pattern of the project site or area. Thus, Question 15c is not applicable to the proposed project.

In 2018, the SFPUC developed a Draft 100-Year Storm Flood Risk Map that shows areas of San Francisco where significant flooding from storm runoff is highly likely to occur during a 100-year storm. A “100-year storm” means a storm with a 1 percent chance of occurring in a given year. The project site is not on the Draft 100-Year Storm Flood Risk Map.<sup>95</sup> At an elevation of approximately 140 feet above mean sea level, the project site has no potential to be affected by sea level rise by the year 2100 as projected by the City of San Francisco.<sup>96</sup> Because of its elevation, distance from the nearest potential sources of flooding, and intervening topography, the project site is not susceptible to the potential effects of a tsunami or seiche.<sup>97</sup> For these reasons, there is no potential for project impacts with respect to flood hazard, tsunami or seiche zones, and Question 15d is not applicable.

**Impact HY-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. (Less than Significant)**

The project site is located within the area of the city served by a combined stormwater and sewer system. Under such a system, wastewater (sewage) and stormwater are collected and comingled in underground piping and tunnels for conveyance to the City’s wastewater treatment plants, operated by the San Francisco Public Utilities Commission (SFPUC). The project site is less than 5,000 square feet and thus does not require submittal of a stormwater control plan per San Francisco Public Works Code article 4.2, section 147. Nevertheless, the project sponsor would be required to maintain construction best management practices to minimize surface runoff, erosion, and sedimentation from the construction site. During project operation, combined stormwater and wastewater from the project site would be treated pursuant to the City’s National Pollutant Discharge Elimination System (NPDES) permit prior to discharge to receiving waters. This would ensure that the proposed project would not degrade surface or groundwater quality during construction or operations. Therefore, impacts related to water quality from development of the proposed project would be less than significant.

**Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table. (Less than Significant)**

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95 San Francisco Water Power Sewer, Draft 100-Year Storm Flood Risk Map, <http://www.sfwater.org/index.aspx?page=1229>, accessed February 11, 2019.

96 The City projects a sea level rise of 66 inches by the year 2100 in City and County of San Francisco, 2016, San Francisco Sea Level Rise Action Plan, [http://default.sfplanning.org/plans-and-programs/planning-for-the-city/sea-level-rise/160309\\_SLRAP\\_Final\\_ED.pdf](http://default.sfplanning.org/plans-and-programs/planning-for-the-city/sea-level-rise/160309_SLRAP_Final_ED.pdf), accessed February 19, 2019.

97 California Emergency Management Agency (CalEMA), Tsunami Inundation Map for Emergency Planning, State of California – City and County of San Francisco, San Francisco North Quadrangle, San Francisco South Quadrangle (San Francisco Bay), June 15, 2009, [http://www.conservation.ca.gov/cgs/geologic\\_hazards/Tsunami/Inundation\\_Maps/SanFrancisco/Documents/Tsunami\\_Inundation\\_SouthSFNorthSF\\_PacificCoast\\_SanFrancisco.pdf](http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SanFrancisco/Documents/Tsunami_Inundation_SouthSFNorthSF_PacificCoast_SanFrancisco.pdf), accessed April 30, 2018.

The project site is covered with impervious surfaces except for the rear yard. Impervious surfaces greatly limit the amount of surface water that can infiltrate a site to recharge the groundwater. The proposed building expansion into the rear yard would result in a slight increase in impervious surface but not enough to interfere with groundwater recharge.

If dewatering is required during project construction, any effects related to lowering the water table would be temporary and would not be expected to substantially deplete groundwater resources in any underlying aquifers. In addition, the proposed project does not include any groundwater wells to extract groundwater supplies.

Project operation would not result in the use of groundwater and the project would not otherwise be expected to adversely affect groundwater supplies or quality.

For these reasons, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, and impacts would be less than significant.

**Impact HY-3: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant)**

As discussed under HY-1, above, during construction, the project sponsor would be required to maintain construction best management practices to minimize surface runoff, erosion, and sedimentation from the construction site, and during project operation, combined stormwater and wastewater from the project site would be treated pursuant to the City's NPDES permit prior to discharge to receiving waters. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and this impact would be less than significant.

**Impact C-HY-1: The proposed project, in combination with other past, present, or reasonably foreseeable projects, would not substantially deplete groundwater supplies, alter existing drainages, or otherwise degrade water quality. (Less than Significant)**

The proposed project and all future projects within San Francisco would be required to comply with the water quality and drainage control requirements discussed above that apply to all land use development projects within the city. Since all development projects would be required to follow the same regulations as the proposed project, the implementation of new, conforming development projects, peak stormwater drainage rates and volumes resulting from design storms would be expected to decrease gradually over time relative to existing peak flows. Moreover, all development projects would be required to comply with the same drainage, dewatering, and water quality regulations as the proposed project. As a result, cumulative effects related to drainage patterns, water quality, stormwater runoff, stormwater capacity of the combined sewer system and groundwater supply and quality would be less than significant.



<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>17. HAZARDS AND HAZARDOUS MATERIALS. Would the project:</b>					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not located within an airport land use plan area, nor is it within two miles of a public use airport or a private airstrip. There are no areas that would be classified as wildlands in the project vicinity. The closest heavily vegetated area to the project is the Presidio of San Francisco, about a half-mile west of the project site and separated from it by extensive urban infrastructure that is not intermixed with wildlands. Therefore, criteria 16e and 16h are not applicable.

**Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant)**

Neither construction nor operation of the proposed project would involve the routine transport, use, or disposal of significant quantities of hazardous materials. Small quantities of commercially available hazardous materials such as household cleaning, paints, and landscaping supplies may

be used; however, these materials would not be expected to be used in sufficient quantities or contrary to normal use, and therefore would not pose a threat to human health or the environment.

Based on the above, the impact of the proposed development on the public and the environment related to the routine transport, use, and handling of hazardous materials therefore would be less than significant.

**Impact HZ-2: The proposed project would not create a significant hazard to the public or the environment through the release of hazardous materials. (Less than Significant)**

The proposed project would disturb at least 50 cubic yards of soil in an area that the San Francisco Health Department (the health department), pursuant to San Francisco Building Code section 106A.3.2.4, identified as likely containing hazardous substances in the soil or groundwater. Therefore, before the project may obtain a building permit, it must comply with the requirements of article 22A of the San Francisco Health Code (also known as the Maher Ordinance), which the health department administers and oversees.

Per San Francisco Health Code section 22A.4, the health department may waive the requirements imposed by the Maher Ordinance if the applicant demonstrates that the property has been continuously zoned as residential under the planning code since 1921, has been in residential use since that time, and no evidence has been presented to create a reasonable belief that the soil and/or groundwater may contain hazardous substances. In these circumstances, the health department will provide the applicant with a waiver, which is a written notification that the requirements of article 22A have been waived and no further oversight by the health department is required for the project.

The health department issued two Maher waivers for the proposed project because the property has been continuously zoned as residential under the planning code since 1921, has been in residential use since that time, and no evidence has been presented to create a reasonable belief that the soil and/or groundwater may contain hazardous substances. The first waiver, issued on March 28, 2017 for the excavation/addition building permit (#201704285244), recommends that construction activities follow a work health and safety plan and dust control measures.<sup>98</sup> The second Maher waiver, issued on October 31, 2017 for the excavation-only building permit (#201705116316), recommends that construction activities follow a work health and safety plan and dust control measures, and determined that a former underground storage tank removed from the residential site or nearby residential site does not present a significant health or environmental risk to the project property based on the information available from publicly available state databases and health department files.<sup>99</sup> The October 31, 2017 Maher waiver also recommends that excavated fill soils be segregated, stored on plastic sheeting, and analyzed for contaminants prior to reuse or disposal.

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<sup>98</sup> San Francisco Department of Public Health, Waiver from San Francisco Health Code Article 22A (Maher Ordinance), 2417 Green Street, March 28, 2017.

<sup>99</sup> San Francisco Department of Public Health, Waiver from San Francisco Health Code Article 22A (Maher Ordinance), 2417 Green Street, October 31, 2017.

On October 31, 2017, when the health department staff issued the second Maher waiver, and consistent with normal procedures for building permit approvals, staff also signed the back of building permit #201705116316 and added a stamp that stated the following:

Accepted by the San Francisco Department of Public Health Maher Program with the following conditions: Obtain copies and follow the requirements of the Site Mitigation Plan, Environmental Health and Safety Plan, Dust Control Plan and other documents and requirements to ensure compliance with the S.F. Maher Ordinance.

During a meeting with health department on January 17, 2018, to discuss the 2417 Green Street project, Stephanie Cushing, Director of Environmental Health, noted that the health department had one approval stamp that it used both for projects that have approved site mitigation plans and for projects that receive Maher waivers. Ms. Cushing noted that the language on the Maher waiver form and the language on the approval stamp could be misconstrued to indicate that further health department oversight is required.<sup>100</sup> However, Ms. Cushing confirmed that the Maher waiver was appropriate for the 2417 Green Street project and that no further oversight by the health department was required.

The July 20, 2018 appeal of the June 22, 2018 categorical exemption issued for the proposed project cited a report from hydrogeologist Matthew Hagemann that states that the project requires a remediation plan to ensure safe testing and removal of any contaminated soil. This assessment was based on an interpretation that the language on the approval stamp implied that the project was not eligible for a waiver. As discussed above, this is an understandable but incorrect reading of the facts concerning the case.

On February 11, 2018, out of an abundance of caution, the health department requested that the project sponsor submit a work plan for soil and/or groundwater sampling and testing.<sup>101</sup> On February 12, 2018 the project sponsor submitted a work plan to the health department that proposed two sample locations within the existing garage.<sup>102</sup> The work plan proposed laboratory analysis for total petroleum hydrocarbons (TPH) as gasoline (TPHg), as diesel (TPHd), and as motor oil (TPHmo); volatile organic compounds (VOCs); semi-VOCs; organochlorine pesticides; polychlorinated biphenyls (PCBs); reactivity, corrosivity, and ignitability; CAM 17 metals; and asbestos. On February 18, 2018, the health department approved the work plan.<sup>103</sup>

On February 27, 2018, the sponsor's consultant, ICES, submitted a site characterization report,<sup>104</sup> and on February 28, 2018, the health department issued a letter that agreed with the report's conclusion that the soil sediments within the foundation and garage expansion excavation are non-hazardous:

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<sup>100</sup> The health department has subsequently purchased and begun using a stamp that reads "MAHER WAIVER." when such a waiver has been granted.

<sup>101</sup> San Francisco Department of Public Health, Environmental Health, SFHC Article 22A, 2417 Green Street Residence, EHB-SAM Case Number: 1534, February 11, 2018.

<sup>102</sup> ICES, Work Plan, Site Characterization, 2417 Green Street, San Francisco, California, February 12, 2018.

<sup>103</sup> San Francisco Department of Public Health, Environmental Health, SFHC Article 22A, 2417 Green Street Residence, EHB-SAM Case Number: 1534, February 18, 2018.

<sup>104</sup> ICES, Site Characterization, 2417 Green Street, San Francisco, California, February 27, 2018.

Results from the soil samples indicated that the samples contained TPHg, TPHd, TPHmo, VOC, SVOC, organochlorine pesticide, and PCB concentrations that were below the Regional Water Quality Control Board's Direct Exposure Human Health Risk Screening Levels (DE HHRLs) for residential land use. Results of other analysis indicated that the samples were non-flammable and non-reactive; and contained pH values (corrosivity) ranging from 7.58 to 7.71. The asbestos concentrations contained in the samples were non-detectable (less than 0.25%). The metal concentrations detected in the samples were below their respective residential DE HHRLs and/or within background levels for San Francisco Bay Area soils, with the exception of arsenic. The arsenic concentrations detected in [samples] S-1 and S-2 ranging from 3.1 mg/kg to 3.5 mg/kg exceeded the residential DE HHRL of 0.067 mg/kg but were below the background level of 11 mg/kg. The Regional Water Quality Control Board considers background levels to be acceptable for contaminants where their respective DE HHRLs are less than typical background levels.<sup>105</sup>

Based on review of the documents, health department staff found the project in compliance with San Francisco Health Code article 22A and required no further investigation.<sup>106</sup>

In the appeal of the June 22, 2018 categorical exemption, the appellant raised the concern that the soil samples taken from under the garage would be clean and not contaminated soil. This concern is not valid for the following reasons. The two soil samples were collected from the proposed excavation area within the existing garage: one sidewall sample taken at a depth of 3 feet below ground surface to test the fill material and the other collected at a depth of 9 feet below ground surface to test the underlying soils. The samples were taken approximately 25 to 30 feet south of the front property line, and project excavation would extend no further than 55 feet south of the front property line. The health department allows for sampling locations to be spaced 150 feet apart, so the location of the sampling is appropriate and consistent with health department protocols. Also, as these samples represent the fill and the underlying soil, they were also taken at the appropriate depth.<sup>107</sup>

In conclusion, the project would not result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

**Impact HZ-3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school. (Less than Significant)**

Three schools are located within 0.25 miles of the project site: St. Vincent de Paul School, Hillwood Academic Day School, and Town School for Boys. Any hazardous waste at the project site would be remediated and handled in accordance with local, state and federal law. Furthermore, the proposed project would include the use of common household items in quantities too small to

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<sup>105</sup> San Francisco Department of Public Health, Environmental Health, SFHC Article 22A Compliance, 2417 Green Street Residence, San Francisco, EHB-SAM Case Number: 1534, February 28, 2018.

<sup>106</sup> Ibid.

<sup>107</sup> Stephanie Cushing, Department of Public Health memo to Jeanie Poling, Planning Department regarding 2417 Green Street, March 13, 2019.

create a significant hazard to the public or the environment. Based on this, this impact would be less than significant.

**Impact HZ-4: The proposed project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and not create a significant hazard to the public or the environment. (Less than Significant)**

Pursuant to section 65962.5 of the Government Code, the Secretary for Environmental Protection maintains a list of sites with potentially hazardous wastes, commonly referred to as the Cortese list. The Cortese list includes hazardous waste sites from the Department of Toxic Substances Control's (DTSC's) EnviroStor database, hazardous facilities identified by DTSC that are subject to corrective action pursuant to Health and Safety Code section 25187.5, leaking underground storage tank sites from the State Water Resources Control Board's (state board's) Geotracker database, solid waste disposal sites maintained by the state board, and sites with active cease and desist orders and clean up and abatement orders. The project site is not on the Cortese List and thus would not create a significant hazard to the public or environment. The impact would be less than significant.

**Impact HZ-5: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)**

No changes are proposed to the public right-of-way and the proposed project would continue the existing residential uses within the boundaries of the project site. Thus, the project would not substantially increase hazards due to a design feature or incompatible uses and would not result in an inadequate emergency access. The impact would be less than significant.

**Impact C-HZ-1: The proposed project, in conjunction with other past, present and reasonably foreseeable project, would not make a cumulatively considerable contribution to significant impacts with respect to hazards to people or the environment. (Less than Significant)**

Development in the city is subject to city, regional, and state controls designed to protect the public and the environment from risks associated with hazards and hazardous materials, and to ensure that emergency access routes are maintained. Any future development in the project vicinity would be subject to these same laws and regulations. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to hazards and hazardous materials.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>18. MINERAL RESOURCES. Would the project:</b>					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Impact MI-1: The proposed project would have no impact with respect to the availability of known or locally important mineral resources. (No Impact)**

All land in San Francisco, including the project site, is designated by the California Geological Survey as Mineral Resource Zone 4 under the Surface Mining and Reclamation Act of 1975.<sup>108</sup> The Zone 4 designation indicates that adequate information does not exist to assign the area to any other zone: the area has not been designated as having significant mineral deposits. Specifically, the project site is underlain by deep sand deposits that have not been designated as important at the state or local level.

The project site is within a densely developed urban area and has been developed with residential use since 1905. Even were the underlying sand considered to contain marketable minerals, it would not be feasible to conduct sand extraction activities in the midst of urban development. The development and operation of the proposed project would not have an impact on any off-site operational mineral resource recovery sites, as there are no such operations in the vicinity, and the project site is not and has never been used in any way in mineral resources recovery. The proposed project therefore would have no impact with respect to the availability of mineral resources.

**Impact C-ME-1: The proposed project in combination with other past, present or reasonably foreseeable projects would have no impact with respect to the availability of known or locally important mineral resources. (No Impact)**

The proposed project has no potential to result in an impact to mineral resources. Therefore, the project would not contribute to a cumulative impact on these resources.

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<sup>108</sup> California Division of Mines and Geology, 1996, Open File Report 96-03 and Special Report 146 Parts I and II.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>19. ENERGY. Would the project:</b>					
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact EN-1: The proposed project would result in increased energy consumption but would not encourage activities that result in the use of large amounts of fuel, water, or energy or use these in a wasteful manner. (Less than Significant)**

The proposed project would increase the population and intensity of use of the project site but would not exceed anticipated growth in the area. The proposed project would be subject to the energy conservation standards included in the San Francisco Green Building Ordinance. Documentation showing compliance with the ordinance would be required to be submitted with the applications of the building permits, and compliance would be enforced by the Department of Building Inspection. The project also, by its character, would conserve fuel and energy use because it would provide housing in an urban area that is accessible by transit and is bicycle and pedestrian friendly. Therefore, the proposed project would not cause a wasteful use of energy, and effects related to use of fuel, water, and energy would be less than significant.

**Impact C-EN-1: The proposed project in combination with other past, present or reasonably foreseeable projects would increase the use of energy, fuel and water resources, but not in a wasteful manner. (Less than Significant)**

The demand for energy created by the proposed project would be insubstantial in the cumulative context of citywide demand and would not require an expansion of power facilities. While overall energy demand in California is increasing commensurate with increasing population, the state also is making concerted energy conservation efforts. While the city produces a substantial demand for energy and fuel, both city and state policies seek to minimize increases in demand through conservation and energy efficiency regulations and policies such that energy is not used in a wasteful manner, and the cumulative impacts with respect to energy and fuel use would be less than significant. Because San Francisco is substantially built out, development in the city's urban core focuses on densification, which effectively reduces per capita use of energy and fuel by concentrating utilities and services in locations where they can be used efficiently. Similarly, the City recognizes the need for water conservation and has instituted programs and policies to maximize water conservation. San Francisco has one of the lowest per capita water use rates in the

state<sup>109</sup> and routinely implements water conservation measures through code requirements and policy. Therefore, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable impact related to mineral and energy resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>20. AGRICULTURE AND FORESTRY RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.					
<b>Would the project:</b>					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is located within an urbanized area of San Francisco. No land in San Francisco County has been designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as agricultural land. Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not require the conversion of any

109 San Francisco Public Utilities Commission, Water Resources Division Annual Report, Fiscal Year 2017-18, <https://view.joomag.com/water-resources-division-annual-report-fiscal-year-2017-18-waterresourcesar-fy17-18/0863377001542310828>, accessed February 20, 2019.



land designated as prime farmland, unique farmland, or Farmland of Statewide Importance to non-agricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts, as no lands in San Francisco are zoned agricultural or are under Williamson Act contracts.<sup>110</sup> No land in San Francisco is designated as forest land or as Timberland Production by the California Public Resources Code or Government Code. Therefore, the proposed project would not conflict with zoning for forest land, cause a loss of forest land, or convert forest land to a different use. For these reasons, Questions 18a, 18b, 18c, 18d, and 18e are not applicable to the proposed project.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>21. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</b>					
a) Substantially impair an adopted emergency response plan or emergency evacuation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structure to significant risks including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The City and County of San Francisco and bordering areas within San Mateo County do not have any state responsibility areas for fire prevention or lands classified as very high fire hazard severity zones,<sup>111</sup> therefore, this topic is not applicable. Refer to topic C.17, Hazards and Hazardous Materials, for a discussion of wildland fire risks.

<sup>110</sup> San Francisco is identified as "Urban and Built-Up Land" on California Department of Conservation, 2008, Important Farmland in California Map, [www.consrv.ca.gov](http://www.consrv.ca.gov), accessed October 23, 2017.

<sup>111</sup> CALFIRE Fire and Resource Assessment Program, San Francisco County Draft Fire Hazard Severity Zones in Local Responsibility Areas Map, October 5, 2007; San Mateo County Fire Hazard Severity Zones in State Responsibility Areas Map, November 7, 2007; and San Mateo County Very High Fire Hazard Severity Zones in Local Responsibility Areas Map, November 24, 2008. Available at: [http://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland\\_zones\\_maps](http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps).

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>22. MANDATORY FINDINGS OF SIGNIFICANCE.</b>					
<b>Does the project:</b>					
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino*, (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

The proposed project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section F.3, Cultural Resources, implementation of the proposed project would not result in a substantial adverse change in the significance of an archeological resource or a tribal cultural resource and would not disturb human remains. As discussed in Section F.15, Geology and Soils, implementation of the proposed project would not directly or indirectly destroy a unique paleontological resource or site. For these reasons, the proposed project would not result in the elimination of important examples of major periods of California history or prehistory.

The proposed project would not combine with past, present, or reasonably foreseeable future projects to create significant cumulative impacts related to any of the topics discussed in Section F, Evaluation of Environmental Effects. There would be no significant cumulative impacts to which the proposed project would make cumulatively considerable contributions.

As discussed in Section F.15, Geology and Soils, the proposed project would result in potentially significant impacts related to seismic hazards. The foregoing analysis identifies Mitigation Measure M-GE-1, which would reduce these impact to less than significant impacts related to geology and soils. With implementation of this mitigation measure, the proposed project would not result in environmental effects that would cause substantial adverse effects on human beings.

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## G. MITIGATION MEASURE

**Mitigation Measure M-GE-1: Ongoing Monitoring By and Coordination with the Planning Department and the Department of Building Inspections Prior to and During ~~the Construction Phase Regarding Compliance with Geotechnical Requirements~~.** Pursuant to the San Francisco Department of Building Inspection process, the project sponsor (and their design and construction team, ~~geotechnical engineer, and contractor, as applicable~~) ~~will~~ shall be subject to ongoing monitoring by and coordination requirements with the planning department and the building department regarding plan check reviews and building inspections prior to and during construction work. ~~This process will include the following requirements:~~

- ~~• Prior to commencement of construction, the project sponsor shall submit to the planning department and building department a report outlining anticipated construction milestones with corresponding (approximate) dates of reaching those milestones as well and all memoranda and/or reports anticipated to be prepared or approved at those milestones. The report shall address how all code requirements will be met, including responsible parties and the city agency providing oversight. The report shall be reviewed and approved by the planning department and the building department prior to commencement of construction.~~
- ~~• Once construction commences, the sponsor shall notify the planning department and the building department (when coordination with the building department is not already included as typical part of the process) when the above milestones have been reached and their outcomes. Specifically, all memoranda and/or reports issued at times of those milestones shall be provided to the planning department and the building department.~~

In conjunction with its submittal of structural plans, the project sponsor shall submit to the building department construction documents that identify anticipated significant construction milestones when a field report and/or memorandum by the engineer(s) of record shall be submitted to the planning and building departments. The building department shall review and determine whether to approve the list of significant reporting milestones as part of its approval of structural plans.

The engineer(s) of record shall notify the planning and building departments when milestones indicated on the construction documents have been reached, and their outcomes. Specifically, the project sponsor's engineer of record shall submit field reports and/or memoranda documenting each milestone to the planning and building departments.

Pursuant to planning department policy, any memoranda and/or reports prepared by the project sponsor and/or a consultant working for the project sponsor shall adhere to the planning department's protocols of objectivity.

Structural and geotechnical observation and inspection shall be provided onsite during construction.

## **H. PUBLIC NOTICE AND COMMENT**

### **Comments on Notification of Environmental Review**

On February 14, 2019, the planning department mailed a notification of project receiving environmental review to owners of properties within 300 feet of the project site, adjacent occupants, neighborhood groups, and other interested parties. In response to the notification, the planning department received three letters from the representative of 2421 Green Street and four letters from other neighbors. Comments included concerns about impacts to historic resources related to views, air, and light (addressed under Impact CR-1 on page 15), impacts to the historic resource at 2421 Green Street related to construction methodology (addressed under Impacts GE-1 through GE-3 on pages ~~59~~ 60 through ~~65~~ 66), impacts related to the release of hazardous matter (addressed under Impact HZ-2 on page ~~74~~ 72), and the accuracy of the project description (see Project Characteristics on page 1).

Comments were also raised concerning the scale of development, consistency with the planning code and with Cow Hollow design guidelines, and neighborhood notification for the discretionary review hearing. These issues are not related to impacts on the environment and will be addressed during the planning department's review of the building permit.

One commenter raised concern that the project was being piecemealed (divided into smaller projects to qualify for one or more exemptions, which is prohibited under state CEQA statute). This initial study (and the two categorical exemptions for the project that were previously issued and rescinded) appropriately covered the whole of the project – both the excavation and the expansion of the building. In other words, the sponsor did correctly obtain CEQA clearance for the entirety of his project. Subsequently, however, the sponsor exceeded the scope of work of a foundation permit, which constitutes a permitting (not CEQA) violation.

Other comments concerned permits that were suspended and not revoked and notices of violation concerning the safety and condition of the vacant building. These issues will be addressed as part of project approvals or through the permit enforcement process.

### **Comments on the Preliminary Mitigated Negative Declaration**

On June 26, 2019, the planning department issued a notice of availability of and intent to adopt a mitigated negative declaration to owners and residents of properties within 300 feet of the project site, neighborhood groups, and interested parties. On July 15, 2015, the planning department received a comment letter on the preliminary mitigated negative declaration from a neighbor voicing concerns about the project's impacts related to geological stability and subterranean water flows in combination with a proposed development project across the street at 2452 Green Street.

As discussed under Impact GE-1 on pages 60–66, to ensure that the potential for adverse effects related to geology and soils is adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Code and the San Francisco Building Code, which is the state building code plus local amendments that supplement the state code. Furthermore, compliance with Mitigation Measure M-GE-1 would ensure the security and stability of the project site and adjacent properties.

As addressed under Impact C-GE-1 on page 67, environmental impacts related to geology and soils are generally site-specific. Nearby cumulative development projects would be subject to the same seismic safety standards and design review procedures applicable to the proposed project. Thus, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to geology and soils.

As discussed under “Control of Groundwater” on page 63, pursuant to City code requirements, the final design will include measures to intercept groundwater where it may impact the proposed construction, using methods such as drainage behind retaining walls, under-slab-drainage, French drains and area drains, and waterproofing. Any required waterproofing system will be designed and inspected by the architect and/or engineer of record and shall be reviewed and approved by the building department. If groundwater, or evidence of groundwater, is encountered during construction, the contractor will notify the geotechnical consultant to evaluate whether additional measures are required to control the flow of groundwater at the site. Where collected, groundwater will be discharged to a suitable collection point.

As addressed under Impact C-HY-1 on page 70, the proposed project and all future projects within San Francisco would be required to comply with the water quality and drainage control requirements that apply to all land use development projects within the city. Since all development projects would be required to follow the same regulations as the proposed project, the implementation of new, conforming development projects, peak stormwater drainage rates and volumes resulting from design storms would be expected to decrease gradually over time relative to existing peak flows. Moreover, all development projects would be required to comply with the same drainage, dewatering, and water quality regulations as the proposed project. As a result, cumulative effects related to drainage patterns, water quality, stormwater runoff, stormwater capacity of the combined sewer system and groundwater supply and quality would be less than significant.

## I. DETERMINATION

On the basis of this Initial Study:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

DATE \_\_\_\_\_

\_\_\_\_\_  
Lisa Gibson  
Environmental Review Officer  
for  
John Rahaim  
Director of Planning


## J. INITIAL STUDY PREPARERS

Planning Department, City and County of San Francisco  
Environmental Planning Division  
165 Mission Street, Suite 400  
San Francisco, CA 94103

Environmental Review Officer: Lisa Gibson  
Principal Environmental Planner: Tania Sheyner, AICP  
Senior Environmental Planner: Jeanie Poling  
Preservation Planner: Stephanie Cisneros

## K. FIGURES – See the following pages.

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.



Lisa Gibson  
Environmental Review Officer  
for  
John Rahaim  
Director of Planning

DATE June 26, 2019

**J. INITIAL STUDY PREPARERS**

Planning Department, City and County of San Francisco  
Environmental Planning Division  
165 Mission Street, Suite 400  
San Francisco, CA 94103

Environmental Review Officer: Lisa Gibson  
Principal Environmental Planner: Tania Sheyner, AICP  
Senior Environmental Planner: Jeanie Poling  
Preservation Planner: Stephanie Cisneros

**K. FIGURES – See the following pages.**

[Page 84A of the FMND is the signature page of the PMND]



**Figure 1 – Project Site Location**



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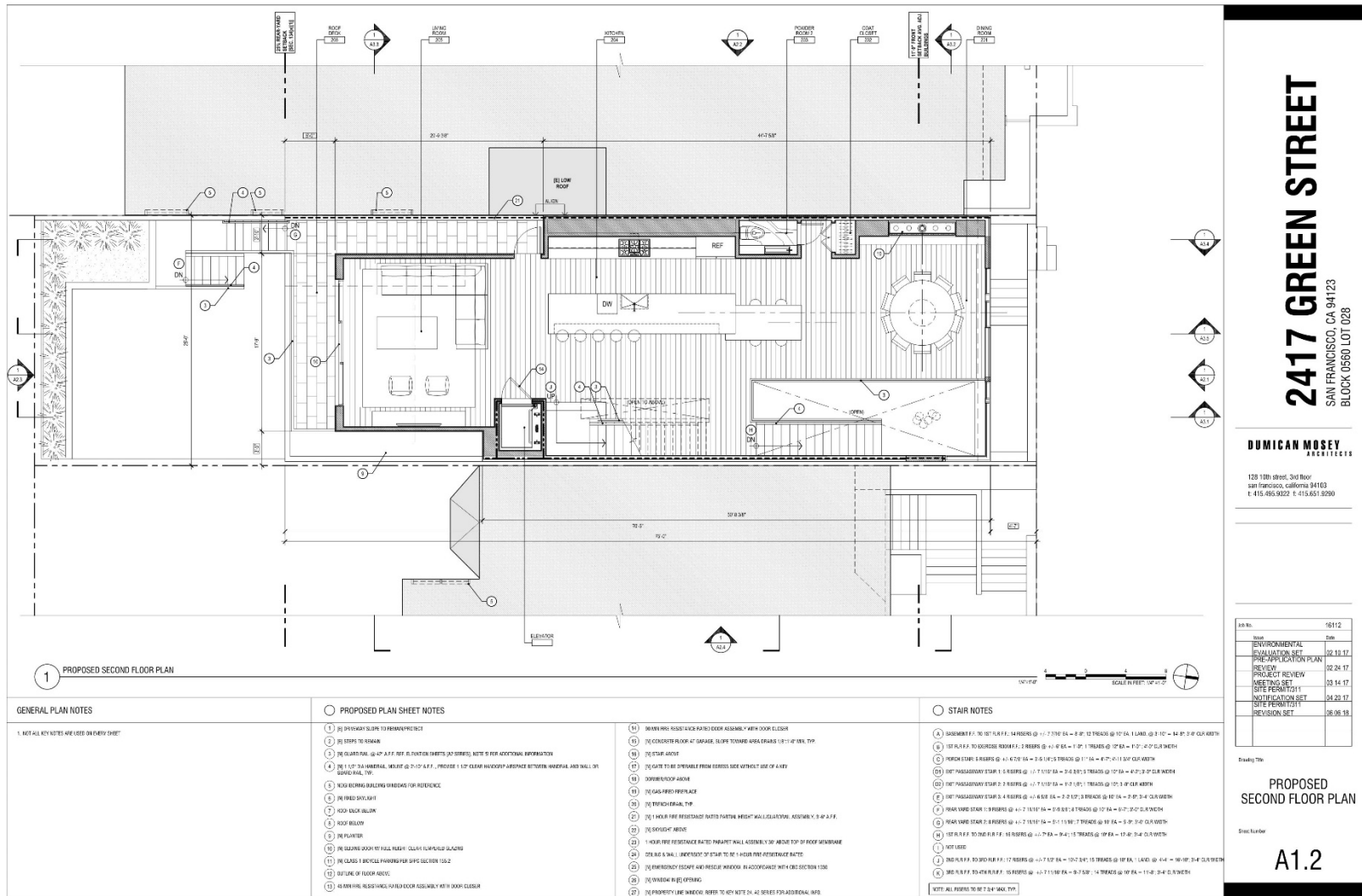


Figure 5 – Proposed Second Floor Plan

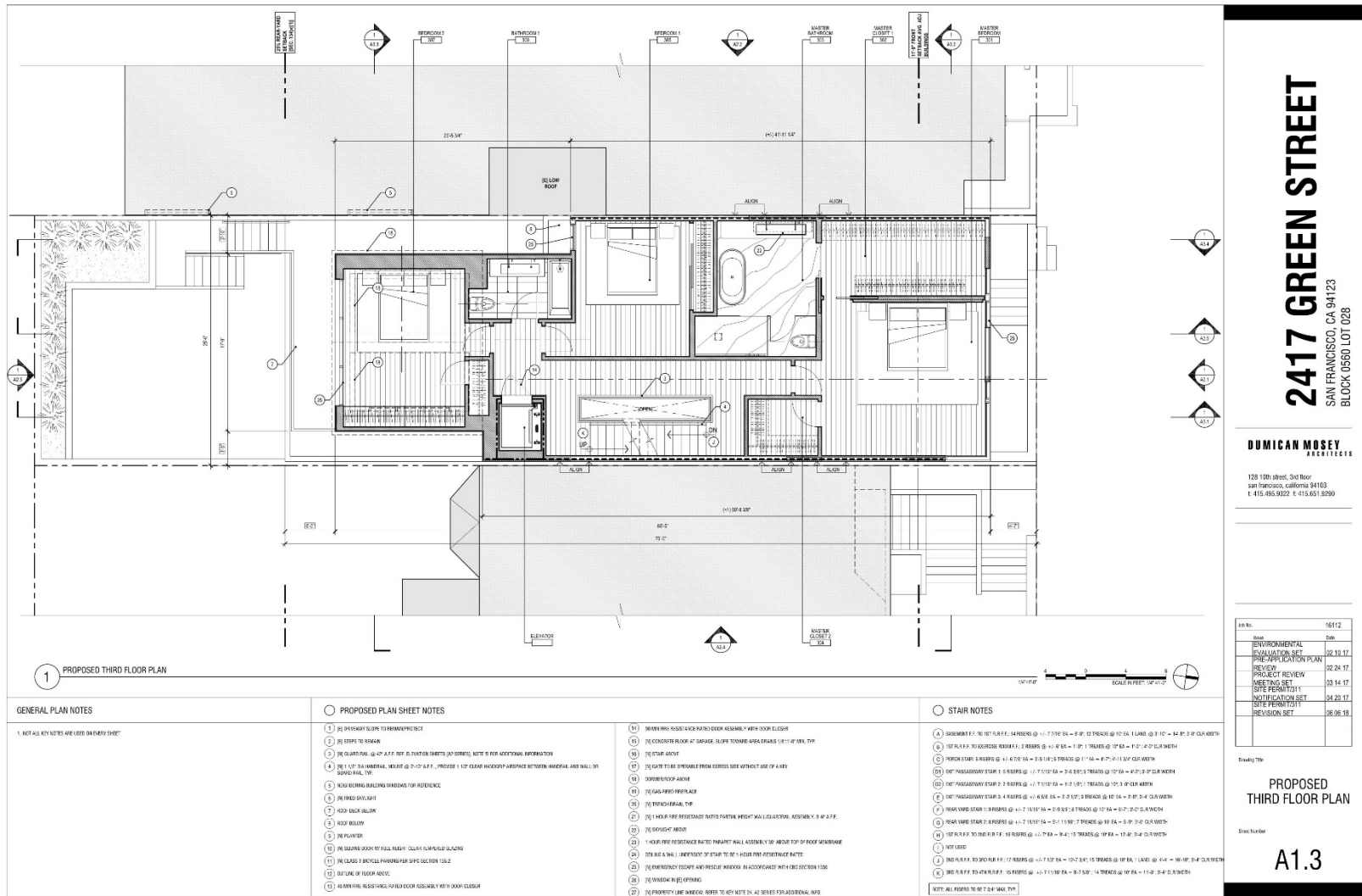


Figure 6 – Proposed Third Floor Plan









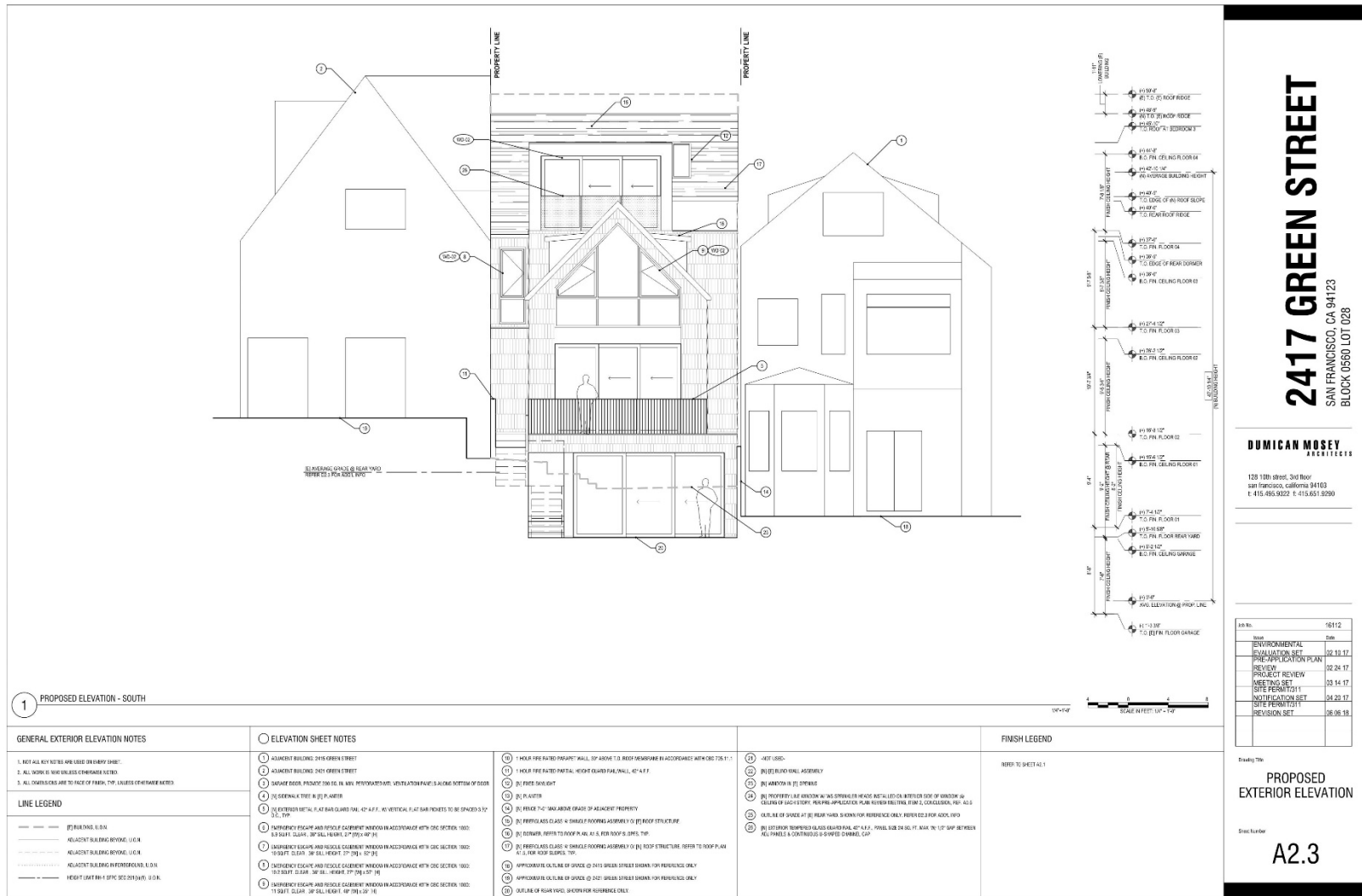


Figure 10 – Proposed South (Rear) Elevation



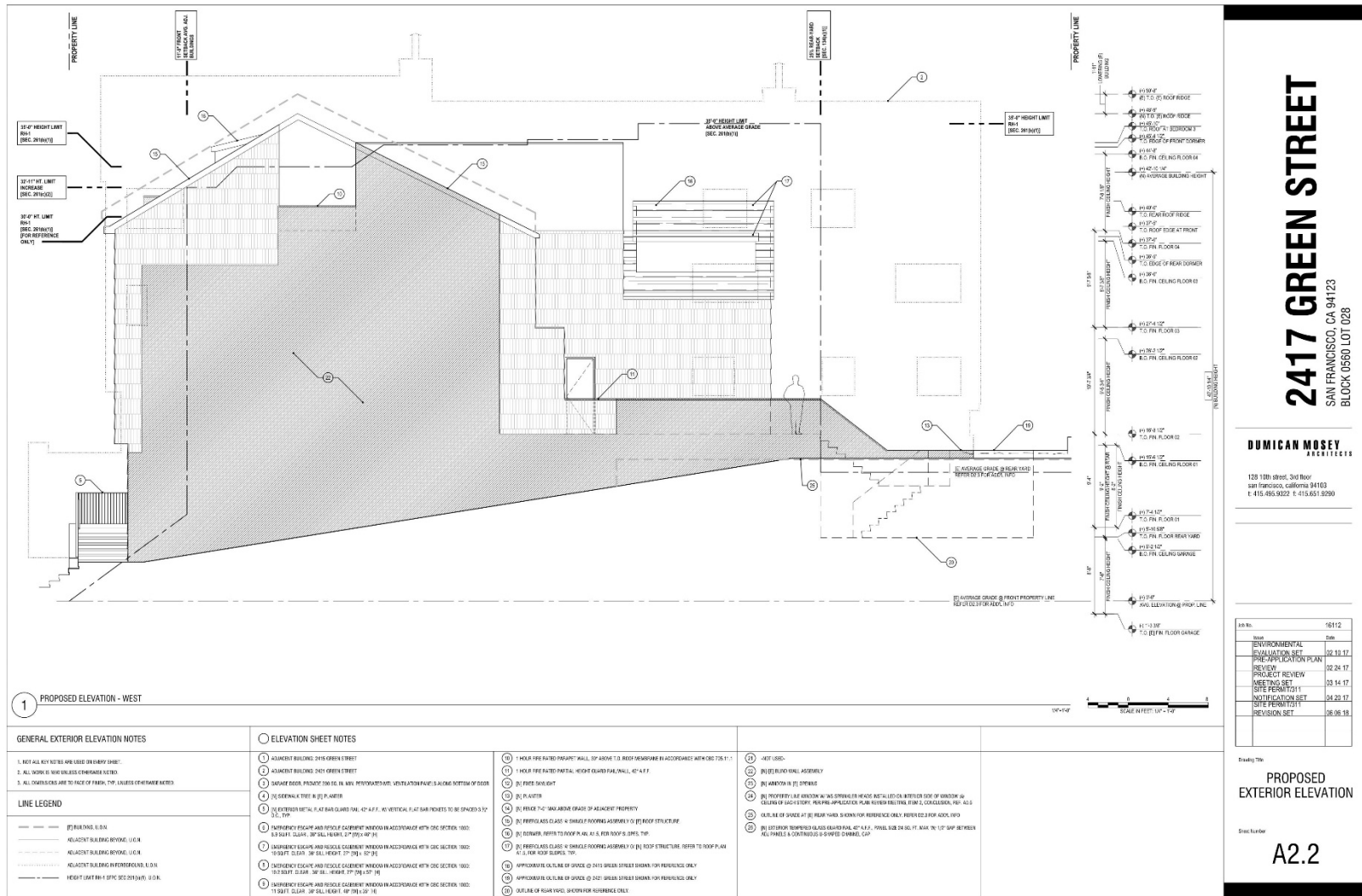


Figure 12 – Proposed West Elevation



Figure 13 – Projects within One-Quarter Mile of the Project Site

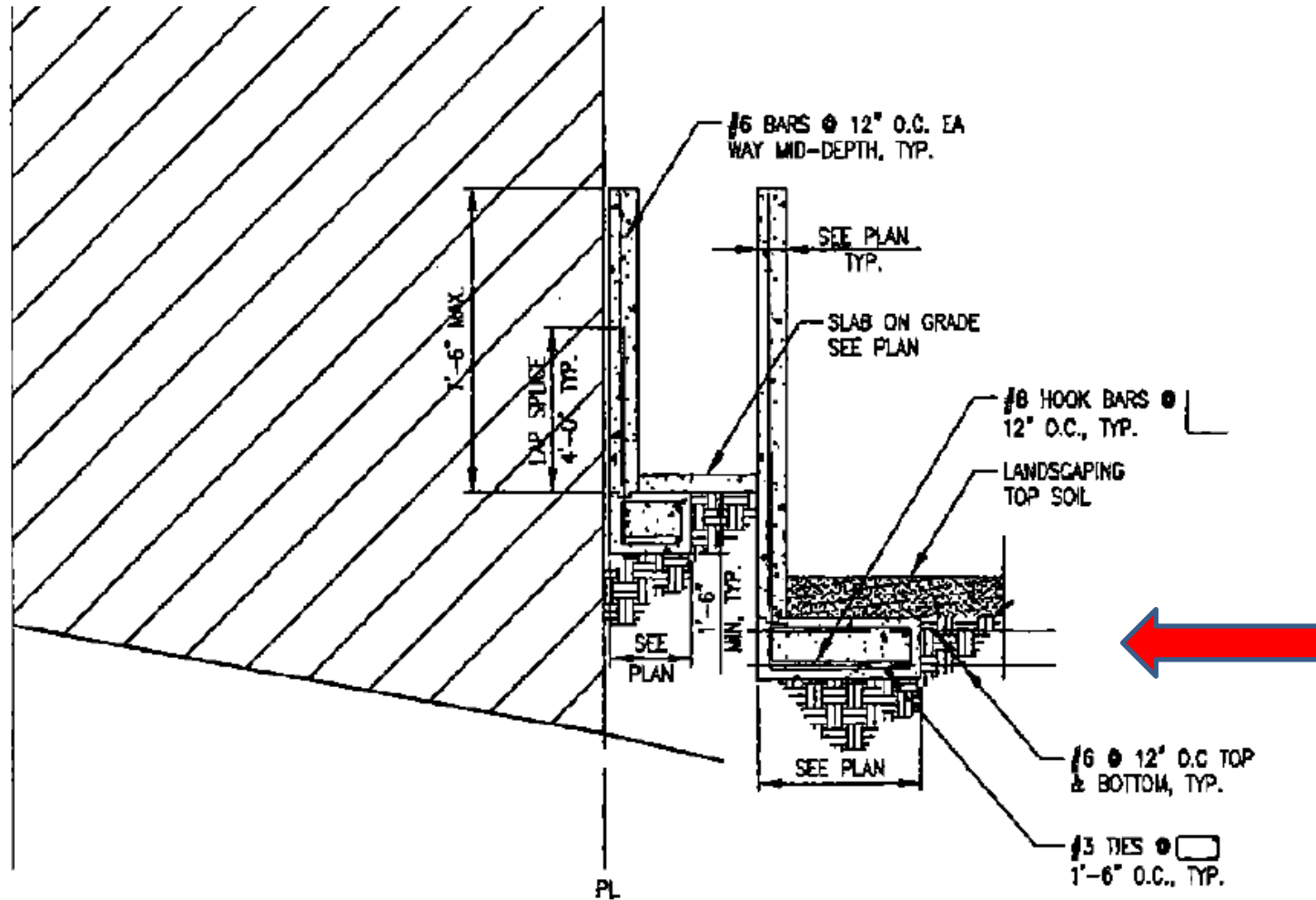


Figure 14 – Detail 3 on Sheet S4.1 of Building Permit Application No. 201705116316

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# EXHIBIT D



**LAWRENCE B. KARP**  
**CONSULTING GEOTECHNICAL ENGINEER**

FOUNDATIONS, WALLS, PILES  
UNDERPINNING, TIEBACKS  
DEEP RETAINED EXCAVATIONS  
SHORING & BULKHEADS  
CEQA, EARTHWORK & SLOPES  
CAISSONS, COFFERDAMS  
COASTAL & MARINE STRUCTURES

SOIL MECHANICS, GEOLOGY  
GROUNDWATER HYDROLOGY  
CONCRETE TECHNOLOGY

July 7, 2020

C&CSF Planning Department  
Rich Hillis, Director  
1650 Mission Street, 4<sup>th</sup> Floor  
San Francisco, CA 94103

Subject: 2417 Green Street Project [Block 560 - Lot 028]  
Lateral and Subjacent Support Loss for 2421 Green Street  
Excavation Without Valid Permits, Missing Documents  
Architect Specifies Full Foundation Replacement

Dear Mr. Hillis:

Submitted herewith is a brief letter-report concerning the subject Project's certain effect on the upslope building, the historic Coxhead House & Residence at 2421 Green, constructed in 1892-93. The Project residence, at 2417 Green, built in 1906, unoccupied for years, is situated below the tall common brick foundations of its upslope zero setback neighbor at 2421 Green. The undersigned has reviewed public documents on file with the City, and has conducted on-site inspections of 2421 Green as well as the 2417 Green Project site (Civil Code §846.5). The undersigned has written six reports to SF City Planning and the SF Board of Supervisors; list appears on page 5.

**Background to Proposed Project**

The design and construction of the 2417 Green Project, owned by Christopher Durkin, had its effective start with preparation of 7 drawings by Durkin dated 4/15/17. Without any consideration of the neighboring well known historical resource First Bay Tradition hillside residence of master architect Ernest Coxhead, 2421 Green, including its common brick foundations and its CEQA status (Karp 2019, Exhibit 7), Slope Protection Act mapping by the City showing the Lots are in a landslide area (Karp 2018, Exhibit J), the San Francisco Existing Building Code (SFEBEC) and the San Francisco Building Code (SFBC) prohibiting excavations near the foundations of adjacent buildings, SFBC [§1804.1] and §1803.5.7, (Karp 2019, Exhibit 5), and Code foundation stability requirements, SFBC §3307 (Karp 2019, Exhibit 6) requiring lateral and subjacent support and protection of adjoining buildings, Durkin or his lawyers had City Planning (Christopher May) approve the Durkin drawings to circumvent building department scrutiny (Karp 2019, Exhibits 2 & 4).

The drawings, following City Planning (May) full signatures of approval on 10/10/17, were initialed on 10/13/17 by Cyril Yu of SFDBI who also rubber stamped them with the Director's pass on 11/3/17 for Permit Application 2017.10.02.0114 (Karp 2018, Exhibit H), suspended on 12/20/17 and now cancelled (SFEBEC §105.5). After observing the excavations at 2417 below 2421 Green (Karp 2018, Exhibit G), the undersigned visited Yu and asked him why he approved permit application 0114; he said each drawing had been approved by City Planning so SFDBI could not obstruct their approval and had to approve because City Planning are the zoning investigators not DBI and they had before approved the Project and the prior Permit Application 2017.05.11.6316 (which was also suspended on 12/20/17) thereby becoming invalid 6 months later.



### Missing Project Information

The following information does not exist although all of it is required to prepare and evaluate any architectural design, environmental impact, and determination of the extent of expected damage to the historic resource, the Coxhead House & Residence at 2421 Green.

1. "Topographical & Boundary Survey, 2417 Green Street SF", map prepared/stamped by LLS (per Ord. 121-18; SSPA Information Sheet No. S-15 10/2/18, SFBC §106.25, SFBC §§107.2.5, 1804.1, 3307.1).
2. "Elevation Survey - East Wall, 2421 Green Street, SF", detailed map prepared/stamped by LLS.
3. "Structural Design - Foundation & Superstructure - Seismic Upgrade, 2417 Green Street, SF"
4. "Protection Details, Foundations at 2417 Green SF Property Line" (Excavations were approved by City Planning, no valid permit or compliance w/Code, in 2017); SFBC §§1804.1, 1803.5.7, 3307.1.
5. Slope & Seismic Protection Act 2018" geotechnical engineering questionnaire certified under oath.

All the above information is missing but they are vital requirements for evaluation of the current drawings.

### Architect Specifies Full Foundation Replacement

Recent drawings submitted to City Planning by the developer indicate nothing significant has improved since the 1/9/20 Planning Commission hearing where the undersigned submitted a report (Karp 2020) concerning a grossly inadequate mitigated negative declaration. The developer is still arguing for [more] excavations below 2421 Green for further underground expansion, refuses to admit that windows at 2421 Green will be obliterated by the enlarged 2417 western wall heightened by a new fourth story requiring rebuilding of the wall, and that there must be an Accessory Dwelling Unit (ADU); all the things the Planning Commission said "NO" to when they ordered a severe scaling back of the 2417 Project.

Recent, during the last month, drawings for 2417 Green show expansion of the building envelope which indicates [additional] underground excavation, addition of a fourth story that will block more windows at 2421 Green and add loads to the west wall of 2417 and its foundations which will require excavations and enlarged foundations. The architect's specification for a full foundation replacement is part of the Project.

Basically, at this point the neighbor to the Project, at 2421 Green Street, the Coxhead House & Residence, a well known historical resource, will be severely, irreparably, damaged if the developer's plans are allowed to proceed. Cover Sheet 1 of 42 states that Holmes is the part of the team that will provide structural engineering, but that is impossible without a topographical land survey and a Site Plan derived from the survey and a proper geotechnical report. More than two years ago the owner and his engineer were promised drawings by Holmes, but there is nothing and probably never will be because of the withholding of site information.

### Proper Site Plan Required By Law

SFBC §106.25 states: "Site plan. .... documents .... shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines .....proposed finish grades, and it shall be drawn in accordance with an accurate boundary line survey." In June 2020 land surveyor Westover did what he called a "Partial" survey of the back yard, leaving out everything to do with the building. A proper, essential, survey will show existing excavations and existing foundation elevations as well as bonding of the buildings with respect to the common property line.



### **SFCPD Pretends the Slope Protection Ordinances Do Not Exist**

The Slope & Seismic Protection Act, SSPA, (Karp 2020, Exhibit E) is a San Francisco ordinance that updates previous iterations of the Slope Protection Act, SPA, an ordinance assembled and updated by the Board of Supervisors as the need arises so they understand the Acts even though City Planning does not. First, an overview of how the City Planning Department (CPD) and developers operate is necessary, taken from my experience in design/construction in San Francisco since the 1950s, particularly foundation underpinning and shoring in San Francisco, where some Project's interface with both SFCPD and SFDBI.

CPD is staffed by full time employees who are not California licensed design professionals (architects and engineers) as would occur with those who prepare EIRs (Environmental Impact Reports). CPD avoids EIRs like the plague because it takes approval of Projects out of their hands with no side benefits. To that end, with these conditions, CPD employees have made statements for the 2417 Project that distort written Code requirements and facts which mimic what developers and their attorneys tell them.

To begin with, basically, the Project area has long been designated as being within one of the sections of the City that has been illustrated by maps contained for many years in the Slope Protection Act (SPA). When the State of California began, in 2000, mapping seismic hazard (landslide and liquefaction) areas in San Francisco as part of a statewide program they did not void local mapping by (1) pretending the areas were mistakenly identified; (2) pretending the areas have been stabilized; (3) voiding the 5/20/15 "Geotechnical Report Requirements"; Bulletin No. S-05 (Karp 2020, Exhibit E) is currently in full force and effect; and (4) waiving calculations and detailing necessary for permits under SFBC §§1804.1 & 1803.5.7 (excavations near property line foundations) and compliance with SFBC §3307.1 (protection of neighboring property and maintenance of lateral and subjacent support to neighboring foundations).

For the above reasons, and per civil/geotechnical engineering standards, stability mapping does not become obsolete unless so publically declared. The operative wording (in order of the attached portions to the report (Karp 2020) of the 2018 SSPA is "...or falls within certain mapped areas of the City..." ("Slope Protection" cover sheet, Exhibit E); "...Map is posted near 1660 Mission St. 2<sup>nd</sup> Floor Counter (C&CSF 1987): "Landslide Hazard Areas are colored 'Red'" (Information Sheet No. S-05, page 1, report (Karp 2020, Exhibit E [and maps illustrated in report (Karp 2020, Exhibit C)]); and "...or falls within certain mapped areas of the City..." (Ordinance No. 121-18 Amended by Board 5/8/18, SFBC §106A.4.1.4.1 "Creation", page 2 in report, Karp 2020, Exhibit E).

The next issue that affects use of the SSPA is topography. References to property that slopes at an inclination of 4 units horizontal to 1 unit vertical (4h:1v) uses the word "average" which can be argued forever as the Project's advocates will do as distraction. But the SSPA Ordinance refers to a topographical "map dated 7/25/18". It is important to understand this map; it shows 2417 Green is within an average area equal to or steeper than 4h:1v. It was published as a wall poster for the CPD offices. In the reproduction of the attached SSPA Ordinance (Karp 2020, Exhibit E) the map is unintelligible, however enlarged it shows, with brown shading, average 4h:1v areas. It can be accessed on the City's website. The CPD slope map shows about the same oblong area for Green Street shaded brown as the maps reproduced in the 1987 mapping by SFDBI (Karp 2020, Exhibit C).

The final issue concerns applicability of the SSPA to projects that include excavation of more than 50 cubic yards of material, shoring, underpinning, and SFBC Chapter 18. The most critical aspect of the 2017 Green Project is that there has never been a topographic survey ("orthocontour map") of the Project and its affected contiguous neighbors.



Such surveying would give relative elevations of all improvements on the ground including depths of the neighboring foundations especially those uphill (at 2421 Green) which could be compared with information supposed to be in the geotechnical report (deliberately omitted). More than 50 CY have already been excavated (Karp 2018, Exhibit G) in order to conceal the Project's extent which clearly explains why the developer continues to refuse to obtain an instrumented land survey.

Applicable to 2417 Green is the following paragraph: The project site is located within an area of potential landslide hazard zone as identified by the well known 1987 map posted on the 2<sup>nd</sup> Floor of the Building Department which is a "successor" to the original 1974 Blume map and listed as a reference in DBI's 5/20/15 Bulletin S-05 "Geotechnical Report Requirements" which is in full force and effect. In 2018, the San Francisco Building Code was amended by the Slope and Seismic Hazard Zone Protection Act (Ordinance No. 121-18) to include sloped areas to be protected that average 4h:1v (25%) shown on the Planning Department's topographical poster map of 7/25/18 "...or fall within certain mapped areas of the City..." which also appears in SFBC §106A.4.1.4.1 (described on page 2 of the Ordinance), and landslides shown on the 2000 State of California earthquake induced landslides and liquefaction hazard map.

Note that Ordinance No. 121-18, on page 1 (Karp 2020, Exhibit E) is also tied to CEQA so the SSPA should have been fully covered in a proper Initial Study for 2417 Greej but it was ignored. Non-compliance with the SSPA will eventually be corrected in an EIR because of the following case law:

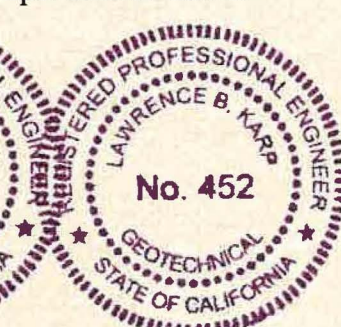
(Quote:) "[i]f there is disagreement among expert opinion supported by facts .... the Lead Agency shall treat the effect as significant and shall prepare an EIR" (citing 14 Cal. Code Regs., §15064(b), (g)). Reviewed and cited was the applicable "fair argument" standard: "An EIR is required whenever "substantial evidence in the record supports a "fair argument" significant impacts or effects may occur." (emphasis added) [quoting City of Arcadia v. State Water Resources Control Bd. (2006) 135 Cal.App.4th 1392, 1421.] (End quote.)

(Quote:) "An MND is permitted only "if 'the initial study identified potential significant effects on the environment but revisions in the project plans "would avoid or mitigate the effects to a point where clearly no significant effect on the environment would occur" and [if] there is no substantial evidence that the project as revised may have a significant effect on the environment ...." (emphasis added) [quoting Architectural Heritage Assn. v. County of Monterey (2004) 122 Cal.App.4th 1095, 1101.] (End quote.)

CPD has glossed over the results of the 1/9/20 hearing before the PC. Writings produced by CPD that are not signed and stamped by licensed engineers as required by Business & Professions Code §6735. There is no survey and no structural drawings because those would reveal circumvented information. With an EIR qualified design professionals will review the Project and ask for, to begin with, a topographical survey (orthocontour map). The neighbors will have input to the EIR which, although the PC indicated they would with an MND, it will never happen. With no EIR all neighbors will ever see is what the developer gives them until the Board of Supervisors returns the Project to CPD for an EIR or directly orders. Ultimately, if that fails, and the developer is allowed to proceed with his existing plans or similar, a restraining order due to irreparable harm to a historic resource and its hillside foundations will be necessary. In sum, the SSPA strengthens the SSA, not weakens it as the developer and CPD allege in not allowing it to be included in the already very weak geotechnical reporting for the Project (Karp 2019b). Especially important now, in the SSPA (Karp 2020, Exhibit E), the civil/geotechnical Engineer of Record must complete under oath, penalty of perjury, a questionnaire about excavation, shoring, and underpinning. This of course has not been provided by the developer of 2417 Green.

Yours truly,

Lawrence B. Karp



**LAWRENCE B. KARP CONSULTING ENGINEER**



## References

- Karp, Lawrence B. -Consulting Geotechnical Engineer, April 27, 2011; "2125 Green Street, San Francisco CA [Block 0357-Lot 017, Voluntary Partial Seismic Upgrade]", report prepared for Courtney Clarkson, 14 pages & 9 drawings.
- Karp, Lawrence B. -Consulting Geotechnical Engineer, January 25, 2013; "300 Sea Cliff Avenue, San Francisco, CA [Block 1312-Lot 001B], Building Site Conditions & Foundation Recommendations", report prepared for Marc Benioff (Tarawaya LLC), 16 pages.
- Karp, Lawrence B. -Consulting Geotechnical Engineer, July 21, 2015; "Proposed Golden State Warriors Arena, Mission Bay, Blocks 29-32, San Francisco CA", report prepared for Soluri Meserve, 11 pages.
- Karp, Lawrence B. -Consulting Geotechnical Engineer, September 13, 2017; "Extension of 1861 Protracted Folsom Street, Bernal Heights, San Francisco, CA", report prepared for C&CSF Board of Supervisors (London Breed, President), 13 pages w/10 Exhibits.
- Karp, Lawrence B. -Consulting Geotechnical Engineer, January 9, 2018; "Imminent Foundation & Sidewall Damages [to the Coxhead House at 2421 Green], 2417 Green Street Project, San Francisco, CA", report prepared for C&CSF Board of Supervisors (London Breed, President), 12 pages w/10 Exhibits.
- Karp, Lawrence B. -Consulting Geotechnical Engineer, January 17, 2019a; "Brick Foundation & Sidewall Damage to the Coxhead House, 2417 Green Street Project, San Francisco, CA", report prepared for C&CSF Planning Commission (Rich Hillis, President), 4 pages w/7 Exhibits.
- Karp, Lawrence B. -Consulting Geotechnical Engineer, July 5, 2019b; "[SFDBI Preliminary] Review of Geotechnical Report 2417 Green Street, San Francisco, Block/Lot 0560/028, DBI Permit Numbers: 2017-0428-5244", report prepared for C&CSF Department of Building Inspection (Stephan Leung, Plan Review Services Division), 3 pages w/5 Exhibits.
- Karp, Lawrence B. -Consulting Geotechnical Engineer, July 10, 2019c; "Millennium Tower, 301 Mission Street, San Francisco CA, Two Differing Plans for Foundation Retrofitting", report prepared for C&CSF Board of Supervisors (Norman Yee, President), 7 pages w/2 Exhibits.
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- San Francisco, City and County of (C&CSF 2020) - Municipal Code, effective January 1, 2020; "Building Code 2019 Edition" ("2019 SFBC"); California Code of Regulations, Title 24, Part 2 (Vol. 1 of 2, 831 pages & Vol. 2 of 2, 735 pages).

# EXHIBIT E





TWO WAY  
TRAFFIC  
AHEAD

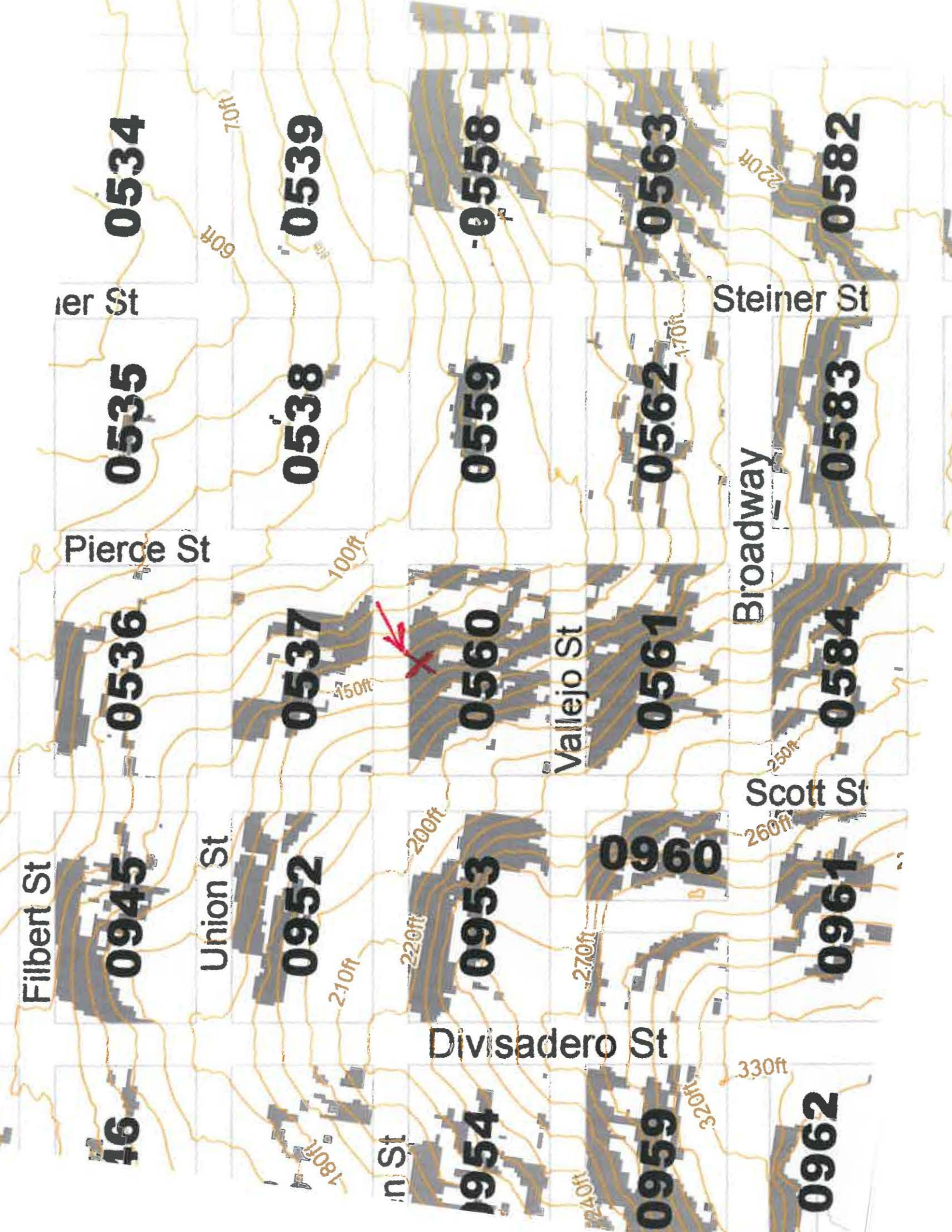
Far West  
Sanitation and Storage  
800-832-6888

FAR WEST SANITATION

800-832-6888

# EXHIBIT F





16

0945

0536

0535

0534

Union St

0952

0537

0538

0539

in St

1954

0953

0560

0559

0558

Divisadero St

0959

0960

0561

0562

0563

330ft

0962

0961

Scott St

0584

0583

0582

Broadway

Steiner St

Pierce St

Vallejo St

ier St

# EXHIBIT G



MAP  
OF THE  
CITY AND COUNTY OF  
SAN FRANCISCO  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING

FRANK H. MOSS JR.  
CITY ENGINEER

1987

SCALE OF FEET  
0 1000 2000

R. J. SEIB  
Delineator

Revisions by  
P. A. DEVINE  
R. DUPORE  
H. CHEE  
T. CHANG



PAC

7282

ALVO

SKYLINE

# LANDSLIDE LOCATIONS



OUTLINE OF SLIDE AREA



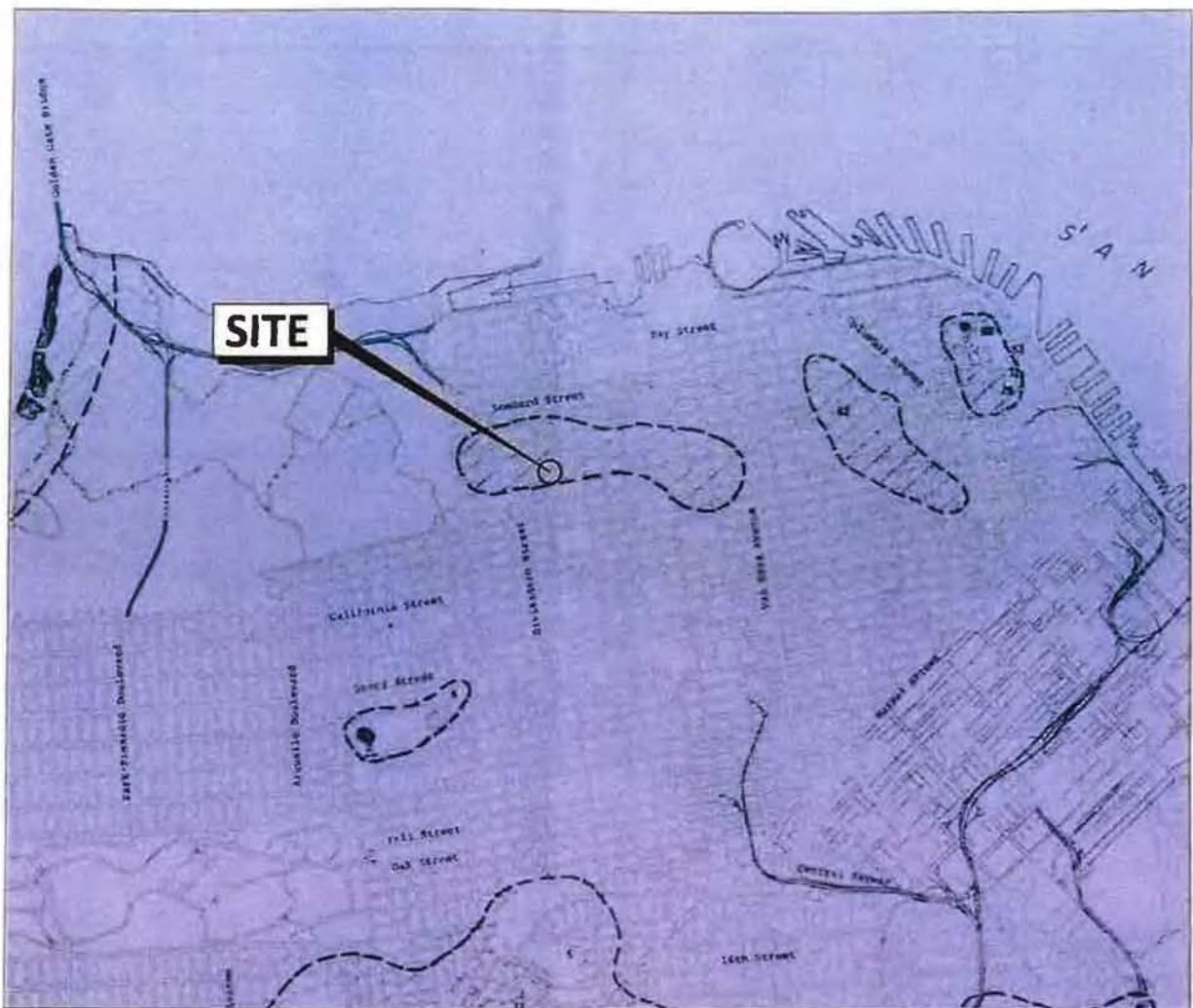
AREAS OF POTENTIAL  
LANDSLIDE HAZARD








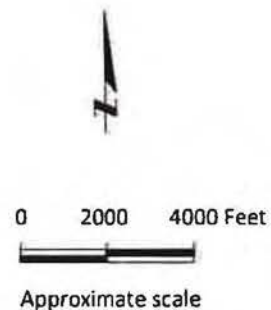


# EXHIBIT H



#### EXPLANATION

-  outline of slide area
-  areas of potential landslide hazard
-  location of slide, SFDBI  
those underlined are active slides



Base map: John A. Blume & Associates, Engineers, (1974). Figure 4, Landslide Locations, San Francisco Seismic Safety Investigation, June 1974.

**divis**  
CONSULTING, INC.  
GEOTECHNICAL AND SEISMIC

2417 GREEN STREET  
San Francisco, California

## SAN FRANCISCO SLOPE PROTECTION ACT MAP

Date 01/12/17 17-120101-01 Figure 2

# EXHIBIT I





# SAN FRANCISCO PLANNING DEPARTMENT

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## Preliminary Mitigated Negative Declaration

*Date:* June 26, 2019  
*Case No.:* **2017-002545ENV**  
*Project Title:* **2417 Green Street**  
*BPA No.:* 201704285244  
*Zoning:* RH-1 [Residential-House, One Family] Use District  
40-X Height and Bulk District  
*Block/Lot:* 0560/028  
*Lot Size:* 2,500 square feet  
*Project Sponsor:* Chris Durkin, 2417 Green Street, LLC  
(415) 407-0486  
*Lead Agency:* San Francisco Planning Department  
*Staff Contact:* Jeanie Poling – (415) 575-9072  
jeanie.poling@sfgov.org

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

Reception:  
**415.558.6378**

Fax:  
**415.558.6409**

Planning  
Information:  
**415.558.6377**

### PROJECT DESCRIPTION:

The project site is on the south side of Green Street on the block bound by Green, Pierce, Scott, and Vallejo streets in the Pacific Heights neighborhood. The 2,500-square-foot project site contains a vacant four-story single-family residential building constructed circa 1905. The residence encompasses the front (northern) two thirds of the lot. The property at its Green Street frontage slopes with an elevation of approximately 150 feet along the western (up slope) side to 145 feet along eastern (down-slope) side. The project would lower building floor plates by approximately 2 feet, construct one- and three-story horizontal rear additions, and construct third and fourth floor vertical additions above a portion of the existing building. The floor area would increase from approximately 4,118 square feet to approximately 5,115 square feet. A one-bedroom accessory dwelling unit measuring approximately 1,023 square feet would be added on the first floor. The project also proposes a partial excavation of the rear yard for a sunken terrace, façade alterations, interior modifications, and expansion of the existing basement level garage to accommodate one additional vehicle, for a total of two vehicle parking spaces.

### FINDING:

This project could not have a significant effect on the environment. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining the Significance of the Environmental Effects Caused by a Project), 15065 (Mandatory Findings of Significance), and 15070 (Decision to Prepare a Negative or Mitigated Negative Declaration), and the following reasons as documented in the initial evaluation (initial study) for the project, which is attached.

A mitigation measure is included in this project to avoid potentially significant effects. See page 80.

cc: Chris Durkin, Project Sponsor  
Christopher May, Current Planning Division  
Supervisor Catherine Stefani, District 2

Distribution List  
Interested Parties  
Virna Byrd, M.D.F.

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# **Initial Study**

## **2417 Green Street**

### **Planning Department Case No. 2017-002545ENV**

#### **A. INTRODUCTION**

The San Francisco Planning Department (the planning department) published a categorical exemption for the proposed project on May 16, 2017. The categorical exemption was appealed and heard by the Board of Supervisors on January 9, 2018. The Board of Supervisors upheld the appeal and, on February 6, 2018, issued Motion No. M18-12, which stated, “[T]he Board finds that there is substantial evidence in the record before the Board that the Project proposed at 2417 Green Street presents unusual circumstances relating to historic resources and hazardous materials and it appears as a result of those circumstances the project may have a significant effect on the environment and, based on the facts presented to the Board of Supervisors at the hearing on January 9, 2018, the Project is therefore not Categorically Exempt from CEQA review.” Accordingly, the planning department has prepared this initial study to evaluate the potential impacts of the 2417 Green Street project. The concerns raised in the appeal and during the appeal hearing are addressed below in Sections F.3, Cultural Resources; F.15, Geology and Soils; and F.17, Hazardous Materials.

#### **B. PROJECT DESCRIPTION**

##### **Project Location**

The project site is located on the south side of Green Street on the block bound by Green, Pierce, Scott, and Vallejo streets in the Pacific Heights neighborhood (see Figure 1 on page 83<sup>1</sup>). The 2,500-square-foot project site contains a vacant four-story, approximately 45-foot-tall, single-family residential building constructed circa 1905. The residence contains a total of approximately 4,450 square feet of space consisting of approximately 4,120 square feet of habitable space and a 337-square-foot garage, and encompasses the front (northern) two thirds of the lot. The property slopes along its Green Street frontage, with an elevation of approximately 150 feet along the western (up-slope) property line to 145 feet along the eastern (down-slope) property line. The rear of the property has been landscaped into three terraces with small (less than 3-foot-tall) retaining walls separating each terrace, descending from west to east. Each level has been backfilled to create a level patio and planting areas. The existing building has one off-street vehicle parking space that is accessed via a curb cut and driveway on Green Street. The project site is currently in a state of suspended construction, with the site having been partially excavated and some interior renovation work started.

##### **Project Characteristics**

The proposed project would lower all floor plates by approximately 2 feet, construct one- and three-story horizontal rear additions, and construct third and fourth floor vertical additions above a portion of the existing building. Project construction would also include a full structural and

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<sup>1</sup> Initial study figures can be found at the end of the document starting on page 83.

seismic upgrade. Existing and proposed site plans are shown on Figure 2 on page 85, and proposed plans and elevations are shown on Figures 3 through 12 on pages 83 through 96.

The floor area would increase from approximately 4,120 square feet under existing conditions to approximately 5,120 square feet under the proposed project. A one-bedroom accessory dwelling unit measuring approximately 1,020 square feet would be added on the first floor, for a total of two residential units on the site. The project also proposes a partial excavation of the rear yard for a sunken terrace, façade alterations such as new window configurations and new windows and door, interior modifications, and expansion of the existing basement level garage to accommodate one additional vehicle, for a total of two off-street vehicle parking spaces. A new street tree would be added on the Green Street sidewalk. Table 1 summarizes the existing and proposed building characteristics.

**Table 1 – Summary of Existing and Proposed Building Characteristics**

	Existing	Proposed
Approximate Floor Area	4,120 square feet	5,120 square feet
Number of stories	4	4
Approximate Height	45 feet	45 feet
Dwelling units	1	2
Off-street vehicle parking spaces	1	2

Source: Dumican Mosey Architects, Site Permit/311 Notification Plans, revised June 6, 2018.

## **Construction Schedule and Equipment**

Project construction is anticipated to take approximately three to five months to complete. The project would require excavation of approximately 408 cubic yards of soil and rock to a depth of 13 feet below grade. Some project excavation below the existing building has already occurred (see Project History, below). Additional excavation would be conducted using a pneumatic pavement breaker (hand-held jackhammer) with a force rating of 90 pounds. Excavation would occur in sections for one to two weeks over a period of three to five months. No pile driving would be required as part of project construction. The foundation would be reinforced concrete with standard retaining walls around the garage and perimeter spread footings around the outside walls.

## **Project History**

The following bullet points provide a chronological summary of the various actions documented in the record related to the proposed project that have occurred since April 2017, when the project sponsor filed for a building permit associated with the proposed project. Text provided within quotes is verbatim as it appears in official documents and City records (building permit applications, complaints, and Board-issued California Environmental Quality Act [CEQA] findings).

- On April 28, 2017, the project sponsor filed Building Permit Application (BPA) #**201704285244** for the proposed excavation/addition project: “Horizontal addition. Expansion of existing

garage in basement level, first, second, third, and fourth story horizontal rear yard addition; alterations to existing front façade; excavation and full foundation replacement; lowering existing building approximately 1'-11"; interior remodel throughout."

- On May 16, 2017, the planning department issued a categorical exemption (planning department case number 2017-002545ENV) for the proposed excavation/addition project covered under BPA #201704285244: "Alterations to an existing four-story-over-basement, single-family residence with one vehicle parking space; excavate to add two vehicle parking spaces; three-story rear addition; facade alterations and foundation replacement; lower existing building."<sup>2</sup>
- On May 18, 2017, the Department of Building Inspection (DBI, or the building department) issued BPA #201705116316: "Partial deteriorated basement wall and foundation replacement with new landscaping site wall at backyard." DBI Info Sheet G-20 notes that foundation work does not require planning department approval, and thus did not route BPA #201705116316 to the planning department for review.
- On September 27, 2017, DBI received complaint no. 201708032: "Working beyond scope of BPA #201705116316. Doing horizontal addition." DBI determined that the scope of work warranted review by the planning department. The planning department determined that one of the proposed retaining walls in the rear yard aligned with the proposed foundation of a proposed horizontal rear addition subject to San Francisco Planning Code section 311 neighborhood notification, which had not yet been completed.
- On September 28, 2017, DBI suspended BPA #201705116316, and on January 5, 2018, DBI closed the case, noting, "new permit has been issued to comply with complaint. DCP approved scope that was initially not reviewed by their department. kmh."
- On October 2, 2017, the planning department opened enforcement action 2017-012992ENF in response to complaint no. 201708032.
- On October 2, 2017, the property owner submitted BPA #201710020114: "To comply [with] NOV201708032, administrative permit to facilitate Department of City Planning review, revision to BPA #201705116316, delete freestanding retaining wall at rear yard. No work under this permit. N/A Maher ordinance."
- On October 10, 2017, after determining that the May 16, 2017 categorical exemption covered the excavation work, the planning department signed off on BPA #201710020114 for excavation below the existing building without the side wall of the proposed rear addition.
- On October 23, 2017, the planning department issued neighborhood notification pursuant to Planning Code section 311 for the proposed horizontal rear expansion under BPA #201704285244.
- On October 28 and 30, 2017, three discretionary review requests were filed with the planning department (planning case nos. 2017-002545DRP, 2017-002545DRP-02, and 2017-002545DRP-03).

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2 The currently proposed project is slightly smaller than the project analyzed in the May 16, 2017, categorical exemption.

- On November 3, 2017, DBI issued BPA #201710020114 for legalization of the excavation work.
- On November 22, 2017, Richard Toshiyuki Drury of Lozeau Drury LLP filed an appeal of the May 16, 2017 categorical exemption with the Board of Supervisors on behalf of the adjacent property owner at 2421 Green Street, raising concerns over (1) impacts to historic resources at 2421 Green Street related to views, air, and light (2) impacts to historic resources at 2421 Green Street related to construction methodology, and (3) impacts related to the release of hazardous materials (Board of Supervisors File No. 171267). The planning department determined that the appeal was timely because the excavation permit (BPA #201710020114) was the approval action under CEQA.
- On December 12, 2017, DBI received complaint no. 201724852: “date last observed: 11-DEC-17; identity of person performing the work: Cannot confirm identity, was n; floor: roof; unit: N/A; exact location: Main Bldg; building type: Residence/Dwelling WORK W/O PERMIT; WORK BEYOND SCOPE OF PERMIT; ; additional information: Chimney has been removed from the building without a permit;”
- On December 20, 2017, DBI received complaint no. 201727021: “Front chimney is unsafe. Also refer to Complaint #201724852.” (On June 3, 2019, DBI closed the case.)
- On January 8, 2018, DBI received complaint no. 201830371: “Penetrations in roof made when chimneys were removed. Have not been sealed. Rain water entering building, also penetrations in walls at rear. A monthly fee will be assessed on NOV’S.” (On May 22, 2018, DBI determined the case abated after penetrations were sealed.)
- On January 9, 2018, the Board of Supervisors upheld the appeal of the categorical exemption issued on May 16, 2017, and on February 6, 2018, the Board issued CEQA findings that concluded:

[T]he Board finds that there is substantial evidence in the record before the Board that the Project proposed at 2417 Green Street presents unusual circumstances relating to historic resources and hazardous materials and it appears as a result of those circumstances the project may have a significant effect on the environment and, based on the facts presented to the Board of Supervisors on the hearing on January 9, 2018, the Project is therefore not Categorically Exempt from CEQA review.<sup>3</sup>

Following the Board hearing, the planning department rescinded the categorical exemption issued on May 16, 2017, and resumed environmental analysis, taking into consideration documents and oral testimony presented during the appeal period and at the appeal hearing.

- On May 8, 2018, DBI issued BPA #201804277607 for temporary shoring to comply with NOV 201727021 to shore up the remaining center brick façade.
- On June 11, 2018, DBI closed complaint no. 201727261 and noted, “Planning Department suspended two permits: 201705116316 and 201710020114.”

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3 San Francisco Board of Supervisors, Motion No. M18-012, Adopting Findings Reversing the Categorical Exemption Determination – 2417 Green Street, Amended February 6, 2018, File No. 180123, available at <https://sfgov.legistar.com/View.ashx?M=F&ID=5792879&GUID=75361D57-546D-41F0-B0A3-D11B6083C3D2>.



- On June 22, 2018, the planning department issued a categorical exemption certificate for a revised building expansion project to lower all floor plates by approximately 2 feet; construct one- and three-story horizontal rear additions; construct third and fourth floor vertical additions; add an accessory dwelling unit; excavate at rear; and expand existing basement level garage to accommodate one additional vehicle (planning case no. 2017-002545ENV).
- On July 20, 2018, the representative of 2421 Green Street filed an appeal of the June 22, 2018 categorical exemption certificate, raising concerns regarding (1) impacts to historic resources at 2421 Green Street related to views, air, and light (2) impacts to historic resources at 2421 Green Street related to construction methodology, and (3) impacts related to the release of hazardous materials.
- On July 30, 2018, the planning department determined that the July 20, 2018 appeal of the June 22, 2018 categorical exemption certificate was not timely because the approval action under CEQA (i.e., the discretionary review hearing before the Planning Commission) had not yet occurred.
- On August 28, 2018, DBI opened complaint case no. 201888531, "Work being done without permits. PA# 201804277607 issued in May for temp." (DBI closed the case on September 4, 2018, stating "work being performed is approved.")
- On September 20, 2018, DBI received complaint no. 201804277607, "Beyond scope of work \$500. Tomporing shoring." (DBI closed the case on November 14, 2018, noting "work complete.")
- On September 21, 2018, DBI received complaint case no. 201893553: "date last observed: 20-SEP-18; time last observed: For the past year; identity of person performing the work: Christopher Durkin; exact location: Main Bldg; building type: Residence/Dwelling ABANDONED/DERELICT STRUCTURE; WORK W/O PERMIT; WORK BEYOND SCOPE OF PERMIT; OTHER BUILDING; additional information: The windows have been left open to the elements for over a year; there are animals, mold, asbestos; the building windows are adjacent to our home's windows." (DBI closed the case on September 25, 2018, noting "Permits for this project have been suspended and there is no work taking place on site. Permit for temp shoring 201804277607 is complete. No windows were open at time of visit. I asked to contractor to make sure site is secure.")
- On January 15, 2019, the planning department rescinded the categorical exemption issued on June 22, 2018 and began preparation of an initial study for the project.
- On January 18, 2019 DBI received complaint no. 201920322: "date last observed: 17-JAN-19; time last observed: Daily x2years; identity of person performing the work: Chris Durkin, developer; Eric ; floor: Third; exact location: Main Bldg; building type: Residence/Dwelling WATER INTRUSION; VACANT STRUCTURE; ; additional information: Windows on East side and at rear of vacant building remain open to rain and animal intrusion past 2 years. Neighbors have filed numerous complaints." (DBI closed the case on January 18, 2019 with the note, "Case closed and referred to CES by email per MH; slw.")
- On January 18, 2019, DBI received complaint no. 201920683: "vacant building."

- On March 19, 2019, DBI received complaint no. 201937943: “Date last observed: 19-mar-19; time last observed: continual; identity of person performing the work: christopher durkin & ; floor: all storie; unit: single res; exact location: common area; building type: residence/dwelling water intrusion; abandoned/derelict structure; structural problems; work being done in dangerous manner; ; additional information: water is pouring out of vacant building making the front sidewalk slick and dangerous; \*.” (DBI closed the case on March 19, 2019, noting, “Case reviewed, to be referred to CES. mh/oh.”)

## **Project Approvals**

The proposed project requires issuance of building permits by DBI. A discretionary review hearing before the Planning Commission has been requested for BPA #201704285244, which is the building permit application that corresponds to the proposed project. The discretionary review hearing constitutes the Approval Action for the Project that would establish the start of the 30-day period for the appeal of the final negative declaration to the Board of Supervisors, pursuant to section 31.04(h) of the San Francisco Administrative Code.

## **C. PROJECT SETTING**

### **Project Site and Surrounding Land Uses**

As noted above, the project site is on the south side of Green Street, within a city block bounded by Pierce Street to the east, Green Street to the north, Scott Street to the west, and Vallejo Street to the south. The immediately surrounding neighborhood is comprised primarily of two- to three-story single-family homes constructed between 1900 and the 1950s in a wide range of architectural styles. Lots on the block and in the vicinity are generally 25 feet wide by 125 feet deep, with some wider lots containing larger homes. The project block slopes upward to the southwest, generally on a greater than 20 percent slope.

The project block and immediately surrounding blocks are zoned RH-1 (Residential-House, One-Family). Nearby zoning districts include RH-3 (Residential-House, Three-Family) and RM-1 (Residential, Mixed, Low Density) zoning on blocks to the northeast, closer to the Union Street Neighborhood Commercial District (NCD). The nearest commercial district, the Union Street NCD, is two blocks to the north and two blocks to the east of the project site, and the Upper Fillmore NCD is located three blocks east and four blocks south of the project site. One block east of the project site on the opposite side of Green Street is St. Vincent de Paul Church and K-8 school. Streets in the vicinity are neighborhood residential, generally around 35-40 feet wide, and contain limited traffic. The sidewalks along the project site and block are approximately 15 feet wide. The project site is well served by public transportation. Within one-quarter mile of the project site, Muni operates the following bus lines: the 22 Fillmore, 24 Divisadero, 41 Union and 3 Jackson.

### **Cumulative Projects**

The cumulative context for land use development project effects is typically localized, within the immediate vicinity of the project site, or at the neighborhood level. Cumulative development in the project vicinity (within approximately a quarter-mile radius of the project site) includes the projects listed in Table 2 and illustrated on Figure 13, on page 96. These projects are either under

construction or are projects for which the planning department has a project application on file. The areas and the projects relevant to the analysis vary, depending on the topic, as detailed in the cumulative analyses presented in subsequent sections of this document. As shown, these projects primarily include new residential uses.

**Table 2 – Projects within One-Quarter Mile of the Project Site**

Address	Planning Department Case No.	Project Description	Project Status
2301 Lombard St	2015-014040CUA	New construction of a mixed-use building with 22 dwelling units and 2,600 square feet of retail	Under construction
2346-2350 Union St	2017-007518PRJ	Addition of five new accessory dwelling units to an apartment building	Under construction
2637 Union St	2018-000739PRJ	Modification of a single-family home and addition of an accessory dwelling unit	Under planning department review
2831 Pierce St	2018-006138PRJ	Modification of a two-unit residential building. Addition of fourth floor.	Under planning department review
2582 Filbert St	2016-008605PRJ	New construction of a single-family home	Under construction
2237 Union St	2014-001423PRJ	Modification of a single-family home	Under construction
2251 Greenwich St	2014-002266PRJ	Demolition-reconstruction of Fire Station #16	Under construction
2261 Filbert St	2014-000645PRJ	Modification of a single-family home	Under construction

*Note:* Some projects listed as under construction may have been recently completed.

*Sources:* San Francisco Planning Department, 2018 Q4 Development Pipeline and San Francisco Property Information Map, reviewed in April 2019.

## D. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	<i>Applicable</i>	<i>Not Applicable</i>
Discuss any variances, special authorizations, or changes proposed to the planning code or zoning map, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City or region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## San Francisco Planning Code

The San Francisco Planning Code, which incorporates the Zoning Maps of the City and County of San Francisco (the City), governs permitted land uses, densities, and the arrangement of building

structures within the city. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless (1) the proposed project conforms to the planning code, (2) allowable exceptions are granted pursuant to provisions of the planning code, or (3) amendments to the planning code are incorporated into the proposed project.

### ***Zoning and Density***

The project site is in a Residential-House, One Family (RH-1) zoning district and a 40-X height and bulk district. The RH-1 district is occupied almost entirely by single-family houses on lots 25 feet in width without side yards. Floor sizes and building styles vary but tend to be uniform within tracts developed in distinct time periods. Though built on separate lots, the structures have the appearance of small-scale row housing, rarely exceeding 35 feet in height. Front setbacks are common, and ground level open space is generous. The 40-X height/bulk district indicates a maximum height of 40 feet (with certain allowable exceptions), and “X” indicates that bulk limits are not applicable. The proposed project would be consistent with the existing planning code zoning and height and bulk designations because it would not exceed the existing zoning and density. Specifically, the building would remain a single-family residence as zoned, and would add an accessory dwelling unit, as permitted under Planning Code section 207(c)(6). Furthermore, the project would not increase the building height beyond the existing height of 45 feet, as measured pursuant to Planning Code section 260.<sup>4</sup> Thus the proposed project would be consistent with the planning code and would not require any variances, special authorizations, or changes to the planning code or zoning map.

### **Plans and Policies**

#### ***San Francisco General Plan***

Development in San Francisco is subject to the San Francisco General Plan. The general plan provides general policies and objectives to guide all land use decisions in the City. Any conflicts between the proposed project and policies that relate to physical environmental issues are discussed in Section F, Evaluation of Environmental Effects. The compatibility of the proposed project with general plan policies that do not relate to physical environmental issues would be considered by decision-makers as part of their decision to approve or disapprove the proposed project. The project is a modification of a single-family home with the addition of an accessory dwelling unit. The project would be minor in scope, would not introduce incompatible land uses to the neighborhood, and would encourage housing production by adding the accessory dwelling unit. It would not otherwise conflict with any general plan policies or objectives. Thus, the project would not conflict with the San Francisco General Plan or any other adopted policy.

#### ***Proposition M – The Accountable Planning Initiative***

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added Section 101.1 to the City’s planning code to establish eight priority policies. These policies, and the corresponding sections of this document addressing the environmental

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4 At its highest point, the existing building is almost 45 feet tall. Since it is on an upsloping lot, the height varies along with the slope and gradually becomes shorter as the grade increases towards the rear. With the proposed alteration to the roofline, the project would result in a decrease in the building height at the front by approximately 3 feet.

issues associated with these policies, are as follows: (1) preservation and enhancement of neighborhood-serving retail uses; (2) protection of neighborhood character; (3) preservation and enhancement of affordable housing (Question 2b, Population and Housing, regarding housing displacement); (4) discouragement of commuter automobiles (Question 5a, Transportation and Circulation); (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership; (6) maximization of earthquake preparedness (Question 14a, Geology and Soils); (7) landmark and historic building preservation (Question 3a, Cultural Resources); and (8) protection of open space (Question 10a, Shadow, and Questions 11a and 11b, Recreation).

Prior to issuing a permit for any project that requires an initial study under CEQA, or for any demolition, conversion, or change of use, and prior to taking any action that requires a finding of consistency with the general plan, the City is required to find the proposed project or legislation consistent with the priority policies. The compatibility of the proposed project with general plan objectives and policies that do not relate to physical environmental issues will be considered by decision makers as part of their decision whether to approve or disapprove the proposed project. Any potential conflicts identified as part of that process would not alter the physical environmental effects of the proposed project.

### ***Regional Plans and Policies***

The principal regional planning agencies and their overarching policies and plans that guide planning in the nine-county Bay Area include the Metropolitan Transportation Commission's and Association of Bay Area Governments' *Plan Bay Area 2040*,<sup>5</sup> which is an integrated long-range transportation and land use plan to meet greenhouse gas reduction targets set by the California Air Resource Board, the Bay Area Air Quality Management District's (the air district's) *Bay Area 2017 Clean Air Plan* (2017 Clean Air Plan), the Metropolitan Transportation Commission's *Regional Transportation Plan – Transportation 2035*, the San Francisco Regional Water Quality Control Board's *San Francisco Basin Plan*, and the San Francisco Bay Conservation and Development Commission's *San Francisco Bay Plan*.

Based on the location, size, and nature of the proposed project, no anticipated conflicts with regional plans would occur as a result of the proposed project.

### ***Required Approvals by Other Agencies***

See Section B, Project Description, for a list of required project approvals.

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5 Metropolitan Transportation Commission and the Association of Bay Area Governments. 2017. *Plan Bay Area 2040 Final Plan*. Available: <http://www.2040.planbayarea.org/what-is-plan-bay-area-2040>. Accessed: April 24, 2019.

## SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hydrology/Water Quality
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Wind	<input type="checkbox"/> Hazards & Hazardous Materials
<input type="checkbox"/> Population and Housing	<input type="checkbox"/> Shadow	<input type="checkbox"/> Mineral Resources
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Recreation	<input type="checkbox"/> Energy
<input type="checkbox"/> Tribal Cultural Resources	<input type="checkbox"/> Utilities/Service Systems	<input type="checkbox"/> Agriculture and Forestry Resources
<input type="checkbox"/> Transportation and Circulation	<input type="checkbox"/> Public Services	<input type="checkbox"/> Wildfire
<input type="checkbox"/> Noise	<input type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Mandatory Findings of Significance
<input type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Geology/Soils	

## E. EVALUATION OF ENVIRONMENTAL EFFECTS

All items on the initial study checklist that have been checked “Less than Significant Impact,” “No Impact,” or “Not Applicable” indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect relating to that topic. A discussion is included for those issues checked “Less than Significant Impact” and for most items checked with “No Impact” or “Not Applicable.” For all of the items checked “Not Applicable” or “No Impact” without discussion, the conclusions regarding potential significant adverse environmental effects are based upon field observation, staff experience and expertise on similar projects, and/or standard reference material available within the planning department, such as the planning department’s Transportation Impact Analysis Guidelines for Environmental Review, and the California Natural Diversity Data Base and maps, published by the California Department of Fish and Wildlife. For each checklist item, the evaluation has considered the impacts of the proposed project both individually and cumulatively.

### Analysis of Topics Raised in the Appeal of the Categorical Exemption

The following impact analyses address concerns that were raised in both appeals of the categorical exemption: Impact CR-1 (historic resources), Impact GE-1 (geology and soils), and Impact HZ-2 (hazardous materials).

### Public Resources Code Section 21099 – Aesthetics and Parking Analysis

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014.<sup>6</sup> Among other provisions, SB 743 amends CEQA by adding Public Resources

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<sup>6</sup> SB 743 is available at: [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140SB743](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743).

section 21099 regarding analysis of aesthetics and parking impacts for urban infill projects.<sup>7</sup> The CEQA Guidelines<sup>8</sup> were amended in 2019 to include a new section 15064.3 that addresses the provisions of SB 743.

Public Resources Code section 21099(d) states, “Aesthetic and parking impacts of a residential, mixed- use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.”<sup>9</sup> Accordingly, aesthetics and parking are not to be considered in determining whether a project has the potential to result in significant environmental effects for projects that meet all of the following three criteria:

- a) The project is in a transit priority area<sup>10</sup>
- b) The project is on an infill site<sup>11</sup>
- c) The project is residential, mixed-use residential, or an employment center<sup>12</sup>

The proposed project meets each of the above three criteria because it (1) is located within one-half mile of several bus transit stops that meet the definition in Public Resources Code section 21099(d) of a “major transit stop,” (2) is located on an infill site that is already developed with and surrounded by other urban development, and (3) is a residential project.<sup>13</sup> Thus, this initial study does not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.

Public Resources Code section 21099(e) states that a lead agency maintains the authority to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers, and that aesthetics impacts as addressed by the revised Public Resources Code do not include impacts on historical or cultural resources. Thus, there is no change in the planning department’s methodology related to design and historic review.

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7 Public Resources Code section 21099(d).

8 California Code of Regulations, Title 14, Division 6, Chapter 3.

9 Public Resources Code section 21099(d)(1).

10 Public Resources Code section 21099(a) defines a “transit priority area” as an area within one-half mile of an existing or planned major transit stop. A “major transit stop” is defined in section 21064.3 of the Public Resources Code as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

11 Public Resources Code section 21099(a) defines an “infill site” as a lot located within an urban area that has been previously developed, or a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

12 Public Resources Code section 21099(a) defines an “employment center” as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and located within a transit priority area.

13 San Francisco Planning Department, Transit-oriented Infill Project Eligibility Checklists for 2417 Green Street, February 1, 2019. This document (and all documents cited in this initial study unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case No. 2017-002545ENV.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>1. LAND USE AND PLANNING. Would the project:</b>					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact LU-1: The proposed project would not physically divide an established community. (Less than Significant)**

The proposed project involves modification and expansion of an existing single-family home on an established lot and the addition of one accessory dwelling unit. The project would not alter the established street grid or permanently close any streets or sidewalks. The project would not impede the passage of persons through construction of any physical barriers. Although portions of the sidewalk adjacent to the project site could be closed for periods of time during project construction (approximately three to five months), these closures would be temporary in nature. Therefore, the proposed project would not physically divide an established community and this impact would be less than significant.

**Impact LU-2: The proposed project would not cause a significant impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)**

Land use impacts could be considered significant if a proposed project conflicts with any plan, policy, or regulation adopted for the purpose of avoiding an environmental effect. However, a conflict with a plan, policy, or regulation adopted for the purpose of mitigating an environmental effect does not necessarily indicate a significant effect on the environment. The proposed project would result in an expansion of an existing (currently vacant) residential unit on the site and an addition of one accessory dwelling unit to the city housing stock and would not be expected to conflict with any applicable land use plan, policy, or regulation such that an adverse physical change would result. The project would be generally consistent with the land use policies outlined in the San Francisco General Plan, including promoting infill development, providing new housing, and concentrating more intense development near transit services. Moreover, the proposed residential use is permitted by city code and plans applicable to the area, and the project would be within the applicable bulk limits. Thus, the proposed project would not result in adverse physical changes in the environment related to conflicts with any plan, policy, or regulation adopted for the purpose of avoiding an environmental effect.

Furthermore, the proposed project would not conflict with any adopted environmental plan or policy, such as the Metropolitan Transportation Commission's and the Association of Bay Area Governments' Plan Bay Area 2040 or the air district's 2017 Clean Air Plan, which directly



addresses environmental issues and/or contains targets or standards that must be met in order to preserve or improve characteristics of the city's physical environment. See Section D, Compatibility with Existing Zoning and Plans, for a more detailed discussion of the proposed project's general consistency with applicable plans and policies. Thus, the proposed project would result in a less-than-significant impact with regard to consistency with existing plans and policies adopted for the purpose of avoiding an environmental effect.

**Impact C-LU-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the project vicinity, would result in less-than-significant cumulative land use impacts. (Less than Significant)**

The cumulative context for land use effects is typically localized, within the immediate vicinity of the project site, or at the neighborhood level. Table 2 on page 7 identifies development projects within a quarter-mile radius of the project site. All of the nearby cumulative projects would be constructed within their individual project sites and would perpetuate the existing land uses and land use pattern in the neighborhood (largely, single-family and some multi-family residential). None of these cumulative development projects would introduce incompatible uses that would adversely impact the existing character of the project vicinity. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a less-than-significant cumulative land use impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>2. POPULATION AND HOUSING. Would the project:</b>					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Impact PH-1: The proposed project would not induce substantial unplanned population growth. (Less than Significant)**

The project would enlarge one existing (currently vacant) single-family home and add one accessory dwelling unit. According to the 2017 America Communities Survey five-year estimates, Census Tract 132, where the project site is located, had a reported population of 4,044 residents. The U.S. Census population estimate for San Francisco in 2017 was 884,363 residents. Based on San

San Francisco's average household size of 2.35,<sup>14</sup> the two newly occupied dwelling units would accommodate approximately five residents. The five new residents would increase the population within the Census Tract 132 by approximately 0.012 percent and would increase the citywide population by approximately 0.0005 percent, which would not be considered substantial. Thus, population growth associated with the proposed project would not be substantial in relation to the overall population of the area, and this impact would be less than significant.

**Impact PH-2: The proposed project would not displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing. (No Impact)**

The project site is currently vacant; thus, no residents would be displaced. The project would result in construction of one net new dwelling unit on the site. Thus, there would be no impact related to displacement of people or housing units.

**Impact C-PH-1: The proposed project, cumulatively with other past, present and reasonably foreseeable future development, would not induce substantial population growth or displace substantial numbers of people or housing units. (Less than Significant)**

Table 2 on page 7 lists development projects within a quarter-mile radius of the project site. These cumulative development projects would not introduce incompatible uses that would adversely impact the existing character of the project vicinity. Moreover, projects in the City's development pipeline would result in population growth that is consistent with Association of Bay Area Governments' projections through 2040. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a less-than-significant cumulative land use impact.

The San Francisco General Plan 2014 Housing Element<sup>15</sup> anticipates continuation of the trend of residential population growth in San Francisco that has been in progress since at least 2000.<sup>16</sup> San Francisco Mayor's Executive Directive 17-02<sup>17</sup> calls for construction of "at least 5,000 units of new or rehabilitated housing every year for the foreseeable future," and for the implementation of policies to facilitate this construction. Any cumulative growth in the project area therefore is not expected to result in a cumulative demand for new housing, since this demand is already anticipated. For these reasons, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would increase the population in the area, but would not induce substantial population growth beyond that already anticipated to occur and this impact would be less than significant.

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14 U.S. Census, 2017, <https://www.census.gov/quickfacts/fact/table/sanfranciscocitycalifornia,sanfranciscocountycalifornia/HSD310217#view=wtot>, accessed January 31, 2019.

15 City of San Francisco, 2015, San Francisco General Plan 2014 Housing Element, April, [http://www.sf-planning.org/ftp/General\\_Plan/2014HousingElement-AllParts\\_ADOPTED\\_web.pdf](http://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf), accessed November 6, 2017.

16 The New York Times. Mapping the US Census 2010. Mapping the 2010 U.S. Census, San Francisco, <http://www.nytimes.com/projects/census/2010/map.html?view=PopChangeView&l=14&lat=37.77752894957491&lng=-122.41932345299993>, accessed May 2, 2018.

17 City and County of San Francisco Office of the Mayor, Executive Directive 17-02, <http://sfmayor.org/article/executive-directive-17-02>, accessed February 19, 2019.

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<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>3. CULTURAL RESOURCES. Would the project:</b>					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**Impact CR-1: The proposed project could cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5, including those resources listed in Articles 10 and 11 of the planning code. (Less than Significant with Mitigation)**

Historical resources are those properties that meet the definitions in section 21084.1 of CEQA and section 15064.5 of the CEQA Guidelines. Historical resources include properties listed in, or formally determined eligible for listing in, the California Register of Historical Resources (California Register) or in an adopted local historic register. Historical resources also include resources identified as significant in a historical resource survey, meeting one or more of the following criteria.

- Criterion 1 (Events): Is associated with events that have made a significant contribution to the broad pattern of California's history and cultural heritage;
- Criterion 2 (Persons): Is associated with the lives of persons important in our past;
- Criterion 3 (Architecture): Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Criterion 4 (Information Potential): Has yielded, or may be likely to yield, information important in prehistory or history.

Additionally, properties that are not listed but are otherwise determined to be historically significant, based on substantial evidence, would also be considered historical resources.

Potential impacts to historic resources are addressed in section 15064.5(b) of the CEQA Guidelines, which states, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the

environment.” A “substantial adverse change” is defined in the CEQA Guidelines as the “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.”<sup>18</sup> CEQA also defines “materially impaired” as work that “materially alters, in an adverse manner, those physical characteristics that convey the historical resource’s historical significance and justify its inclusion in or eligibility for inclusion in the California Register of Historical Resources or in a local register of historical resources.”<sup>19</sup>

Under CEQA Guidelines section 15064.5(b), a significant impact would occur if the project “demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance.” Under these provisions, the significance of a historical resource would be materially impaired—that is, a significant impact would occur—if the project would result in physical demolition, destruction, relocation, or alteration of the resource (which would be considered direct impacts of the project) or its immediate surroundings.

## **Project Site**

The planning department evaluated whether the building at 2417 Green Street is a historical resource as defined by CEQA. The planning department required the submittal of a historic resource evaluation and determined, based on the conclusions of that historic resource evaluation and additional independent analysis conducted by qualified planning department staff, that the existing structure on the project site is not a historical resource as defined by CEQA.<sup>20,21</sup> The following is a summary of the planning department’s findings.

The building located at 2417 Green Street was built circa 1905 and was first owned by Lonella H. Smith. Louis B. Floan was the contractor for the building, but no architect was identified. The building is a rectangular plan, three-story-over-basement, wood-frame, single-family residence with a side-facing gable roof and shingle and brick cladding. The building was altered in 1954 to insert a garage with concrete cladding, in 1972–1973 to replace the front entry porch, and at an unknown date to replace upper floor windows. While the building retains some characteristics of the First Bay Tradition style, including the simple wall surface, wood shingles, and small-scale ornamentation, it has been substantially altered such that it is not considered an outstanding example of this architectural style. Thus, the building at the project site is not a historical resource as defined by CEQA.

The planning department found that the existing building on the project site does not appear to be eligible for inclusion on the California Register either as an individual historic resource or as a contributor to a historic district. There is no information provided in the historical resource evaluation or in the planning department’s background files to indicate that the existing structure at 2417 Green Street is associated with events that have made a significant contribution to the broad

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<sup>18</sup> CEQA Guidelines, section 15064.5(b)(1).

<sup>19</sup> CEQA Guidelines, section 15064.5(b)(2).

<sup>20</sup> Tim Kelley Consulting, LLC, Historical Resource Evaluation Part 1, 2417 Green Street, San Francisco, California, April 2017.

<sup>21</sup> San Francisco Planning Department, Preservation Team Review Form, 2417 Green Street, May 10, 2017; and San Francisco Planning Department, Historic Resource Evaluation Response, 2417 Green Street, May 31, 2018.

patterns of local or regional history or the cultural heritage of California or the United States. Moreover, no significant historical figures are known to be associated with the existing building. Lastly, the property does not significantly embody the distinctive characteristics of the First Bay Tradition style, it is not the work of a master architect, and it does not possess high artistic value.

Furthermore, the existing building on the project site is not located within a California Register-eligible historic district. The historical resources evaluation found no cohesive collection of buildings in the immediate area that would indicate a possible district. The nearest historic district is the California Register-eligible Pacific Heights Historic District, which includes buildings immediately south of and 125 feet to the west of the subject building. The 2417 Green Street structure was found to not contribute to this district since the subject building and its immediate neighbors to the east are not associated with the architectural significance of the district. The district is characterized by large, formal, detached dwellings, typically designed by master architects and displaying a high level of architectural detailing and materials. The building at 2417 Green Street is builder-designed and displays a relatively vernacular style. While the properties to the west of 2417 Green Street may be eligible for inclusion in the district, the existing building on the project site was found to not contribute to the eligible Pacific Heights Historic District.

### **Adjacent Historic Resources**

The project site is located immediately adjacent to and east of an identified-eligible historic resource located at 2421 Green Street.<sup>22</sup> The rear yard of 2417 Green Street also abuts 2727 Pierce Street (City Landmark 51). Due to the proximity of two adjacent historic resources to the project site, potential direct and indirect impacts to both were analyzed and are discussed below.

### **Potential Direct Impacts to Adjacent Historic Resources**

As discussed in the planning department's Historic Resource Evaluation Response, the proposed project at 2417 Green Street would adhere to all planning department requirements with regard to rear yard setbacks and mid-block open space. It is unlikely that the proposed rear addition would cause a physical direct impact to the adjacent historic resources at 2421 Green Street or 2727 Pierce Street due to the fact that the addition would not physically attach to or require physical alterations of any components of these adjacent properties. The proposed project at 2417 Green Street would be confined to the boundary of the subject lot. The proposed rear addition would incorporate 3'-4" side setbacks at the basement level, 0'-3" side setbacks at the first floor, and 3'-10" side setbacks at the second, third, and fourth floors between the addition and the immediately adjacent historic resource at 2421 Green Street and would sit below the overall height of the historic resource at 2421 Green Street.<sup>23</sup> The size and location of the addition would not require the removal or infill of property line windows at 2421 Green Street.<sup>24</sup>

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<sup>22</sup> 2421 Green Street was identified in the planning department's 1976 Survey and given a rating of "4." The property was also discussed in *Here Today: San Francisco's Architectural Heritage*, by Roger R. Olmsted and Tom H. Watkins (page 270).

<sup>23</sup> At its highest point, the existing building is almost 45 feet tall. Since it is on an upsloping lot, the height varies along with the slope and gradually becomes shorter as the grade increases towards the rear. With the proposed alteration to the roofline, the project would result in a decrease in the building height at the front by approximately 3 feet.

<sup>24</sup> Property line windows are not protected in the San Francisco Planning Code.

Furthermore, during the exemption appeal, the appellant's engineer cited an elevation detail on the foundation replacement permit (BPA #201705116316) drawings that indicated a connection with the foundation of 2421 Green Street, discussed in more detail under Impact GE-1 on page 59. Given the history of this project, as outlined in the Project History section above, combined with the concerns raised by the Board of Supervisors at the appeal hearing, **this initial study finds that project construction could compromise the structural integrity of the historic adjacent foundation at 2421 Green Street. As noted in the CEQA findings by the Board of Supervisors during the appeal of the categorical exemption,<sup>25</sup> such an impact could be considered significant.** To address this concern, the planning department coordinated with the building department during the preparation of this initial study, and had the Plan Review Services Division of the building department review the project's geotechnical investigation in advance of when they would typically do so. Nevertheless, given the Board's concerns and the fact that the project sponsor has, in the past, directed work on the project site beyond what was permitted by the building department, **Mitigation Measure M-GE-1, Ongoing Coordination with the Planning Department and the Department of Building Inspections Prior to and During the Construction Phase Regarding Compliance with Geotechnical Requirements**, provided below for ease of reference and also discussed further on page 63, would obligate the project sponsor to maintain ongoing coordination with DBI and the planning department, pursuant to a required milestone schedule, prior to and over the course of project construction for the specific purposes of ensuring the security and stability of the project site and adjacent historic resources.

**Mitigation Measure M-GE-1: Ongoing Coordination with the Planning Department and the Department of Building Inspections Prior to and During the Construction Phase Regarding Compliance with Geotechnical Requirements.** Pursuant to the San Francisco Department of Building Inspection process, the project sponsor (and their design team, geotechnical engineer, and contractor, as applicable) will be subject to ongoing coordination requirements with the planning department and the building department regarding plan check reviews and building inspections prior to and during construction work. This process will include the following requirements:

- Prior to commencement of construction, the project sponsor shall submit to the planning department and building department a report outlining anticipated construction milestones with corresponding (approximate) dates of reaching those milestones as well and all memoranda and/or reports anticipated to be prepared or approved at those milestones. The report shall address how all code requirements will be met, including responsible parties and the city agency providing oversight. The report shall be reviewed and approved by the planning department and the building department prior to commencement of construction.
- Once construction commences, the sponsor shall notify the planning department and the building department (when coordination with the building department is not already included as typical part of the process) when the above milestones have

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<sup>25</sup> San Francisco Board of Supervisors, Motion No. M18-012, Adopting Findings Reversing the Categorical Exemption Determination – 2417 Green Street, Amended February 6, 2018, File No. 180123, available at <https://sfgov.legistar.com/View.ashx?M=F&ID=5792879&GUID=75361D57-546D-41F0-B0A3-D11B6083C3D2>

been reached and their outcomes. Specifically, all memoranda and/or reports issued at times of those milestones shall be provided to the planning department and the building department.<sup>26</sup>

With implementation of Mitigation Measure M-GE-1, potential significant impacts related to historical resources (including construction-related impacts on the adjacent historical resource at 2721 Green Street) would be reduced to a less-than-significant level.

Additionally, the rear yard of 2727 Pierce Street (City Landmark 51) that abuts the rear yard of 2417 Green Street would not be physically impacted by the proposed rear addition, which would be entirely located within the buildable area of the lot such that a planning code-compliant 25-foot rear yard is maintained. This would provide significant distance between the rear yard of 2727 Pierce Street and the proposed rear addition at 2417 Green Street such that there would be no potential for a direct impact to the landmark building.

### ***Potential Indirect Impacts to Adjacent Historic Resources***

Construction impacts to the adjacent building at 2421 Green Street are addressed under Impact NO-2 (vibration) on page 311 and Impact GE-1 (geology and soils) on page 59.

This section addresses the potential for the project to result in indirect impacts to the historic setting of the immediately adjacent historic resource at 2421 Green Street and the nearby 2727 Pierce Street (City Landmark 51), including impacts related to public views of the 2421 Green Street structure. The loss of private views does not constitute a significant impact under CEQA and is and therefore is not included in this analysis.

The current setting of the adjacent historic resources at 2421 Green Street and 2727 Pierce Street is comprised of standard city lots subject to the restrictions and requirements of the RH-1 (Residential-House, One Family) zoning district and 40-X height and bulk district. Historically, the subject block remained unified and largely undeveloped until the Casebolt House (City Landmark 51) was constructed at 2727 Pierce Street in 1867. The block was subsequently subdivided, and lots were sold for private development that ultimately resulted in the current setting, comprised of multi-level single-family residences that adhere to the slope of the land and have a strong pattern of mid-block open space.

The existing footprint of 2417 Green Street is not a precondition for 2421 Green Street or 2727 Pierce Street to convey their historic architectural designs, for which they have been found to be significant under Article 10 of the planning code and the National Register, respectively. The setting of the two historic resources has changed over time to accommodate an ever-changing urban environment. Although the 2417 Green Street project includes a rear expansion that would be visible from 2421 Green Street and from 2727 Pierce Street, this change would not physically impact either resource such that they would no longer be able to convey their architectural significance.

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<sup>26</sup> Pursuant to Department policy, any memoranda and/or reports prepared by project sponsor and/or a consultant working for the project sponsor shall adhere to Planning Department's protocols of objectivity.

The designating ordinance for 2727 Pierce Street (City Landmark 51) identifies character-defining features associated with the significance of the property. These features include architectural details that collectively illustrate the property's high-style Italianate design. Features associated with the setting of the landmark (i.e., landscaping, open space, and views) are not identified in the designating ordinance as character-defining features. Although there is an extant garden at the rear of the property, it is not identified as a character-defining feature in the landmark designation report. The proposed project at 2417 Green Street would be visible from the rear yard of 2727 Pierce Street but it would not physically touch or materially impair any of the landmark's character-defining features such that it would no longer be able to convey its significance. Therefore, the proposed project at 2417 Green Street would not cause a significant adverse impact on 2727 Pierce Street.

The adjacent historic resource at 2421 Green Street is currently undergoing consideration for listing in the National Register of Historic Places for its association with the life and work of master architect Ernest Albert Coxhead and for its representation as an outstanding example of the First Bay Tradition architectural style.<sup>27</sup> Based on the information presented in the National Register nomination form, the intent of the original design of 2421 Green Street was to take advantage of the view(s) from the eastern, western, and northern elevations. While this design intent is important to understanding the original design, it is only one aspect of the overall design. Other aspects that speak to the architectural significance of 2421 Green Street include its exterior shingle cladding, general form and mass, steeply pitched roof forms, and fenestration patterns. The quality of view(s) from the windows that would be blocked by the proposed project is not an aspect of historic significance and is not character-defining to the architectural significance of the building. Rather, these are private views from a private residence, some of which would be noticeably affected by the proposed project, but not to the degree that would materially impair the ability of this resource to convey its historical importance. Moreover, private views are typically not analyzed under CEQA. Additionally, the 2421 Green Street was constructed within an ever-changing urban environment that saw rapid residential development in the years following construction – specifically on adjacent lots – that resulted in the partial obstruction of these views. The site also has a “[s]outhern rear yard that captures direct sunlight nurturing a garden that backs onto neighboring gardens creating a park-like setting at the back of the house.” Although the overall setting of 2421 Green Street is described as “park-like” in the National Register Nomination Form, it is located within an urban environment of developed city lots.

The proposed project at 2417 Green Street would not physically touch or alter the exterior features of 2421 Green Street, as the project would be confined to the boundaries of the 2417 Green Street lot. The proposed rear addition would incorporate 3'-4" side setbacks at the basement level, 0'-3" side setbacks at the first floor, and 3'-10" side setbacks at the second, third, and fourth floors to allow for space between the addition and the immediately adjacent properties and would sit below the overall height of the historic resource at 2421 Green Street such that no existing windows would require physical alteration. The proposed rear addition may alter the amount of direct sunlight on

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<sup>27</sup> Carol L. Karp, *Nomination for Listing, National Register of Historic Places, Architect Ernest Coxhead's Residence & Studio, 1893, 2421 Green Street, San Francisco, California*, August 28, 2017. Submitted with November 22, 2017, CEQA Exemption Appeal, Board of Supervisors File No. 171267. Available at <https://sfgov.legistar.com/View.ashx?M=F&ID=5672392&GUID=AC8156DB-3B1C-4308-AD5D-56087798A95E>.



the rear garden at 2421 Green Street but would not significantly diminish or alter the “park-like” setting at the rear. The proposed project would maintain a 25-foot rear yard that would adhere to the rear yard requirements of the planning code and would maintain mid-block open space consistent with residential design guidelines such that these features would continue to relate to adjacent properties. Although the proposed project would be visible from the east-facing windows of 2421 Green Street, it would not physically touch or alter any of the historic resource’s character-defining features. The 2421 Green Street property would continue to convey its historical significance. Therefore, the project at 2417 Green Street would not cause a significant adverse impact to the setting or surroundings of 2421 Green Street.

Based on massing studies provided by the project sponsor, views of the proposed project would not result in a significant impact due to a change of public views available of the adjacent 2421 Green Street structure, for the following reasons:

- The primary view of the 2421 Green Street residence from the closest public right-of-way (Green Street) is how most people experience the building and that primary view would not change.
- Views of the 2421 Green Street that would change (specifically, by blocking one of the side facades of the building) are from a block or more away. These medium- and long-range view show the building within a dense urban context, and the change in these views as a result of the proposed project would not compromise the integrity of significance or character-defining features of the historic resource.
- Most public views from sidewalks and roadways of adjacent historic resources would remain the same as under the existing conditions.

The July 20, 2018 appeal of the June 22, 2018 categorical exemption issued for the project cites a report by architect Carol Karp that states that the proposed project would adversely affect the historical significance of the adjacent historic resource at 2421 Green Street by blocking light, air, and views from the 2421 Green Street structure. Light, air, and private views are not character-defining features of 2421 Green Street, and effects on light, air, and private views are not considered impacts under CEQA; public views of the 2421 Green Street structure are discussed above and would not be affected by the proposed project in a way that would result in a significant impact.

As discussed above, the proposed addition to the existing single-family residence at 2417 Green Street would not include any physical alterations or setting impacts to the adjacent historical resources at 2421 Green Street or 2727 Pierce Street such that there would be a substantial adverse change in the significance of these resources that would no longer make them eligible for inclusion in a local, state, or national register of historical resources.

### ***Potential Impacts to Adjacent Historic District***

The project also would not have the potential to affect any adjacent historic district. The nearest historic district is the Pacific Heights Historic District, which captures buildings to the south and west of the subject building. The historic district is significant under Criterion 3 (Architecture) for its strong collection of late-Victorian (typically Queen Anne), Shingle (First Bay Region), Arts & Crafts, Classical Revival, Colonial Revival, Tudor Revival, French Provincial, and Mediterranean

Revival architecture. The boundaries of the historic district are roughly Pacific, Lyon, Steiner and Green Streets and the period of significance is 1895 to 1930. Specifically, the boundaries include buildings immediately to the south of the subject property that front on Vallejo Street and buildings to the west that front on Scott Street. The subject property and the four adjacent properties to the west are not included within the boundaries of the historic district. The 2417 Green Street structure would not contribute to this district since the subject building and its immediate neighbors to the east are not associated with the architectural significance of the district. While the properties to the west of 2417 Green Street may be eligible for inclusion in the district, the subject building does not contribute to the Pacific Heights Historic District. Therefore, the proposed project would have no adverse impact to the historic district.

In conclusion, the project would not significant adverse impacts to historic resources.

**Impact CR-2: The proposed project would not cause a substantial adverse change in the significance of an archeological resource pursuant to CEQA Guidelines section 15064.5. (Less than Significant)**

In March 2017 and in January 2019, planning department staff archeologists conducted preliminary archeological review for the project and determined that the potential for resources to be present is low based on the steepness of the project site and the fact that the existing residence was constructed by terracing into the slope, which removed several feet of near-surface soils. Additional excavation would not change this assessment as there is little potential for buried resources to be present in this setting.<sup>28</sup> Thus, the project would not cause a substantial adverse change in the significance of an archeological resource and this impact would be less than significant.

**Impact CR-3: The proposed project would not disturb human remains, including those interred outside of formal cemeteries (Less than Significant)**

In March 2017 and in January 2019, planning department staff archeologists conducted preliminary archeological review for the project. There are no known human remains, including those interred outside of formal cemeteries, located in the immediate vicinity of the project site. Thus, this impact would be less than significant.

**Impact C-CR-1: The proposed project in combination with past, present, and reasonably foreseeable future projects in the vicinity would not result in cumulative impacts to historic resources. (Less than Significant)**

The analysis of cumulative impacts on historical resources considers past, present, and reasonably foreseeable future projects within a 0.25-mile radius of the project site. The planning department has identified eight environmental cases within this area associated with projects either under construction or for which entitlements have been approved. These projects are listed in Table 2 on page 7.

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<sup>28</sup> Sally Salzman Morgan, Planner/Archaeologist, San Francisco Planning Department, email to Jeanie Poling regarding 2417 Green St archeological review, January 30, 2019.

Those past, present, and reasonably foreseeable future projects would be constructed in a densely developed urban environment and would be minimally visible from locations outside of their immediate vicinities. These projects are geographically dispersed and sufficiently removed from the project site such that any alteration or demolition of existing buildings and new construction in these locations would not act in combination with one another to substantially change the setting of any historical resource. Thus, these projects in combination with one another would not materially alter the characteristics that qualify any of the historical resources for listing in the California Register, and would not contribute to any cumulative impacts on historical resources.

**Impact C-CR-2: The proposed project in combination with past, present, and reasonably foreseeable future projects in the vicinity would not result in cumulative impacts to archeological resources or human remains. (Less than Significant)**

Archeological resources and human remains are non-renewable resources of a finite class. All adverse effects to archeological resources erode a dwindling cultural/scientific resource base. Federal and state laws protect archeological resources in most cases, either through project redesign or by requiring that the scientific data present within an archeological resource be archeologically recovered. As discussed above, the proposed project would not have a significant impact related to archeological resources, and the project's impact, in combination with other projects in the area that would also involve ground disturbance, and that also could encounter previously recorded or unrecorded archeological resources or human remains, would not result in a cumulatively considerable significant cumulative impact.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>4. TRIBAL CULTURAL RESOURCES. Would the project:</b>					
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Topics:</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>	<b>Not Applicable</b>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact TC-1: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074. (Less than Significant)**

CEQA section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in CEQA section 21074, tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and that are listed, or determined to be eligible for listing, on a national, state, or local register of historical resources. Pursuant to CEQA section 21080.3.1, on January 31, 2019, the planning department requested consultation with Native American tribes regarding the potential for the proposed project to affect tribal cultural resources. The planning department received no response requesting consultation from any representative of a Native American tribe during the 30-day comment period.

Based on the background research, there are not known tribal cultural resources in the project area. Moreover, the project site is not located in an archeological sensitive area; therefore, the potential for the site to contain tribal cultural resources is very low. Based on this, impacts on tribal cultural resources would be less than significant.

**Impact C-TC-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the project vicinity, would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074. (Less than Significant)**

Impacts related to tribal cultural resources are typically site-specific and generally limited to the immediate construction area. As discussed above, under TC-1, project-level impacts would be less than significant. Moreover, there are no other projects that have the potential to be affected by the proposed project. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a less-than-significant cumulative impact on tribal cultural resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>5. TRANSPORTATION AND CIRCULATION. Would the project:</b>					
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact TR-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing circulation systems; would not conflict or be inconsistent with CEQA Guideline section 15064.3(b); would not substantially increase hazards due to a design feature or incompatible uses; and would not result in an inadequate emergency access (Less than Significant)**

### **Vehicle Miles Traveled in San Francisco and Bay Area**

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development at great distance from other land uses, located in areas with poor access to non-private vehicular modes of travel, generate more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available.

Given these travel behavior factors, San Francisco has a lower vehicle miles traveled (VMT) ratio than the nine-county San Francisco Bay Area region. In addition, some areas of the city have lower VMT ratios than other areas of the city. These areas of the city can be expressed geographically through transportation analysis zones (TAZs). TAZs are used in transportation planning models for transportation analysis and other planning purposes. The zones vary in size from single city blocks in the downtown core, multiple blocks in outer neighborhoods, to even larger zones in historically industrial areas like the Hunters Point Shipyard.

The San Francisco County Transportation Authority (the transportation authority) uses the San Francisco Chained Activity Model Process (SF-CHAMP) to estimate VMT by private automobiles and taxis for different land use types. Travel behavior in SF-CHAMP is calibrated based on observed behavior from the California Household Travel Survey 2010-2012, Census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings. SF-CHAMP uses a synthetic population, which is a set of individual actors that

represents the Bay Area's actual population, who make simulated travel decisions for a complete day. The transportation authority uses tour-based analysis for office and residential uses, which examines the entire chain of trips over the course of a day, not just trips to and from the project. For retail uses, the transportation authority uses trip-based analysis, which counts VMT from individual trips to and from the project (as opposed to an entire chain of trips). A trip-based approach, as opposed to a tour-based approach, is necessary for retail projects because a tour is likely to consist of trips stopping in multiple locations, and the summarizing of tour VMT to each location would over-estimate VMT.<sup>29</sup>

For residential development, the existing regional average daily VMT per capita is 14.6.<sup>30</sup> San Francisco 2040 cumulative conditions were projected using a SF-CHAMP model run, using the same methodology as outlined above for existing conditions, but includes residential and job growth estimates and reasonably foreseeable transportation investments through 2040. For residential development, the projected 2040 regional average daily VMT per capita is 13.7.

### **Vehicle Miles Traveled Analysis**

Land use projects may cause substantial additional VMT. The following identifies thresholds of significance and screening criteria used to determine if a land use project would result in significant impacts under the VMT metric.

Per San Francisco Transportation Impact Analysis Guidelines,<sup>31</sup> for residential projects, a project would generate substantial additional VMT if it exceeds the regional household VMT per capita minus 15 percent. For office projects, a project would generate substantial additional VMT if it exceeds the regional VMT per employee minus 15 percent. As documented in the proposed transportation impact guidelines, a 15 percent threshold below existing development is "both reasonably ambitious and generally achievable."

California Office of Planning and Research's (OPR's) proposed transportation impact guidelines provides screening criteria to identify types, characteristics, or locations of land use projects that would not exceed these VMT thresholds of significance. OPR recommends that if a project or land use proposed as part of the project meets any of the below screening criteria, then VMT impacts are presumed to be less than significant for that land use and a detailed VMT analysis is not required. These screening criteria and how they are applied in San Francisco are described below:

- *Map-Based Screening for Residential, Office, and Retail Projects.* OPR recommends mapping areas that exhibit where VMT is less than the applicable threshold for that land use. Accordingly, the transportation authority has developed maps depicting existing VMT levels in San Francisco for residential, office, and retail land uses based on the SF-CHAMP 2012 base-year model run. The planning department uses these maps and associated data to determine whether a proposed project is located in an area of the city that is below the VMT threshold.

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<sup>29</sup> San Francisco Planning Department, Executive Summary: Resolution Modifying Transportation Impact Analysis, Appendix F, Attachment A, March 3, 2016.

<sup>30</sup> Includes the VMT generated by the project.

<sup>31</sup> Updated February 14, 2019. Available at <https://sfplanning.org/project/transportation-impact-analysis-guidelines-environmental-review-update#impact-analysis-guidelines>.

- *Small Projects.* OPR recommends that lead agencies may generally assume that a project would not have significant VMT impacts if the project would either: (1) generate fewer trips than the level required for studying consistency with the applicable congestion management program; or (2) where the applicable congestion management program does not provide such a level, fewer than 100 vehicle trips per day. The transportation authority's 2015 San Francisco Congestion Management Program does not include a trip threshold for studying consistency. Therefore, the planning department uses the 100 vehicle trip per day screening criterion as a level at which projects generally would not generate a substantial increase in VMT.
- *Proximity to Transit Stations.* OPR recommends that residential, retail, and office projects, as well as projects that are a mix of these uses, proposed within 0.5 miles of an existing major transit stop (as defined by CEQA Guidelines section 21064.3) or an existing stop along a high quality transit corridor (as defined by CEQA Guidelines section 21155) would not result in a substantial increase in VMT. However, this presumption would not apply if the project would: (1) have a floor area ratio of less than 0.75; (2) include more parking for use by residents, customers, or employees of the project than required or allowed, without a conditional use; or (3) is inconsistent with the applicable sustainable communities strategy.

The existing average daily VMT per capita for the transportation analysis zone the project site is located in, TAZ 794, is below the existing regional average daily VMT. In TAZ 794, the average daily VMT per capita for residential uses is 6.9, which is 47 percent below the existing regional average daily VMT per capita for residential uses of 14.6. Therefore, the project site is located within an area of the city where the existing VMT is more than 15 percent below the regional VMT, and the proposed project would not generate substantial additional VMT. Future 2040 average daily VMT per capita for TAZ 794 is 6.7; this is 49 percent below the future 2040 regional average daily VMT per capita of 13.7. Furthermore, the project meets the proximity to transit stations screening criterion, which also indicates that the proposed project use would not cause substantial additional VMT.

## Project Travel Demand

Localized trip generation of the proposed project was calculated using a trip-based analysis and information in the 2002 Transportation Impact Analysis Guidelines for Environmental Review developed by the San Francisco Planning Department.<sup>32</sup>

The proposed project would expand an existing (currently vacant) single-family residence and add an accessory dwelling unit. It is anticipated that the project would result in an additional five residents who would add approximately 18 daily person-trips, 10 daily auto trips, and two PM peak-hour auto trips.<sup>33</sup>

During the three- to five-month project construction period, trucks would travel to and from the project site. It is not anticipated that any construction-related lane closure would be required; however, if required, a lane closure permit would be secured to accommodate this work scope.

<sup>32</sup> In February 2019, the Planning Department published an update to the 2002 *Transportation Impact Analysis Guidelines for Environmental Review*. The guidelines updated some of the transportation significance criteria and methodology but would not change the less-than-significant impact conclusions herein.

<sup>33</sup> San Francisco Planning Department, Transportation Calculations for 2417 Green Street, February 1, 2019.

Lane and sidewalk closures are subject to review and approval by San Francisco Public Works and the Transportation Advisory Staff Committee, which consists of representatives from the Fire Department, Police Department, MTA Traffic Engineering Division, and San Francisco Public Works. Due to its temporary duration and limited scope, project-related construction impacts on traffic generally would not be considered significant.

No transit lines run along Green Street in front of the project site; the nearest transit lines to the project site are the 41 Union line that runs along Union Street, one block north of the project site, and the 22 Fillmore line that runs along Fillmore Street, a block and a half east of the project site. Pedestrian use is typical of a residential neighborhood. The project would not generate a significant number of additional trips and would not change transit, bicycle, or pedestrian conditions in the project vicinity. During project construction, truck traffic and any construction activities would be noticeable to transit users, bicycle riders, and pedestrians in the project vicinity; however, construction-related impacts would be less than significant due to their temporary duration and limited scope.

The project is an infill site as defined under CEQA Guideline section 15064.3(b); thus, as discussed above under Public Resources Code section 21099, parking is not considered in determining whether a project has the potential to result in significant environmental effects.<sup>34</sup> The project involves alterations to an existing single-family home and the addition of an accessory dwelling unit. All physical changes would be on the project site and not in the public right-of-way (other than the addition of a street tree). Thus, the project would not substantially increase hazards due to a design feature or incompatible uses and would not result in inadequate emergency access. Furthermore, the project would not conflict with any plans, programs, or ordinances addressing circulation systems because the project would not modify any roadways in a way that could affect circulation.

In conclusion, project impacts related to transportation and circulation are less than significant.

**Impact C-TR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the project vicinity, would result in less-than-significant cumulative impacts related to transportation and circulation. (Less Than Significant)**

Construction of the proposed project could overlap with construction of nearby cumulative development projects. For the purposes of transportation analysis, the cumulative setting includes development projects within a quarter-mile radius of the project site, as identified in Table 2 on page 7. None of these cumulative development projects would introduce incompatible uses that would adversely impact transportation and circulation in the project vicinity or combine with construction of the proposed project to result in cumulative construction-related impacts. Thus, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a less-than-significant cumulative impacts related to transportation and circulation.

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<sup>34</sup> San Francisco Planning Department, Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation Analysis, 2417 Green Street, February 1, 2019.



<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>6. NOISE. Would the project result in:</b>					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not within the vicinity of an airstrip or airport. Therefore, topic 6c is not applicable.

**Impact NO-1: During project construction, the proposed project would not generate substantial temporary noise levels in excess of established standards. (Less than Significant)**

The construction period for the proposed project would last approximately three to five months and would generally consist of excavation, structural and seismic upgrades, interior renovations, and exterior work. Excavation and building construction would temporarily increase noise that could be considered an annoyance by occupants of nearby properties. The amount of construction noise generated at any one time would vary depending on the types of construction activities underway, numbers and types of pieces of heavy equipment and duration of use of each, distance between noise source and listener, and presence or absence of barriers (including subsurface barriers) between the noise source and the receptors. Table 3 identifies typical noise levels from construction equipment. There would be times when noise could interfere with indoor activities in nearby residences and other businesses near the project site.

**Table 3 – Typical Noise Levels from Construction Equipment**

<b>Construction Equipment</b>	<b>Noise Level (dBA, Leq at 50 feet)</b>	<b>Noise Level (dBA, Leq at 100 feet)</b>
Jackhammer (Pavement Breaker) <sup>1</sup>	<b>88</b>	<b>82</b>
Hoe ram	<b>90</b>	<b>94</b>
Drill rig truck	79	73
Loader	79	73
Dozer	82	76
Excavator	81	75
Grader	85	79
Dump truck	76	70
Flatbed truck	74	68
Concrete truck	81	75
Forklift (gas-powered)	83	77
Generator	81	75
Compressor	78	72
San Francisco Noise Ordinance Limit	86	80

*Source:* Federal Highway Administration, Roadway Construction Noise Model User Guide, 2006.

**Notes:**

Leq noise levels are calculated assuming a 100 percent usage factor at full load (i.e., Lmax noise level 100 percent) for the one-hour measurement period. Noise levels in **bold** exceed the Noise Ordinance limit, but as indicated in note 1, two of the exceedances are exempt from this limit.

1. Exempt from the ordinance noise limit of 86 dBA at 50 feet or 80 dBA at 100 feet.

In San Francisco, construction noise is regulated by the San Francisco Noise Ordinance (San Francisco Police Code article 29). The ordinance requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a distance of 100 feet from the source. To comply with the Noise Ordinance, impact tools (e.g., jackhammers, hoe rams, impact wrenches) must have manufacturer-recommended and City-approved mufflers for both intake and exhaust. Furthermore, section 2908 of the police code prohibits construction work between 8:00 p.m. and 7:00 a.m. if noise would exceed the ambient noise level by 5 dBA at the project property line, unless a special permit is authorized by the Director of the Department of Public Works or the Director of Building Inspection.

As discussed above under Project History, some project excavation below the existing building has already occurred. Additional excavation would be conducted using a pneumatic pavement breaker (hand-held jackhammer). Excavation would occur in sections for one to two weeks over a period of three to five months. No nighttime construction would occur for the proposed project and no pile driving would be necessary. The project would be required to comply with regulations set forth in the Noise Ordinance.

Because the project would not use heavy equipment, and would comply with noise regulations, and because noise associated with construction activities would be temporary and intermittent, construction noise impacts would be less than significant.

**Impact NO-2: During construction, the proposed project would not generate excessive groundborne vibration. (Less than Significant)**

Excavation and building construction would temporarily increase noise and produce groundborne vibration in the project vicinity. Construction equipment would generate vibration that could be considered an annoyance by occupants of nearby properties.

The project would require excavation of approximately 408 cubic yards of soil and rock to a depth of 13 feet below grade. As discussed under Project Description, above, some project excavation below the existing building has already occurred. Additional excavation would be conducted in sections for one to two weeks over a period of three to five months using a hand-held jackhammer with a force rating of 90 pounds. A vibration assessment was conducted for the proposed project.<sup>35</sup> The vibration assessment determined that if the jackhammer were operating 3 feet from any adjacent residence, the estimated ground vibration would be within the range of 0.05 to 0.25 inches per second. A conservative limit of 0.5 inches per second is suggested by the U.S. Bureau of Mines to help prevent minor cosmetic damage to buildings (i.e., 'hairline' cracking of gypsum board or plaster finishes). The estimated ground vibration of 0.05 to 0.25 inches per second is below the conservative threshold of 0.5 inches per second; thus, project construction would not result in vibration that has the potential to cause a significant impact and construction-related vibration impacts of the proposed project would be less than significant.

Construction impacts on adjacent foundations are addressed under Impact GE-1 (geology and soils) on page 59.

**Impact NO-3: During project operation, the proposed project would not generate excessive groundborne vibration or noise levels. (Less than Significant)**

The project site is in an urbanized area with ambient noise levels typical of those in San Francisco's residential neighborhoods. The primary source of ambient noise in the project vicinity is traffic flow. San Francisco traffic noise modeling indicates that existing noise levels at the project site range from 55 to 60 Ldn.<sup>36</sup>

The project proposes alterations to an existing dwelling unit and the addition of a new accessory dwelling unit. Vehicular traffic makes the greatest contribution to ambient noise levels throughout most of San Francisco. Based on published scientific acoustic studies, the traffic volumes in a given location would need to approximately double to produce an increase in ambient noise levels noticeable to most people.<sup>37</sup> Implementation of the proposed project would increase the number of daily vehicle trips to and from the project site by approximately 10 trips,<sup>38</sup> which would

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<sup>35</sup> Charles M. Salter Associates Inc., 2417 Green Street Vibration Assessment, June 15, 2018.

<sup>36</sup> San Francisco Planning Department, Traffic Noise Model, May 3, 2017. Ldn is the average equivalent sound level over a 24-hour period, with a penalty added for noise during the nighttime hours of 10:00 p.m. to 07:00 a.m. During the nighttime period, 10 decibels is added to reflect the impact of the noise.

<sup>37</sup> FHWA. Highway Traffic Noise Analysis and Abatement Guidance, [https://www.fhwa.dot.gov/environment/noise/regulations\\_and\\_guidance/analysis\\_and\\_abatement\\_guidance/revguidance.pdf](https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf), accessed May 11, 2018.

<sup>38</sup> San Francisco Planning Department, Transportation Calculations for 2417 Green Street, February 1, 2019.

represent a negligible increase in existing traffic volumes on the surrounding streets and would not cause a noticeable increase in the ambient noise level in the project vicinity.

The proposed project would not require an emergency generator but may include small-scale mechanical equipment, specifically an HVAC system, that could produce operational noise. These operations would be subject to section 2909 of the City's Noise Ordinance (Article 29 of the San Francisco Police Code). Given its size and scale, the stationary equipment at the proposed two-unit residential building is unlikely to generate noise that exceeds established standards or results in a substantial permanent increase in ambient noise levels. Thus, operational noise and vibration impacts would be less than significant.

**Impact C-NO-1: The implementation of the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a significant cumulative noise or vibration impacts. (Less than Significant)**

### **Cumulative Construction Noise**

The projects listed in Table 2 on page 7 are located one or more blocks away from the project site and therefore would be unlikely to combine in a way that would result in cumulative noise impacts. Moreover, construction noise from the proposed project and other nearby projects would be temporary and intermittent. Thus, project noise effects would not combine with past, present and reasonably foreseeable future projects to result in cumulative construction noise impacts.

### **Cumulative Vibration**

Vibration effects associated with construction the projects listed in Table 2 would be far enough away from the project site such that they would not combine to result in cumulative vibration impacts. Thus, cumulative construction vibration impacts are less than significant.

### **Cumulative Operational Noise**

Past and present development in the project vicinity may result in permanent increases in ambient noise levels from traffic and temporary and periodic increases from repeated and ongoing episodes of major construction. Recently approved and reasonably foreseeable nearby projects listed in Table 2, including the proposed project, would be expected to result in continuing increases in traffic volumes and associated traffic noise, but traffic would be distributed along local roadways and would not result in a doubling of traffic volumes along nearby streets. Moreover, the proposed project's mechanical equipment and mechanical equipment from reasonably foreseeable cumulative projects would be required to comply with the Noise Ordinance. Therefore, in combination with reasonably foreseeable cumulative projects, the proposed project would not make a considerable contribution to any significant noise impacts during project operation, and cumulative operational noise impacts would be less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>7. AIR QUALITY. Would the project:</b>					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Overview

The Bay Area Air Quality Management District (air district) is the regional agency with jurisdiction over the nine-county San Francisco Bay Area Air Basin (air basin), which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa counties and portions of Sonoma and Solano counties. The air district is responsible for attaining and maintaining federal and state air quality standards in the air basin, as established by the federal Clean Air Act and the California Clean Air Act, respectively. Specifically, the air district has the responsibility to monitor ambient air pollutant levels throughout the air basin and to develop and implement strategies to attain the applicable federal and state standards. The federal and state Clean Air Acts require plans to be developed for areas that do not meet air quality standards, generally. The most recent air quality plan, the 2017 Clean Air Plan, was adopted by the air district on April 19, 2017. The 2017 Clean Air Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, in accordance with the requirements of the state Clean Air Act to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases in a single, integrated plan; and establish emission control measures to be adopted or implemented. The 2017 Clean Air Plan contains the following primary goals:

- Protect air quality and health at the regional and local scale: Attain all state and national air quality standards, and eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Protect the climate: Reduce Bay Area greenhouse gas emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The 2017 Clean Air Plan is the most current applicable air quality plan for the air basin. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of an air quality plan.

### Criteria Air Pollutants

In accordance with the state and federal Clean Air Acts, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead. These air pollutants are termed criteria air pollutants because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. In general, the air basin experiences low concentrations of most pollutants when compared to federal or state standards. The air basin is designated as either in attainment<sup>39</sup> or unclassified for most criteria air pollutants with the exception of ozone, PM<sub>2.5</sub>, and PM<sub>10</sub>, for which these pollutants are designated as non-attainment for either the state or federal standards. By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size to, by itself, result in non-attainment of air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality impacts. If a project's contribution to cumulative air quality impacts is considerable, then the project's impact on air quality would be considered significant.<sup>40</sup>

Land use projects may contribute to regional criteria air pollutants during the construction and operational phases of a project. Table 4 identifies air quality significance thresholds followed by a discussion of each threshold. Projects that would result in criteria air pollutant emissions below these significance thresholds would not violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the air basin.

**Table 4 – Criteria Air Pollutant Significance Thresholds**

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (exhaust)	82	15
PM <sub>2.5</sub>	54 (exhaust)	54	10
Fugitive dust	Construction Dust Ordinance or other best management practices	Not applicable	

Source: Bay Area Air Quality Management District, CEQA Air Quality Guidelines, May 2017, page 2-1.

**Ozone Precursors.** As discussed previously, the air basin is currently designated as non-attainment for ozone and particulate matter. Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and

<sup>39</sup> "Attainment" status refers to those regions that are meeting federal and/or state standards for a specified criteria pollutant. "Non-attainment" refers to regions that do not meet federal and/or state standards for a specified criteria pollutant. "Unclassified" refers to regions where there is not enough data to determine the region's attainment status for a specified criteria air pollutant.

<sup>40</sup> Bay Area Air Quality Management District, CEQA Air Quality Guidelines, page 2-1, May, 2017, [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed November 15, 2017.

oxides of nitrogen (NO<sub>x</sub>). The potential for a project to result in a cumulatively considerable net increase in criteria air pollutants, which may contribute to an existing or projected air quality violation, are based on the state and federal Clean Air Acts emissions limits for stationary sources. To ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, air district regulation 2, rule 2 requires that any new source that emits criteria air pollutants above a specified emissions limit must offset those emissions. For ozone precursors ROG and NO<sub>x</sub>, the offset emissions level is an annual average of 10 tons per year (or 54 pounds (lbs.) per day).<sup>41</sup> These levels represent emissions below which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

Although this regulation applies to new or modified stationary sources, land use development projects result in ROG and NO<sub>x</sub> emissions as a result of increases in vehicle trips, architectural coating, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of land use projects and those projects that result in emissions below these thresholds would not be considered to contribute to an existing or projected air quality violation or result in a considerable net increase in ROG and NO<sub>x</sub> emissions. Due to the temporary nature of construction activities, only the average daily thresholds are applicable to construction phase emissions.

**Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>).**<sup>42</sup> The air district has not established an offset limit for PM<sub>2.5</sub>. However, the emissions limit in the federal New Source Review for stationary sources in nonattainment areas is an appropriate significance threshold. For PM<sub>10</sub> and PM<sub>2.5</sub>, the emissions limit under New Source Review is 15 tons per year (82 lbs. per day) and 10 tons per year (54 lbs. per day), respectively. These emissions limits represent levels below which a source is not expected to have an impact on air quality.<sup>43</sup> Similar to ozone precursor thresholds identified above, land use development projects typically result in particulate matter emissions as a result of increases in vehicle trips, space heating and natural gas combustion, landscape maintenance, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of a land use project. Again, because construction activities are temporary in nature, only the average daily thresholds are applicable to construction-phase emissions.

**Fugitive Dust.** Fugitive dust emissions are typically generated during construction phases. Studies have shown that the application of best management practices at construction sites significantly control fugitive dust<sup>44</sup> and individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.<sup>45</sup> The air district has identified a number of best management practices to control fugitive dust emissions from construction activities.<sup>46</sup> The City's Construction Dust Control Ordinance (ordinance 176-08, effective July 30, 2008) requires a number of measures

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41 Bay Area Air Quality Management District 2009, Revised Draft Options and Justification Report, CEQA Thresholds of Significance, page 17, [http://sfmea.sfplanning.org/2014.0653E\\_Revised\\_FND.pdf](http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf), accessed February 19, 2019.

42 PM<sub>10</sub> is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or smaller. PM<sub>2.5</sub>, termed "fine" particulate matter, is composed of particles that are 2.5 microns or less in diameter.

43 Ibid. Footnote 63, page 16.

44 Western Regional Air Partnership, 2006, WRAP Fugitive Dust Handbook, September 7, [http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook\\_Rev\\_06.pdf](http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf), accessed May 11, 2018.

45 Bay Area Air Quality Management District, CEQA Air Quality Guidelines, page D-47, May, 2017.

46 Ibid.

to control fugitive dust and the best management practices employed in compliance with the ordinance are an effective strategy for controlling construction-related fugitive dust.

**Other Criteria Pollutants.** Regional concentrations of CO in the Bay Area have not exceeded the state standards in the past 11 years and SO<sub>2</sub> concentrations have never exceeded the standards. The primary source of CO emissions from development projects is vehicle traffic. Construction-related SO<sub>2</sub> emissions represent a negligible portion of the total basin-wide emissions and construction-related CO emissions represent less than five percent of the Bay Area total basin-wide CO emissions. As discussed previously, the Bay Area is in attainment for both CO and SO<sub>2</sub>. Furthermore, the air district has demonstrated, based on modeling, that to exceed the California ambient air quality standard of 9.0 ppm (parts per million) (8-hour average) or 20.0 ppm (1-hour average) for CO, project traffic in addition to existing traffic would need to exceed 44,000 vehicles per hour at affected intersections (or 24,000 vehicles per hour where vertical and/or horizontal mixing is limited). Therefore, given the Bay Area's attainment status and the limited CO and SO<sub>2</sub> emissions that could result from development projects, development projects would not result in a cumulatively considerable net increase in CO or SO<sub>2</sub> emissions, and quantitative analysis is not required.

### **Local Health Risks and Hazards**

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long-duration) and acute (i.e., severe but short-term) adverse effects to human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and mortality. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

Unlike criteria air pollutants, TACs do not have ambient air quality standards but are regulated by the air district using a risk-based approach to determine which sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis in which human health exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, to provide quantitative estimates of health risks.<sup>47</sup>

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than that for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would be

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<sup>47</sup> In general, a health risk assessment is required if the air district concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The applicant is then subject to a health risk assessment for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more toxic air contaminants.



exposed to air pollution 24 hours per day, seven days a week, for 30 years.<sup>48</sup> Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

Exposures to fine particulate matter (PM<sub>2.5</sub>) are strongly associated with mortality, respiratory diseases, and lung development in children, and other endpoints such as hospitalization for cardiopulmonary disease.<sup>49</sup> In addition to PM<sub>2.5</sub>, diesel particulate matter is also of concern. The California Air Resources Board (California air board) identified diesel particulate matter as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans.<sup>50</sup> The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TAC routinely measured in the region.

In an effort to identify areas of San Francisco most adversely affected by sources of TACs, San Francisco partnered with the air district to conduct a citywide health risk assessment based on an inventory and assessment of air pollution and exposures from mobile, stationary, and area sources within San Francisco. Areas with poor air quality, termed the “Air Pollutant Exposure Zone,” were identified based on health-protective criteria that consider estimated cancer risk, exposures to fine particulate matter, proximity to freeways, and locations with particularly vulnerable populations. The project site is not located within the Air Pollutant Exposure Zone. Each of the Air Pollutant Zone criteria is discussed below.

**Excess Cancer Risk.** The Air Pollution Exposure Zone includes areas where modeled cancer risk exceeds 100 incidents per million persons exposed. This criterion is based on United States Environmental Protection Agency (U.S. EPA) guidance for conducting air toxic analyses and making risk management decisions at the facility and community-scale level.<sup>51</sup> As described by the air district, the U.S. EPA considers a cancer risk of 100 per million to be within the “acceptable” range of cancer risk. Furthermore, in the 1989 preamble to the benzene National Emissions Standards for Hazardous Air Pollutants rulemaking,<sup>52</sup> the U.S. EPA states that it “...strives to provide maximum feasible protection against risks to health from hazardous air pollutants by (1) protecting the greatest number of persons possible to an individual lifetime risk level no higher than approximately one in one million and (2) limiting to no higher than approximately one in ten thousand (100 in one million) the estimated risk that a person living near a plant would have if he or she were exposed to the maximum pollutant concentrations for 70 years.” The 100 per one million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on air district regional modeling.<sup>53</sup>

**Fine Particulate Matter.** U.S. EPA staff’s 2011 review of the federal PM<sub>2.5</sub> standard concluded that the then current federal annual PM<sub>2.5</sub> standard of 15 µg/m<sup>3</sup> (micrograms per cubic meter) should

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48 California Office of Environmental Health Hazard Assessment, 2015, Air Toxics Hot Spot Program Risk Assessment Guidelines, Pg. 4-44, 8-6, February, <https://oehha.ca.gov/media/downloads/cmr/2015guidancemanual.pdf>.

49 San Francisco Department of Public Health, 2014, Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review.

50 California Air Resources Board (ARB), Fact Sheet, The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines, October, 1998.

51 Ibid. Footnote 63, page 67.

52 54 Federal Register 38044, September 14, 1989.

53 Bay Area Air Quality Management District, 2017, Clean Air Plan, page D-43.

be revised to a level within the range of 13 to 11  $\mu\text{g}/\text{m}^3$ , with evidence strongly supporting a standard within the range of 12 to 11  $\mu\text{g}/\text{m}^3$ .<sup>54</sup> The Air Pollutant Exposure Zone for San Francisco is based on the health protective  $\text{PM}_{2.5}$  standard of 11  $\mu\text{g}/\text{m}^3$ , as supported by the U.S. EPA's assessment, although lowered to 10  $\mu\text{g}/\text{m}^3$  to account for uncertainty in accurately predicting air pollutant concentrations using emissions modeling programs.

***Proximity to Freeways.*** According to the California air board, studies have shown an association between the proximity of sensitive land uses to freeways and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children. Siting sensitive uses in close proximity to freeways increases both exposure to air pollution and the potential for adverse health effects. As evidence shows that sensitive uses in an area within a 500-foot buffer of any freeway are at an increased health risk from air pollution,<sup>55</sup> parcels that are within 500 feet of freeways are included in the Air Pollutant Exposure Zone.

***Health Vulnerable Locations.*** Based on the air district's evaluation of health vulnerability in the Bay Area, those ZIP codes (94102, 94103, 94105, 94124, and 94130) in the worst quintile of Bay Area health vulnerability scores as a result of air pollution-related causes were afforded additional protection by lowering the standards for identifying parcels in the Air Pollutant Exposure Zone to: (1) an excess cancer risk greater than 90 per one million persons exposed, and/or (2)  $\text{PM}_{2.5}$  concentrations in excess of 9  $\mu\text{g}/\text{m}^3$ .<sup>56</sup>

The above citywide health risk modeling was also used as the basis in approving amendments to the San Francisco Building and Health Codes, referred to as the Enhanced Ventilation Required for Urban Infill Sensitive Use Developments or Health Code Article 38 (ordinance 224-14, effective December 8, 2014) (article 38). The purpose of article 38 is to protect the public health and welfare by establishing an Air Pollutant Exposure Zone and imposing an enhanced ventilation requirement for all urban infill sensitive use development within the Air Pollutant Exposure Zone. In addition, projects within the Air Pollutant Exposure Zone require special consideration to determine whether the project's activities would add a substantial amount of emissions to areas already adversely affected by poor air quality.

**Impact AQ-1: The project would not conflict with, or obstruct implementation of, the 2017 Clean Air Plan. (Less than Significant)**<sup>56</sup>

The most recently adopted air quality plan for the air basin is the 2017 Clean Air Plan. The 2017 Clean Air Plan is a road map that demonstrates how the San Francisco Bay Area will achieve compliance with the state ozone standards as expeditiously as practicable and how the region will reduce the transport of ozone and ozone precursors to neighboring air basins. In determining consistency with the plan, this analysis considers whether the project would: (1) support the

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54 U.S. EPA, Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards. "Particulate Matter Policy Assessment," April, 2011, <https://www3.epa.gov/ttn/naaqs/standards/pm/data/20110419pmpafinal.pdf>, accessed February 19, 2019.

55 California Air Resources Board, 2005 Air Quality and Land Use Handbook: A Community Health Perspective. April, <http://www.arb.ca.gov/ch/landuse.htm>.

56 San Francisco Planning Department and San Francisco Department of Public Health, Air Pollutant Exposure Zone Map (Memo and Map), April 9, 2014. These documents are part of San Francisco Board of Supervisors File No. 14806, Ordinance No. 224-14; Amendment to Health Code Article 38.

primary goals of the plan, (2) include applicable control measures from the plan, and (3) avoid disrupting or hindering implementation of control measures identified in the plan.

The primary goals of the plan are to (1) protect air quality and health at the regional and local scale; (2) eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and (3) protect the climate by reducing greenhouse gas emissions. To meet the primary goals, the plan recommends specific control measures and actions. These control measures are grouped into various categories and include stationary and area source measures, mobile source measures, transportation control measures, land use measures, and energy and climate measures. The plan recognizes that to a great extent, community design dictates individual travel mode, and that a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and greenhouse gases from motor vehicles is to channel future Bay Area growth into vibrant urban communities where goods and services are close at hand, and people have a range of viable transportation options. To this end, the plan includes 85 control measures aimed at reducing air pollution in the air basin.

The measures applicable to the proposed project site are in the transportation sector (bicycle parking requirement), energy efficiency sector (water and energy conservation requirements), waste reduction sector (mandatory recycling and composting and demolition debris recycling requirements) and environment/conservation sector (tree planting requirements, construction site runoff prevention best management practices, and the use of low-emission building materials). The proposed project's impact with respect to greenhouse gases are discussed in Section F.8, Greenhouse Gas Emissions, which demonstrates that the proposed project would comply with the applicable provisions of the City's greenhouse gas reduction strategy.

The compact development of the proposed project and high availability of viable transportation options ensure that residents could bicycle, walk, and ride transit to and from the project site instead of taking trips via private automobile. These features ensure that the project would avoid substantial growth in automobile trips and vehicle miles traveled. The proposed project's anticipated 10 daily vehicle trips would result in a negligible increase in air pollutant emissions. Furthermore, the proposed project would be generally consistent with the San Francisco General Plan, as discussed in Section D above under Plans and Policies. Transportation control measures that are identified in the 2017 Clean Air Plan are implemented by the San Francisco General Plan and the planning code, for example, through the city's Transit First Policy, bicycle parking requirements, and transit impact development fees. Compliance with these requirements would ensure the project includes relevant transportation control measures specified in the 2017 Clean Air Plan. Therefore, the proposed project would include applicable control measures identified in the 2017 Clean Air Plan to meet the 2017 Clean Air Plan's primary goals.

Examples of a project that could cause the disruption or delay of 2017 Clean Air Plan control measures are projects that would preclude the extension of a transit line or bike path, or projects that propose excessive parking beyond parking requirements. The proposed project would expand an existing, vacant single-family home and add an accessory dwelling unit in a dense, walkable urban area near a concentration of regional and local transit service. It would not preclude the extension of a transit line or a bike path or any other transit improvement, and thus would not disrupt or hinder implementation of control measures identified in the 2017 Clean Air Plan.

For the reasons described above, the proposed project would not interfere with implementation of the 2017 Clean Air Plan, and because the proposed project would be consistent with the applicable air quality plan that demonstrates how the region will improve ambient air quality and achieve the state and federal ambient air quality standards, this impact would be less than significant.

### **Construction Air Quality Impacts**

Project-related air quality impacts fall into two categories: short-term impacts from construction and long-term impacts from project operation. The following addresses construction-related air quality impacts resulting from the proposed project.

#### **Impact AQ-2: The project's construction activities would generate fugitive dust and criteria air pollutants but would not result in a cumulatively considerable net increase in criteria air pollutants. (Less than Significant)**

Construction activities (short-term) typically result in emissions of ozone precursors and fine particulate matter in the form of dust (fugitive dust) and exhaust (e.g., vehicle tailpipe emissions). Emissions of ozone precursors and fine particulate matter are primarily a result of the combustion of fuel from on-road and off-road vehicles. However, ROG's are also emitted from activities that involve painting, other types of architectural coatings, or asphalt paving. The proposed project would expand an existing single-family home and add an accessory dwelling unit. During the project's approximately three- to five-month construction period, construction activities would have the potential to result in emissions of ozone precursors and fine particulate matter, as discussed below.

#### ***Fugitive Dust***

Project-related demolition, excavation, grading, and other construction activities may cause wind-blown dust that could contribute particulate matter into the local atmosphere. Depending on exposure, adverse health effects can occur due to this particulate matter in general and also due to specific contaminants such as lead or asbestos that may be constituents of soil. Although there are federal standards for air pollutants and implementation of state and regional air quality control plans, air pollutants continue to have impacts on human health throughout the country. California has found that particulate matter exposure can cause health effects at lower levels than national standards. The current health burden of particulate matter demands that, where possible, public agencies take feasible available actions to reduce sources of particulate matter exposure. According to the California air board, reducing PM<sub>2.5</sub> concentrations to state and federal standards of 12 µg/m<sup>3</sup> in the San Francisco Bay Area would prevent between 200 and 1,300 premature deaths.<sup>57</sup>

In response, the San Francisco Board of Supervisors approved the Construction Dust Control Ordinance (ordinance 176-08, effective July 30, 2008) with the intent of reducing the quantity of dust generated during site preparation, demolition and construction work in order to protect the

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<sup>57</sup> ARB, Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California, Staff Report, Table 4c, October 24, 2008.

health of the general public and of onsite workers, minimize public nuisance complaints, and to avoid orders to stop work by the Department of Building Inspection.

The Construction Dust Control Ordinance requires that all site preparation work, demolition, or other construction activities within San Francisco that have the potential to create dust or to expose or disturb more than 10 cubic yards or 500 square feet of soil comply with specified dust control measures whether or not the activity requires a permit from the Department of Building Inspection. The Director of the Department of Building Inspection may waive this requirement for activities on sites less than one half-acre that are unlikely to result in any visible wind-blown dust.

In compliance with the Construction Dust Control Ordinance, the project sponsor and the contractor responsible for construction activities at the project site would be required to use the following practices to control construction dust on the site or other practices that result in equivalent dust control that are acceptable to the director. Dust suppression activities may include watering all active construction areas sufficiently to prevent dust from becoming airborne; increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. During excavation and dirt-moving activities, contractors shall wet sweep or vacuum the streets, sidewalks, paths, and intersections where work is in progress at the end of the workday. Inactive stockpiles (where no disturbance occurs for more than seven days) greater than 10 cubic yards or 500 square feet of excavated material, backfill material, import material, gravel, sand, road base, and soil shall be covered with a 10 mil (0.01 inch) polyethylene plastic (or equivalent) tarp, braced down, or use other equivalent soil stabilization techniques. San Francisco ordinance 175-91 restricts the use of potable water for soil compaction and dust control activities undertaken in conjunction with any construction or demolition project occurring within the boundaries of San Francisco, unless permission is obtained from the San Francisco Public Utilities Commission. Non-potable water must be used for soil compaction and dust control activities during project construction and demolition. The San Francisco Public Utilities Commission operates a recycled water truck-fill station at the Southeast Water Pollution Control Plant that provides recycled water for these activities at no charge.

Compliance with the regulations and procedures set forth by the Dust Control Ordinance would ensure that fugitive dust generated by the project's construction activities would not result in a cumulatively considerable net increase in criteria air pollutants.

### ***Criteria Air Pollutants***

As discussed above, construction activities would result in emissions of criteria air pollutants from the use of off- and on-road vehicles and equipment. To assist lead agencies in determining whether short-term construction-related air pollutant emissions require further analysis as to whether the project may exceed the criteria air pollutant significance thresholds shown in Table 4 on page 34, the air district, in its *CEQA Air Quality Guidelines* (May 2017), developed screening criteria. If a proposed project meets the screening criteria, then construction of the project would result in less-than-significant criteria air pollutant impacts. A project that exceeds the screening criteria may require a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds. The *CEQA Air Quality Guidelines* note that the screening

levels are generally representative of new development on greenfield<sup>58</sup> sites without any form of mitigation measures taken into consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

The proposed project would expand an existing single-family home and add an accessory dwelling unit. The size of proposed construction activities would be well below the criteria air pollutant screening sizes identified in the air district's *CEQA Air Quality Guidelines*. Thus, quantification of construction-related criteria air pollutant emissions is not required, and the proposed project's construction activities would result in a less-than-significant criteria air pollutant impact.

In conclusion, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard.

**Impact AQ-3: The project's construction activities would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)**

As discussed above, the project site is not within an Air Pollutant Exposure Zone. During project construction, emissions would be temporary and variable in nature and would not be expected to expose sensitive receptors to substantial air pollutants. Furthermore, the project would be required to comply with California regulations limiting idling to no more than five minutes.<sup>59</sup> Thus, the proposed project would not generate toxic air contaminants, including diesel particulate matter, exposing sensitive receptors to substantial air pollutant concentrations, and this impact would be less than significant.

### **Operational Air Quality Impacts**

Land use projects typically result in emissions of criteria air pollutants and toxic air contaminants primarily from an increase in motor vehicle trips. However, land use projects may also result in criteria air pollutants and toxic air contaminants from combustion of natural gas, landscape maintenance, use of consumer products, and architectural coating. The following addresses air quality impacts resulting from operation of the proposed project.

**Impact AQ-4: Project operations would not result in a cumulatively considerable net increase in criteria air pollutants and would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)**

As discussed above in Impact AQ-2, the air district, in its *CEQA Air Quality Guidelines* (May 2017), has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency or applicant does not need to perform a detailed air quality assessment.

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<sup>58</sup> A greenfield site refers to agricultural or forest land or an undeveloped site earmarked for commercial, residential, or industrial projects.

<sup>59</sup> California Code of Regulations, Title 13, Division 3, § 2485 (on-road) and § 2449(d)(2) (off-road).

The proposed project would expand an existing single-family home and add an accessory dwelling unit. The proposed project would be well below the criteria air pollutant screening sizes for construction and operation of low- and mid-rise apartments identified in the air district's CEQA Air Quality Guidelines. Thus, the proposed project would not result in a cumulatively considerable net increase in criteria air pollutants.

Vehicle trips are the primary source of toxic air contaminants that could result in health risk impacts to sensitive receptors (i.e., people exposed to the toxic air contaminants). The proposed project's estimated 10 daily vehicle trips would be well below the 10,000 vehicle-per-day 'minor, low-impact' source of toxic air contaminants that the Bay Area Air Quality Management District estimates could pose a significant health risk. Also, as noted above, the proposed project would not require an emergency generator. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations, and this impact is less than significant.

**Impact AQ-5: The proposed project would not create objectionable odors that would affect a substantial number of people. (Less than Significant)**

Typical odor sources of concern include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing facilities, fiberglass manufacturing facilities, auto body shops, rendering plants, and coffee roasting facilities. During construction, diesel exhaust from construction equipment would generate some odors; however, construction-related odors would be temporary and would not persist upon project completion. The proposed project's new residential use would not be a significant source of new odors. Therefore, odor impacts would be less than significant.

### **Cumulative Air Quality Impacts**

**Impact C-AQ-1: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area would not contribute to cumulative air quality impacts. (Less than Significant)**

As discussed above, regional air pollution is by its very nature largely a cumulative impact. Emissions from past, present, and future projects contribute to the region's adverse air quality on a cumulative basis. No single project by itself would be sufficient in size to result in regional nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative adverse air quality impacts.<sup>60</sup> The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. Therefore, because the proposed project's construction (Impact AQ-2) and operational (Impact AQ-4) emissions would not exceed the project-level thresholds for criteria air pollutants, the proposed project would not be considered to result in a cumulatively considerable contribution to regional air quality impacts. Furthermore, as discussed above, the project site is not located in an area that already experiences poor air quality and project operations would not contribute to substantial

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<sup>60</sup> Bay Area Air Quality Management District, CEQA Air Quality Guidelines, page 2-1, May 2017.

pollutant concentrations or other emissions. Thus, cumulative air quality impacts would be less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>8. GREENHOUSE GAS EMISSIONS. Would the project:</b>					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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. Accordingly, San Francisco has prepared Strategies to Address Greenhouse Gas Emissions<sup>61</sup> which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy in compliance with the CEQA Guidelines. These GHG reduction actions have resulted in a 28 percent reduction in GHG emissions in 2015 compared to 1990 levels,<sup>62</sup> exceeding the year 2020 reduction goals outlined in the air district's 2017 Clean Air Plan, Executive Order S-3-05, and Assembly Bill 32 (also known as the Global Warming Solutions Act).<sup>63</sup>

61 San Francisco Planning Department, 2017, Strategies to Address Greenhouse Gas Emissions in San Francisco, 2017, <https://sfplanning.org/project/greenhouse-gas-reduction-strategies>, accessed February 19, 2019.

62 San Francisco Department of the Environment, San Francisco's Carbon Footprint, <https://sfenvironment.org/carbon-footprint>, accessed July 19, 2017.

63 Executive Order S-3-05, Assembly Bill 32, and the air district's 2017 Clean Air Plan (continuing the trajectory set in the 2010 Clean Air Plan) set a target of reducing GHG emissions to below 1990 levels by year 2020.



Given that the City has met the state and region's 2020 GHG reduction targets and San Francisco's GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under order S-3-05,<sup>64</sup> order B-30-15,<sup>65,66</sup> and Senate Bill 32,<sup>67,68</sup> the City's GHG reduction goals are consistent with order S-3-05, order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan. Therefore, proposed projects that are consistent with the City's GHG reduction strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans or result in significant GHG emissions, and would therefore not exceed San Francisco's applicable GHG threshold of significance.

The following analysis of the proposed project's impact on climate change focuses on the project's contribution to cumulatively significant GHG emissions. Because no individual project could emit GHGs at a level that could result in a significant impact on the global climate, this analysis is in a cumulative context, and this section does not include an individual project-specific impact statement.

**Impact C-GG-1: The proposed project would generate greenhouse gas emissions, but not at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)**

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct operational emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers; energy required to pump, treat, and convey water; and emissions associated with waste removal, disposal, and landfill operations.

The proposed project involves the expansion of an existing single-family home and the addition of an accessory dwelling unit. Therefore, the proposed project would contribute to annual long-term

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- 64 Office of the Governor, Executive Order S-3-05, 2005, <http://www.pcl.org/projects/2008symposium/proceedings/Coatsworth12.pdf>, accessed March 16, 2016. Executive Order S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 million metric tons of carbon dioxide equivalents (MTCO<sub>2</sub>E)); by 2020, reduce emissions to 1990 levels (approximately 427 million MTCO<sub>2</sub>E); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO<sub>2</sub>E). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.
- 65 Office of the Governor, Executive Order B-30-15, April 29, 2015. <https://www.gov.ca.gov/news.php?id=18938>, accessed November 15, 2017. Executive Order B-30-15, issued on April 29, 2015, sets forth a target of reducing GHG emissions to 40 percent below 1990 levels by 2030 (estimated at 2.9 million MTCO<sub>2</sub>E).
- 66 San Francisco's GHG reduction goals are codified in section 902 of the Environment Code and include: (i) by 2008, determine City GHG emissions for year 1990; (ii) by 2017, reduce GHG emissions by 25 percent below 1990 levels; (iii) by 2025, reduce GHG emissions by 40 percent below 1990 levels; and by 2050, reduce GHG emissions by 80 percent below 1990 levels.
- 67 Senate Bill 32 amends California Health and Safety Code Division 25.5 (also known as the California Global Warming Solutions Act of 2006) by adding section 38566, which directs that statewide greenhouse gas emissions to be reduced by 40 percent below 1990 levels by 2030.
- 68 Senate Bill 32 was paired with Assembly Bill 197, which would modify the structure of the State Air Resources Board; institute requirements for the disclosure of greenhouse gas emissions criteria pollutants, and toxic air contaminants; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of greenhouse gas emissions.

increases in GHGs as a result of increased vehicle trips (mobile sources) and residential operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions. The proposed project would be subject to regulations adopted to reduce GHG emissions as identified in the GHG reduction strategy. As discussed below, compliance with the applicable regulations would reduce the project's GHG emissions related to transportation, energy efficiency, waste reduction, and conservation.

Compliance with the City's bicycle parking requirements would reduce the proposed project's transportation-related emissions by reducing GHG emissions from single-occupancy vehicles and promoting the use of alternative transportation modes with zero GHG emissions. The City's energy efficiency requirements that are applicable to the project include residential water conservation measures (showerhead and faucet replacement) and residential energy conservation measures (attic insulation).

The City's waste-reduction requirements that are applicable to the project include mandatory recycling and composting and construction and demolition debris recycling. Compliance with these measures would reduce the amount of materials sent to a landfill, thus reducing GHGs emitted by landfill operations, and promoting the reuse of materials, which conserves their embodied energy<sup>69</sup> and reduces the energy required to produce new materials. In the environment/conservation sector, the project would comply with the City's street tree planting requirements (which increase carbon sequestration), wood-burning device restrictions (which reduce emissions of GHGs and black carbon), and use low-emitting finishes (which limits the release of volatile organic compounds<sup>70</sup>).

Thus, the proposed project was determined to be consistent with San Francisco's GHG reduction strategy.<sup>71</sup> These regulations have proven effective, as San Francisco's GHG emissions have measurably decreased when compared to 1990 emissions levels, demonstrating that the City has met and exceeded Executive Order S-3-05, Assembly Bill 32, and the 2017 Clean Air Plan GHG reduction goals for the year 2020. Furthermore, the City has met its 2017 GHG reduction goal of reducing GHG emissions to 25 percent below 1990 levels by 2017. Other existing regulations, such as those implemented through Assembly Bill 32, will continue to reduce a proposed project's contribution to climate change. In addition, San Francisco's local GHG reduction targets are consistent with the long-term GHG reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan. Therefore, because the proposed project is consistent with the City's GHG reduction strategy, it is also consistent with the GHG reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan, would not conflict with these plans, and would therefore not exceed

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69 Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site.

70 While not a GHG, volatile organic compounds are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing volatile organic compound emissions would reduce the anticipated local effects of global warming.

71 San Francisco Planning Department, Greenhouse Gas Analysis: Compliance Checklist for 2417 Green Street, January 31, 2019.

San Francisco's applicable GHG threshold of significance. As such, the proposed project would result in a less-than-significant impact with respect to GHG emissions.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>9. WIND. Would the project:</b>					
a) Create wind hazards in publicly accessible areas of substantial pedestrian use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact WI-1: The proposed project would not create wind hazards in publicly accessible areas of substantial pedestrian use. (Less than Significant)**

In San Francisco, average winds speeds are the highest in the summer and lowest in winter. However, the strongest peak wind speeds occur in winter. The highest average wind speeds occur in mid-afternoon and the lowest in the early morning. Based on over 40 years of recordkeeping, the highest mean hourly wind speeds (approximately 20 mph) occur midafternoon in July, while the lowest mean hourly wind speeds (in the range of 6 to 9 mph) occur throughout the day in November. Meteorological data collected at the old San Francisco Federal Building at 50 United Nations Plaza over a six-year period<sup>72</sup> show that westerly<sup>73</sup> through northwesterly winds are the most frequent and strongest winds during all seasons. Of the 16 primary wind directions, four have the greatest frequency of occurrence: these are northwest, west-northwest, west, and southwest (referred to as prevailing winds).

Analysis of the Federal Building wind data shows that during the hours from 6:00 a.m. to 8:00 p.m., about 70 percent of the winds blow from five adjacent directions of the 16 directions as follows: northwest (10 percent of all winds), west-northwest (14 percent of all winds), west (35 percent of all winds), west-southwest (accounting for 2 percent of all winds), and southwest (9 percent of all winds). In San Francisco, over 90 percent of all measured winds with speeds over 13 mph blow from these five directions. The other 10 percent of winds over 13 mph are from storms and can come from any other direction.

Section 148 of the San Francisco Planning Code establishes wind comfort and wind hazard criteria used to evaluate new development in four areas of the city. Section 148 provides that any new building or addition in these areas of the city that would cause wind speeds to exceed the hazard level of 26-mph-equivalent wind speed (as defined in the planning code) more than one hour of any year must be modified to meet this criterion. (The 26 mph standard accounts for short-term—three-minute averaged—wind observations at 36 mph as equivalent to the frequency of an hourly averaged wind of 26 mph. As noted above, winds over 34 mph make it difficult for a person to

<sup>72</sup> Arens, E. et al., "Developing the San Francisco Wind Ordinance and its Guidelines for Compliance," Building and Environment, Vol. 24, No. 4, pages 297-303, 1989.

<sup>73</sup> Wind directions are reported as directions from which the winds blow.

maintain balance, and gusts can blow a person over.) While the proposed project is not subject to section 148, the planning department uses the wind hazard criterion as the CEQA significance threshold to determine whether a proposed project would substantially alter ground-level winds in public areas in an adverse manner.

Building structures near or greater than 100 feet in height could create pedestrian level conditions such that the wind hazard criterion of 26-mph-equivalent wind speed for a single hour of the year would be exceeded. There is no threshold height that triggers the need for wind-tunnel testing to determine whether the building design would result in street-level winds that exceed the standard. It is generally understood, however, from many prior wind-tunnel tests on a variety of projects throughout San Francisco that most, if not all, buildings under 80 feet do not result in adverse wind effects at street level, barring unusual circumstances.

The proposed project would construct one- and three-story horizontal rear additions, and third and fourth floor vertical additions that would not exceed the existing approximately 45-foot-tall building. Because the project elements would all be well below 100 feet tall and because the project site is not located near any other tall buildings, the project would not alter wind in a manner that creates wind hazards in publicly accessible areas. Therefore, impacts related to wind hazards in publicly accessible areas of substantial pedestrian use would be less than significant.

**Impact C-WI-1: The proposed project, in combination with other past, present, and reasonably foreseeable projects, would not result in cumulatively considerable impacts related to wind. (Less than Significant)**

As discussed above, the proposed modification to the building would be less than 100 feet tall and would not alter wind in a manner that substantially affects public areas. For this reason, the project would not combine with cumulative development projects to create or contribute to a cumulative wind impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>10. SHADOW. Would the project:</b>					
a) Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact SH-1: The proposed project would not create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space. (Less than Significant)**

In an urban environment, shadow is a function of the height, size, and massing of buildings and other elements of the built environment, and the angle of the sun. The angle of the sun varies due to the time of day (from rotation of the earth) and the change in seasons (due to the earth's elliptical orbit around the sun and the earth's tilted axis). Morning and afternoon shadows are typically

longer because the sun is lower in the sky. The longer mid-day shadows are cast during the winter, when the mid-day sun is lowest in the sky, and the shorter mid-day shadows are cast during the summer, when the mid-day sun is higher in the sky. At the time of the summer solstice (which falls on approximately June 21 of every year), the mid-day sun is highest in the sky, and the longest day and shortest night occur on this date. Conversely, the shortest day and longest night occur on the winter solstice (which falls on approximately December 21 of every year). The vernal and fall equinoxes (when day and night are equal in length) represent the halfway point between solstices.

San Francisco Planning Code section 295, which was adopted in response to Proposition K (passed November 1984), mandates that new structures above 40 feet in height that would cast additional shadows on properties under the jurisdiction of, or designated to be acquired by, the Recreation and Parks Department cannot be approved by the Planning Commission (based on recommendation from the Recreation and Park Commission) if the shadow “will have any adverse impact on the use” of the park, unless the impact is determined to be insignificant. The proposed project would expand an existing four-story 45-foot-tall single-family home and add one accessory dwelling unit but would not have the potential to cast new shadow on nearby parks or open spaces. Section 295(a)(4) exempts “structures of the same height and in the same location as structures in place on June 6, 1984.” In any event, a 43-foot shadow fan illustrates that project would not cast shadow on Recreation & Parks land or publicly accessible open space.<sup>74</sup> The park and recreational facilities closest to the project site are the 11.9-acre Alta Plaza located four blocks south of the project site, and the 1,480-acre Presidio of San Francisco, located five blocks west of the project site. Given the distance between the project site and these parks, as well as the existing and proposed height of the building (approximately 45 feet tall), the proposed project would not result in new shadow on nearby publicly accessible open spaces.

The proposed project would shade portions of streets, sidewalks, and private properties in the project vicinity at various times of the day throughout the year. Shadows on streets and sidewalks would not exceed levels commonly expected in urban areas and would be considered a less-than-significant effect under CEQA. Although occupants of nearby properties may regard the increase in shadow as undesirable, the limited increase in shading of private properties as a result of the proposed project would not be considered a significant impact under CEQA. For these reasons, the proposed project would not create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space.

**Impact C-SH-1: The proposed project, in combination with other past, present, and reasonably foreseeable projects, would not result in cumulatively considerable impacts related to shadow. (Less than Significant)**

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<sup>74</sup> San Francisco Planning Department, 2417 Green Street Shadow fan modeled from proposed 43-foot tall building, May 30, 2019. At its highest point, the existing building is almost 45 feet tall. Since it is on an upsloping lot, the height varies along with the slope and gradually becomes shorter as the grade increases towards the rear. With the proposed alteration to the roofline, the project would result in a decrease in the building height at the front by approximately 3 feet.

As discussed above, the proposed building would not result in any net new shadow on any publicly accessible open spaces, and thus would not combine with cumulative development projects to create or contribute to a cumulative shadow impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>11. RECREATION. Would the project:</b>					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact RE-1: The proposed project would not increase the use of existing parks and recreational facilities, would not deteriorate any such facilities, and would not require the expansion of such facilities. (Less than Significant)**

As noted above, the park and recreational facilities closest to the project site are the 11.9-acre Alta Plaza located four blocks south of the project site, and the 1,480-acre Presidio of San Francisco, located five blocks west of the project site. The project site would provide passive recreational uses onsite for the residents through the approximately 600-square-foot backyard. In addition, residents of the proposed units would be within walking distance of the above-noted open spaces.

The projected five new permanent residents on the project site would not substantially increase demand for, or use of, neighborhood parks or recreational facilities such that substantial physical deterioration would be expected. Also, the new residents would not require the construction of new recreational facilities or the expansion of existing facilities. For these reasons, the proposed project would have a less-than-significant impact on recreational facilities and resources.

**Impact C-RE-1: The proposed project, in combination with past, present and reasonably foreseeable future projects, would not result in cumulative impacts on recreational facilities or resources. (Less than Significant)**

Cumulative residential development in the project vicinity would result in an intensification of land uses and a cumulative increase in the demand for recreational facilities and resources in the project vicinity and in the city overall. The City has accounted for such growth in the 2014 update

of the Recreation and Open Space Element of the San Francisco General Plan.<sup>75</sup> In addition, San Francisco voters passed two bond measures, in 2008 and 2012, to fund the acquisition, planning, and renovation of City recreational resources. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact on recreational facilities or resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>12. UTILITIES AND SERVICE SYSTEMS.</b>					
<b>Would the project:</b>					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact UT-1: Implementation of the proposed project would not exceed the wastewater treatment capacity of the provider that would serve the project and would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities. (Less than Significant)**

Most of San Francisco, including the project site, is served by a combined wastewater system. Under such a system, sewage and stormwater flows are captured by a single collection system and the combined flows are treated through the same wastewater treatment plants. The San Francisco

<sup>75</sup> San Francisco Planning Department, San Francisco General Plan, Recreation and Open Space Element, April 2014, pp. 20-36, [http://www.sf-planning.org/ftp/General\\_Plan/Recreation\\_OpenSpace\\_Element\\_ADOPTED.pdf](http://www.sf-planning.org/ftp/General_Plan/Recreation_OpenSpace_Element_ADOPTED.pdf), accessed May 20, 2016.

Public Utilities Commission (SFPUC) provides and operates water supply and wastewater treatment facilities for the city. Pacific Gas and Electric Company provides electricity and natural gas to the project site, and various private companies provide telecommunications facilities.

The proposed project would add an estimated five new residents to the currently vacant project site; this would result in an incremental increase in the demand for water and wastewater treatment, but not in excess of amounts expected and provided for in the project area by the SFPUC. Further, the proposed project would incorporate water-conserving design features, such as low-flush toilets and showerheads, which would reduce both water demand and wastewater production. Wastewater and water lines that serve the project site have sufficient capacity to serve the population added to the area by the project. The SFPUC's treatment facilities have adequate capacity to serve the growth anticipated in the general plan. The project would not cause collection treatment capacity of the sewer system in the city to be exceeded.

The project would result in an incremental increase in the demand for electricity, natural gas, and telecommunications, which is not in excess of amounts expected and provided for in the project area by utility service providers.

For the reasons discussed above, the utilities demand associated with the project-related residential population increase would not exceed the service capacity of the existing providers and would not require the construction of new facilities or expansion of existing facilities. Therefore, this impact would be less than significant.

**Impact UT-2: Sufficient water supplies are available to serve the proposed project and reasonably foreseeable future development in normal, dry, and multiple dry years; therefore, the proposed project would not require or result in the relocation or construction of new or expanded water facilities the construction or relocation of which could cause significant environmental effects.**

Water would be supplied to the proposed project from the SFPUC's Hetch-Hetchy regional water supply system. Under sections 10910 through 10915 of the California Water Code, urban water suppliers like the SFPUC must prepare water supply assessments for certain large "water demand" projects, as defined in CEQA Guidelines section 15155.<sup>76</sup> The proposed project does not qualify as a "water-demand" project as defined by CEQA Guidelines section 15155(a)(1); therefore, a water supply assessment has not been prepared for the project. However, the SFPUC estimates that a typical development project in San Francisco comprised of either 100 dwelling units, 100,000 square feet of commercial use, 50,000 square feet of office, 100 hotel rooms, or 130,000 square feet of PDR use would generate demand for approximately 10,000 gallons of water per day, which is

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<sup>76</sup> Pursuant to CEQA Guidelines section 15155(1), "a water-demand project" means: (A) A residential development of more than 500 dwelling units; (B) A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; (C) A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor area; (D) A hotel or motel, or both, having more than 500 rooms; (e) an industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; (F) a mixed-use project that includes one or more of the projects specified in subdivisions (a)(1)(A), (a)(1)(B), (a)(1)(C), (a)(1)(D), (a)(1)(E), and (a)(1)(G) of this section; (G) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.



the equivalent of 0.011 percent of the total water demand anticipated for San Francisco in 2040 of 89.9 million gallons per day.<sup>77</sup> Because it would expand an existing single-family home and add one accessory dwelling unit, the proposed project would generate less than 0.011 percent of water demand for the city as a whole in 2040, which would constitute a negligible increase in anticipated water demand.

The SFPUC uses population growth projections provided by the planning department to develop the water demand projections contained in the urban water management plan. As discussed in Section F.2, Population and Housing, above, the proposed project would be encompassed within planned growth in San Francisco and is therefore also accounted for in the water demand projections contained in the urban water management plan. Because the proposed project would comprise a small fraction of future water demand that has been accounted for in the city's urban water management plan, sufficient water supplies would be available to serve the proposed project in normal, dry, and multiple dry years, and the project would not require or result in the relocation or construction of new or expanded water supply facilities the construction or relocation of which could cause significant environmental effects. This impact would be less than significant, and no mitigation measures are necessary.

**Impact UT-3: The proposed project would not generate solid waste in excess of state or local standards, would not impair the attainment of solid waste reduction goals, and would comply with statutes, regulations, and reduction goals concerning solid waste. (Less than Significant)**

In September 2015, the City entered into a landfill disposal agreement with Recology, Inc. for disposal of all solid waste collected in San Francisco, at the Recology Hay Road Landfill in Solano County, through September 2024 or until 3.4 million tons have been disposed, whichever occurs first. The City would have an option to renew the agreement for a period of six years or until an additional 1.6 million tons have been disposed, whichever occurs first.<sup>78</sup> The Recology Hay Road Landfill is permitted to accept up to 2,400 tons per day of solid waste. At that maximum permitted rate, the landfill has the capacity to accommodate solid waste until approximately 2034. Under existing conditions, the landfill receives an average of approximately 1,850 tons per day from all sources, with approximately 1,200 tons per day from San Francisco, which includes residential and commercial waste and demolition and construction debris that cannot be reused or recycled<sup>79</sup> (see discussion below). At the current rate of disposal, the landfill closure has operating capacity until 2041. The City's contract with the Recology Hay Road Landfill will extend until 2031 or when the City has disposed 5 million tons of solid waste, whichever occurs first. At that point, the City would either further extend the landfill contract or find and entitle an alternative landfill site.

The project's population is part of the population growth taken into account in the San Francisco General Plan 2014 Housing Element Update, as discussed under Section F.2, Population and

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<sup>77</sup> San Francisco Public Utilities Commission, 2015 Urban Water Management Plan for the City and County of San Francisco, June 2016. This document is available at <https://sfwater.org/index.aspx?page=75>

<sup>78</sup> San Francisco Planning Department, Agreement for Disposal of San Francisco Municipal Solid Waste at Recology Hay Road Landfill in Solano County, Final Negative Declaration, Planning Department Case No. 2014.0653, May 21, 2015, [http://sfmea.sfplanning.org/2014.0653E\\_Revised\\_FND.pdf](http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf), accessed February 19, 2019.

<sup>79</sup> CalRecycle, 2010, Jurisdiction diversion/disposal rate detail. <http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionDetail.aspx?JurisdictionID=438&Year=2010>, accessed October 23, 2017.

Housing, and therefore can be assumed to have been taken into account in waste management planning. Further, the project would be required to implement the City's Mandatory Recycling and Composting Ordinance (No. 100-09), the objective of which is to minimize the City's landfill trash generation. In compliance with this ordinance, the project would be required to provide convenient facilities for the separation of recyclables, compostables and landfill trash for its users. Occupants of the project site would be required to separate disposed material.

Project construction also would generate demolition and construction waste. The City's Construction and Demolition Debris Recovery Ordinance prohibits construction and demolition material from being taken to landfill or placed in the garbage. All mixed debris must be transported by a registered hauler to a registered facility to be processed for recycling, and source separated material must be taken to a facility that recycles or reuses those materials. As discussed above, the City has access to adequate landfill capacity at least through 2031 and potentially through 2041 and anticipates that an adequate alternative site will be identified at that point. On this basis, the City has adequate solid waste capacity to serve the proposed project, and the project's impact with respect to landfill capacity would be less than significant.

**Impact C-UT-1: The proposed project, in combination with past, present and reasonably foreseeable future projects, would not result in cumulative impacts on utilities and service systems. (Less than Significant)**

Cumulative development in the project vicinity would incrementally increase demand for utilities and service systems within the city, but not beyond levels anticipated and planned for by the City's public service providers. The SFPUC has accounted for the anticipated growth in its wastewater service projections. The City also has implemented various programs to minimize generation of solid waste disposed to landfills from all projects, as discussed above. All development projects in the city, including development that contributes to demand for utility service in the immediate vicinity of the proposed project, as well as projects throughout the city that contribute to water demand and the demand for wastewater treatment and for solid waste disposal, are required to comply with the City's water conservation, wastewater minimization, and solid waste reduction ordinances and policies.

As explained in Impact UT-2 above, no single development project alone in San Francisco would require the development of new or expanded water supply facilities. The analysis provided in Impact UT-2 considers whether the proposed project in combination with both existing development and projected growth through 2040 would require new or expanded water supply facilities, the construction or relocation of which could have significant cumulative impacts on the environment. Therefore, no separate cumulative analysis is required.

Compliance with City ordinances would reduce the effects of cumulative demand for utility capacity and services such that service capacities would not be exceeded. In addition, electricity, natural gas, and telecommunications companies provide adequate services for the proposed project in combination with reasonably foreseeable future project; therefore, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, has been accounted for in these plans and would not result in a cumulative utilities and service systems impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>13. PUBLIC SERVICES. Would the project:</b>					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services such as fire protection, police protection, schools, parks, or other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact PS-1: The proposed project would increase demand for police and fire protection services but would not require construction of new or physically altered facilities, associated with the provision of such services, that could cause significant environmental impacts. (Less than Significant)**

The project site receives police protection services from the San Francisco Police Department. The Northern Police Station, located at 1125 Fillmore Street, approximately a mile south of the project site, serves the project site.<sup>80</sup> The station underwent seismic, structural, electrical and plumbing improvements in 2016 and no expansions of the station are proposed. Fire Station 16, located at 2251 Greenwich Street, is about a quarter mile northeast of the project site is being replaced and is currently under construction. The next closest fire station that currently provides first responder service to the project site is Fire Station 38 at 2150 California Street, about a mile southeast of the project site. A new public safety building, which serves as citywide police and fire headquarters, was completed in 2016. There are no current plans to construct or expand additional police or fire stations that serve the project area.

The project would add an estimated five residents to the project site. The project would comply with the regulations of the 2016 California Fire Code, which includes requirements for fire protection systems, such as the provision of smoke alarms and fire extinguishers, adequate building access, and emergency response systems.

For these reasons, the proposed project would not require the construction or alteration of a police or fire station or affect response times, service ratios, or other performance objectives related to police and fire protection services, and these impacts would be less than significant.

**Impact PS-2: The proposed project would not result in a substantial increased demand for school facilities and would not require new or expanded school facilities. (Less than Significant)**

<sup>80</sup> San Francisco Police Department, <http://sanfranciscopolice.org/police-district-maps>, accessed April 30, 2018.

The proposed project would add an estimated five new residents, which may include school-aged children who might attend schools operated by the San Francisco Unified School District (SFUSD). SFUSD ongoing enrollment forecasting allows the district to plan for additional expansion of its facilities if determined necessary. Given the SFUSD's overall capacity of almost 64,000 students,<sup>81</sup> the increase of one or two students associated with the project would not substantially change the demand for schools, nor would the project result in the need for construction of new school facilities. The impact would be less than significant.

**Impact PS-3: The proposed project would not substantially increase the demand for other government services, and would not necessitate the need for new or physically altered government facilities to meet service performance objectives. (Less than Significant)**

The proposed project would increase the population of the city by approximately five residents. Population increase in the area from development of the proposed project would be nominal compared to population growth for the city overall. The project area is adequately served by government facilities. The population of the proposed project would not generate the need for new or physically altered government facilities. Therefore, the proposed project would have a less-than-significant impact on governmental facilities.

In addition, the proposed project, in combination with the other residential and mixed-use projects proposed in the area, would incrementally increase demand for public services, which include fire and police protection, school services, and other governmental services. The Fire Department, the Police Department, other City agencies, and SFUSD have accounted for such growth in providing other public services to the residents of San Francisco. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to public services.

**Impact C-PS-1: The proposed project, in combination with past, present and reasonably foreseeable future projects, would not result in cumulative impacts on public services. (Less than Significant)**

The proposed project, in combination with other residential projects proposed in the area, would incrementally increase the demand for public services, which include fire and police protection, and other governmental services. The Fire Department, the Police Department, and other city agencies have accounted for such growth in providing other public services to the residents of San Francisco. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to public services.

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81 San Francisco Unified School District. Growing Population, Growing Schools. SPUR Forum Presentation, Slide 14. August 31, 2016, [https://www.spur.org/sites/default/files/events\\_pdfs/SPUR%20Forum\\_August%2031%202016.pptx\\_.pdf](https://www.spur.org/sites/default/files/events_pdfs/SPUR%20Forum_August%2031%202016.pptx_.pdf), accessed May 23, 2018.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>14. BIOLOGICAL RESOURCES. Would the project:</b>					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact BI-1: The proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any special-status species. Would not interfere with the movement of species, and would not conflict with the City's tree ordinance. (Less than Significant)**

The project site is located in a developed area of San Francisco. It provides no habitat for special status plants or wildlife and does not include any riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and the United States Fish and Wildlife Service, or any state or federally protected wetlands. No trees are proposed for removal as part of the proposed project, and the proposed project does not fall within any local, regional or state habitat conservation plan areas. The project would not remove any trees protected by the City's Urban Forestry Ordinance (Public Works Code section 801 et seq.) and would plant a

new street tree, in compliance with the public works code. Therefore, project-related biological impacts of the proposed project would be less than significant.

**Impact C-BI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative impact related to biological resources. (Less than Significant)**

As with the proposed project, nearby cumulative development projects would also be subject to federal, state, and local regulations related to biological resources. As with the proposed project, compliance with these ordinances would reduce the effects of development projects to less-than-significant levels.

The proposed project would not modify any natural habitat and would have no impact on any candidate, sensitive, or special-status species, any riparian habitat, or other sensitive natural community; and/or would not conflict with any local policy or ordinance protecting biological resources or an approved conservation plan. For these reasons, the proposed project would not have the potential to combine with past, present, and reasonably foreseeable future projects in the project vicinity to result in a significant cumulative impact related to biological resources. Therefore, there would be no cumulative impacts on biological resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>15. GEOLOGY AND SOILS. Would the project:</b>					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project would connect to San Francisco's sewer and stormwater collection and treatment system. It would not use a septic water disposal system. Therefore, Topic 15e is not applicable to the project.

**Impact GE-1: The proposed project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic ground shaking, ground failure, or landslides. (Less than Significant with Mitigation)**

### San Francisco Permit Review Process

To ensure that the potential for adverse effects related to geology and soils is adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Code (state building code, California Code of Regulations, Title 24); the San Francisco Building Code (local building code), which is the state building code plus local amendments that supplement the state code, including the building department's administrative bulletins and information sheets.

The project site is in a landslide hazard zone and thus is subject to the additional requirements of the Slope Protection Act (building code section 106A.4.1.4), as identified in the building code.<sup>82</sup> The Slope Protection Act states that the final geotechnical report must be prepared and signed by both a licensed geologist and a licensed geotechnical engineer, which in turn shall undergo design review by a licensed geotechnical or civil engineer to verify that appropriate geological and geotechnical issues have been considered and that appropriate slope instability mitigation strategies, including drainage plans if required, are proposed.

Based on the review of the geotechnical submittal (discussed in more detail below), the building department director may also require that the project be subject to review by a three-member

<sup>82</sup> The project site is located within an area of potential landslide hazard as identified on the 1974 Blume map. In 2018, the San Francisco Building Code was amended by the Slope and Seismic Hazard Zone Protection Act (Ordinance No. 121-18) to no longer reference the Blume map. However, Building Permit Application 201704285244 for the building expansion was submitted before Ordinance No. 121-18 became effective, and thus the project is subject to DBI regulations in place before Ordinance No. 121-18 became effective.

Structural Advisory Committee that will advise the building department on matters pertaining to the building's design and construction. The three committee members must be selected from a list of qualified engineers submitted by the Structural Engineers Association of Northern California and approved by the building department. One member must be selected by the building department, one member shall be selected by the project sponsor, and the third member shall be selected jointly.

### **Existing Subsurface Conditions**

The analysis in this section relies on the information and findings provided in the geotechnical investigation conducted for the proposed project.<sup>83</sup> The geotechnical investigation includes a review of available geologic and geotechnical data for the site vicinity, an engineering analysis of the proposed project in the context of geologic and geotechnical site conditions, subsurface exploration including soil borings, and preparation of project-specific design and construction recommendations.

In February 2017 (prior to excavation), two soil borings were taken in the back yard, at the location of the proposed building expansion. The borings encountered 2.6 to 2.7 feet of soft to medium stiff sandy clay with gravel and debris (fill), overlying 1 to 2 feet of very stiff sandy clay with gravel (residual soil) overlying friable to weak sandstone at 3.75 to 4.25 feet below ground surface. One dynamic penetration test/hand auger taken within the building encountered 0.5 feet of medium dense gravel (fill) overlying friable to weak sandstone at 1 foot below ground surface. Groundwater was not observed during field investigations. In April 2019, the geotechnical engineer and geologist visited the site to observe the partial excavation in the existing garage and two exploratory foundation pits along existing exterior foundations.

While groundwater was not observed during the field investigation, groundwater levels vary seasonally depending on factors such as landscaping activities and seasonal rainfall. Groundwater is typically encountered at the interface between geologic contacts (i.e., between the soil and bedrock) and within sand lenses in the native clays. Seasonal springs may be encountered in the sands above the native clays.

### **Proposed Excavation and Foundation Construction Activities**

Based on soil samples taken, the geotechnical report anticipates that the majority of site grading would consist of cuts in undocumented fill, native clays and bedrock, and that the foundation subgrade would consist of bedrock. The geotechnical report concludes that the site can be developed as planned, provided the recommendations presented in the geotechnical report are incorporated into the project plans and specifications and are implemented during construction. The geotechnical engineer anticipates that the proposed building alterations would be supported on shallow foundations bearing on bedrock. Depending on the final development plans, excavation of up to 10 feet below the ground level of the adjacent site to the west (2421 Green Street) would be required to construct the proposed basement expansion. It is anticipated that this excavation would be kept about 2 to 3 feet from the property line. Where the excavation would

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<sup>83</sup> Divis Consulting, Inc., Geotechnical Report and Geologic Hazard Study, 2417 Green Street, San Francisco, California, April 25, 2019.



abut an adjacent building, and the adjacent foundations bear on soil, the foundation adjacent to the excavation would be shored using at-rest pressures and adding any surcharge loads; however, it is anticipated that adjacent foundations bear on bedrock. Excavation may be performed in non-sequential sections with a maximum length (along the adjacent property line) of 5 feet.

### **Preliminary Building Department Review of the Proposed Project**

The July 20, 2018 appeal of the June 22, 2018 categorical exemption for the proposed project and subsequent correspondence from the 2421 Green Street representative cited multiple concerns by engineer Lawrence Karp concerning BPA#201705116316 (for the garage expansion and foundation replacement) and BPA #201710020114 (to legalize the excavation work). The Board of Supervisors upheld the appeal and noted,

The Karp Report and other information submitted at and prior to the January 9, 2018, appeal hearing constituted substantial evidence that the Project, if approved, may result in one or more substantial adverse changes in the significance of the neighboring historic resource located at 2421 Green Street that have not been sufficiently addressed in the Categorical Exemption for the Project...The Board finds that the Karp Report and other information submitted at and prior to the January 9, 2018, appeal hearing constituted substantial evidence not previously identified that affect the CEQA evaluation set forth in the Categorical Exemption regarding how the Project may impair the significance of an historic resource by causing impacts to its immediate surroundings.<sup>84</sup>

To address these concerns raised in the appeal and in response to the CEQA findings by the Board of Supervisors, the planning department coordinated with the building department to obtain preliminary review of the geotechnical report and geologic hazard study prepared for the proposed project. The building department's Plan Review Services Division staff reviewed a 2017 geotechnical investigation and made recommendations to revise the report; these recommendations are reflected in the geotechnical report dated April 25, 2019.<sup>85</sup> The Plan Review Services Division staff reviewed the revised report and found that the report generally meets the standards for professional practice of geotechnical engineering.<sup>86</sup>

Pursuant to City code requirements, the project sponsor will be required to undertake the following actions:

- **Final Structural Plan Development.** The sponsor's geotechnical engineer will be required to consult with the design team during the development of the structural plans and will review the structural plans and calculations, shoring plans, and civil plans as required by the Department of Building Inspection, and submittals by the foundation contractor. The

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<sup>84</sup> San Francisco Board of Supervisors, Motion No. M18-012, Adopting Findings Reversing the Categorical Exemption Determination – 2417 Green Street, Amended February 6, 2018, File No. 180123, available at <https://sfgov.legistar.com/View.ashx?M=F&ID=5792879&GUID=75361D57-546D-41F0-B0A3-D11B6083C3D2>.

<sup>85</sup> Divis Consulting, Inc., Geotechnical Report and Geologic Hazard Study, 2417 Green Street, San Francisco, California, April 25, 2019.

<sup>86</sup> Stephan Leung, G.E., Plan Review Services Division, San Francisco Department of Building Inspection, Preliminary Review of Geotechnical Report for 2417 Green Street, San Francisco, Block/Lot: 0560/028, DBI Permit Numbers: 2017-0428-5244, May 16, 2019.

final building design will be required to comply with all recommendations of the geotechnical engineer as well as DBI requirements.

- **Control of Groundwater.** The final design will include measures to intercept groundwater where it may impact the proposed construction, using methods such as drainage behind retaining walls, under-slab-drainage, French drains and area drains, and waterproofing. Any required waterproofing system will be designed and inspected by the architect and/or engineer of record and shall be reviewed and approved by the building department. If groundwater, or evidence of groundwater, is encountered during construction, the contractor will notify the geotechnical consultant to evaluate whether additional measures are required to control the flow of groundwater at the site. Where collected, groundwater will be discharged to a suitable collection point.
- **Third-Party Review.** Pursuant to the Slope Protection Act, the project's geotechnical investigation report and construction documents will undergo third-party review by a licensed geotechnical engineer. Such review will verify that appropriate geological and geotechnical issues have been considered and that appropriate slope instability mitigation strategies have been proposed.
- **Unexpected Conditions During Construction.** If the contractor encounters any adjacent foundations not shown on the project documents or unexpected materials during excavation, project excavation will be halted, and the project geotechnical engineer will be contacted immediately to provide additional consultation on site due to different site conditions. The geotechnical engineer's recommendation shall be reviewed and approved by DBI staff prior to resuming of construction activities.
- **Construction Monitoring.** The contractor will notify the geotechnical engineer and the building department five days prior to any excavation, and the geotechnical engineer shall periodically be present during excavation to observe the actual soil/rock conditions and to evaluate the stability of the cut. The contractor shall establish survey points on the shoring and on adjacent buildings and streets within twice the height of the proposed excavation prior to the start of excavation and where access permits and shall submit the proposed survey points to the building department for review and approval. These survey points shall be used to monitor the vertical and horizontal movements of the shoring and surrounding structures and streets during construction. The contractor shall survey and take photographs of the adjacent buildings prior to the start of excavation and immediately after its completion. If unacceptable earth movement or evidence of structural settlement is encountered during construction, as determined by the geotechnical engineer, project excavation shall be halted and the geotechnical engineer shall evaluate if additional measures are required to prevent further movement. In this event, the geotechnical engineer shall notify the building department that unacceptable earth movement has occurred and of the additional measures proposed to prevent further movement.

Given the history of this project, as outlined in the Project History section, above, combined with the concerns raised by the Board of Supervisors at the appeal hearing, this initial study finds that project construction could compromise the structural integrity of the adjacent foundation at 2421

Green Street. This would be a significant impact. Implementation of **Mitigation Measure M-GE-1, Ongoing Coordination with the Planning Department and the Department of Building Inspections Prior to and During the Construction Phase Regarding Compliance with Geotechnical Requirements**, would reduce this impact to a less-than-significant level. The mitigation measure would ensure ongoing coordination between the project sponsor's team, the planning department, and the department of building inspection regarding geotechnical issues that could arise during the course of plan review and project construction.

**Mitigation Measure M-GE-1: Ongoing Coordination with the Planning Department and the Department of Building Inspections Prior to and During the Construction Phase Regarding Compliance with Geotechnical Requirements.**

Pursuant to the San Francisco Department of Building Inspection process, the project sponsor (and their design team, geotechnical engineer, and contractor, as applicable) will be subject to ongoing coordination requirements with the planning department and the building department regarding plan check reviews and building inspections prior to and during construction work. This process will include the following requirements:

- Prior to commencement of construction, the project sponsor shall submit to the planning department and building department a report outlining anticipated construction milestones with corresponding (approximate) dates of reaching those milestones as well and all memoranda and/or reports anticipated to be prepared or approved at those milestones. The report shall address how all code requirements will be met, including responsible parties and the city agency providing oversight. The report shall be reviewed and approved by the planning department and the building department prior to commencement of construction.
- Once construction commences, the sponsor shall notify the planning department and the building department (when coordination with the building department is not already included as typical part of the process) when the above milestones have been reached and their outcomes. Specifically, all memoranda and/or reports issued at times of those milestones shall be provided to the planning department and the building department.<sup>87</sup>

Compliance with Mitigation Measure M-GE-1 would ensure the security and stability of the project site and adjacent properties. Furthermore, as addressed under Impact CR-1, compliance with this mitigation measure would avoid any potential impacts to historic resources.

### **Other Geotechnical Issues Raised in the Exemption Appeal**

The July 20, 2018 appeal of the June 22, 2018 categorical exemption states, among other assertions, that no topographic and boundary survey has been performed for the proposed project, and that without land survey data, it would be impossible for the project sponsor to provide protection of

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<sup>87</sup> Pursuant to Department policy, any memoranda and/or reports prepared by project sponsor and/or a consultant working for the project sponsor shall adhere to Planning Department's protocols of objectivity.

adjacent properties. Project approval by the planning department concerns consistency with the planning code and does not require a survey or final structural plans.

The July 20, 2018 appeal of the June 22, 2018 categorical exemption also states that the brick foundation of 2421 Green Street would be damaged by the project:

Fundamentally, all that is needed to know is that the drawings (e.g. Detail 3, Sheet S4.1) show a critical new foundation on 2417 Green that crosses the property line to be anchored in the 125 year old brick foundation.

A subsequent letter from Lawrence B. Karp dated January 17, 2019, also states that the proposed project cannot be accomplished without construction that would “compromise the lateral and subjacent support” of 2421 Green Street. The letter further states that Detail 3 on Sheet S4.1 of BPA #201705116316 (the foundation replacement permit) shows a connection with the adjacent foundation (see red arrow on Figure 14). The project sponsor subsequently clarified that the lines on the plans are call outs for longitudinal reinforcement in the wall footing and do not show a connection to the adjacent foundation. The sponsor’s letter of clarification further states, “For the avoidance of any further misunderstanding by any city department or board, the proposed project at 2417 Green Street is in NO WAY PHYSICALLY CONNECTED to 2421 Green Street and does not require any work whatsoever to be performed at 2421 Green Street.”<sup>88</sup> DBI staff reviewed this plan sheet and concurred with the project sponsor that “[t]here is no physical connections between the new footings and the neighbor’s existing masonry footings.”<sup>89</sup> Nevertheless, the foundation replacement permit (BPA #201705116316) has been suspended and would be superseded by the building expansion permit (BPA #201704285244).

**Impact GE-2: The proposed project would not result in substantial loss of topsoil or erosion. (Less than Significant)**

The 2,500-square-foot project site is covered with a building and a landscaped backyard. Grading and excavation would expose topsoil and could potentially result in erosion. Construction-related activities would be required to comply with San Francisco Public Works Code section 146, which requires all land-disturbing activities to implement and maintain best management practices to minimize surface runoff, erosion and sedimentation to prevent construction site runoff discharges into the City’s combined stormwater/sewer system.<sup>90</sup> The project site’s relatively small landscaped area and compliance with section 146’s best management practices during construction activities would ensure that the project would not result in the loss of topsoil or erosion. This impact would be less than significant.

**Impact GE-3: The proposed project would not be located on a geologic unit that is unstable, or that could become unstable as a result of the project, and would not result in landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant with Mitigation)**

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<sup>88</sup> Christopher F. Durkin, P.E., Clarification Letter, 2417 Green Street – Exposing of Fraud in Reports prepared by Larry Karp, April 11, 2019.

<sup>89</sup> Stephen Leung, Department of Building Inspection, email to Tania Sheyner, Planner Department. June 13, 2019.

<sup>90</sup> Ordinance No. 260-13, Public Works Code - Control of Construction Site Runoff, November 5, 2013.

As discussed under Impact GE-1, the project site is located within a landslide hazard zone and, thus, may be subject to landslide hazard. This hazard potential would be highest during site excavation and construction, which would last between three and five months, and the project has the potential to result in significant impacts related to protection of the adjacent foundation at 2421 Green Street that could become unstable as a result of the project. As discussed above under Impact GE-1, oversight by DBI and implementation of Mitigation Measure M-GE-1 would ensure the security and stability of the project site and adjacent properties, and would reduce to less than significant any potential impacts related to earthquake fault, seismic ground shaking, ground failure, or landslide. Compliance with this mitigation measure would also reduce to less-than-significant any effects related to landslide, lateral spreading, subsidence, liquefaction, or collapse.

**Impact GE-4: The proposed project would not create substantial risks to life or property as a result of being located on expansive soil. (Less than Significant)**

Soils located beneath fully developed urban areas are generally not highly susceptible to the effects of expansive soils, which are characterized by their ability to undergo significant volume change (i.e., to shrink and swell) due to variations in moisture content. The presence of expansive soils is typically associated with high clay content. Expansive soils can damage structures and buried utilities and increase maintenance requirements. Section 1803 of the state building code states that in areas likely to have expansive soil, the building official shall require soil tests to determine where such soils do exist, and if so, the geotechnical report must include recommendations and special design and construction provisions for foundations of structures on expansive soils, as necessary.

Subsurface exploration at the project site identified undocumented artificial fill overlying residual soils resting on friable to weak sandstone bedrock.<sup>91</sup> Because soils with high clay content were not encountered, the project site is unlikely to contain expansive soil, and impacts related to expansive soils would be less than significant.

**Impact GE-5: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant)**

Paleontological resources, or fossils, are the remains, imprints, or traces of mammals, plants, and invertebrates from a previous geological period. Such fossil remains as well as the geological formations that contain them are also considered a paleontological resource. Together, they represent a limited, non-renewable scientific and educational resource. The potential to affect fossils varies with the depth of disturbance, construction activities, and previous disturbance.

Ground-disturbing activities would occur to a depth of 13 feet and be confined to the sandy clay and Franciscan Complex bedrock underlying the site. These geologic units are considered to have low potential to contain significant fossils or paleontological resources.<sup>92</sup> Thus, the project site has a low potential to contain significant fossils due to the geologic units that would be affected by project

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<sup>91</sup> Divis Consulting, Inc., Geotechnical Investigation Report for 2417 Green Street, April 25, 2019.

<sup>92</sup> California Academy of Sciences Invertebrate, Zoology, and Geology Fossil Collection Database, <http://researcharchive.calacademy.org/research/izg/fossil/index.asp?xAction=ShowForm&PageStyle=Single&PageSize=0&OrderBy=AccessionNo&County=san+francisco&RecStyle=Full>, accessed June 6, 2018.

construction. Thus, the proposed project would result in less-than-significant impacts to a unique paleontological resource or site.

A unique geologic or physical feature embodies distinctive characteristics of any regional or local geologic principles, provides a key piece of information important to geologic history, contains minerals not known to occur elsewhere in the county, and/or is used as a teaching tool. No unique geologic features exist at the project site; therefore, no impacts on unique geological features would occur.

**Impact C-GE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not have a substantial cumulative impact on geology and soils. (Less than Significant)**

Environmental impacts related to geology and soils are generally site-specific. Nearby cumulative development projects identified in Table 2 on page 7 would be subject to the same seismic safety standards and design review procedures applicable to the proposed project. Compliance with the seismic safety standards and the design review procedures would ensure that the effects from nearby cumulative development projects would be reduced to less-than-significant levels. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to geology and soils.

**Impact C-GE-2: The project, in combination with cumulative projects, would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant)**

Paleontological impacts are generally site specific and highly localized. Therefore, the potential for the proposed project to combine with reasonably foreseeable future projects and create a cumulative impact related to paleontological resources would be low. Therefore, the proposed project would have a less-than-significant cumulative impact on paleontological resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>16. HYDROLOGY AND WATER QUALITY.</b>					
<b>Would the project:</b>					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Topics:</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>	<b>Not Applicable</b>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site does not contain any streams or water courses, and the proposed project would not alter the course of a stream or river or alter the existing drainage pattern of the project site or area. Thus, Question 15c is not applicable to the proposed project.

In 2018, the SFPUC developed a Draft 100-Year Storm Flood Risk Map that shows areas of San Francisco where significant flooding from storm runoff is highly likely to occur during a 100-year storm. A “100-year storm” means a storm with a 1 percent chance of occurring in a given year. The project site is not on the Draft 100-Year Storm Flood Risk Map.<sup>93</sup> At an elevation of approximately 140 feet above mean sea level, the project site has no potential to be affected by sea level rise by the year 2100 as projected by the City of San Francisco.<sup>94</sup> Because of its elevation, distance from the nearest potential sources of flooding, and intervening topography, the project site is not susceptible

<sup>93</sup> San Francisco Water Power Sewer, Draft 100-Year Storm Flood Risk Map, <http://www.sfwater.org/index.aspx?page=1229>, accessed February 11, 2019.

<sup>94</sup> The City projects a sea level rise of 66 inches by the year 2100 in City and County of San Francisco, 2016, San Francisco Sea Level Rise Action Plan, [http://default.sfplanning.org/plans-and-programs/planning-for-the-city/sea-level-rise/160309\\_SLRAP\\_Final\\_ED.pdf](http://default.sfplanning.org/plans-and-programs/planning-for-the-city/sea-level-rise/160309_SLRAP_Final_ED.pdf), accessed February 19, 2019.

to the potential effects of a tsunami or seiche.<sup>95</sup> For these reasons, there is no potential for project impacts with respect to flood hazard, tsunami or seiche zones, and Question 15d is not applicable.

**Impact HY-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. (Less than Significant)**

The project site is located within the area of the city served by a combined stormwater and sewer system. Under such a system, wastewater (sewage) and stormwater are collected and comingled in underground piping and tunnels for conveyance to the City's wastewater treatment plants, operated by the San Francisco Public Utilities Commission (SFPUC). The project site is less than 5,000 square feet and thus does not require submittal of a stormwater control plan per San Francisco Public Works Code article 4.2, section 147. Nevertheless, the project sponsor would be required to maintain construction best management practices to minimize surface runoff, erosion, and sedimentation from the construction site. During project operation, combined stormwater and wastewater from the project site would be treated pursuant to the City's National Pollutant Discharge Elimination System (NPDES) permit prior to discharge to receiving waters. This would ensure that the proposed project would not degrade surface or groundwater quality during construction or operations. Therefore, impacts related to water quality from development of the proposed project would be less than significant.

**Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table. (Less than Significant)**

The project site is covered with impervious surfaces except for the rear yard. Impervious surfaces greatly limit the amount of surface water that can infiltrate a site to recharge the groundwater. The proposed building expansion into the rear yard would result in a slight increase in impervious surface but not enough to interfere with groundwater recharge.

If dewatering is required during project construction, any effects related to lowering the water table would be temporary and would not be expected to substantially deplete groundwater resources in any underlying aquifers. In addition, the proposed project does not include any groundwater wells to extract groundwater supplies.

Project operation would not result in the use of groundwater and the project would not otherwise be expected to adversely affect groundwater supplies or quality.

For these reasons, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, and impacts would be less than significant.

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<sup>95</sup> California Emergency Management Agency (CalEMA), Tsunami Inundation Map for Emergency Planning, State of California – City and County of San Francisco, San Francisco North Quadrangle, San Francisco South Quadrangle (San Francisco Bay), June 15, 2009, [http://www.conservation.ca.gov/cgs/geologic\\_hazards/Tsunami/Inundation\\_Maps/SanFrancisco/Documents/Tsunami\\_Inundation\\_SouthSFNorthSF\\_PacificCoast\\_SanFrancisco.pdf](http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SanFrancisco/Documents/Tsunami_Inundation_SouthSFNorthSF_PacificCoast_SanFrancisco.pdf), accessed April 30, 2018.



**Impact HY-3: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant)**

As discussed under HY-1, above, during construction, the project sponsor would be required to maintain construction best management practices to minimize surface runoff, erosion, and sedimentation from the construction site, and during project operation, combined stormwater and wastewater from the project site would be treated pursuant to the City's NPDES permit prior to discharge to receiving waters. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and this impact would be less than significant.

**Impact C-HY-1: The proposed project, in combination with other past, present, or reasonably foreseeable projects, would not substantially deplete groundwater supplies, alter existing drainages, or otherwise degrade water quality. (Less than Significant)**

The proposed project and all future projects within San Francisco would be required to comply with the water quality and drainage control requirements discussed above that apply to all land use development projects within the city. Since all development projects would be required to follow the same regulations as the proposed project, the implementation of new, conforming development projects, peak stormwater drainage rates and volumes resulting from design storms would be expected to decrease gradually over time relative to existing peak flows. Moreover, all development projects would be required to comply with the same drainage, dewatering, and water quality regulations as the proposed project. As a result, cumulative effects related to drainage patterns, water quality, stormwater runoff, stormwater capacity of the combined sewer system and groundwater supply and quality would be less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>17. HAZARDS AND HAZARDOUS MATERIALS. Would the project:</b>					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not located within an airport land use plan area, nor is it within two miles of a public use airport or a private airstrip. There are no areas that would be classified as wildlands in the project vicinity. The closest heavily vegetated area to the project is the Presidio of San Francisco, about a half-mile west of the project site and separated from it by extensive urban infrastructure that is not intermixed with wildlands. Therefore, criteria 16e and 16h are not applicable.

**Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant)**

Neither construction nor operation of the proposed project would involve the routine transport, use, or disposal of significant quantities of hazardous materials. Small quantities of commercially available hazardous materials such as household cleaning, paints, and landscaping supplies may be used; however, these materials would not be expected to be used in sufficient quantities or contrary to normal use, and therefore would not pose a threat to human health or the environment.

Based on the above, the impact of the proposed development on the public and the environment related to the routine transport, use, and handling of hazardous materials therefore would be less than significant.

**Impact HZ-2: The proposed project would not create a significant hazard to the public or the environment through the release of hazardous materials. (Less than Significant)**

The proposed project would disturb at least 50 cubic yards of soil in an area that the San Francisco Health Department (the health department), pursuant to San Francisco Building Code section

106A.3.2.4, identified as likely containing hazardous substances in the soil or groundwater. Therefore, before the project may obtain a building permit, it must comply with the requirements of article 22A of the San Francisco Health Code (also known as the Maher Ordinance), which the health department administers and oversees.

Per San Francisco Health Code section 22A.4, the health department may waive the requirements imposed by the Maher Ordinance if the applicant demonstrates that the property has been continuously zoned as residential under the planning code since 1921, has been in residential use since that time, and no evidence has been presented to create a reasonable belief that the soil and/or groundwater may contain hazardous substances. In these circumstances, the health department will provide the applicant with a waiver, which is a written notification that the requirements of article 22A have been waived and no further oversight by the health department is required for the project.

The health department issued two Maher waivers for the proposed project because the property has been continuously zoned as residential under the planning code since 1921, has been in residential use since that time, and no evidence has been presented to create a reasonable belief that the soil and/or groundwater may contain hazardous substances. The first waiver, issued on March 28, 2017 for the excavation/addition building permit (#201704285244), recommends that construction activities follow a work health and safety plan and dust control measures.<sup>96</sup> The second Maher waiver, issued on October 31, 2017 for the excavation-only building permit (#201705116316), recommends that construction activities follow a work health and safety plan and dust control measures, and determined that a former underground storage tank removed from the residential site or nearby residential site does not present a significant health or environmental risk to the project property based on the information available from publicly available state databases and health department files.<sup>97</sup> The October 31, 2017 Maher waiver also recommends that excavated fill soils be segregated, stored on plastic sheeting, and analyzed for contaminants prior to reuse or disposal.

On October 31, 2017, when the health department staff issued the second Maher waiver, and consistent with normal procedures for building permit approvals, staff also signed the back of building permit #201705116316 and added a stamp that stated the following:

Accepted by the San Francisco Department of Public Health Maher Program with the following conditions: Obtain copies and follow the requirements of the Site Mitigation Plan, Environmental Health and Safety Plan, Dust Control Plan and other documents and requirements to ensure compliance with the S.F. Maher Ordinance.

During a meeting with health department on January 17, 2018, to discuss the 2417 Green Street project, Stephanie Cushing, Director of Environmental Health, noted that the health department had one approval stamp that it used both for projects that have approved site mitigation plans and for projects that receive Maher waivers. Ms. Cushing noted that the language on the Maher waiver

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<sup>96</sup> San Francisco Department of Public Health, Waiver from San Francisco Health Code Article 22A (Maher Ordinance), 2417 Green Street, March 28, 2017.

<sup>97</sup> San Francisco Department of Public Health, Waiver from San Francisco Health Code Article 22A (Maher Ordinance), 2417 Green Street, October 31, 2017.

form and the language on the approval stamp could be misconstrued to indicate that further health department oversight is required.<sup>98</sup> However, Ms. Cushing confirmed that the Maher waiver was appropriate for the 2417 Green Street project and that no further oversight by the health department was required.

The July 20, 2018 appeal of the June 22, 2018 categorical exemption issued for the proposed project cited a report from hydrogeologist Matthew Hagemann that states that the project requires a remediation plan to ensure safe testing and removal of any contaminated soil. This assessment was based on an interpretation that the language on the approval stamp implied that the project was not eligible for a waiver. As discussed above, this is an understandable but incorrect reading of the facts concerning the case.

On February 11, 2018, out of an abundance of caution, the health department requested that the project sponsor submit a work plan for soil and/or groundwater sampling and testing.<sup>99</sup> On February 12, 2018 the project sponsor submitted a work plan to the health department that proposed two sample locations within the existing garage.<sup>100</sup> The work plan proposed laboratory analysis for total petroleum hydrocarbons (TPH) as gasoline (TPHg), as diesel (TPHd), and as motor oil (TPHmo); volatile organic compounds (VOCs); semi-VOCs; organochlorine pesticides; polychlorinated biphenyls (PCBs); reactivity, corrosivity, and ignitability; CAM 17 metals; and asbestos. On February 18, 2018, the health department approved the work plan.<sup>101</sup>

On February 27, 2018, the sponsor's consultant, ICES, submitted a site characterization report,<sup>102</sup> and on February 28, 2018, the health department issued a letter that agreed with the report's conclusion that the soil sediments within the foundation and garage expansion excavation are non-hazardous:

Results from the soil samples indicated that the samples contained TPHg, TPHd, TPHmo, VOC, SVOC, organochlorine pesticide, and PCB concentrations that were below the Regional Water Quality Control Board's Direct Exposure Human Health Risk Screening Levels (DE HHRSLs) for residential land use. Results of other analysis indicated that the samples were non-flammable and non-reactive; and contained pH values (corrosivity) ranging from 7.58 to 7.71. The asbestos concentrations contained in the samples were non-detectable (less than 0.25%). The metal concentrations detected in the samples were below their respective residential DE HHRLs and/or within background levels for San Francisco Bay Area soils, with the exception of arsenic. The arsenic concentrations detected in [samples] S-1 and S-2 ranging from 3.1 mg/kg to 3.5 mg/kg exceeded the residential DE HHRL of 0.067 mg/kg but were below the background level of 11 mg/kg. The Regional

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<sup>98</sup> The health department has subsequently purchased and begun using a stamp that reads "MAHER WAIVER." when such a waiver has been granted.

<sup>99</sup> San Francisco Department of Public Health, Environmental Health, SFHC Article 22A, 2417 Green Street Residence, EHB-SAM Case Number: 1534, February 11, 2018.

<sup>100</sup> ICES, Work Plan, Site Characterization, 2417 Green Street, San Francisco, California, February 12, 2018.

<sup>101</sup> San Francisco Department of Public Health, Environmental Health, SFHC Article 22A, 2417 Green Street Residence, EHB-SAM Case Number: 1534, February 18, 2018.

<sup>102</sup> ICES, Site Characterization, 2417 Green Street, San Francisco, California, February 27, 2018.

Water Quality Control Board considers background levels to be acceptable for contaminants where their respective DE HHRLs are less than typical background levels.<sup>103</sup>

Based on review of the documents, health department staff found the project in compliance with San Francisco Health Code article 22A and required no further investigation.<sup>104</sup>

In the appeal of the June 22, 2018 categorical exemption, the appellant raised the concern that the soil samples taken from under the garage would be clean and not contaminated soil. This concern is not valid for the following reasons. The two soil samples were collected from the proposed excavation area within the existing garage: one sidewall sample taken at a depth of 3 feet below ground surface to test the fill material and the other collected at a depth of 9 feet below ground surface to test the underlying soils. The samples were taken approximately 25 to 30 feet south of the front property line, and project excavation would extend no further than 55 feet south of the front property line. The health department allows for sampling locations to be spaced 150 feet apart, so the location of the sampling is appropriate and consistent with health department protocols. Also, as these samples represent the fill and the underlying soil, they were also taken at the appropriate depth.<sup>105</sup>

In conclusion, the project would not result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

**Impact HZ-3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school. (Less than Significant)**

Three schools are located within 0.25 miles of the project site: St. Vincent de Paul School, Hillwood Academic Day School, and Town School for Boys. Any hazardous waste at the project site would be remediated and handled in accordance with local, state and federal law. Furthermore, the proposed project would include the use of common household items in quantities too small to create a significant hazard to the public or the environment. Based on this, this impact would be less than significant.

**Impact HZ-4: The proposed project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and not create a significant hazard to the public or the environment. (Less than Significant)**

Pursuant to section 65962.5 of the Government Code, the Secretary for Environmental Protection maintains a list of sites with potentially hazardous wastes, commonly referred to as the Cortese list. The Cortese list includes hazardous waste sites from the Department of Toxic Substances Control's (DTSC's) EnviroStor database, hazardous facilities identified by DTSC that are subject to corrective action pursuant to Health and Safety Code section 25187.5, leaking underground storage

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<sup>103</sup> San Francisco Department of Public Health, Environmental Health, SFHC Article 22A Compliance, 2417 Green Street Residence, San Francisco, EHB-SAM Case Number: 1534, February 28, 2018.

<sup>104</sup> Ibid.

<sup>105</sup> Stephanie Cushing, Department of Public Health memo to Jeanie Poling, Planning Department regarding 2417 Green Street, March 13, 2019.

tank sites from the State Water Resources Control Board's (state board's) Geotracker database, solid waste disposal sites maintained by the state board, and sites with active cease and desist orders and clean up and abatement orders. The project site is not on the Cortese List and thus would not create a significant hazard to the public or environment. The impact would be less than significant.

**Impact HZ-5: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)**

No changes are proposed to the public right-of-way and the proposed project would continue the existing residential uses within the boundaries of the project site. Thus, the project would not substantially increase hazards due to a design feature or incompatible uses and would not result in an inadequate emergency access. The impact would be less than significant.

**Impact C-HZ-1: The proposed project, in conjunction with other past, present and reasonably foreseeable project, would not make a cumulatively considerable contribution to significant impacts with respect to hazards to people or the environment. (Less than Significant)**

Development in the city is subject to city, regional, and state controls designed to protect the public and the environment from risks associated with hazards and hazardous materials, and to ensure that emergency access routes are maintained. Any future development in the project vicinity would be subject to these same laws and regulations. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to hazards and hazardous materials.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>18. MINERAL RESOURCES. Would the project:</b>					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Impact MI-1: The proposed project would have no impact with respect to the availability of known or locally important mineral resources. (No Impact)**

All land in San Francisco, including the project site, is designated by the California Geological Survey as Mineral Resource Zone 4 under the Surface Mining and Reclamation Act of 1975.<sup>106</sup> The Zone 4 designation indicates that adequate information does not exist to assign the area to any

<sup>106</sup> California Division of Mines and Geology, 1996, Open File Report 96-03 and Special Report 146 Parts I and II.

other zone: the area has not been designated as having significant mineral deposits. Specifically, the project site is underlain by deep sand deposits that have not been designated as important at the state or local level.

The project site is within a densely developed urban area and has been developed with residential use since 1905. Even were the underlying sand considered to contain marketable minerals, it would not be feasible to conduct sand extraction activities in the midst of urban development. The development and operation of the proposed project would not have an impact on any off-site operational mineral resource recovery sites, as there are no such operations in the vicinity, and the project site is not and has never been used in any way in mineral resources recovery. The proposed project therefore would have no impact with respect to the availability of mineral resources.

**Impact C-ME-1: The proposed project in combination with other past, present or reasonably foreseeable projects would have no impact with respect to the availability of known or locally important mineral resources. (No Impact)**

The proposed project has no potential to result in an impact to mineral resources. Therefore, the project would not contribute to a cumulative impact on these resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>19. ENERGY. Would the project:</b>					
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact EN-1: The proposed project would result in increased energy consumption but would not encourage activities that result in the use of large amounts of fuel, water, or energy or use these in a wasteful manner. (Less than Significant)**

The proposed project would increase the population and intensity of use of the project site but would not exceed anticipated growth in the area. The proposed project would be subject to the energy conservation standards included in the San Francisco Green Building Ordinance. Documentation showing compliance with the ordinance would be required to be submitted with the applications of the building permits, and compliance would be enforced by the Department of Building Inspection. The project also, by its character, would conserve fuel and energy use because it would provide housing in an urban area that is accessible by transit and is bicycle and pedestrian friendly. Therefore, the proposed project would not cause a wasteful use of energy, and effects related to use of fuel, water, and energy would be less than significant.

**Impact C-EN-1: The proposed project in combination with other past, present or reasonably foreseeable projects would increase the use of energy, fuel and water resources, but not in a wasteful manner. (Less than Significant)**

The demand for energy created by the proposed project would be insubstantial in the cumulative context of citywide demand and would not require an expansion of power facilities. While overall energy demand in California is increasing commensurate with increasing population, the state also is making concerted energy conservation efforts. While the city produces a substantial demand for energy and fuel, both city and state policies seek to minimize increases in demand through conservation and energy efficiency regulations and policies such that energy is not used in a wasteful manner, and the cumulative impacts with respect to energy and fuel use would be less than significant. Because San Francisco is substantially built out, development in the city's urban core focuses on densification, which effectively reduces per capita use of energy and fuel by concentrating utilities and services in locations where they can be used efficiently. Similarly, the City recognizes the need for water conservation and has instituted programs and policies to maximize water conservation. San Francisco has one of the lowest per capita water use rates in the state<sup>107</sup> and routinely implements water conservation measures through code requirements and policy. Therefore, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable impact related to mineral and energy resources.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>20. AGRICULTURE AND FORESTRY RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.					
<b>Would the project:</b>					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>107</sup> San Francisco Public Utilities Commission, Water Resources Division Annual Report, Fiscal Year 2017-18, <https://view.joomag.com/water-resources-division-annual-report-fiscal-year-2017-18-waterresourcesar-fy17-18/0863377001542310828>, accessed February 20, 2019.



<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) , timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is located within an urbanized area of San Francisco. No land in San Francisco County has been designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as agricultural land. Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not require the conversion of any land designated as prime farmland, unique farmland, or Farmland of Statewide Importance to non-agricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts, as no lands in San Francisco are zoned agricultural or are under Williamson Act contracts.<sup>108</sup> No land in San Francisco is designated as forest land or as Timberland Production by the California Public Resources Code or Government Code. Therefore, the proposed project would not conflict with zoning for forest land, cause a loss of forest land, or convert forest land to a different use. For these reasons, Questions 18a, 18b, 18c, 18d, and 18e are not applicable to the proposed project.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>21. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</b>					
a) Substantially impair an adopted emergency response plan or emergency evacuation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>108</sup> San Francisco is identified as "Urban and Built-Up Land" on California Department of Conservation, 2008, Important Farmland in California Map, [www.consrv.ca.gov](http://www.consrv.ca.gov), accessed October 23, 2017.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structure to significant risks including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The City and County of San Francisco and bordering areas within San Mateo County do not have any state responsibility areas for fire prevention or lands classified as very high fire hazard severity zones,<sup>109</sup> therefore, this topic is not applicable. Refer to topic C.17, Hazards and Hazardous Materials, for a discussion of wildland fire risks.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>22. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:</b>					
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>109</sup>CALFIRE Fire and Resource Assessment Program, San Francisco County Draft Fire Hazard Severity Zones in Local Responsibility Areas Map, October 5, 2007; San Mateo County Fire Hazard Severity Zones in State Responsibility Areas Map, November 7, 2007; and San Mateo County Very High Fire Hazard Severity Zones in Local Responsibility Areas Map, November 24, 2008. Available at: [http://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland\\_zones\\_maps](http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps).

<b>Topics:</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>	<b>Not Applicable</b>
b) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino*, (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

The proposed project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section F.3, Cultural Resources, implementation of the proposed project would not result in a substantial adverse change in the significance of an archeological resource or a tribal cultural resource and would not disturb human remains. As discussed in Section F.15, Geology and Soils, implementation of the proposed project would not directly or indirectly destroy a unique paleontological resource or site. For these reasons, the proposed project would not result in the elimination of important examples of major periods of California history or prehistory.

The proposed project would not combine with past, present, or reasonably foreseeable future projects to create significant cumulative impacts related to any of the topics discussed in Section F, Evaluation of Environmental Effects. There would be no significant cumulative impacts to which the proposed project would make cumulatively considerable contributions.

As discussed in Section F.15, Geology and Soils, the proposed project would result in potentially significant impacts related to seismic hazards. The foregoing analysis identifies Mitigation Measure M-GE-1, which would reduce these impact to less than significant impacts related to geology and soils. With implementation of this mitigation measure, the proposed project would not result in environmental effects that would cause substantial adverse effects on human beings.

## G. MITIGATION MEASURE

### **Mitigation Measure M-GE-1: Ongoing Coordination with the Planning Department and the Department of Building Inspections Prior to and During the Construction Phase Regarding Compliance with Geotechnical Requirements.**

Pursuant to the San Francisco Department of Building Inspection process, the project sponsor (and their design team, geotechnical engineer, and contractor, as applicable) will be subject to ongoing coordination requirements with the planning department and the building department regarding plan check reviews and building inspections prior to and during construction work. This process will include the following requirements:

- Prior to commencement of construction, the project sponsor shall submit to the planning department and building department a report outlining anticipated construction milestones with corresponding (approximate) dates of reaching those milestones as well and all memoranda and/or reports anticipated to be prepared or approved at those milestones. The report shall address how all code requirements will be met, including responsible parties and the city agency providing oversight. The report shall be reviewed and approved by the planning department and the building department prior to commencement of construction.
- Once construction commences, the sponsor shall notify the planning department and the building department (when coordination with the building department is not already included as typical part of the process) when the above milestones have been reached and their outcomes. Specifically, all memoranda and/or reports issued at times of those milestones shall be provided to the planning department and the building department.<sup>110</sup>

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## H. PUBLIC NOTICE AND COMMENT

On February 14, 2019, the planning department mailed a notification of project receiving environmental review to owners of properties within 300 feet of the project site, adjacent occupants, neighborhood groups, and other interested parties. In response to the notification, the planning department received three letters from the representative of 2421 Green Street and four letters from other neighbors. Comments included concerns about impacts to historic resources related to views, air, and light (addressed under Impact CR-1 on page 15), impacts to the historic resource at 2421 Green Street related to construction methodology (addressed under Impacts GE-1 through GE-3 on pages 59 through 65), impacts related to the release of hazardous matter (addressed under impact HZ-2 on page 71), and the accuracy of the project description (see Project Characteristics on page 1).

Comments were also raised concerning the scale of development, consistency with the planning code and with Cow Hollow design guidelines, and neighborhood notification for the discretionary

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<sup>110</sup> Pursuant to Department policy, any memoranda and/or reports prepared by project sponsor and/or a consultant working for the project sponsor shall adhere to Planning Department's protocols of objectivity.

review hearing. These issues are not related to impacts on the environment and will be addressed during the planning department's review of the building permit.

One commenter raised concern that the project was being piecemealed (divided into smaller projects to qualify for one or more exemptions, which is prohibited under state CEQA statute). This initial study (and the two categorical exemptions for the project that were previously issued and rescinded) appropriately covered the whole of the project – both the excavation and the expansion of the building. In other words, the sponsor did correctly obtain CEQA clearance for the entirety of his project. Subsequently, however, the sponsor exceeded the scope of work of a foundation permit, which constitutes a permitting (not CEQA) violation.

Other comments concerned permits that were suspended and not revoked and notices of violation concerning the safety and condition of the vacant building. These issues will be addressed as part of project approvals or through the permit enforcement process.


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## **I. DETERMINATION**

On the basis of this Initial Study:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

  
\_\_\_\_\_  
Lisa Gibson  
Environmental Review Officer  
for  
John Rahaim  
Director of Planning

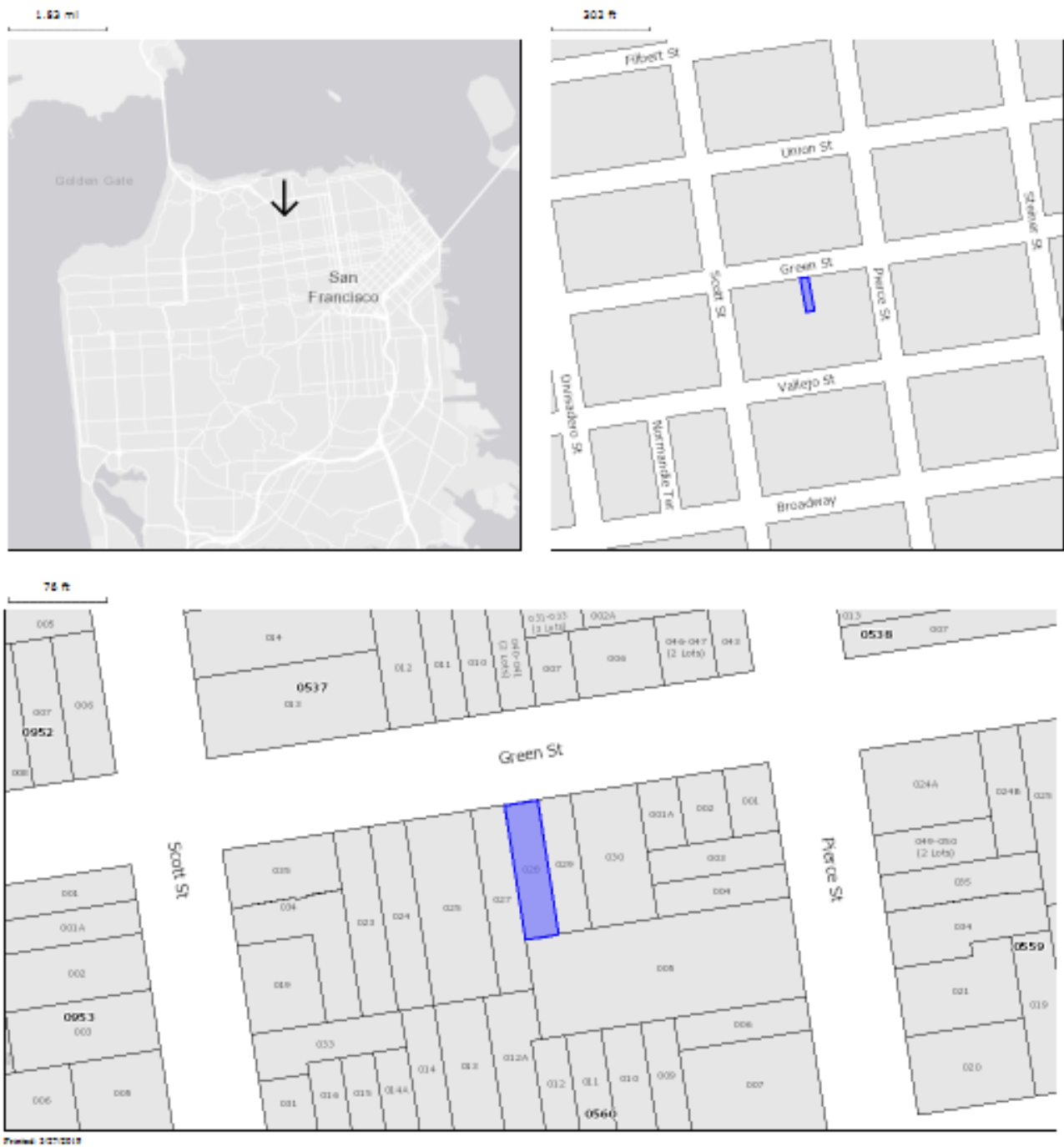
DATE June 26, 2019

**J. INITIAL STUDY PREPARERS**

Planning Department, City and County of San Francisco  
Environmental Planning Division  
165 Mission Street, Suite 400  
San Francisco, CA 94103

Environmental Review Officer: Lisa Gibson  
Principal Environmental Planner: Tania Sheyner, AICP  
Senior Environmental Planner: Jeanie Poling  
Preservation Planner: Stephanie Cisneros

**K. FIGURES – See the following pages.**



**Figure 1 – Project Site Location**

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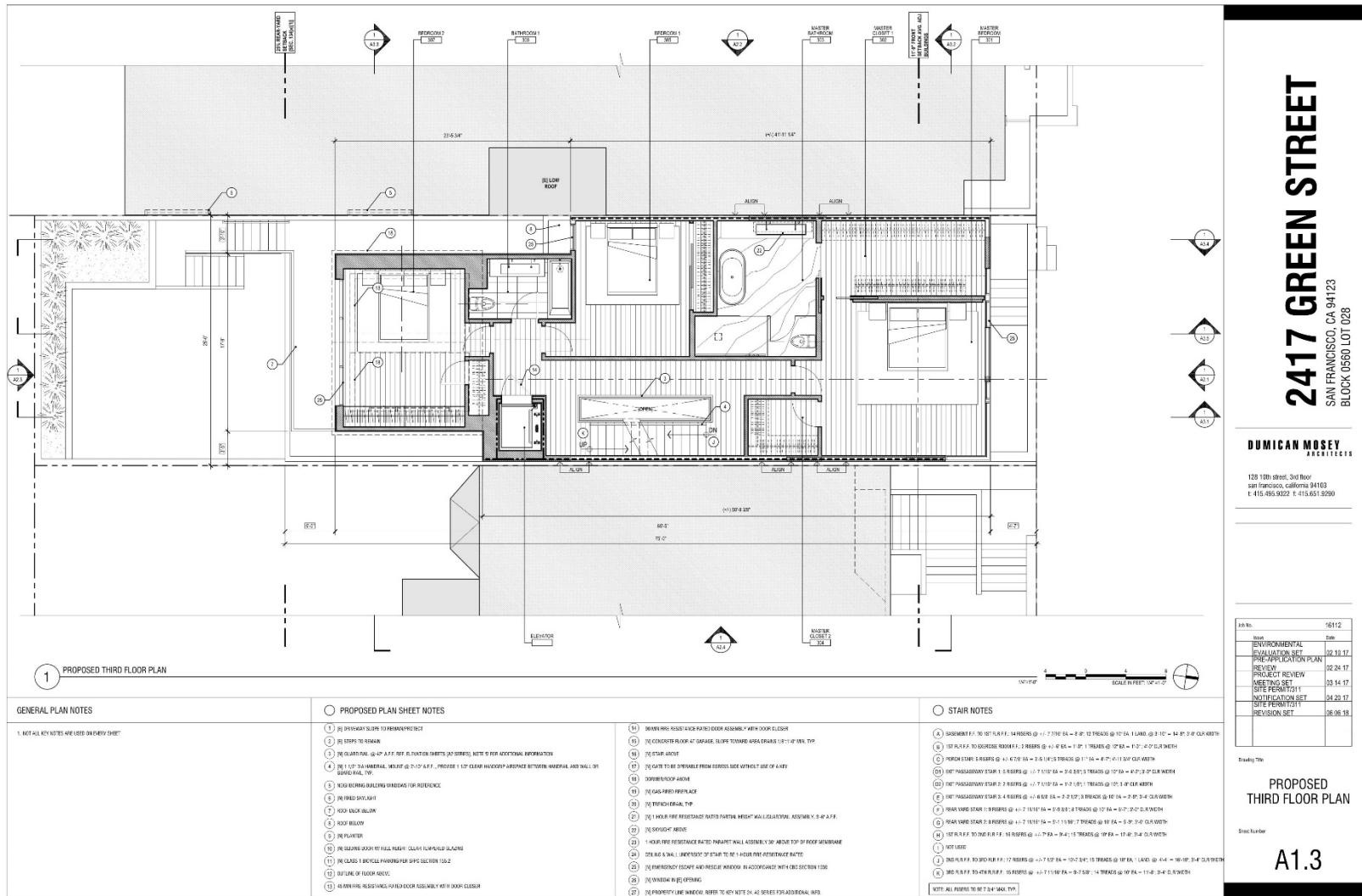


Figure 6 – Proposed Third Floor Plan

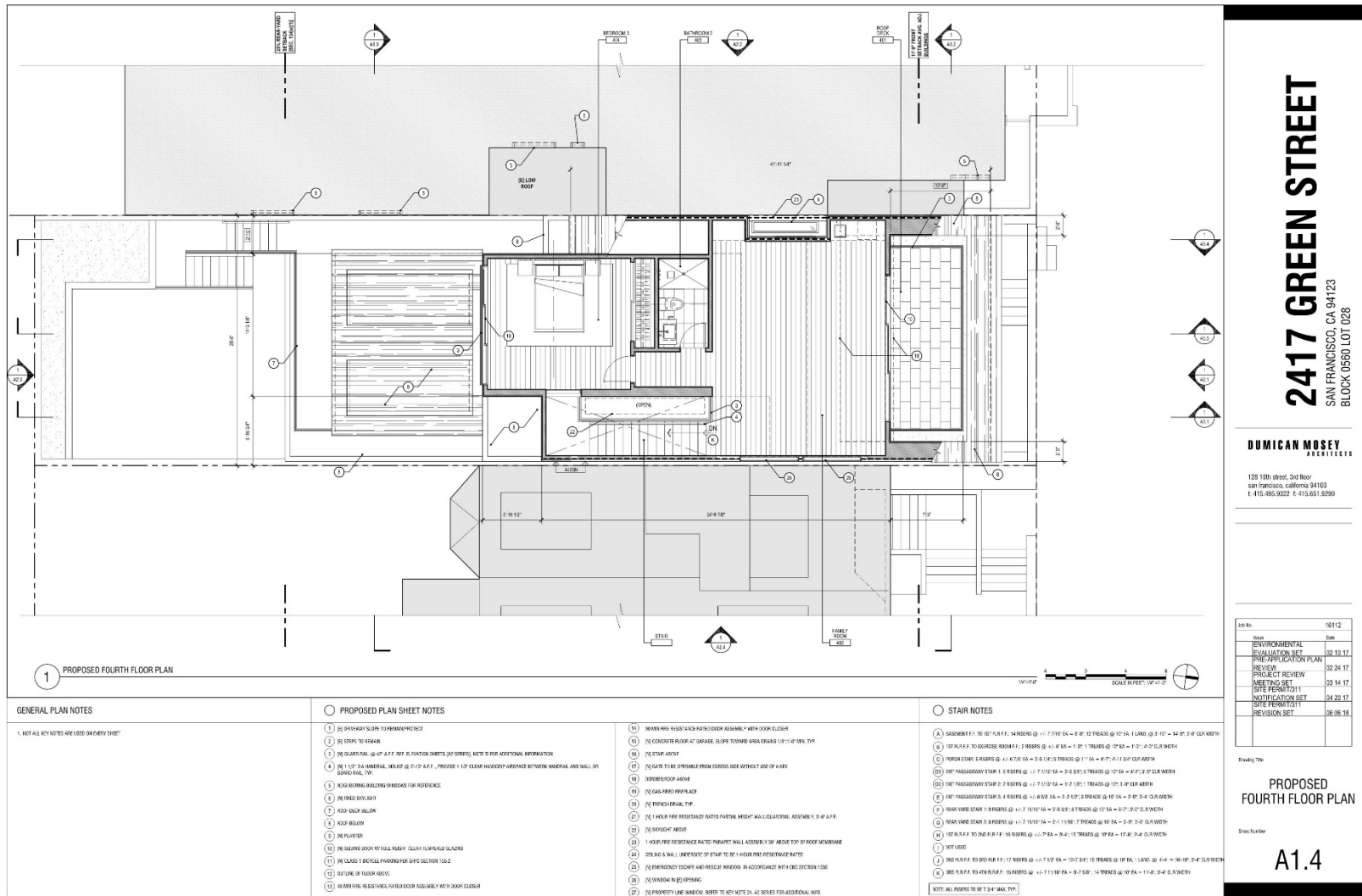
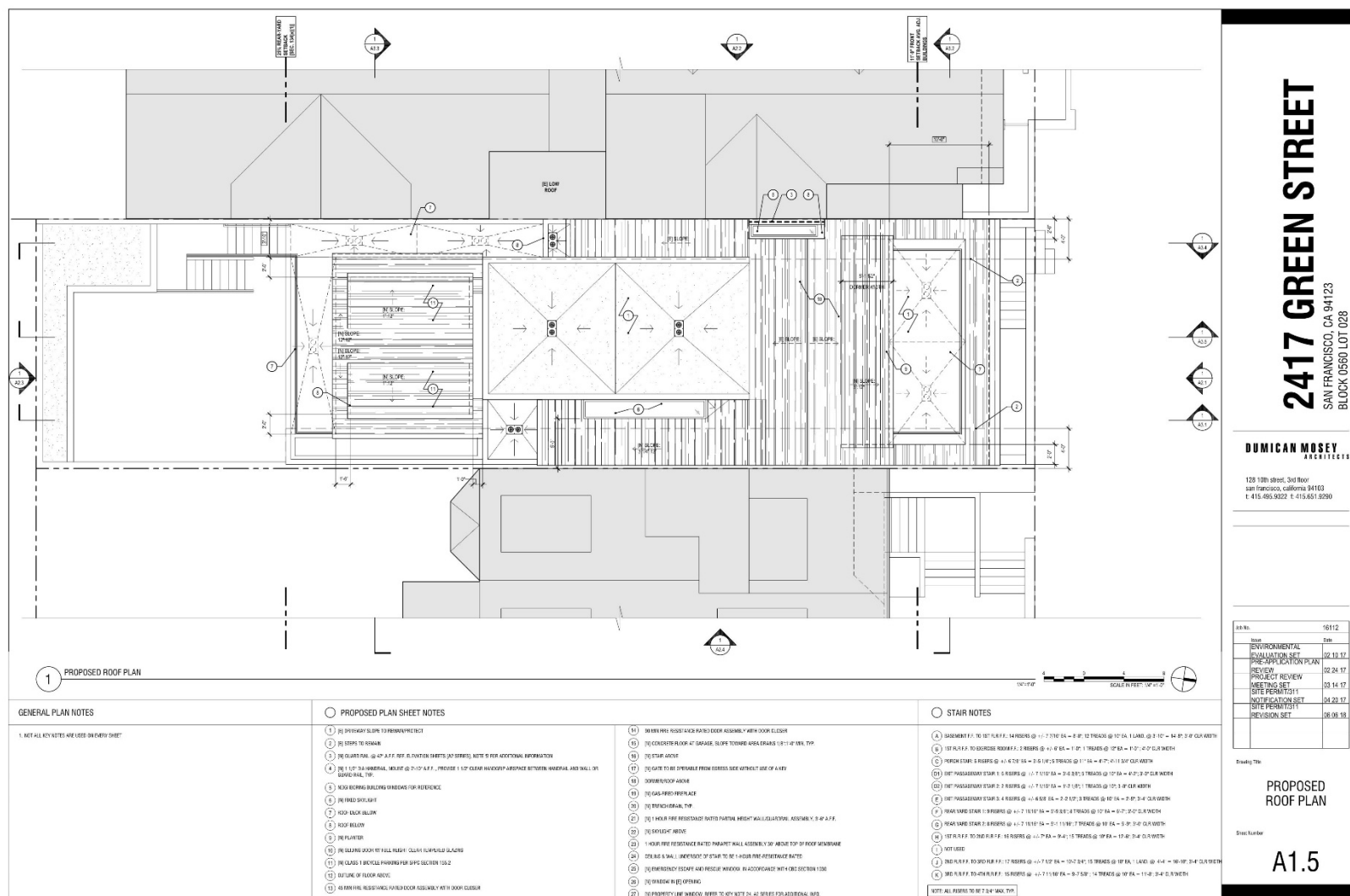


Figure 7 – Proposed Fourth Floor Plan



**Figure 8 – Proposed Roof Plan**





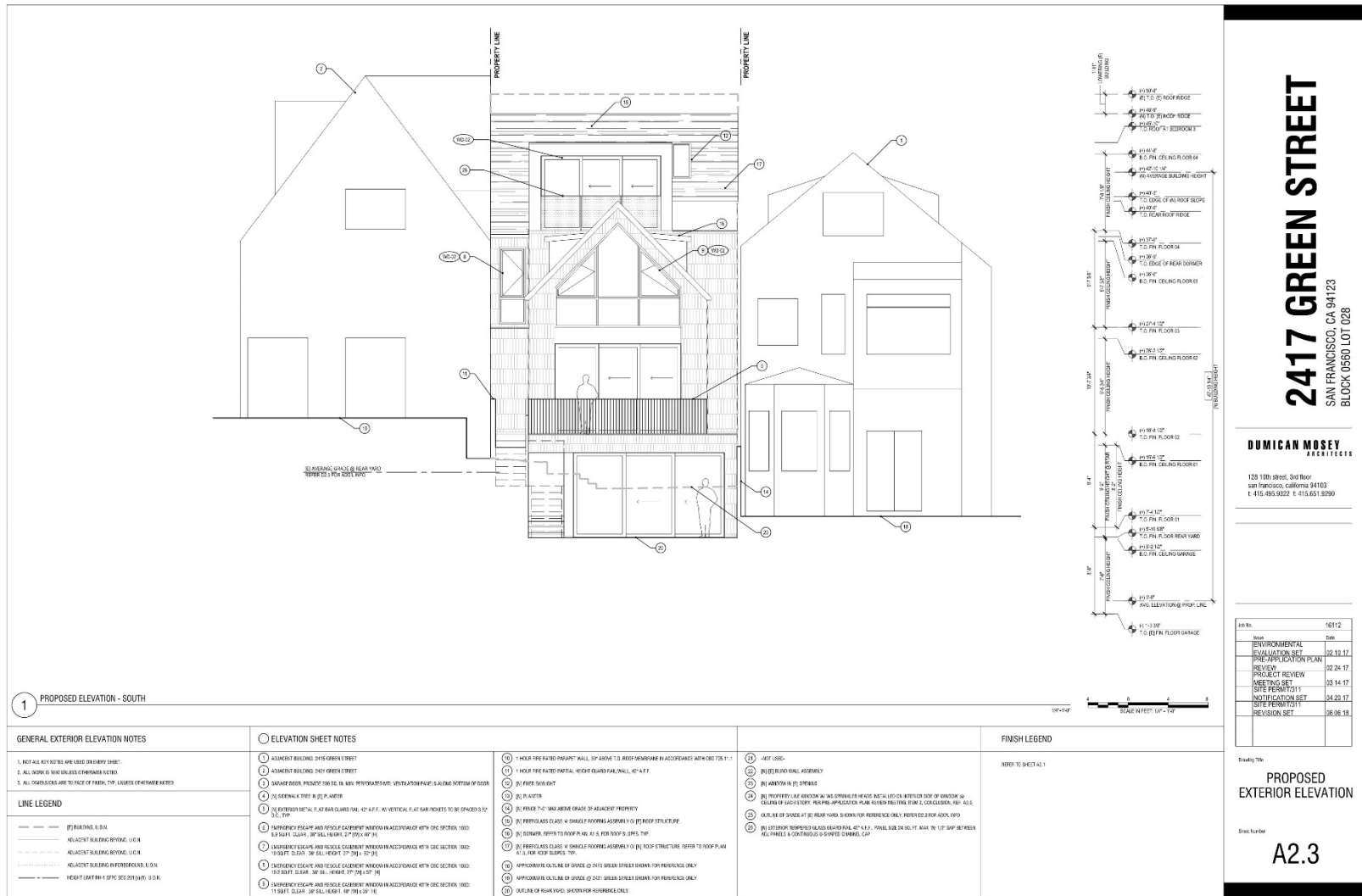


Figure 10 – Proposed South (Rear) Elevation







Figure 13 – Projects within One-Quarter Mile of the Project Site

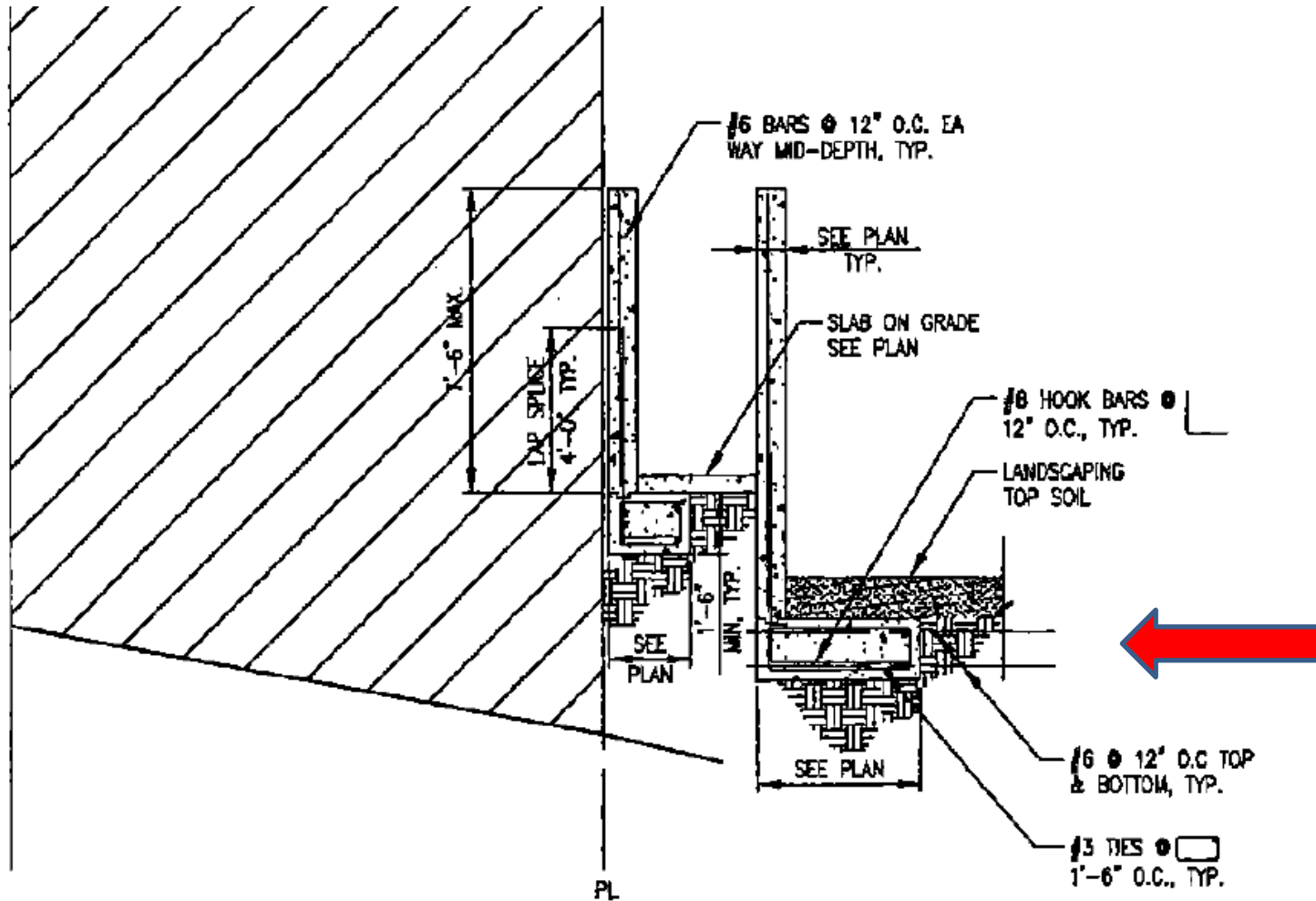


Figure 14 – Detail 3 on Sheet S4.1 of Building Permit Application No. 201705116316

# EXHIBIT J



LOSS OF LATERAL  
SUBJACENT  
SUPPORT HERE  
WILL CAUSE  
DROP HERE  
AND  
TENSION HERE

UNREINFORCED  
COMMON BRICK  
FOUNDATION  
TYPICAL

GREEN ST.

25 25

BRICK FDN  
(BROKEN INTO 2017-2018)

AREA PARTIALLY  
EXCAVATED 2017-2018 &  
PROPOSED 2019-2020

EXISTING BUILDING  
(NO SURVEY)  
(NO ENGINEERING)

2417  
(1906)

2421  
(1892)

LOT 028

DURKIN  
(SPEC)

LAMBERT/BYRD  
(RES)

137.5

LOT 027

KAUFMAN  
(RES)

BEA  
(CASEBOLT  
HOUSE)

SCHEMATIC  
PLAN

PROPOSED  
CONSTRUCTION  
(SSPA)

LBK 1/6 JULY 2020 SCALE 1"=30'



*Lawrence B. Karp*

TALL  
BUILDING

FORMER  
NATURAL  
GRADE

UNREINFORCED  
BRICK & MORTAR

SCHEMATIC  
SECTION

WOOD FRAMED  
BUILDINGS BONDED  
HERE - JACKING 2417  
WILL CAUSE DISTRESS  
TO 2421

4H:1V  
INFLUENCE LINE

NO SURVEY  
NO ENGINEERING

EXCAVATION HERE  
WILL CAUSE DROP HERE  
AND TENSION HERE



















# EXHIBIT K

## Clarification Letter

Via Email: [jeanie.poling@sfgov.org](mailto:jeanie.poling@sfgov.org)

April 11, 2019

San Francisco Planning Department  
Attention: Jeanie Poling  
1650 Mission St. 4<sup>th</sup> Floor  
San Francisco, CA 94103

**Subject: 2417 Green Street - Exposing of Fraud in Reports prepared by Larry Karp**

Dear Ms. Poling

This correspondence is intended to refute the knowingly fraudulent claims made by Mr. Karp in his reports dated 9.1.18 and 1.17.19 regarding the property at 2417 Green Street. Karp falsely claims that the project does not comply with CEQA, it legally does comply, and furthermore he is not even remotely qualified to comment on requirements under CEQA. This just shows his bias and bad faith. I've offered numerous times in writing to meet with him to clarify structural details. Karp's client Mr. Kaufman and associated attorney Richard Drury have refused to allow a meeting to take place. Additionally Karp is trying to create controversy by falsely stating that approved foundation plans by SFDBI and SF Planning show a connection to the adjacent foundation at 2421 Green St. This notion is preposterous, the highly trained and qualified staff at DBI would never approve a project showing a connection to the adjacent property without a separate permit from the adjacent owner. At first it could have been argued that Karp simply does not know how to read engineering drawings but I personally informed his attorney Richard Drury that the lines on the plans he's referring to are merely call outs for longitudinal reinforcement in the wall footing so he has no excuse! This is a very typical, very standard

engineering detail and Karp has esteemed himself to the extent that he's willing to outright lie in his written report(s) of record. This behavior by Karp is deceitful and intentional misrepresentation not only to the Board of Supervisors but also to the property owner Phil Kaufman. Karp has created extremely unreasonable fear and anger in his elderly client for the purpose of artificially inflating his invoices. He is an embarrassment to the professional engineering community. Furthermore, this deception is a crime and should be investigated as financial exploitation and elder abuse. Under the Professional Engineers Act (Business and Professions Code) this unethical behavior is grounds for revocation of his license.

For the avoidance of any further misunderstanding by any city department or board, the proposed project at 2417 Green Street is in NO WAY PHYSICALLY CONNECTED to 2421 Green Street and does not require any work whatsoever to be performed at 2421 Green Street. The property at 2421 Green Street will remain unharmed throughout the course of construction. As an act of consideration to the owner at 2421 Green Street, I have required that the design and proposed garage expansion foundation wall remain approximately six to seven feet away from the existing foundation of 2421 Green Street. The soil conditions are stiff rock, I know this not only based on professional geotechnical reports and borings but also because construction was underway many months ago on approved permits and strong rock was encountered during excavation which provides excellent support for adjacent buildings. The proposed project is much needed to improve the property at 2417 Green to make it habitable and seismically safe. The continued delays(over two years now) put 2417 Green at risk as well as the adjacent properties should a major seismic event occur during this ridiculous political delay. To ensure safety of all three properties the permit to replace the foundation should be released from suspension immediately without any further delay. The proposed project is typical and modest and this type of

construction is performed every single day in the neighborhood and throughout San Francisco. In fact there are several projects right now many of which are much larger in scale and scope on this very same street! The other adjacent neighbor at 2415 Green Street performed a similar excavation project several years ago, which resulted in no damage to 2417 Green or to 2421 Green. In fact a new foundation is beneficial to adjacent property owners, the work I'm proposing will actually improve support for 2421 Green St.

Despite the fact that DBI has already reviewed and approved the proposed foundation project twice, I intend to fully comply with any new requirements that DBI insist I meet.

Prior to issuance of any new foundation permit, I shall provide the following:

- Revised foundation details showing adjacent footings where applicable.
- All appropriate structural calculations and drainage details.
- Cold joint details for sequential concrete foundation wall construction.
- Additional geotechnical and engineering geologist review including geotechnical observations during excavation.
- Slope protection act requirements as required by DBI:
  - For reference I hired a licensed surveyor to measure the site slope the actual slope is approximately 12%. This is not a steep site by any means.
  - The licensed surveyor has also installed monitoring points on both properties which will remain until construction is completed.
  - A highly regarded Engineering Geologist has been retained to oversee construction along with a highly regarded Geotechnical Engineer.
  - The highly regarded structural engineering firm Holmes Structures has been retained for complete structural design of the project.

The proposed project at 2417 Green Street is a fully legal, code compliant remodel of an existing single family home. By state law the planning and building departments are required to approve this project and issue the requisite permits.

Should you have any questions regarding the above please do not hesitate to call.

Very Truly Yours,

A circular professional engineer seal for Christopher F. Durkin, State of California. The seal contains the text "REGISTERED PROFESSIONAL ENGINEER", "CHRISTOPHER F. DURKIN", "C71064", "EXPI. 06-30-19", and "STATE OF CALIFORNIA". A handwritten signature is written over the seal.

Christopher Durkin, P.E.



# EXHIBIT L

**PRELIMINARY GEOTECHNICAL REPORT**  
**2417 GREEN STREET**  
**SAN FRANCISCO, CALIFORNIA**  
**SAN FRANCISCO ASSESSORS BLOCK 0560 LOT 028**

Client:  
2417 Green Street, LLC  
c/o Chris Durkin  
474 Euclid Ave  
San Francisco, CA 94118  
cfdurkin@gmail.com

12 January 2017  
Project: 17-120101-01

Prepared by:



UNAUTHORIZED USE OF THIS DOCUMENT IS STRICTLY PROHIBITED BY ANYONE OTHER THAN THE SPECIFIC CLIENT AND PROJECT

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- FIGURE 4 - GEOLOGIC MAP
- FIGURE 5 - FAULT MAP
- FIGURE 6 - SEISMIC DESIGN

## APPENDICIES

- APPENDIX A - IMPORTANT INFORMATION REGARDING YOUR GEOTECHNICAL REPORT

## **INTRODUCTION**

This letter report presents our preliminary geotechnical conclusions and recommendations for the subject project. Additional geotechnical studies, including a site specific field investigation, are required prior to final design.

The subject project is located at 2417 Green Street in San Francisco. The site is located on Block 0560 Lot 028 as mapped by the San Francisco Planning Department as shown on the Site Plan, Figure 1.

## **PROPOSED IMPROVEMENTS**

We understand that plans include: remodeling of the existing residence and expanding the existing basement.

## **DATA REVIEW**

To develop a preliminary understanding of the geologic conditions at the site, we reviewed the following documents:

- Blake M.C. et. al. (2000). Geologic Map and Map Database of Parts of Marin, San Francisco, Alameda, Contra Costa and Sonoma Counties, California.
- California Geological Survey (2001). State of California Seismic Hazard Zones, City and County of San Francisco, Official Map.
- John A. Blume & Associates, Engineers, (1974). San Francisco Seismic Safety Investigation, June 1974.

## **SPECIAL STUDIES ZONES**

### **San Francisco Slope Protection Act**

The site is located within an area defined by Section 106A.4.1.4 of the 2013 San Francisco Building code and consequently is located within a special study zone under the Slope Protection Act; Figure 2.

This report provides preliminary conclusions and recommendations regarding geologic hazards at the site. If a geologic hazard report is required by the San Francisco Department of Building Inspection, we can provide one upon your request.

### **State of California Seismic Hazard Zones**

The site is not located within a seismic hazard zone as defined by the State of California; Figure 3.

### **Alquist Priolo Fault Mapping Act**

The site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act and no known active or potentially active faults exist on the site.

## **GEOLOGIC SETTING**

The site lies along a northeast-facing slope along the northern side of Russian Hill within the Pacific Heights District in San Francisco.

The site is located within the Coast Ranges geomorphic province of California that is characterized by rugged northwest-trending mountain chains, valleys and ridges. The predominant geologic structure and these topographic features are controlled by folds and faults that resulted from the collision of the Farallon plate and North American plate and subsequent strike-slip faulting along the San Andreas Fault system. The San Andreas Fault is more than 600 miles long from Point Arena in the north to the Gulf of California in the south. The Coast Ranges province is bounded on the east by the Great Valley and on the west by the Pacific Ocean.

The bedrock in the area is mapped as Jurassic- to late Cretaceous-age [ $\sim 200 - 65$  million years ago (Ma)] Franciscan Complex consisting of sandstone, shale, chert, greenstone and serpentinite. Locally, the surficial deposits at the site are mapped as Dune Sand.

A geologic map of the site vicinity is presented as Figure 4.

#### **ANTICIPATED SUBSURFACE CONDITIONS**

Based on the documents reviewed, we preliminarily conclude the site is underlain by: Dune Sand, undifferentiated surficial deposits and bedrock.

Undocumented fill may have been placed at the site during prior developments and/or grading activities.

#### **SEISMICITY**

The major active faults in the area are the San Andreas, San Gregorio, Hayward, Rodgers Creek and Calaveras Faults as shown on Figure 5. The closest major active fault is the San Andreas, which is approximately 10 kilometers to the west. The most recent major earthquake to affect the Bay Area was the Loma Prieta Earthquake of 17 October 1989, in the Santa Cruz Mountains with a  $M_w$  of 6.9, approximately 98 km from the site.

The U.S. Geological Survey's Working Group on California Earthquake Probabilities (2013) has compiled the earthquake fault research for the San Francisco Bay area in order to estimate the probability of fault segment rupture. They have determined that the overall probability of moment magnitude 6.7 or greater earthquake occurring before 2037 is 72 percent.

The seismicity of the site is governed by the activity of the San Andreas Fault, although ground shaking from future earthquakes on other faults would also be felt at the site. The intensity of earthquake ground motion at the site will depend upon the characteristics of the generating fault, distance to the earthquake epicenter, and magnitude and duration of the earthquake. We judge that strong to violent ground shaking could occur at the site during a large earthquake on one of the nearby faults.

#### **GEOLOGIC HAZARDS**

The project site is in a seismically active region. A preliminary discussion regarding geologic hazards and their impact on the site follows.

### **Ground Shaking**

The seismicity of the site is governed by the activity of the San Andreas Fault, although ground shaking from future earthquakes on other faults would also be felt at the site. The intensity of earthquake ground motion at the site will depend upon the characteristics of the generating fault, distance to the earthquake epicenter, and magnitude and duration of the earthquake. We judge that strong to violent ground shaking could occur at the site during a large earthquake on one of the nearby faults.

### **Fault Rupture**

No active faults are known to exist within the City and County of San Francisco (Blume, 1974). Historically, ground surface displacements closely follow the trace of geologically young faults.

### **Slope Stability**

No documented landslides were found to be present at the site; (Blume, 1974). Most of the regional slide deposits are mapped in ravines and swales and/or generally occur on steeper bedrock slope gradients.

### **Liquefaction and Associated Hazards**

When a saturated, cohesionless soil liquefies, it experiences a temporary loss of shear strength created by a transient rise in excess pore pressure generated by strong ground motion. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures and sand boils are evidence of excess pore pressure generation and liquefaction.

The site is not mapped within a liquefaction seismic hazard zone.

### **Cyclic Densification**

Cyclic densification is the densification of non-saturated sand above the groundwater table due to shaking and can occur during an earthquake, resulting in settlement of the ground surface and overlying improvements.

The near surface soils are mapped as Dune Sand. Consequently, loose clean sand may be present at the site. Cyclic densification may occur at the site where loose clean sands are present and not removed/improved by the proposed construction.

### **PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS**

Our preliminary geotechnical conclusions and recommendations regarding design and construction are presented in the remainder of this letter. The conclusions and recommendations presented herein should be re-evaluated based on either a site-specific field investigation or relevant subsurface information or both. A final geotechnical report should be prepared by us prior to finalizing the design of the proposed improvements.

### **Undocumented Fill**

Undocumented fill may be encountered at the site. Undocumented fill should not be relied upon for foundation support. Where new concrete flatwork or pavements are proposed, any undocumented fill should be reworked.

### **Groundwater**

Groundwater is typically encountered at the interface between geologic contacts, (fill/native, sand/clay and soil/bedrock). Any excavation on a hillside may encounter groundwater and seasonal springs may be present even though no evidence of these springs are encountered during construction. Where groundwater or evidence of groundwater is encountered during construction, we should be notified to evaluate if additional measures are required to control the flow of groundwater at the site.

The final design should include measures to intercept groundwater where it may impact the proposed construction. This may include but is not limited to: drainage behind retaining walls, under-slab-drainage, French drains and area drains to intercept groundwater and surface run-off, and waterproofing. The need for under-slab-drainage should be evaluated based on the waterproofing design. Where collected, groundwater should be discharged to a suitable collection point. In San Francisco, intercepted groundwater is typically re-directed to the combined sewer-storm water system.

Waterproofing is typically installed where the construction of habitable space is below the ground surface and waterproofing for basements is generally required by the building code. While we may provide guidance regarding waterproofing, the design and implementation of any waterproofing system is beyond the scope of our services. The waterproofing system should be designed and inspected by others.

### **Site Preparation, Grading and Engineered Fill**

The contractor should be familiar with the use of standard compaction equipment and moisture conditioning of soil. We can provide additional recommendations regarding the placement of engineered fill and moisture conditioning upon request.

In areas to receive fill or other improvements; flatwork, existing pavements, foundations, abandoned utilities, vegetation, organic topsoil and other deleterious materials should be removed and disposed of prior to any grading activities.

Where new fill is required behind retaining walls, adjacent to foundations and below new improvements, it should be engineered in place.

Engineered fill consists of fill material which has been approved for use by the geotechnical engineer and placed in a manner as recommended by the geotechnical engineer. Engineered fill may consist of either on-site soil, select fill (imported to the site) or in some cases lean concrete. Lean concrete and native (on-site) soils should only be used if specifically approved by the geotechnical engineer.

Engineered fill (soil) should be placed in horizontal layers not exceeding eight inches in loose thickness, moisture-conditioned to above the optimum moisture content, and compacted to at least 90 percent relative compaction. The upper six inches of the soil subgrade for flatwork areas should be compacted to at least 95 percent relative compaction. Fill deeper than five feet should be compacted to at least 95 percent relative compaction.

Select fill should consist of soil that is non-corrosive, free of organic matter, smaller than three inches in greatest dimension, has a liquid limit less than 40 and a plasticity index less than 12. It is the contractor's



responsibility to check that any fill meet the project requirements. Samples may be submitted to the geotechnical engineer for testing at least three business days prior to use at the site.

### **Excavation**

Excavations that will be deeper than five feet and will be entered by workers should be shored or sloped in accordance with the Occupational Safety and Health Administration (OSHA) standards (29 CFR Part 1926). The shoring designer should be responsible for the shoring design. The contractor should be responsible for the construction and safety of temporary slopes and shoring.

### Temporary Slopes

Where space permits, temporary excavation slopes should be no steeper than 2:1 (horizontal:vertical) in native soils and no steeper than 3:1 in clean sand and undocumented fill. Vertical cuts of less than five feet may be performed in very stiff to hard native clays and bedrock provided: any adjacent improvement (i.e. adjacent foundations) are a minimum distance away from the toe of the cut equal to the height of the cut and these vertical cuts are approved by us. Vertical cuts should not be performed in the Dune Sand mapped at the site.

### Shoring

We anticipate that shoring will be required for the proposed improvements. Shoring will likely consist of soldier pile and lagging cantilever shoring with a maximum retained height of about 10 feet. Permeation grouting may also be required in conjunction with or used in lieu of lagging to mitigate the potential for flowing sands through the lagging boards and facilitate excavation. The actual shoring type should be determined based on future geotechnical studies and the final project plans.

### Underpinning

Where adjacent foundations may be impacted by the excavation and the proposed shoring system is not adequate to reduce potential movements, the adjacent foundations should be underpinned. Hand-dug underpinning pits extending approximately three feet below the bottom of the proposed excavation are likely the most economical underpinning for a project of this scope.

### Construction Considerations and Monitoring

If the contractor encounters any adjacent foundation not identified on the structural plans, weak soil/rock or flowing sands during excavation, the excavation should be halted immediately and measures should be taken to mitigate any potential movement. We should be contacted immediately to provide additional consultation. We recommend the contractor investigate the location and depth of adjacent foundations prior finalizing excavation plans.

During excavation, the shoring system may deform laterally, which could cause the ground surface adjacent to the shoring walls to settle. The magnitudes of shoring movements and the resulting settlements are difficult to estimate because they depend on many factors, including the method of installation and the contractor's skill in the shoring installation. We believe that the movements of a properly designed and constructed shoring system should be within ordinary accepted limits of less than one inch. A monitoring program should be established to evaluate the effects of the construction on the adjacent buildings and surrounding ground.

The contractor should be responsible for all temporary cuts, slopes and shoring systems used at the site and should have a competent person on-site who is able to evaluate proposed excavations and soil/bedrock conditions.

### **Permanent Slopes**

Where the existing slopes are re-graded for the proposed improvements, permanent slopes in soil should be graded to a maximum inclination of 2:1 (horizontal:vertical). Steeper slopes may be allowed and should be evaluated on a case-by case basis. Erosion may occur on any slope and maintenance will likely be required. A landscaping plan can be used to minimize erosion and minor sloughing on slopes with inclinations of 2:1 or less. To protect against slope erosion, surface runoff should be redirected away from slopes.

### **Surface Drainage**

Positive surface drainage should be provided at the site to direct surface water away from new and existing foundations as well as the top of retaining walls and slopes. To reduce the potential for water ponding adjacent to the improvements, we recommend the ground surface within a horizontal distance of five feet from the improvement slope down and away with a surface gradient of at least two percent in unpaved areas and one percent in paved areas.

Positive surface drainage should also be provided in crawl spaces, if any, beneath the new improvements. The crawl space should be covered with at least two inches of concrete ("ratproofing") sloped to drain at an inclination of at least one percent to a suitable discharge point. As required, the discharge can be through one-inch-diameter weepholes through retaining walls and redirected to a suitable collection point.

### **Foundations**

Foundations should either bear on similar geologic units or should be designed for differential settlements. We anticipate that foundations will be designed to bear on the Dune Sand (bearing layer) mapped at the site.

We preliminarily recommend that new foundations consist of either continuous shallow foundations of individual spread footings interconnected by stiffened grade beams. Localized areas of soft/medium stiff soil or disturbed bedrock maybe encountered during construction. Weak soil should be over-excavated and replaced with lean concrete. The extent of the over-excavation required should be evaluated in the field by us. We should check the bearing layer once foundation subgrade has been achieved and prior to the placement of re-bar or any other material.

Footings should be a minimum of 18 inches deep or extend at least 12 inches into the bearing layer; whichever is deeper. Footings should be at least 18 inches wide for continuous footings and 24 inches wide for isolated spread footings.

Where proposed foundations are within seven feet of the top of a slope, they should be deepened such that there is a minimum of seven feet between the top of the footing and face of slope. Footings adjacent

to utility trenches (or other footings) should bear below an imaginary 1.5:1 (horizontal:vertical) plane projected upward from the bottom edge of the utility trench (or adjacent footings).

Shallow foundations designed in accordance with the recommendations presented herein should not settle more than 1 inch; differential settlements should not exceed more than ½ inch in 30 feet. Larger, relatively abrupt differential settlements may occur at the transition between different geologic units.

For the recommended minimum embedment, footings constructed on the bearing layer and observed by us may be designed for an allowable bearing pressure of 2,000 pounds per square foot (psf) for dead plus live loads, with a one-third increase for total loads, including wind and/or seismic loads.

Lateral loads on footings can be resisted by a combination of passive resistance acting against the vertical faces of the footings and friction along the bases of the footings. Passive resistance may be calculated using lateral pressures corresponding to an equivalent fluid weight of 250 pounds per cubic foot (pcf); the upper foot should be ignored unless confined by a concrete slab or pavement. Frictional resistance of concrete poured directly on soil should be computed using a base friction coefficient of 0.35; where waterproofing or a vapor barrier is used the coefficient should be reduced to 0.20. The passive resistance and base friction values include a factor of safety of about 1.5 and may be used in combination without reduction.

Uplift loads may be resisted by the weight of the footing and any overlying soil. If footings are inadequate to provide the necessary uplift resistance, drilled piers may be used.

Footing excavations should be free of standing water, debris, and disturbed materials prior to placing concrete.

### **Permanent Retaining Walls**

Retaining walls may be supported by the foundation system described in the previous section.

Retaining walls that are free to rotate at the top may be designed using an active earth pressure. Restrained basement walls (no movement allowed at the top of wall) should be designed for at-rest pressures.

Because the site is in a seismically active area, retaining walls are typically designed to resist pressures associated with earthquake forces. The structural engineer should determine if a seismic increment should be included in the design. If a seismic increment is included in the design, we recommend retaining walls be designed to resist the greater of either the at-rest pressure or active earth pressure plus a seismic increment. At a minimum, any retaining wall should be designed for a Factor of Safety of at least 1.5.

Where new or existing foundations are located behind retaining walls and an imaginary plane taken from the bottom of the footing projected at 1.5:1 (horizontal to vertical) downward intersects the retaining wall, additional surcharge pressures should be included to account for vertical and lateral foundation loading on the retaining wall.

Water can accumulate behind the walls from perched groundwater and other sources, such as rainfall, irrigation, and broken water lines. One acceptable method for back draining the wall is to place a prefabricated drainage panel against the backside of the wall. The drainage panel would typically extend down to either: a prefabricated drainage trench, a perforated PVC collector pipe at the base of the wall or weep holes. Water which drains through the weep holes should not be allowed to pond and should be diverted to a suitable collection system.

Where walls are not back drained, an additional hydrostatic load of 62.4 pcf should be added to the lateral pressures indicated above.

### **Concrete Slab-on-Grade Floors**

Subgrade for concrete slab-on-grade floors should consist of undisturbed native soil and/or bedrock or engineered fill. In general, water vapor transmission through the floor slab should be reduced where there is potential for finished floor coverings to be adversely affected by moisture. This may be achieved using waterproofing, a vapor barrier or both.

If a vapor barrier is installed, it should be underlain by a capillary moisture break. A capillary moisture break consists of at least four inches of clean, free-draining gravel or crushed rock. The vapor barrier should meet the requirements for Class C vapor retarders stated in ASTM E1745-97. The vapor retarder should be placed in accordance with the requirements of ASTM E1643-98. These requirements include overlapping seams by six inches, taping seams, and sealing penetrations in the vapor retarder. The vapor retarder should be covered with two inches of sand to aid in curing the concrete and to protect the vapor retarder during slab construction. The particle size of the gravel/crushed rock and sand should meet the gradation requirements presented in Table 1.

The sand overlying the membrane should be moist, but not saturated, at the time concrete is placed. Excess water trapped in the sand could eventually be transmitted as vapor through the slab. If rain is forecast prior to pouring the slab, the sand should be covered with plastic sheeting to avoid wetting. If the sand becomes wet, concrete should not be placed until the sand has been dried or replaced.

The presence of a capillary break and vapor barrier may not eliminate all moisture transmission through the concrete floor slab. As required and before the final floor covering is placed, the contractor should the moisture emission levels.

**TABLE 1**  
**GRADATION REQUIREMENTS FOR CAPILLARY MOISTURE BREAK**

Sieve Size	Percentage Passing Sieve
Gravel or Crushed Rock	
1 inch	90 – 100
3/4 inch	30 – 100
1/2 inch	5 – 25
3/8 inch	0 – 6
Sand	
No. 4	100
No. 200	0 – 5

#### **Concrete Flatwork and Pavers**

Concrete flatwork may be underlain by Class II aggregate base to reduce the potential for differential settlement; if desirable we recommend a minimum of 4 or 6 inches of Class II aggregate base compacted to 95 percent relative compaction for pedestrian and vehicular traffic, respectively. Area drains may be used to collect surface run-off.

Where concrete flatwork is constructed on a slope, concrete keys may be required to reduce the potential for downhill movement of the constructed flatwork.

The velocity of surface runoff may be reduced using permeable pavers, which allow surface water to infiltrate the pavers; however since the project is located at the top of a slope, we recommend that infiltration into the underlying soil/rock not be allowed and a subdrain system should be installed below the pavers to divert the surface water to a suitable collection system.

We should evaluate the soil subgrade prior to placement of the pavers or flatwork. Where weak fill and/or soil is encountered, it should be replaced with engineered fill. Where wet or dry soil is encountered, it should be ripped a minimum of six inches and moisture conditioned to near optimum moisture content.

The required thicknesses of the permeable aggregate base and subbase courses and geotextile required will depend on the infiltration and water storage design requirements, as well as the pedestrian/traffic loading demand. We can provide additional geotechnical recommendations and/or a review of the final pavement plans upon your request.

## **SEISMIC DESIGN**

For design in accordance with the 2013 San Francisco Building Code (SFBC), we preliminarily recommend Site Class D (stiff soil) be used. Site seismic design factors are presented on Figure 6. The factors presented should be considered preliminary until checked by your structural engineer.

## **LIMITATIONS**

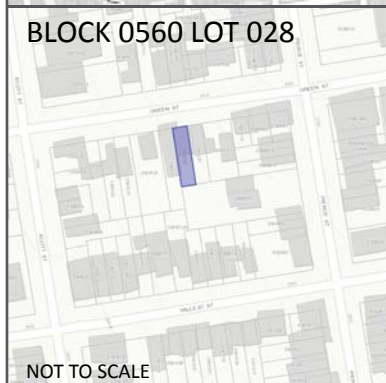
This preliminary geotechnical study has been conducted in accordance with the standard of care commonly used as state-of-practice in the profession. No other warranties are either expressed or implied. A final geotechnical report based on a site specific field study and/or appropriate available on-site subsurface information should be prepared prior to finalizing any design. Corrosivity of the soil and/or bedrock is beyond the scope of this report. The recommendations made in this report are intended to protect the life and safety of occupants within the structure during a major seismic event on a nearby fault; damage to the structure and other improvements may still occur due to seismic forces on the proposed improvements. Our recommendations are only valid where the actual field conditions are observed by us.

## FIGURES





BLOCK 0560 LOT 028



0 0.2 Miles  
Approximate scale

Base map: (c) 2017 san francisco planning department



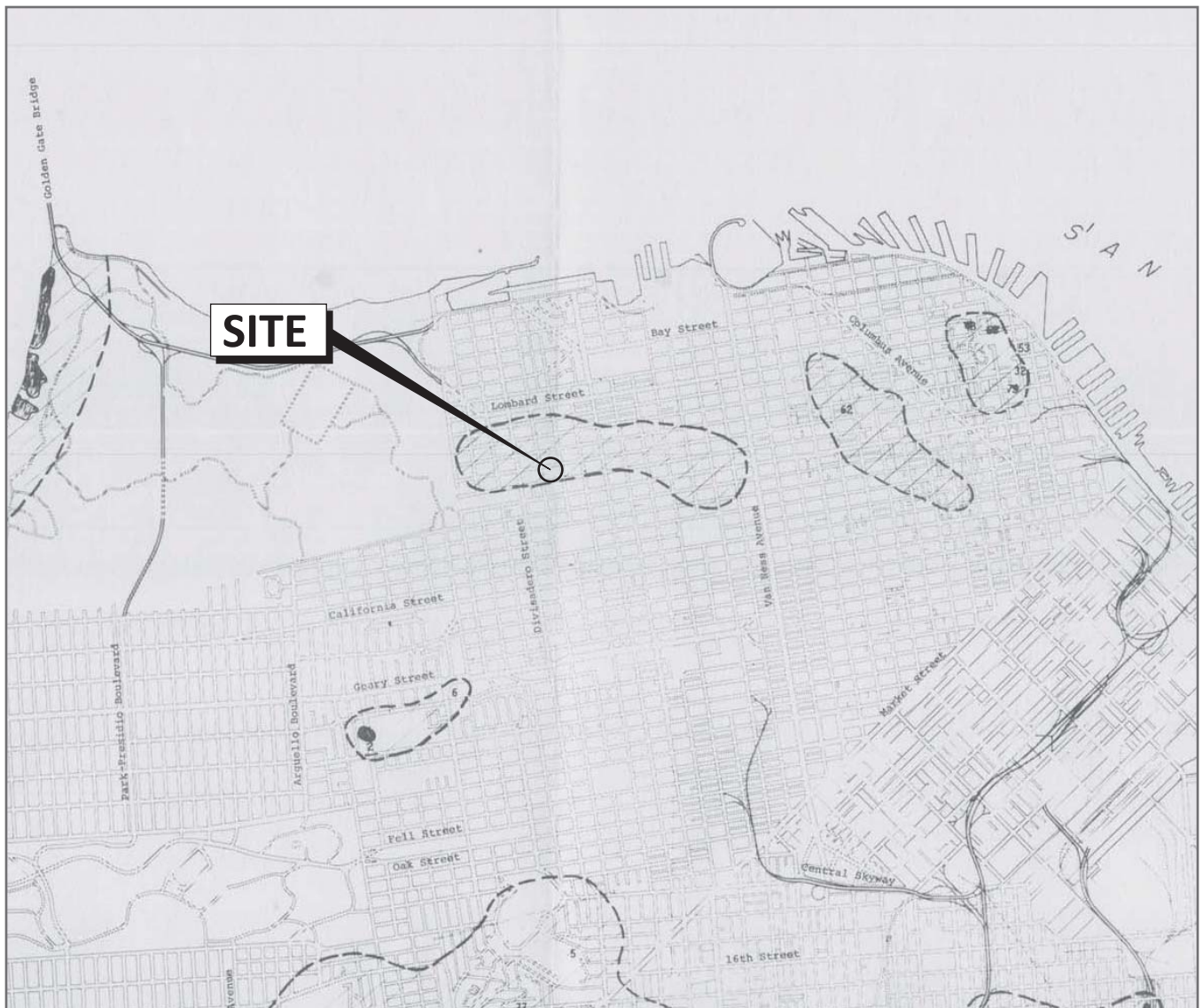
**2417 GREEN STREET**  
San Francisco, California

## SITE LOCATION MAP



Date 01/12/17

17-120101-01

Figure 1



## EXPLANATION

-  outline of slide area
-  areas of potential landslide hazard
- 7 location of slide, SFDBI  
those underlined are active slides



0 2000 4000 Feet



Approximate scale

Base map: John A. Blume & Associates, Engineers, (1974). Figure 4, Landslide Locations, San Francisco Seismic Safety Investigation, June 1974.



**2417 GREEN STREET**  
San Francisco, California

## SAN FRANCISCO SLOPE PROTECTION ACT MAP

Date 01/12/17

17-120101-01

Figure 2





## EXPLANATION



Liquefaction: Areas where historic occurrence of liquefaction, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements.



Earthquake-Induced Landslides: Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements.



0 1000 2000 Feet



Approximate scale

Base map: State of California, Seismic Hazard Zones City and County of San Francisco, Official Map, Released November 17, 2001.



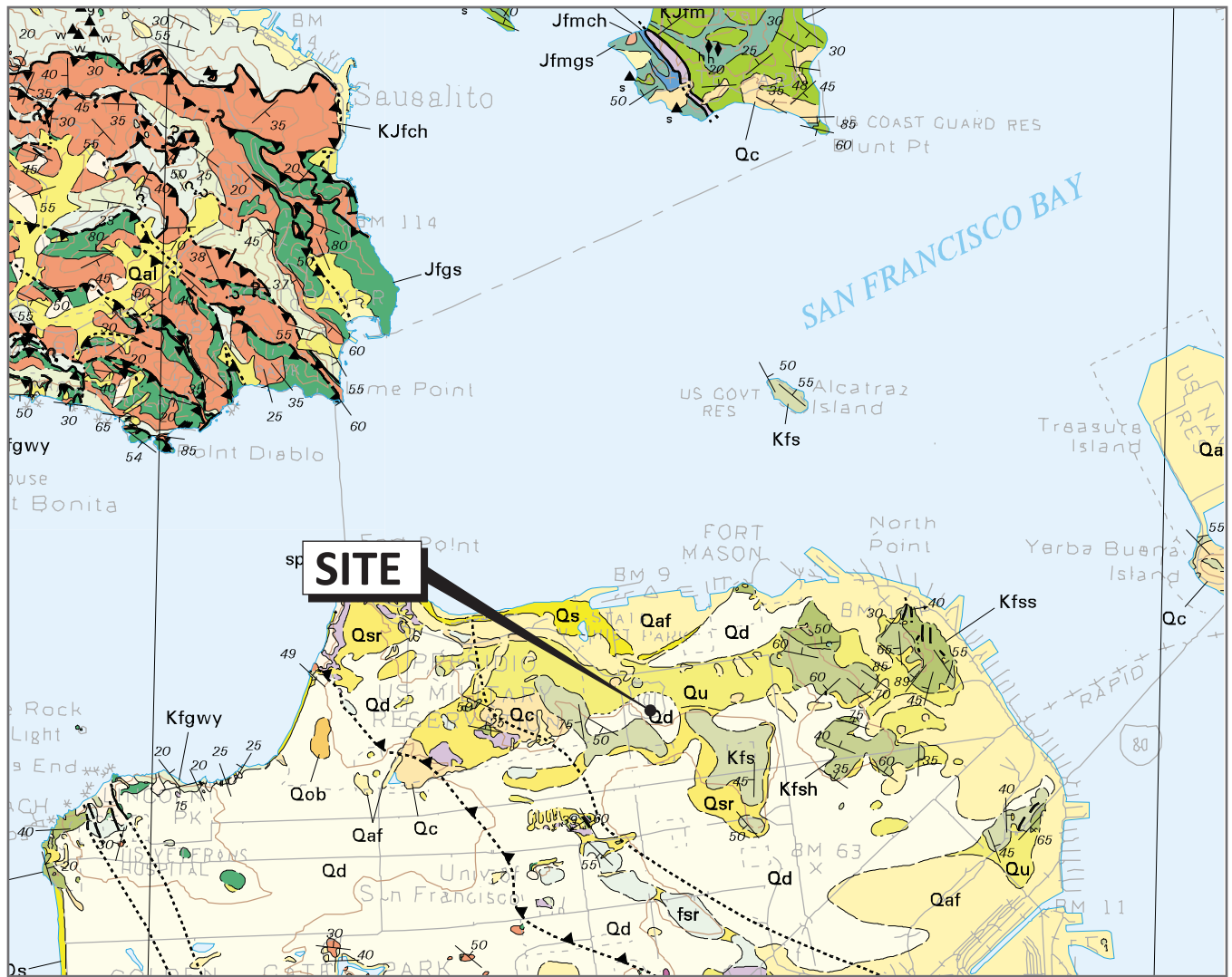
**2417 GREEN STREET**  
San Francisco, California









## SEISMIC HAZARD ZONE MAP

Date 01/12/17

17-120101-01

Figure 3



- |   |   |
|---|---|
|  | water   |
|  | Qaf Artificial fill                                 |
|  | Qd Dune Sand (Quaternary)                           |
|  | Qu Undifferentiated surficial deposits (Quaternary) |
|  | fsr Mélangé   |
|  | Jfgs Greenstone (Jurassic)                          |
|  | KJfch Chert (Cretaceous and Jurassic)               |
|  | sp Serpentine                                       |

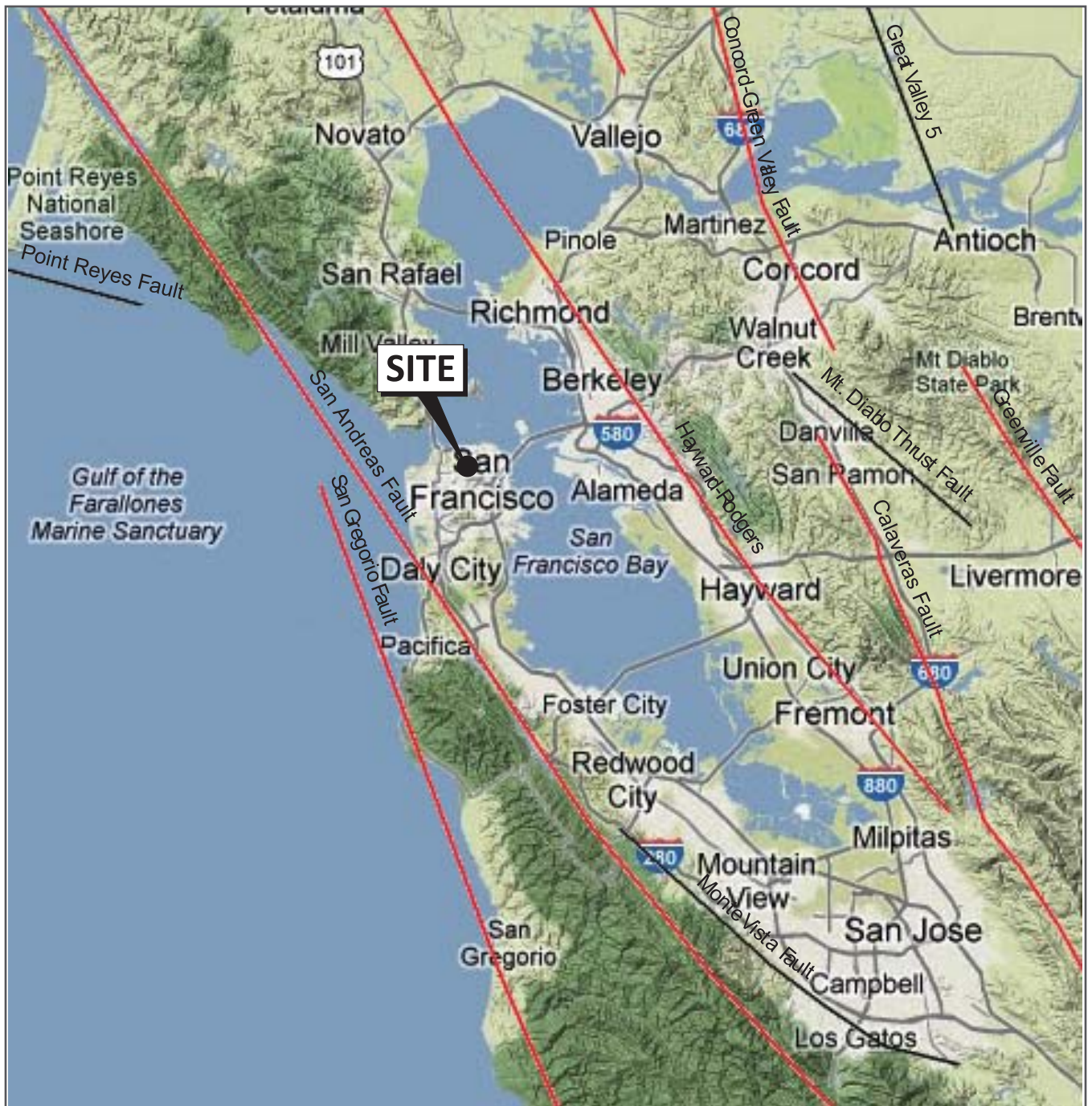
--- Contact, approximately located

0 2000 4000 feet

Approximate scale

Reference: Geologic Map and Map Database of Parts of Marin, San Francisco, Alameda, Contra Costa and Sonoma Counties, California, prepared by M.C. Blake Jr., R.W. Graymer, and D.L. Jones, dated 2000





#### FAULT TYPE

- Strike slip
- Thrust (Reverse)
- Normal



0 5 10 Miles



Approximate scale

Base Map: U.S. Geological Survey, National Seismic Hazards Maps - Fault Sources, 2008.



**2417 GREEN STREET**  
San Francisco, California

## REGIONAL FAULT MAP

Date 01/12/17

17-120101-01

Figure 5

# USGS Design Maps Summary Report

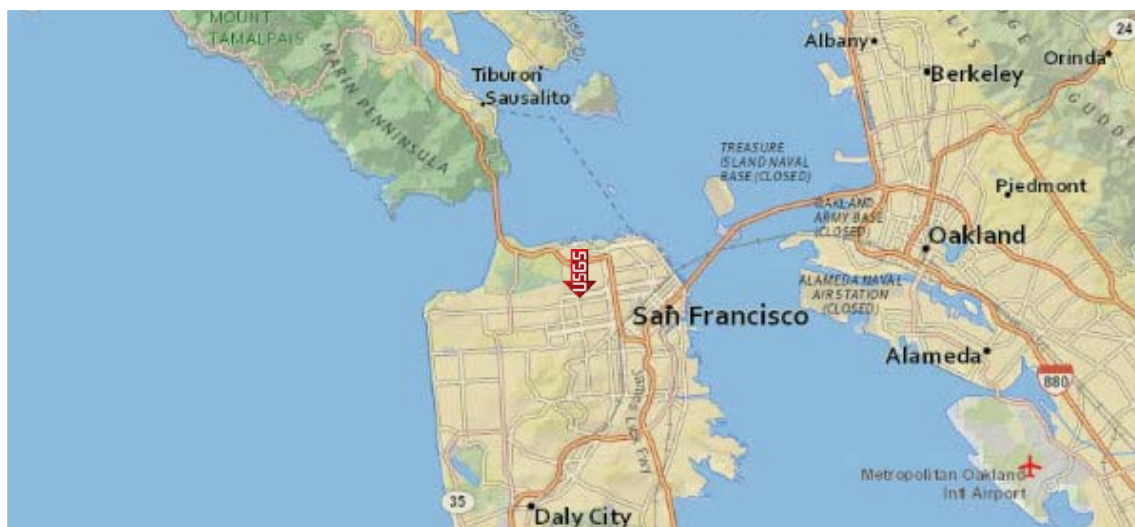
## User-Specified Input

Building Code Reference Document 2012/2015 International Building Code  
(which utilizes USGS hazard data available in 2008)

Site Coordinates 37.79547°N, 122.43933°W

Site Soil Classification Site Class D – “Stiff Soil”

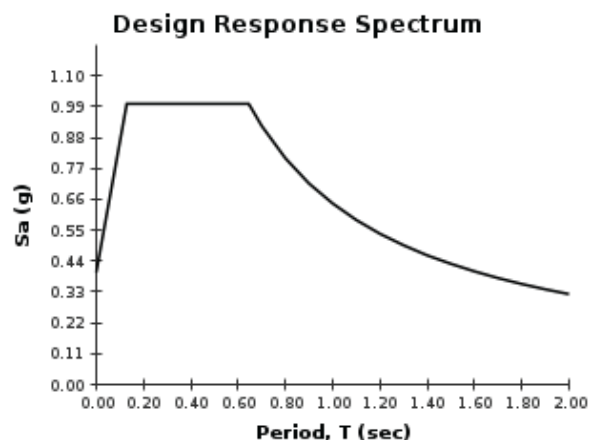
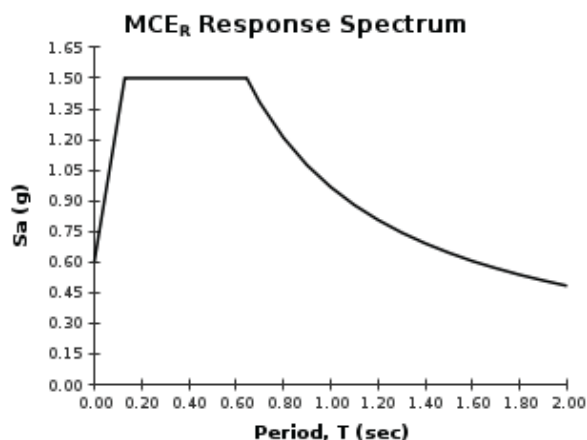
Risk Category I/II/III



## USGS-Provided Output

$S_s = 1.500 \text{ g}$	$S_{MS} = 1.500 \text{ g}$	$S_{DS} = 1.000 \text{ g}$
$S_1 = 0.645 \text{ g}$	$S_{M1} = 0.967 \text{ g}$	$S_{D1} = 0.645 \text{ g}$

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the “2009 NEHRP” building code reference document.



Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

## **APPENDIX A**

### **IMPORTANT INFORMATION REGARDING YOUR GEOTECHNICAL REPORT**



# Important Information about Your Geotechnical Engineering Report

*Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.*

*While you cannot eliminate all such risks, you can manage them. The following information is provided to help.*

## **Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects**

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.*

## **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

## **A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors**

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

## **Subsurface Conditions Can Change**

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

## **Most Geotechnical Findings Are Professional Opinions**

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## **A Report's Recommendations Are *Not* Final**

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual



subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

## **A Geotechnical Engineering Report Is Subject to Misinterpretation**

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

## **Do Not Redraw the Engineer's Logs**

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

## **Give Contractors a Complete Report and Guidance**

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

## **Read Responsibility Provisions Closely**

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

## **Geoenvironmental Concerns Are Not Covered**

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

## **Obtain Professional Assistance To Deal with Mold**

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

## **Rely on Your ASFE-Member Geotechnical Engineer for Additional Assistance**

Membership in ASFE/THE BEST PEOPLE ON EARTH exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.



8811 Colesville Road/Suite G106, Silver Spring, MD 20910  
Telephone: 301/565-2733 Facsimile: 301/589-2017  
e-mail: [info@asfe.org](mailto:info@asfe.org) [www.asfe.org](http://www.asfe.org)

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# EXHIBIT M



**Carol L. Karp**  
**Architect A.I.A.**

July 8, 2020

C&CSF Planning Department  
Rich Hillis, Director  
1650 Mission Street, 4<sup>th</sup> Floor  
San Francisco, CA 94103

Subject: 2417 Green Street Project [Block 560 - Lot 028]  
Incomplete & Misleading Drawings

RE: Coxhead House, 2421 Green Street  
Significant Impact to Historic Architectural Resource

Dear Director Hillis:

This letter-report supplements my previous submittals to the C&CSF Planning Department (SFCPD) and the C&CSF Board of Supervisors to address defects in CAD drawings submitted to SFCPD that attempt to satisfy neighbors and others concerning the Planning Commission's admonitions at the 1/9/20 hearing.

### **Missing Basic Architectural Presentation**

Reviewing 42 computer aided drawings dated 6/8 & 7/1/20, I find they do not conform to minimum standards expected of California licensed architects for the purpose expected. The drawings are essentially the same as before, but now with more distractions. All important information is still missing, as follows:

- A. There is no full and proper Site Plan based on instrumented topographic land survey map prepared by a licensed land surveyor having full site information about adjoining who would be affected by the 2417 project. Sheet A0.8 misleads; data from a proper site orthocontour map would include on a Site Plan recent excavations at 2417 and along 2421 Green, all to San Francisco datum. "Accurate" site plans are required by 2019 SFEBC §102.2.6; a legitimate survey and "accurate" Site Plan must not be waived (again) by SFCPD. This major omission in the plans alone negates the architect's submittal for the purpose of revising the 2427 Project as intended by the Planning Commission.
- B. The operative building code is the 2019 San Francisco Existing Building Code which is not listed at "Applicable Codes" on Cover Sheet 1 of 42 of drawings. As required by law (2019 SFEBC §106 "Documents") an accurate (surveyed) Site Plan must show existing and proposed construction on the Project's land as well as existing data for potential influence on the adjoining's foundations. "Partial" surveys without critical data are deceitful. By ignoring the statutory requirement for an "accurate" Site Plan, the architects are silently stating they or their client do not want the data disclosed.
- C. Under "Project Description", Sheet 1 of 42, #4 is "Excavation and full foundation replacement". 2417 and 2421 Green are shown floating in mid-air with no support for either building, meaning old and new excavations (and walls) removing lateral/subjacent support for 2421 Green will be permitted. Furthermore, to the extent the current drawings now show major additions where the intent of the Planning Commission was to scale back the Project to the existing envelope, seismic retrofit of the 1906 building will be necessary using provisions of 2019 SFEBC Appendix A "Seismic Retrofit of Existing Buildings". This means larger and deeper excavations for stronger perimeter (property line) foundations will be mandatory which construction will profoundly affect the stability of the 128 year old brick foundations and original walls of 2421 Green. The drawings show there is no consideration at all of the major effects the "foundation replacement" will have on the historic architectural resource.



- D. Of the 42 sheets, there is no drawing showing the existing fenestration of the historic architectural resource at 2421 Green Street of the 1892 Coxhead House's east wall. Instead of producing a drawing illustrating, as a result of a legitimate survey, the existing situation, the architect is misrepresenting conditions by only depicting windows that will be visible beyond after construction at 2417 Green and that without dimensions. The existing open-sided lightwell is also, basically, scheduled for obstruction. The misrepresentation appears dramatically with the architects deliberately hiding the windows that will be obliterated by the 2417 Green Project (e.g. Sheets A3.1 and A3.5) by simply pretending they do not exist. It appears from the confusing drawings that a planned total of 23 windows will be obstructed in the Coxhead House, a historic architectural resource recognized by the National Register of Historic Places and protected by the California Environmental Quality Act.

The inventory of windows that will be obliterated, which are "sensitive to the historic resource" (quoting Commissioner Johnson at the 1/9/20 hearing), but are not shown on the drawings is a pretense that they do not exist. Without dimensioned drawings and a proper Site Plan, 16 of the 23 windows are in the open-sided lightwell, which is near the middle of the 2421 wall. The lightwell and its windows are not clearly depicted in the 42 drawings. In addition, 5 of the windows will be blocked at the front of the house because of the huge new fourth floor addition that will raise the roof of 2417 Green to the height of the Coxhead House. The windows, including those in the lightwell that are actually scheduled to be blocked by the 2417 Project, with reference to area and floor, are as follows:

- a. Kitchen/lightwell (2<sup>nd</sup> floor), Dutch door for cross-ventilation, 1 window, 25" x 25" glazed.
- b. Stair/lightwell (2<sup>nd</sup> floor), natural light transom for interior stair, 1 window, 47" x 24" glazed.
- c. Stair/lightwell (3<sup>rd</sup> floor), natural light for 3 windows at interior stair, ea. 21" x 45" glazed.
- d. Central bathroom (3<sup>rd</sup> floor), natural light/ventilation for 2 windows, ea. 21" x 30" glazed.
- e. Master bedroom bathroom (3<sup>rd</sup> floor), natural light/ventilation for 2 windows, ea. 20" x 40".
- f. Bedroom (4<sup>th</sup> floor), (only source for light and ventilation in room, Code requires minimum window area equal to 1/8 floor area), 2 windows, ea. 20" x 40" glazed.
- g. Bathroom (4<sup>th</sup> floor), 1 window, 19" x 29" glazed.
- h. Living room (1<sup>st</sup> floor), critical for light and ventilation, 3 windows, ea. 20" x 32" glazed.
- i. Lower staircase to office (1<sup>st</sup> floor) and laundry room (basement), only source of natural light, 1 window in door, 21" x 21" glazed.
- j. Master bedroom (3<sup>rd</sup> floor), in front of the house, 3 double sash windows opening top and bottom (6 operating leaves), ea. 16" x 40".
- k. Corridor off master bedroom (3<sup>rd</sup> floor), in front of the house), critical for warm weather ventilation, 2 windows, ea. 21" x 25" glazed.
- l. Top of staircase (3<sup>rd</sup> floor), critical natural light source, 3 windows, ea. 21" x 45" glazed.
- m. Laundry room (1<sup>st</sup> floor), 2 windows, ea. 22" x 40" glazed.



### Summary

The vast amount of 42 sheets of drawings may be impressive to some, however key elements that would actually describe the Project are missing, which was not accidental. Issues pertinent to the neighborhood and architecture in the San Francisco Bay Area were never considered by the project architect. California law requires architects to be licensed and that all drawings and reports prepared by architects bear signatures and stamps having their license numbers to indicate responsibility for documents, Business & Professions Code §5536.1(a), but there are no stamps and signatures on the 42 sheets because nobody will take responsibility.

Views from the outside surroundings and the views from the inside of this historic building, the master architect Ernest Coxhead's own home, 1892-1893, which was the genesis of the First Bay Tradition (and in turn the Second and Third Traditions), will be irreparably harmed by the planned, adjacent, speculative, unnecessary, development. Historic architecture is to be viewed, not obliterated. One of the purposes of the California Environmental Quality Act is to preserve historic resources and their surroundings for the future, but this project, and the Planning Department's handling of the situation from the start by obtaining a permit from DBI for the developer in 2017 without an appropriate and proper Site Plan or any expressed concept for protection for the Coxhead House is totally contrary to the intent of CEQA and good architecture. There should be no construction outside the existing 2417 Green envelope and the 2017-2018 excavations should be repaired. The current sets of 42 Sheets of drawings attest to the fact, which two appeals over exemptions vigorously claimed by the Planning Department to the Board of Supervisors confirmed, that an Environmental Impact Report is necessary for the Project.

In summary, I conclude that the proposed project at 2417 Green Street would adversely affect the historic significance of the Coxhead House. The story poles the developer erected, pictured in my 9/19/19 report, show large areas of 2421 Green will be obliterated destroying views to and from the unique building. The planned construction at 2417, which is bonded to 2421 Green, will likely destroy the brick foundation system.

The undersigned architect, native of San Francisco, schooled at Vassar, Berkeley, and Harvard, holds the Bachelor of Architecture degree, awarded in 1970 at UC Berkeley. Licensed in California and Hawaii.

A listing of previous reports to C&CSF Planning Department and to the C&CSF Board of Supervisors, specifically concerning the historic Coxhead House & Residence, written by the undersigned, follow.

Yours truly,

Carol L. Karp



### Prior Reports - Coxhead House

Karp, Carol L. -Architect AIA, December 30, 2017; "2417 Green Street Project [Block 560 - Lot 028], Appeal of CEQA Categorical Exemption; Coxhead House - 2421 Green Street - Threatened Historic Architectural Resource", report prepared for the C&CSF Board of Supervisors (London Breed, President), 2 pages w/5 Exhibits.

Karp, Carol L. -Architect AIA, January 14, 2019a; "2417 Green Street Project [Block 560 - Lot 028], Appeal of CEQA Categorical Exemption (Resubmitted 6/22/18), Planned Significant Impact to Historic Architectural Resource", report prepared for the C&CSF Planning Commission (Rich Hillis, President), 1 page w/5 Exhibits

Karp, Carol L. -Architect AIA, September 11, 2019b; "2417 Green Street Project [Block 560 - Lot 028], Proposed Mitigated Negative Declaration, Significant Impact to Historic Architectural Resource", report prepared for the C&CSF Planning Commission (Myrna Medgar, President), 1 page w/6 photographs of story poles defining area blockage of 2421 Green.



**Carol L. Karp**  
**Architect A.I.A.**

December 30, 2017

C&CSF Board of Supervisors  
London Breed, President  
City Hall, Room 250  
San Francisco, CA 94102

Subject: Appeal of CEQA Categorical Exemption  
2417 Green Street Project [Block 560 - Lot 028]

RE: Coxhead House  
2421 Green Street  
Threatened Historic Resource

Subject: Contiguous Proposed Construction  
2417 Green Street, San Francisco

Dear President Breed & Supervisors:

This correspondence concerns the negative impact that the subject project will have on the building at 2421 Green Street, which is immediately adjacent to the project site. This information is additional to the National Park Service's nomination for placement in the national register of historic places. Ernest Albert Coxhead's own residence, designed and built 1892-1893, has been declared eligible for listing with copies of the final draft nomination papers being part of the appeal lodged with the San Francisco Planning Department 11/17/17 which includes a letter of support from House Minority Leader Nancy Pelosi.

The Coxhead house is renowned as the forefather of the "First Bay Tradition" of architecture which began in San Francisco at the end of the 19<sup>th</sup> century. Coxhead, as most of his following architects (e.g. Bernard Maybeck, Julia Morgan) who emigrated to California, utilized their training to adopt and integrate their designs with the use of native and locally made materials such as redwood, red cedar shingles, and brick. Coxhead's house manifests unique roof profiles and sidewall fenestration predicated on emphasizing views from the house and views of the house that have been punctuated with Cotswald detailing. Subsequent Second Bay and Third Bay Traditions were derivatives that followed.

As covered in our nomination papers, the Shingle Style exterior of the house is an exemplary expression of adaption of Coxhead's classical training with local features and materials into a new California architectural style. Coxhead recognized there would be enough open space on the east and west elevations to glaze much of these elevations. He then carefully positioned bands of windows to capture San Francisco Bay views and sunlight from the East and West. Promoters of the project at 2417 Green, which is intended to enlarge the adjacent house, believe the views are not important. Views from the Coxhead house, which the fenestration was carefully designed around, are reciprocated by views from the house; everything viewed has viewers that can see the Coxhead House.



The building is a unique solution for a house on a typical narrow lot in San Francisco's Pacific Heights and Cow Hollow. It is urban in character in the front and a relaxed freestanding house in the country at the rear. The entry portico and staircase that join the building with the street leads one to a classical style front door that provides an articulated entry into the residence. Architectural historians have written about this specific design feature and how it brought European design to the San Francisco Bay Area. The building is so significant to American architecture that the seminal book on this subject lists two houses by architects (Frank Lloyd Wright and Ernest Albert Coxhead) that were designed and built for themselves.

The nomination papers have extensive photographic coverage of the exterior of the house including drone imagery of the environment surrounding the 2417 project. The Coxhead house is threatened by the contiguous development and the developers have questioned the historic value of the Coxhead House even though it is officially historic. As the nomination papers do not have copies of the unusual published coverage of the house due to copyright, I am attaching copies of the chapters from the major books that prominently cover the Coxhead House, as well as the letter of support by San Francisco's congresswoman and my letter with résumé to the owner, who has allowed the nomination, as follows:

1. "Shingle Style - Innovation and Tradition in American Architecture 1874 to 1982", author Leland Roth, photographer Bret Morgan, Norfleet Abrams 1999.
2. "Bay Area Style - Houses of the San Francisco Bay Region, author David Weingarten, photographer Alan Weintraub, Rizzoli 2004.
3. "On the Edge of the World - Four Architects in San Francisco at the Turn of the Century", author Richard Longstreth, MIT Press 1983.
4. Letter from Rep. Nancy Pelosi to California Office of Historic Preservation, 2017.
5. Letter with résumé from Carol Karp AIA to owner of the Coxhead House, 2017.

According to the architectural drawings submitted to the City by the developer of 2417 Green, the project increases the existing envelope of the building which will obliterate views to and from 2421 Green which will profoundly affect the historic nature of the building. According to the engineering drawings submitted to the City by the developer of 2417 Green Street, the project has no provisions for protecting the 125 year old historic brick foundations, that survived the 1906 Earthquake intact, from damage from loss of lateral and subjacent support due to the planned excavations. There is no survey or geotechnical investigation or any provisions to protect the historic resource. The project is certainly not entitled to a CEQA Categorical Exemption and an Environmental Impact Report should be prepared under CEQA regulations.

Yours truly,



Carol L. Karp

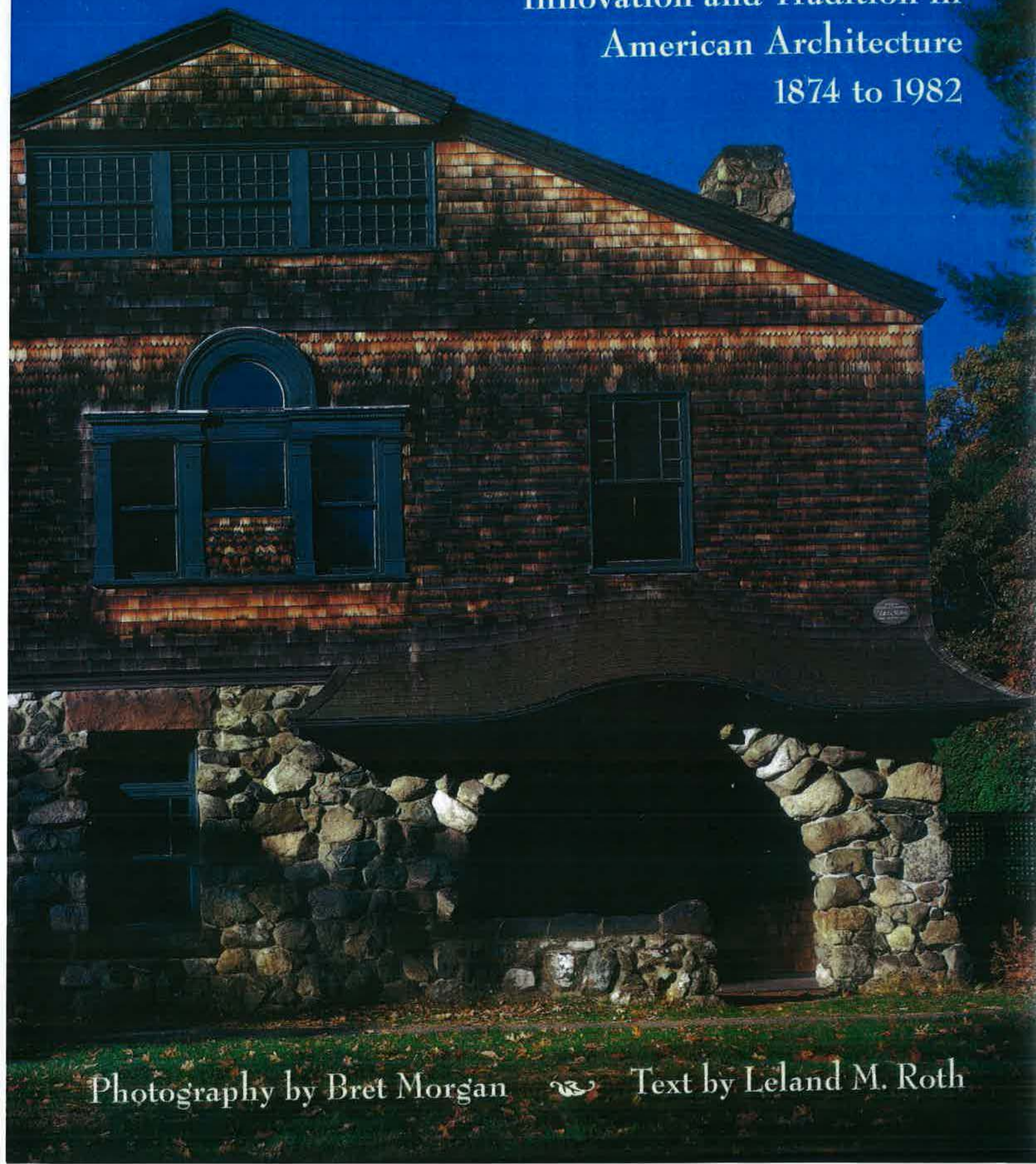


# **ATTACHMENT 1**



# SHINGLE STYLES

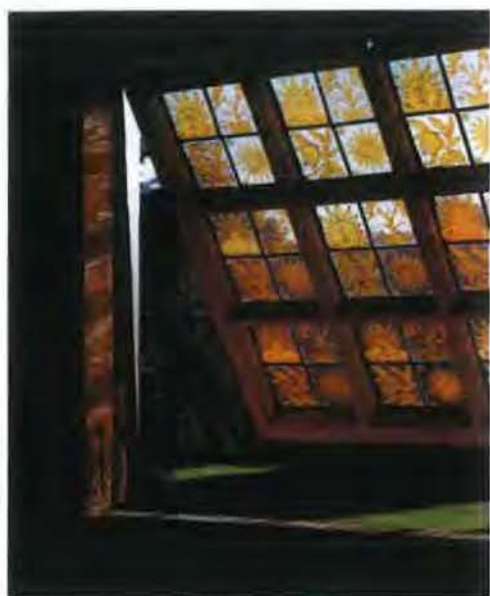
Innovation and Tradition in  
American Architecture  
1874 to 1982



Photography by Bret Morgan        Text by Leland M. Roth



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# SHINGLE STYLES

Innovation and Tradition in  
American Architecture  
1874 to 1982



PHOTOGRAPHY BY BRET MORGAN

TEXT BY LELAND M. ROTH

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# FRANK LLOYD WRIGHT HOME AND STUDIO

Oak Park, Illinois, 1889–1914



The living room, inglenook, and hallway are broadly connected yet individuated spaces.

Vincent Scully's now-classic study, *The Shingle Style: Architectural Theory and Design from Richardson to the Origins of Wright*, concludes with a discussion of Frank Lloyd Wright. It gives Wright's house in Oak Park a place of honor, marking the end of the inventive freedom of the 1870s and 1880s and at the same time announcing the beginning of what would become Wright's Prairie Houses in the early twentieth century.

Wright says nothing in his *Autobiography* about any consideration of Japanese art or architecture in the office of his first employer, Joseph Lyman Silsbee, which Wright entered during 1887. Silsbee, however, was the close boyhood friend and later brother-in-law of Ernest Fennelosa, who was then becoming the foremost American authority on Japanese art and culture. Regardless of the origins of the Japanese influence, clearly Wright was inspired, for in his own house he opened up the rooms to one another, like a Japanese house with the sliding screens pushed back, and he employed a continuous upper molding, running around each room, like the Japanese *kamoi* rail, linking the rooms together.

The most obvious influence on Wright was the East Coast Shingle Style, then being introduced in Chicago by Silsbee, a recent transplant from Syracuse and Buffalo, New York. Silsbee's houses of this period were largely Shingle Style designs, similar to those of eastern architects John Calvin Stevens, McKim, Mead & White, and Lamb & Rich. Silsbee came to the attention of developer J. L. Cochran, who was about to lay out a model suburban community to be called Edgewood, about six miles north of the heart of Chicago. In 1887 he engaged Silsbee to design the houses for this community. Wright, just months in Silsbee's employ, executed a perspective drawing of Cochran's own house from Silsbee's design. Like Bruce Price's houses for Pierre Lorillard in the New York suburb Tuxedo Park, the Edgewood houses were to be relatively small and compact. As in the case of Price, Silsbee was inspired to devise simple dramatic forms in which large dramatic triangular gables predominated.

Wright was aware, too, of the boldly triangular shingled houses being built in Austin, a new suburb just west of Chicago and immediately east of Oak Park, where he lived. Rare photographs survive of the earliest buildings

OPPOSITE: Perhaps the ultimate expression of the dominant front gable first seen in Richardson's Watts Sherman house.









*Wright achieved a unique synthesis of the classical and oriental influences that pervaded Shingle Style design.*





there—boldly massed broad-gabled shingled designs by Frederick Schock (fig. 26). A brief mention of Schock in Wright's *Autobiography* suggests that Wright knew these buildings as well. But the most obvious models for Wright's house in Oak Park were Price's shingled houses at Tuxedo Park (fig. 4). Their simple design program encouraged bold, simple, dramatic forms composed of large triangular gables with long sweeping roof lines. One of these houses in particular seems to have been the inspiration for Wright's design: the Chandler house. Its dramatic gable appeared as a linear photoengraving, together with a plan, in *Building* (September 1886).

The changes that Wright made in moving beyond his apparent models anticipate the direction his work would take in the next two decades. As Neil Levine notes in writing about Wright's dramatically abstract Oak Park house, it is the "projection of an image" of what a house could be, at once familiar and yet strikingly simple, and outside the limits proscribed by conventional types. Indeed, Wright comments in the *Autobiography* that his neighbors were perplexed and asked if the design "were Seaside or Colonial."

Wright's first significant innovation was placing his house not on a light framed porch but on a solid elevated terrace, enclosed by a continuous masonry wall and gained by broad low stone stairs, making a far stronger connection to the earth. Wright used continuous surfaces of shingles throughout, on both the walls and long roof planes. He also enlarged and abstracted Price's near-Palladian window, making it a broad strip of windows illuminating his studio. The great overhang of the front gable portends the extended cantilevers of the eaves of Wright's subsequent Prairie Houses.

Wright's plan was a pinwheel of spaces arranged around a small central hearth sheltered within a diminutive inglenook. The round-arched fireplace, with its long tapered brick voussoirs, speaks of Wright's admiration for Richardson and Louis Sullivan. In the four corners of the living room ceiling, electric lighting fixtures are integrated into square-paneled flourishes of foliate ornament, recalling the similarly integrated ornament and lighting used by Sullivan in his Auditorium theater. The staircase in the adjoining entry stair-hall, incorporating a built-in seat and rising in gentle stages with many landings, exemplifies the Queen Anne house. And in the stair-hall, placed over the upper molding, is a continuous plaster frieze, a miniature near-replica of the imposing high relief sculpture of the great Altar of Zeus of Pergamon, whose classical reference is reinforced by the denticulated cornice in the living room.

What began as a compact cottage house was modified repeatedly by Wright to accommodate his family, and then to house his office and studio, so that its original simplicity has been somewhat obscured. Nonetheless, the dramatic west facade gable and the interconnected extruded spaces within still herald Wright's incipient early modernism.



# ERNEST COXHEAD'S HOUSE

*San Francisco, California, 1893*

Architecture "on the edge of the world" was what architectural historian Richard Longstreth called the work of several highly imaginative architects who moved to San Francisco at the turn of the last century. Almost at once that city was blessed with the inventive genius of five remarkable designers—Ernest Coxhead, Willis Polk, Bernard Maybeck, A. C. Schweinfurth, and A. Page Brown. All came from the East. Maybeck had worked in New York City in the office of Carrère & Hastings; and Brown for McKim, Mead & White.

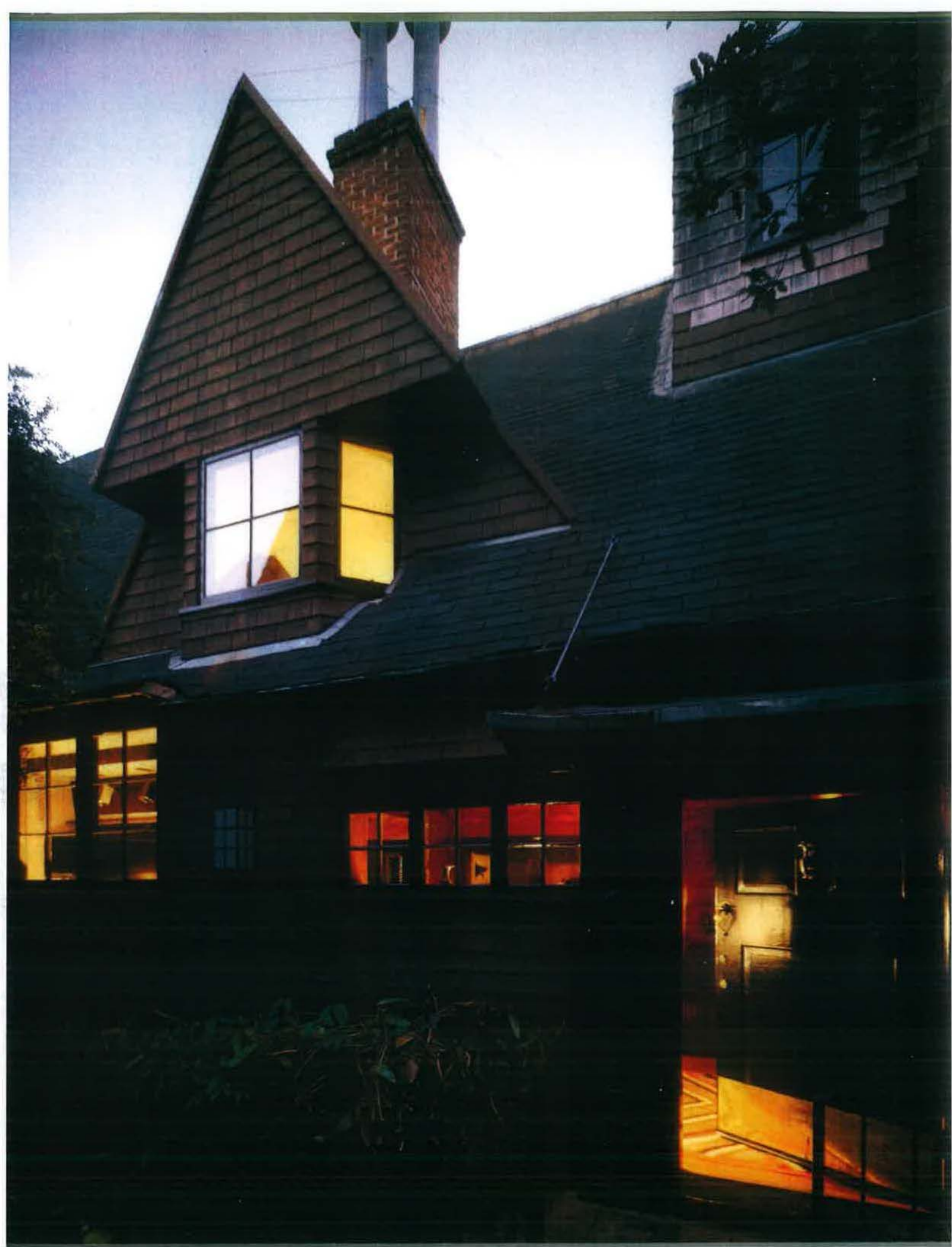
Ernest Coxhead, however, came from much farther east. Born in 1863 in Eastbourne, Sussex, England, Coxhead had studied under an engineer and then at the Royal Academy and the Architectural Association in London. Thanks to his work and education Coxhead possessed a solid grounding in classical design, with its emphasis on clear expression of the building program and its emphasis on proportions, as well as a sound introduction to English medieval architecture, with its attention to detail. He was involved in the restoration of several centuries-old churches and seems to have developed some associations with the young leaders of the English Arts and Crafts movement in London. In 1886 he and his brother, Almeric, left Great Britain and headed west, crossing the American continent and settling first in Los Angeles, California. Why he made so decisive and dramatic a break from family and country may never be known, but he may have been given encouragement by the Episcopal Diocese in California. Between 1887 and 1898 he and Almeric, who managed their practice, designed most of southern California's new Episcopal churches and enjoyed a field of action far greater than would have been afforded them in England.

While in England Coxhead had been introduced to the American Shingle Style. Longstreth notes that a major exhibition of such American work was mounted by the Royal Institute of British Architects shortly before Coxhead left. One of Coxhead's early churches, All Saints in Pasadena, 1888–89, employed a fusion of English Arts and Crafts with the rounded, biomorphic forms made possible by shingle work. Other churches followed, but the building boom in Los Angeles ended in about 1889 as Coxhead was given commissions for three new Episcopal churches in the San Francisco Bay area.



*The fireplace at the rear of the long gallery.*

OPPOSITE: *Winding flights of steps lead to the front door.*







ABOVE: *Eschewing symmetry and formality, Coxhead made his living room a collage of cozy corners.*

His first project in San Francisco, and perhaps his masterwork in church design, was the massive Church of St. John the Evangelist, 1890–91 (fig. 28). It was dynamited to prevent the spread of fire following the earthquake of 1906. Indebted to Richardson, it was based on a compact Greek cross plan but had a center dome capped by a broad squat square shingle-covered tower, vented by deep louvers that ran in continuous bands around the base of the pyramidal roof. The shingled roof surface also wrapped over the gable ends, fusing with the wall surfaces in a unique organic way. Although his other major urban churches were of masonry, Coxhead's smaller parish churches exploited shingles, which seemed to flow over the building surface, around corners, up and over doors and windows, and over gable ends, merging wall and roof into one plastic envelope.

By 1891 the Coxhead partnership began to receive commissions for small houses in San Francisco, such as that for James McGauley on Pacific Heights. For these Coxhead continued to use wood frame construction, and in the McGauley house he used an exposed half-timber frame, interrupted by a



broad brick chimney mass, and a tall, steep roof that prompted Longstreth to call the house a "transplanted English cottage." By 1893 Coxhead's house designs had become more abstracted, their geometric shapes emphasized by continuous coverings of shingles over the walls and roofs. Windows were grouped and placed strongly off-center at what appear to be odd locations but which actually reflect the pragmatic arrangements of the interiors. In some instances, the unusual character of these houses was dramatized by curiously overscaled details. Certainly, a contributing factor in Coxhead's distinctive work were the steeply pitched building sites he worked on, as in Pacific Heights, for the front facades of the houses would automatically be thrown off center by the incline of the street.

In 1891-92, adjacent to the McGauley house, Coxhead designed an extremely long and narrow house for himself and his brother. The narrow street facade, rising four stories, becomes almost a tower, while the entry side (reached by steps and a tunnel-like passage through the base retaining wall), stretches almost 94 feet, with the steep roof plane pulled deliberately low to

*At the rear of the long gallery.*



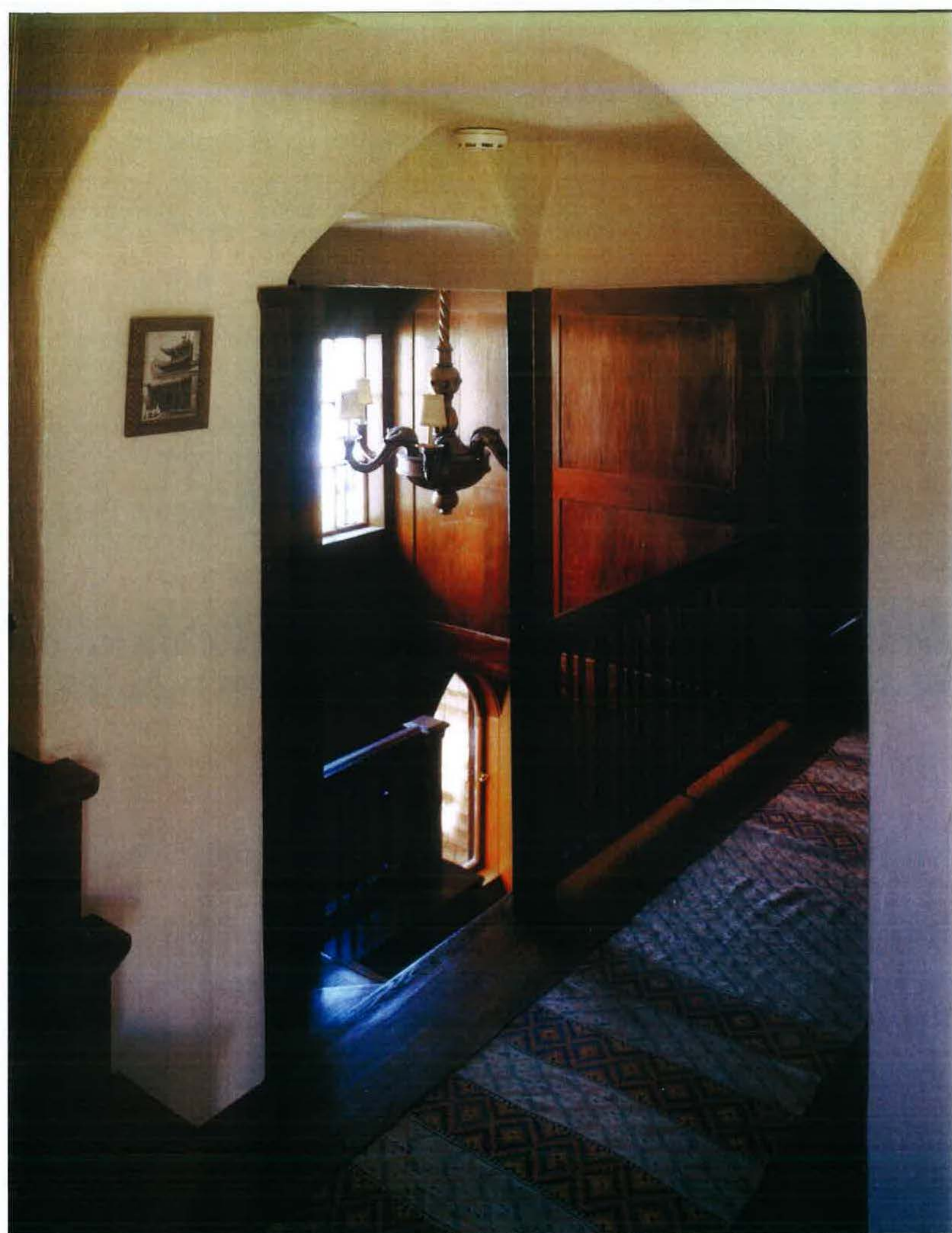


ABOVE: *With the door closed, this corner of the bedroom becomes an intimate sitting area.*

OPPOSITE: *The tiny staircase demonstrates Coxhead's skill in turning the exigencies of a narrow lot to picturesque advantage.*

emphasize its horizontal extension. The narrow site gave rise to some unusual innovations, such as a long entrance corridor that Coxhead broadened a bit to evoke memories of an English long gallery. With two hearths introduced, this gallery divides itself into separate sitting areas. The rear area is especially pleasant. A bay window and French doors bring in abundant light even on gray, foggy days. At every turn the exigencies of the narrow site, and the low roof, are turned to advantage to produce unexpected nooks and cozy recesses. Dark wood, broadly and blockily detailed, dominates the interior spaces, further bringing down the scale. Although dark and encompassing, the rooms are opened up by broad window groupings, which once afforded panoramic views of San Francisco Bay. As neighboring buildings began to impinge on his views, Coxhead moved away, but his rustic aerie survives, an enchanted little world of domestic delight.



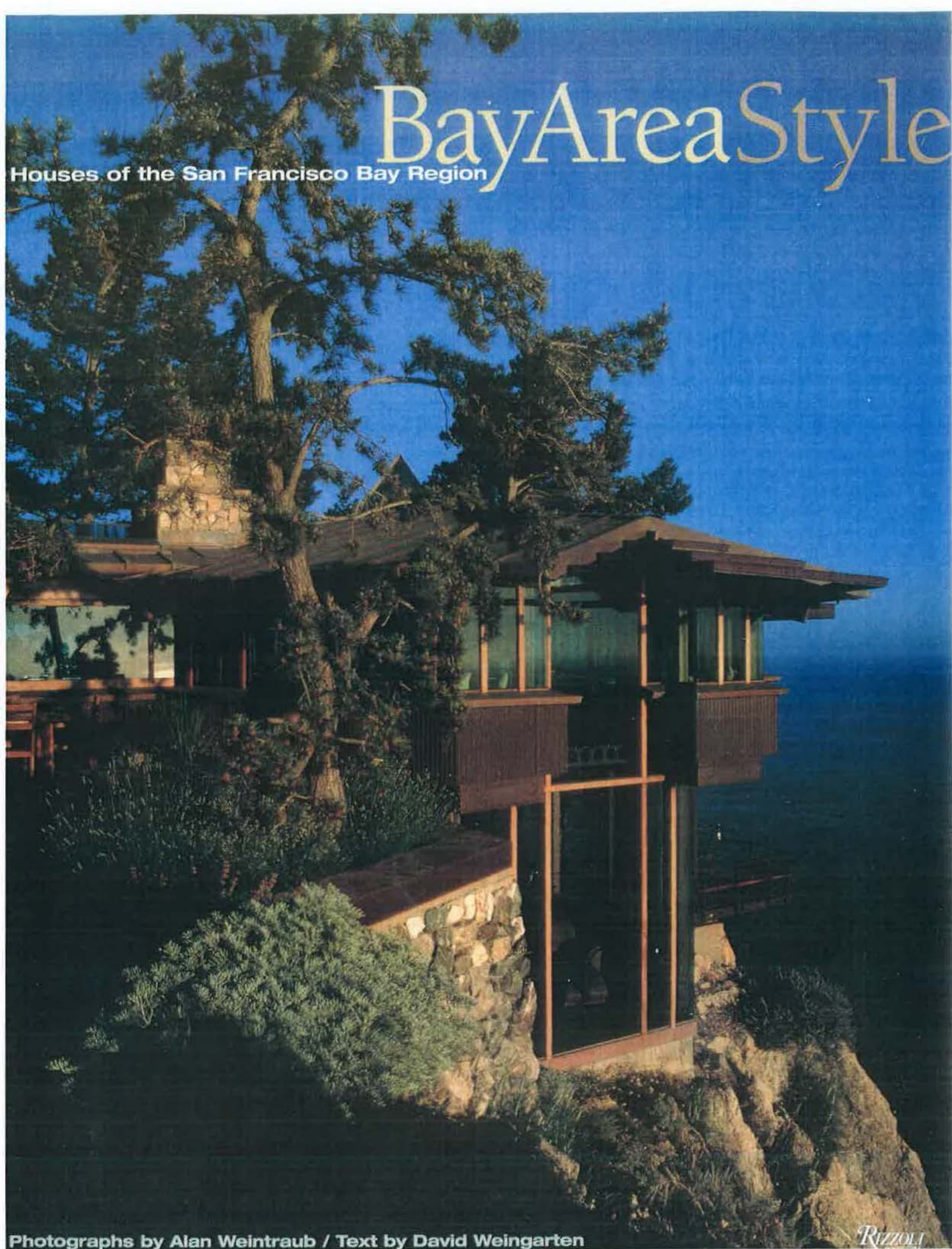


## **ATTACHMENT 2**



# BayAreaStyle

Houses of the San Francisco Bay Region



Photographs by Alan Weintraub / Text by David Weingarten

RIZZOLI

# BayAreaStyle

Houses of the San Francisco Bay Region

**Photographs by Alan Weintraub**

**Text by David Weingarten**

**RIZZOLI**  
NEW YORK



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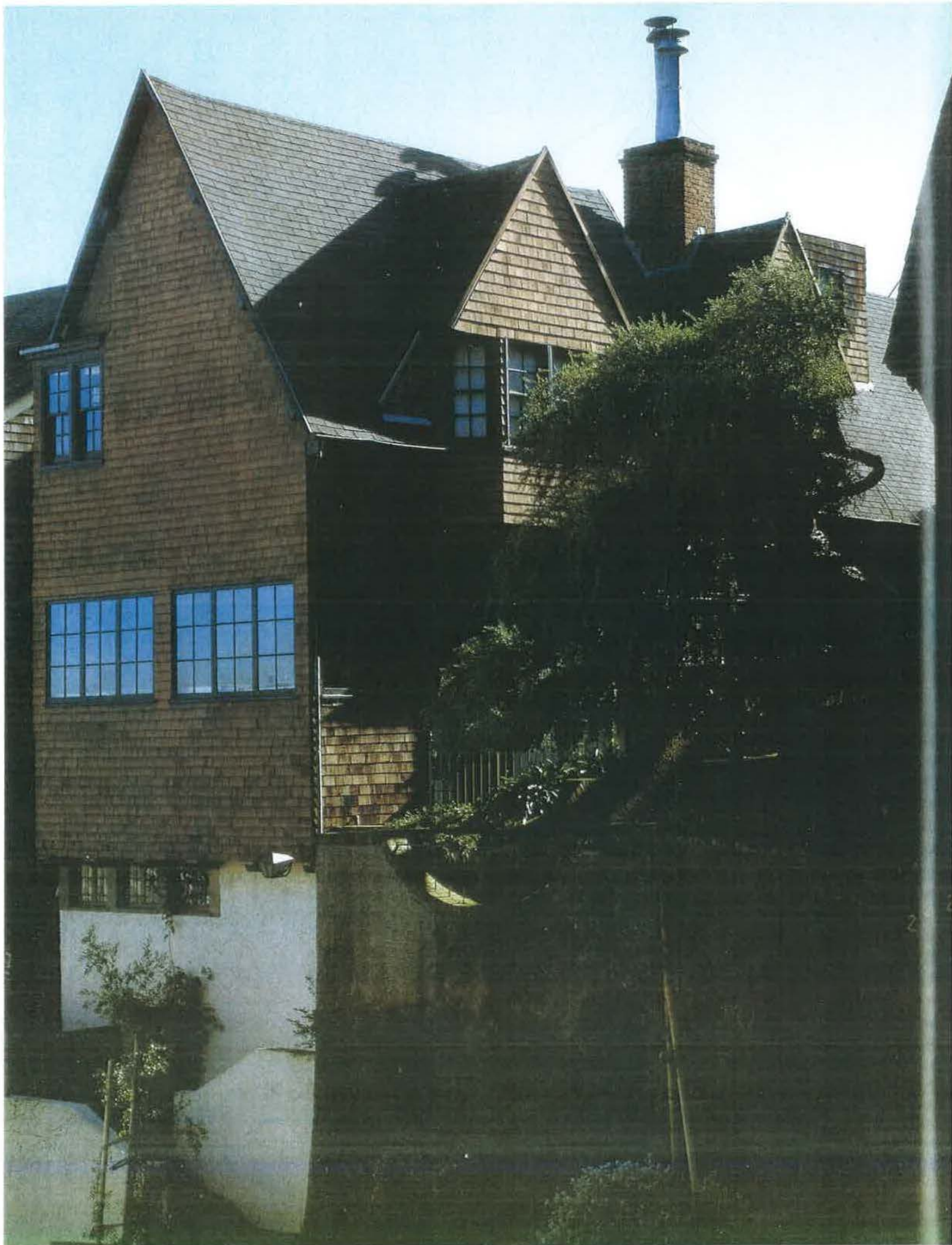
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## Ernest Coxhead **Coxhead House** San Francisco 1893

Though less rustic (and spooky) than his friend Willis Polk's place, Ernest Coxhead's nearly contemporaneous Pacific Heights dwelling is similarly eccentric. The end of this house overhangs a tall concrete wall and, like Polk's, is a large, shingled bay with a steeply sloping pitched roof. A corner window without precedent (or sequel for that matter) is this street facade's most diverting feature.

The entire effect is of English Arts and Crafts without the stifling decorum. We can imagine how well this suited Coxhead, an Englishman transplanted to California.

It is the path through the house, though, wide and narrow, careering along the edges of some rooms, and through the middle of others — a kind of dark ride of the early Bay Region style — that is the singular achievement here. The historian John Beach, in *Bay Area Houses*,



describes it this way, "It is as if the house had been trimmed away, leaving only the circulation space. Then a step here and a landing there are extruded horizontally, expanded from a small space to a larger. By this curious process the stair sequence ceases to be simply an element of a larger building, but is transformed into the building itself." ■

OPPOSITE Street facade with shingled bay overhanging rough stucco wall.

ABOVE LEFT Path to front door.

ABOVE RIGHT Garden facade.







#### OPPOSITE

Living room with large redwood fireplace surround, partially hidden high window to its right, and carefully finished redwood beam ceiling.



#### ABOVE LEFT

Large fireplace by the front door opens to wide hall.

#### ABOVE RIGHT

Long redwood gallery leading from foyer to rear garden.



ABOVE LEFT  
Dining room looking into  
conservatory-like gallery.



ABOVE MIDDLE  
Bedroom with exposed beams  
is open to the steep gable of the  
roof.



ABOVE RIGHT  
Hall opens to two-story redwood  
stairwell. Mysterious stair to third  
floor spills into hall.

OPPOSITE  
Dining room with large windows to  
the garden and built-in redwood  
cabinets.





## **ATTACHMENT 3**

# ON THE EDGE OF THE WORLD



Four Architects  
in San Francisco  
at the Turn  
of the Century

RICHARD  
LONGSTRETH



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Coxhead began to receive commissions for small houses in Pacific Heights at about the time of Polk's first work on Russian Hill. Coxhead's earliest designs, such as that for friend James McGauley (1891), adhere to the prevailing pattern in their use of suburban imagery. McGauley's house is, in effect, a transplanted English cottage. By 1893 an important shift occurred in Coxhead's approach, evident in the adjacent residence built for himself and Almeric (Fig. 73). Like the Williams-Polk house, it exploits a difficult site to achieve a dramatic effect. The design is also a more sophisticated interpretation of English precedents than was McGauley's. The narrow street frontage is accentuated by a towerlike facade that has a taut, abstract quality. The bands of little windows set flush against the surface were probably inspired by recent London work of Shaw and others. However, the composition is more simplified and softened than English models, in keeping with the building's size and materials. The west elevation, facing McGauley's yard, with its dominant horizontality and rural character, contrasts with the facade and underscores the transition from public to private space. Expanses of shingled wall and roof surfaces, interrupted only by the simplest window articulation, extend from a pivotal clustering of elements grouped around the front door. The composition may well

73. Coxhead & Coxhead. Ernest and Almeric Coxhead house, 1893 (*left*), and James McGauley house, 1891–1892 (*right*), San Francisco. (Courtesy John Beach)



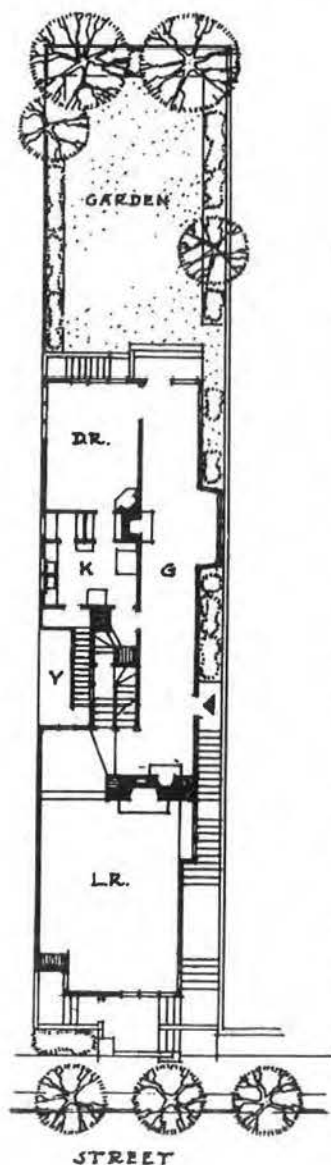


74. Coxhead house, rear view. (Courtesy John Beach)

have been inspired by Voysey's early projects, but Coxhead's version is more compact and mannered at its focal point and less regimented elsewhere.<sup>20</sup> Toward the rear, the house looks somewhat like a Surrey barn that has been remodeled in a straightforward way, lacking the studied poise of the street facade (Fig. 74). Front and rear are set in opposition, while the overriding simplicity of detail lends cohesiveness to the whole. Both the imagery and the studied casualness present in this design owe a major debt to English arts-and-crafts work, which became a guidepost for Coxhead's work during the next several years.<sup>21</sup> But neither Coxhead nor Polk considered the Arts and Crafts Movement to be a discrete entity; instead they appear to have viewed it as a potent source for expression in rustic design—an updated equivalent of the Shingle Style—that was appropriate to the design of modest houses.

Coxhead's plans remained more American. In his own residence there is an ever-changing path up to and through the premises, inspired by Polk's work but developed in a different way. The entrance is reached by a series of winding steps and landings that become progressively constricted, with the final run wedged between a retaining wall and the basement, as if it were an alley in an Italian hill town





75. Coxhead house, plan.  
(Drawn by Howard Moise)



76. Coxhead house, front steps. (Author)

(Figs. 75, 76). A transition occurs at the front door, spatially echoing the change in character between the front and rear portions of the house. Inside, the emphasis is wholly horizontal. The long gallery, the plan's one English component, is unlike its prototypes in that it generates a sense of continuity while dramatizing the site's narrow form through variations in space and light (Fig. 77). From the dark vestibule

the corridor that serves McGauley's windows or tion the spa in a circuit opposite the emphasis. and is made and beams corners, ar highest wi the far cor deck from of the Bay sequence a mitigating

77. Coxhead house, interior.



the corridor gradually becomes brighter, expanding into a glazed bay that serves as a secondary sitting area, with a borrowed vista of McGauley's yard. The gallery brightens further at the end, where windows on two sides open into a secluded garden. In the other direction the space unfolds more rapidly, lapping down a broad turn of steps in a circuitous path to the living room. Although the stair is directly opposite the entrance, it is encased so as not to interrupt the horizontal emphasis. The living room is unusually large for a house of this size and is made even more expansive by grandly scaled redwood paneling and beams (Fig. 78). The living room windows are placed only at the corners, and each one is at a different height. Like a periscope, the highest window bank catches a segment of the McGauley house. At the far corner, the platform and attendant bench offer an observation deck from which to view houses across the street and catch glimpses of the Bay beyond. Paralleling the Williams-Polk house interiors, the sequence and manipulation of each zone imply an extension of space, mitigating the property's narrow confines.

77. Coxhead house, gallery. (Author)





78. Coxhead house, living room. (Author)

An equally unconventional solution is present in the Charles Murdock house around the corner, which Coxhead had designed several months earlier. A native of Boston, Murdock moved to California in 1855 and became a widely respected elder of the intellectual community. Murdock ran a small printing business; he considered bookmaking an art and was patronized by some of the region's most gifted writers. Among his friends were Bret Harte, Robert Louis Stevenson, John Muir, and William Keith. While active in the Unitarian church, he had been married by Joseph Worcester and frequently attended his services. Murdock was also an ardent supporter of the younger generation, including Bruce Porter, Gelett Burgess, and Coxhead. Since Murdock, like many of his friends, could not afford to spend much for his house, it was designed with about as much floor area as Coxhead's residence, and at an even lower cost.<sup>22</sup>

The studied asymmetry of the facade recalls those of E. W. Godwin's well-known artists' houses in Chelsea from a decade earlier,



80. Houses in



## **ATTACHMENT 4**





Nancy Pelosi  
Democratic Leader

August 7, 2017

State of California  
Office of Historic Preservation  
Department of Parks and Recreation  
P.O. Box 942896  
Sacramento, CA 94296-0001

Attention: Julianne Polanco  
State Historic Preservation Officer

Subject: Nomination for Listing  
National Register of Historic Places

RE: Architect Ernest Coxhead's Residence & Studio, 1893  
2421 Green Street, San Francisco, California

Dear Ms. Polanco:

It is with great enthusiasm that I write in support of the nomination of Ernest Coxhead's own house for listing in the National Register of Historic Places. I have had the pleasure of visiting Architect Coxhead's residence and studio located at the juncture of Cow Hollow and Pacific Heights. This area in California's 12<sup>th</sup> Congressional District which I represent in Congress. I take special pride in San Francisco's architectural treasures and recognize the Coxhead house as a first of an architectural tradition in the Bay Area. It happens to be in excellent original condition, including brickwork, having survived amazingly intact, the 1906 San Francisco earthquake and fire.

Designed and built before automobiles and never retrofitted with a garage, both the house entry and garden are quietly accessed from the street via a twisting stairway to the west side. The classical entry conceals an ingenious interior with a long glazed entrance gallery running from a high-ceilinged living room at the north to a dining area on the southern rear garden that shares an eastern property line with the garden of the 1867 Casebolt House, San Francisco Landmark No. 51.

The house is shingle style integrated with subtle Cotswold features that Coxhead brought to Northern California. The beautiful non-symmetrical exterior design that is fitted to the land and view was the beginning of what became the First Bay Area Tradition that evolved into Second and Third Bay Area Traditions taught at the University of California, Berkeley, and practiced by the most heralded Bay Area architects. The importance of the house to the evolution of local architecture cannot be overemphasized.

I believe the nomination papers are well done and the Ernest Coxhead's Residence & Studio should be included in the National register of Historic Places.

Thank you for your attention to the remarkable and still beautifully functioning personal home of Ernest Coxhead.

best regards,

Nancy Pelosi

## **ATTACHMENT 5**



**Carol L. Karp**  
**Architect A.I.A.**

December 29, 2017

Philip Kaufman  
2421 Green Street  
San Francisco, CA 94123

Subject: Ernest Coxhead House  
2421 Green Street, San Francisco  
**Historic Status**

Dear Mr. Kaufman:

This correspondence memorializes our understanding for providing architectural research services for the residence Ernest Albert Coxhead designed and built for himself in 1892-1893 Green Street, San Francisco, which you have owned for about 30 years. Your consulting engineer, Lawrence Karp, had suggested to you in early 2017 that a colleague of ours, Kathryn Marsh Shaffer AIA Architect, prepare a nomination for inclusion of the Coxhead House in the National Park Service's Registry of Historic Places to be lodged with the California State Park's Office of Historic Preservation (OHP) in Sacramento. OHP relies on CEQA for protection of historic resources. Kathryn Shaffer was a distinguished architect, artist, and author, having both written and illustrated by hand the book "Houseboats of Sausalito - Aquatic Architecture of Sausalito" published by Schiffer in 2007. Kathryn had also been a student of Richard Longstreth, author of the book on American architecture "At the Edge of the World", a history of the four important architects that shaped California architecture at the turn of the century, published by MIT Press in 1983. On April 11<sup>th</sup> 2017 Longstreth gave the NPS written permission to use copyrighted material in the Coxhead nomination. Kathryn worked on the Coxhead House project and submitted drafts of the nomination to the OHP until she could no longer serve due to personal reasons. On August 28<sup>th</sup> 2017 Kathryn wrote an assignment of the nomination duties to my office.

I submitted a final draft of the nomination to OHP. On September 13<sup>th</sup> 2017, OHP advised us the Coxhead House was "clearly eligible" for inclusion in the National Registry of Historic Places. This eligibility gives the Coxhead House official historic status in the City & County of San Francisco pursuant to San Francisco Administrative Code §31.08(e)3. Sadly, Mrs. Shaffer passed away on October 2<sup>nd</sup> 2017.

My credentials include attending Vassar College as an undergraduate and in March 1970 I received the professional Bachelor of Architecture degree from the University of California, Berkeley. Subsequently, I studied at Harvard University's Graduate School of Design, Cambridge. I am licensed as an architect in California and Hawaii and I am a Member of the American Institute of Architects. I am a native of San Francisco and I have more than 40 years of local experience in design, construction, and historic preservation. As a public service, I have provided the nomination services to the California Park Services Office of Historic Preservation, and reports to the City & County of San Francisco's Planning Department and the Board of Supervisors, without compensation.

Yours truly,



Carol L. Karp

# EXHIBIT N



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

2656 29<sup>th</sup> Street, Suite 201  
Santa Monica, CA 90405

Matt Hagemann, P.G., C.Hg.  
(949) 887-9013  
[mhagemann@swape.com](mailto:mhagemann@swape.com)

September 9, 2019

Richard Drury  
Lozeau Drury LLP  
410 12th Street, Suite 250  
Oakland, CA 94607

**Subject: 2417 Green Street Project, San Francisco, California**

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Dear Mr. Drury:

I have reviewed the June 26, 2019 Preliminary Mitigated Negative Declaration for 2417 Green Street, Case No. 2017-002545ENV. After a brief discussion of soil sampling conducted at the Project site (p. 73), the MND finds “the project would not result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.”

I previously commented that the soil sampling was not adequate to provide the basis for the San Francisco Department of Public Health to have concluded “there is no possibility of a significant effect on the environment related to exposure to hazardous materials.”<sup>1</sup> Since I made that comment, no additional sampling has been conducted.

I maintain that a program of sampling should be undertaken across the property consisting of at least eight locations and at two depth intervals. Only a property-wide investigation would allow for the conclusion, as made in the MND, that there was no possibility of a significant effect from exposure to hazardous materials.

An environmental impact report should be prepared to include results of a property-wide sampling program to allow for disclosure of any contamination that may be present, and to identify any mitigation that would be necessary for the protection of the public, including construction workers and adjacent residents.

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<sup>1</sup> See letter to Mr. Richard Drury, September 27, 2018, p. 2

Sincerely,

A handwritten signature in blue ink, appearing to read "Matt Hagemann", with a stylized, flowing script.

Matt Hagemann, P.G., C.Hg.



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[mhagemann@swape.com](mailto:mhagemann@swape.com)

November 27, 2018

Richard Drury  
Lozeau Drury LLP  
410 12th Street, Suite 250  
Oakland, CA 94607

**Subject: 2417 Green Street Project**

---

Dear Mr. Drury:

I have reviewed the February 27, 2018 report<sup>1</sup> that documents soil sampling results obtained from the 2417 Green Street property in San Francisco. The two samples, collected from a single surficial depth interval two locations, were analyzed for parameters that are required under San Francisco Health Code article 22A (Maher Ordinance). The report summarized the results and concluded that hazardous materials were not present at the 2417 Green St. property. The San Francisco Department of Public Health (DPH) determined in a June 22, 2018 letter<sup>2</sup>:

Based on review of the documents, DPH found the project in compliance with San Francisco Health Code article 22A, and requires no further investigation. Thus, there is no possibility of a significant effect on the environment related to exposure to hazardous materials. (p. 11.)

I have reviewed the soil sampling requirements of Health Code article 22A and have concluded that the sampling was not adequate to provide the basis for DPH to conclude that "there is no possibility of a significant effect on the environment related to exposure to hazardous materials." The soil sampling that was conducted was limited to two co-located samples. Instead, a program of sampling should have been undertaken across the property consisting of at least eight locations and at two depth intervals (0-0.5 ft. and 3.0-3.5 ft). This is especially important because a source of potential contamination that led

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<sup>1</sup> Site Characterization, 2417 Green St., San Francisco, California, Innovative and Creative Environmental Solutions, February 27, 2018

<sup>2</sup> Certificate of Determination Exemption from Environmental Review, San Francisco Planning Department, June 22, 2018

to the Maher listing is not known. Only a property-wide investigation would allow for the conclusion that there was no possibility of contamination, as made by DPH.

An amended workplan should be submitted by the applicant to DPH that would set forth a comprehensive soil and groundwater (if present) sampling program to determine if the property has been impacted by contamination. A thorough evaluation, made available to the public for review in report format, is necessary to allow for disclosure of any contamination that may be present, and to identify any mitigation that would be necessary for the protection of the public, including construction workers and adjacent residents.

Sincerely,

A handwritten signature in blue ink, appearing to read "M Hagemann", with a long horizontal flourish extending to the right.

Matt Hagemann, P.G., C.Hg.





Technical Consultation, Data Analysis and  
Litigation Support for the Environment

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September 27, 2018

Richard Drury  
Lozeau Drury LLP  
410 12th Street, Suite 250  
Oakland, CA 94607

**Subject: 2417 Green Street Project**

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Dear Mr. Drury:

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I have reviewed the soil sampling requirements of Health Code article 22A and have concluded that the sampling was not adequate to provide the basis for DPH to conclude that “there is no possibility of a significant effect on the environment related to exposure to hazardous materials.” The soil sampling that was conducted was limited to two co-located samples. Instead, a program of sampling should have been undertaken across the property consisting of at least eight locations and at two depth intervals (0-0.5 ft. and 3.0-3.5 ft). This is especially important because a source of potential contamination that led

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Matt Hagemann, P.G., C.Hg.



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Matt Hagemann, P.G., C.Hg.  
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[mhagemann@swape.com](mailto:mhagemann@swape.com)

December 27, 2017

Richard Drury  
Lozeau Drury LLP  
410 12th Street, Suite 250  
Oakland, CA 94607

**Subject:           Comments on the 2417 Green Street Project**

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Dear Mr. Drury:

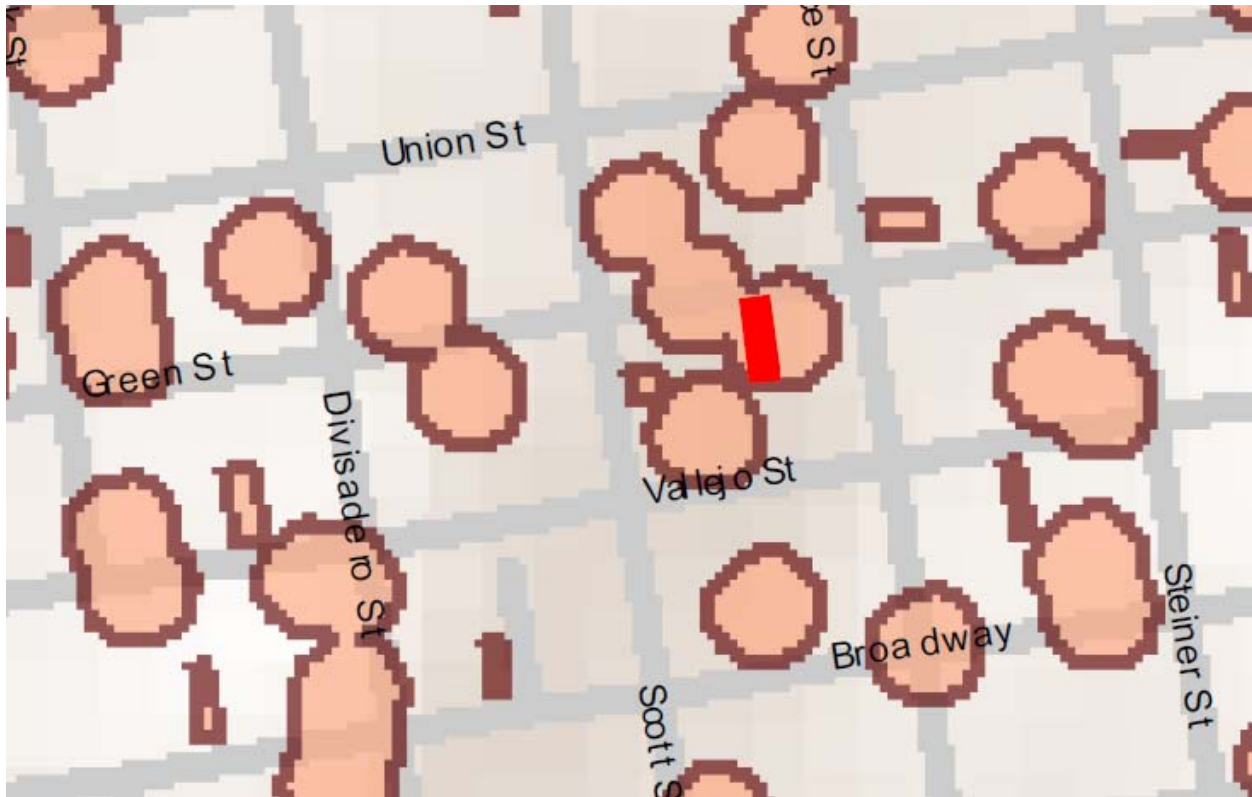
I have reviewed the City of San Francisco's documentation for the May 16, 2017 Categorical Exemption for proposed excavation and construction work at a residence at 2417 Green Street in San Francisco. The City's determination that the project is exempt from CEQA review is erroneous because the subject property occurs on the 2015 Maher Map,<sup>1</sup> which identifies areas within 100 feet of current or historical underground storage tanks. Properties with potential subsurface chemical contamination that require grading of 50 cubic yards of material are regulated under the San Francisco Maher Ordinance (Article 22A of the San Francisco Health Code and Article 106A.3.4.2 of the San Francisco Building Code)<sup>2</sup>.

The applicability of the Maher Ordinance to the project at 2417 Green Street is clear. As shown in the map below, excerpted from Maher Map, the project is atop a mapped site.

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<sup>1</sup> [http://www.sf-planning.org/ftp/files/publications\\_reports/library\\_of\\_cartography/Maher%20Map.pdf](http://www.sf-planning.org/ftp/files/publications_reports/library_of_cartography/Maher%20Map.pdf)

<sup>2</sup> [http://library.amlegal.com/nxt/gateway.dll/California/health/article22aanalyzingsoilsforhazardouswast?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco\\_ca](http://library.amlegal.com/nxt/gateway.dll/California/health/article22aanalyzingsoilsforhazardouswast?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca)



Because the project area occurs on the Maher map, requirements under the ordinance include:

- Preparation of a Maher Ordinance application
- Submittal of a Subsurface Investigation Work Plan prepared by your Environmental Consultant
- Receipt of Work Plan approval and performance of the work described in the Work Plan
- Submittal of a Subsurface Investigation Report prepared by a qualified Environmental Consultant
- Preparation and submittal of a Site Mitigation Plan including description and design for any required mitigating measures (approval is required before earthwork).

No documentation was provided for the Categorical Exemption to show that the City has conducted the required Maher Ordinance work.

The application materials indicate that the proposed project on the subject property would require 408 cubic yard of soil excavation and removal (Environmental Evaluation, p. 7). Given the listing of the property on the Maher Map, this excavation may disturb potentially contaminated soil, which may expose nearby residents and/or construction workers to hazardous chemicals. Given this, there is a fair argument that the proposed project at 2417 Green Street may have adverse environmental impacts that must be analyzed under the Maher Ordinance and CEQA.

A full CEQA analysis should be invoked to allow for the Maher process to be completed, to allow for public disclosure of any contamination that may be present, and to identify any mitigation that would be necessary for the protection of the public, including construction workers and adjacent residents.

Sincerely,

A handwritten signature in blue ink, appearing to read "M Hagemann", with a long horizontal flourish extending to the right.

Matt Hagemann, P.G., C.Hg.



Technical Consultation, Data Analysis and  
Litigation Support for the Environment

2503 Eastbluff Dr., Suite 206  
Newport Beach, California 92660  
Tel: (949) 887-9013  
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Email: [mhagemann@swape.com](mailto:mhagemann@swape.com)

**Matthew F. Hagemann, P.G., C.Hg., QSD, QSP**

**Geologic and Hydrogeologic Characterization  
Industrial Stormwater Compliance  
Investigation and Remediation Strategies  
Litigation Support and Testifying Expert  
CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certification:**

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – present;
- Senior Environmental Analyst, Komex H2O Science, Inc (2000 -- 2003);



- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of numerous environmental impact reports under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions and geologic hazards.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.
- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

### **Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

### **Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

### **Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

### **Geology:**

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

### **Teaching:**

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt currently teaches Physical Geology (lecture and lab) to students at Golden West College in Huntington Beach, California.

### **Invited Testimony, Reports, Papers and Presentations:**

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

**Hagemann, M.F.**, 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

**Hagemann, M.F.**, 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

**Hagemann, M.F.**, 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

**Hagemann, M.F.**, 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

**Hagemann, M.F.**, 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

**Hagemann, M.F.**, 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

**Hagemann, M.F.**, 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

**Hagemann, M.F.**, 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

**Hagemann, M.F.**, 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

**Hagemann, M.F.**, 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

**Hagemann, M.F.**, 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

**Hagemann, M.F.**, 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

**Hagemann, M.F.**, 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

**Hagemann, M.F.**, 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

**Hagemann, M.F.**, and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

**Hagemann, M.F.**, 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

**Hagemann, M.F.**, 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

**Hagemann, M.F.**, and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

**Hagemann, M.F.**, Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

**Hagemann, M. F.**, Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

**Hagemann, M.F.**, 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

**Hagemann, M.F.** and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

**Hagemann, M.F.**, 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.



**Hagemann, M.F.**, 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.



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November 20, 2017

Richard Drury  
Lozeau Drury LLP  
410 12th Street, Suite 250  
Oakland, CA 94607

**Subject:           Comments on the 2417 Green Street Project**

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Dear Mr. Drury:

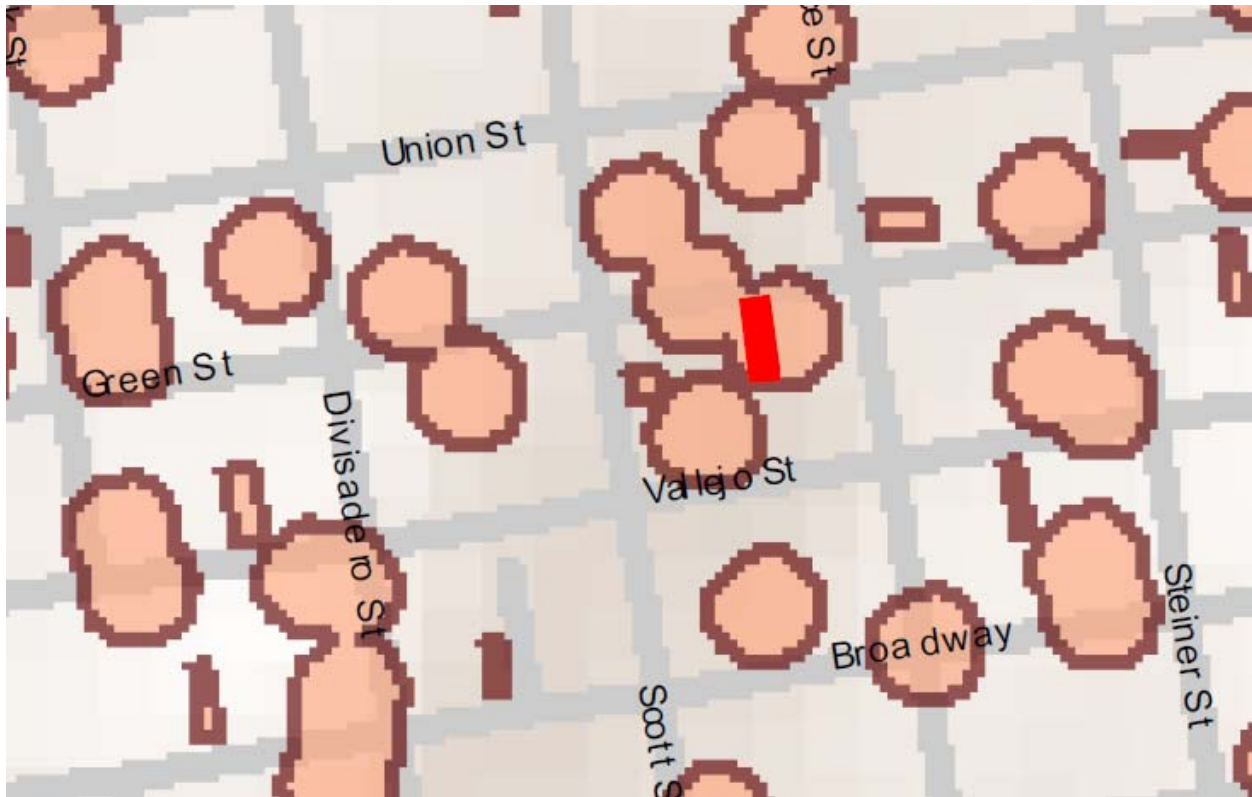
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<sup>1</sup> [http://www.sf-planning.org/ftp/files/publications\\_reports/library\\_of\\_cartography/Maher%20Map.pdf](http://www.sf-planning.org/ftp/files/publications_reports/library_of_cartography/Maher%20Map.pdf)

<sup>2</sup> [http://library.amlegal.com/nxt/gateway.dll/California/health/article22aanalyzingsoilsforhazardouswast?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco\\_ca](http://library.amlegal.com/nxt/gateway.dll/California/health/article22aanalyzingsoilsforhazardouswast?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca)



Because the project area occurs on the Maher map, requirements under the ordinance include:

- Preparation of a Maher Ordinance application
- Submittal of a Subsurface Investigation Work Plan prepared by your Environmental Consultant
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- Preparation and submittal of a Site Mitigation Plan including description and design for any required mitigating measures (approval is required before earthwork).

No documentation was provided for the Categorical Exemption to show that the City has conducted the required Maher Ordinance work.

The application materials indicate that the proposed project on the subject property would require 408 cubic yard of soil excavation and removal (Environmental Evaluation, p. 7). Given the listing of the property on the Maher Map, this excavation may disturb potentially contaminated soil, which may expose nearby residents and/or construction workers to hazardous chemicals. Given this, there is a fair argument that the proposed project at 2417 Green Street may have adverse environmental impacts that must be analyzed under the Maher Ordinance and CEQA.

A full CEQA analysis should be invoked to allow for the Maher process to be completed, to allow for public disclosure of any contamination that may be present, and to identify any mitigation that would be necessary for the protection of the public, including construction workers and adjacent residents.

Sincerely,

A handwritten signature in blue ink, appearing to read "M Hagemann", with a long horizontal flourish extending to the right.

Matt Hagemann, P.G., C.Hg.

# EXHIBIT O

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# Exclusive: How SF sidestepped state law on developing toxic sites

**Cynthia Dizikes**

June 7, 2020 | Updated: June 7, 2020 1:03 p.m.

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Ben Ellis and daughter Emmy, 8, throw a football outside their house in San Francisco last year. They live across the street from a former auto repair garage that is on a state list of hazardous waste sites. Despite that status, the city planning department considered exempting a development on the site from the state's environmental review ...

Photo: Gabrielle Lurie / The Chronicle

Contaminated gas stations, [vehicle repair](#) shops and parking garages have become prized development commodities in San Francisco in recent years as the city struggles with a crushing housing shortage.



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bypass environmental reviews required under state law, a Chronicle investigation has found.

The California Environmental Quality Act prohibits certain exemptions for the tens of thousands of properties on a statewide roster of hazardous-waste sites called the Cortese list. “Categorical” exemptions are only supposed to go to projects with no significant impact on the environment or human health. The prohibition was designed to protect the public, construction workers and future occupants from exposure to dangerous substances, environmental lawyers said.

The state law mandates transparency and requires local governments to notify the public about potential hazards at a site before development begins. It allows the public to demand health protections and additional levels of cleanup, and requires formal consideration of those comments. To enforce compliance, people can sue agencies they think are failing to adhere to the law.

But in the past five years, the [San Francisco](#) Planning Department granted or considered categorical exemptions for at least a dozen projects on Cortese list sites, a Chronicle

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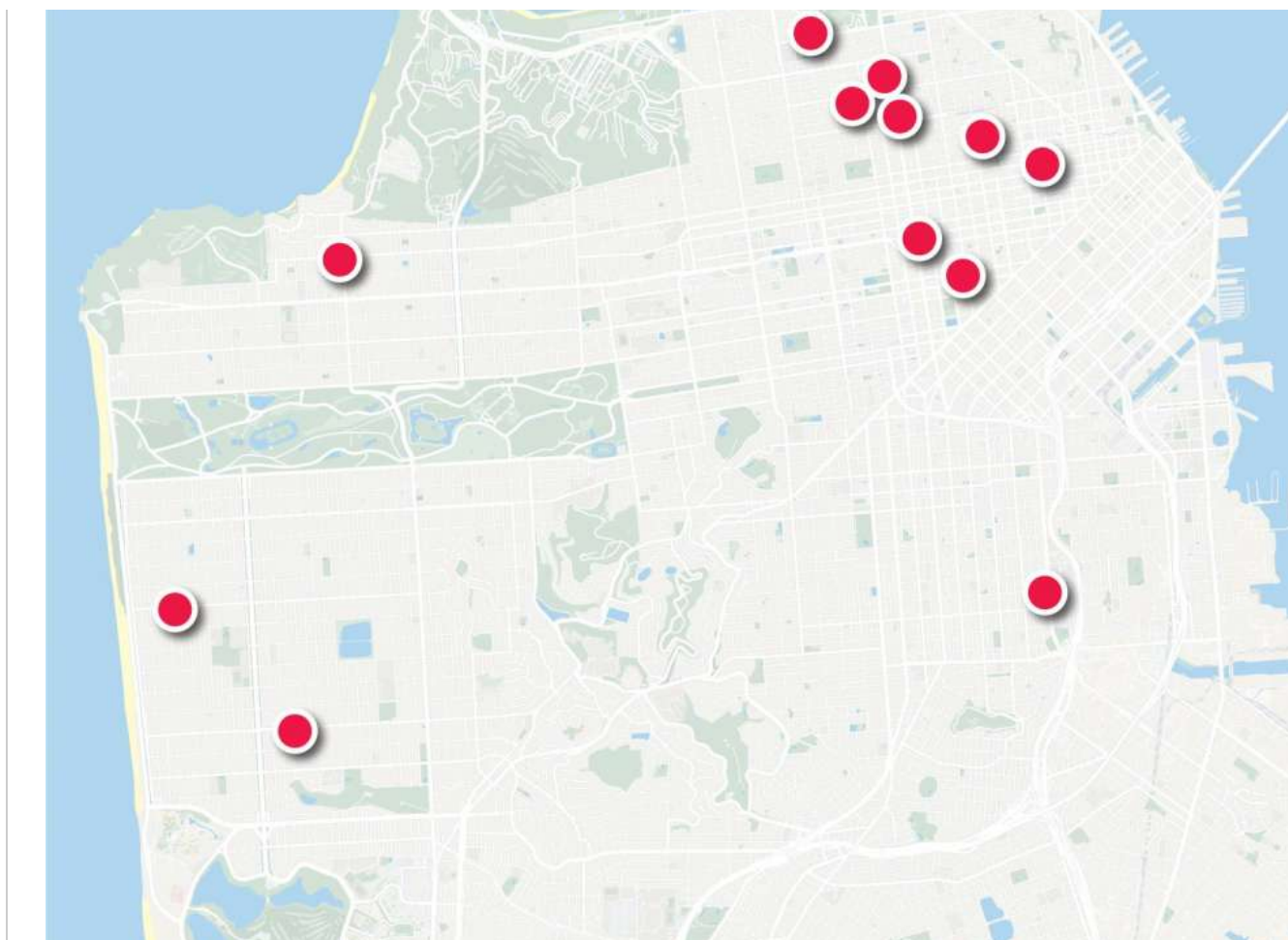
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The mixed-use residential development at 2255 Taraval St. in San Francisco. The city granted the development an exemption from the state's environmental review process, despite the site's presence on a state list of hazardous waste sites.

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The city exempted nine of those projects from the state's public environmental review process. At four of the sites, work hasn't begun. Two are under construction. The final three have newly built condominiums, and at least one of those is occupied.

The city considered exempting the three other projects — including a condo development on the site of a vacant auto repair garage at 1776 Green St. in Cow Hollow, despite the presence of high levels of cancer-causing benzene in the soil and groundwater. The city abandoned that plan in February after neighbors hired a lawyer to fight it.

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Then, following inquiries about the exemptions from The Chronicle in early March, before the coronavirus shut down the economy, the Planning Department said it will stop giving categorical exemptions to projects on the Cortese list.

“The Planning Department is revising its approach to projects on these sites,” spokeswoman Gina Simi said.

Simi said the city relied on state guidance in granting some of the exemptions. Despite repeated requests from The Chronicle to see the guidance, however, Simi has not provided it.

An attorney with the State Water Resources Control Board, which oversees the largest part of the Cortese list with regional water boards, said he was unaware of any such guidance issued by the agency.

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properties to state and regional standards under a local ordinance carried out by the Public Health Department, regardless of whether a project receives an exemption from the state's environmental review process, she said.

"We strongly disagree with the false assertion that the city's local process is not as rigorous or as transparent as what is required under (state law), that it doesn't consider public comment or concerns, and that we intend to circumvent the state's environmental law," Simi said. "The city's environmental review procedures are meticulous."

But several environmental lawyers told The Chronicle that the California Environmental Quality Act allows far more scrutiny of development on toxic sites than the city's process alone. Under state law, the public can require safer measures be taken to reduce significant impacts on the environment and health, and can more easily sue if they are not. They said the city flouted state law and, in doing so, deprived the public of the ability to vet developments.

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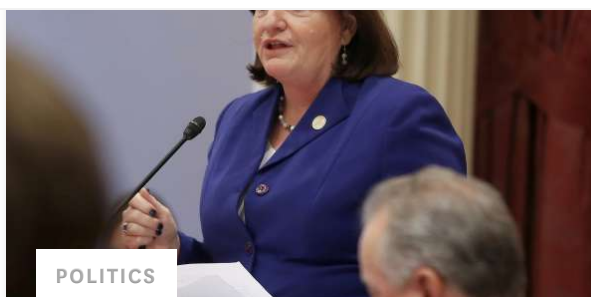
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"The city made a huge mistake and has been blatantly violating state law for years, thereby potentially placing an untold number of city residents at risk of exposure to highly toxic chemicals," said Richard Drury, an environmental lawyer representing neighbors of the vacant auto repair garage on Green Street.

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by the city's lengthy approval process and bans on apartments in large swaths of San Francisco, have turned to polluted land, including former garages and gas stations where toxic substances in underground tanks have leaked into the soil and groundwater.

The city and developers are motivated, as with any project, to get these properties developed as soon as possible — and exemptions from the state law can speed the process by reducing procedural hurdles, legal hangups and costs.

San Francisco has more than 2,000 leaky underground storage tank sites on the Cortese list, named for former state Assemblyman Dominic Cortese of San Jose. Nearly all of them, about 97%, have been cleaned to some extent, records show. Yet many may still contain contamination that could be hazardous.

The Chronicle looked at projects on Cortese list sites for which the city granted or considered categorical exemptions. There were at least 20 such projects since 2015, according to city data. The Chronicle focused on 12 where developers planned to excavate thousands of cubic yards of soil to build hundreds of new residential units.

Public documents for five of the 12 sites show the city also tried a second method to avoid state review and fast-track development: “common sense” exemptions.

State law restricts such exemptions to projects that present “no possibility” of significant hazards.



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A sign at 986 South Van Ness Ave. in San Francisco where the city considered exempting a proposed development from the state's environmental review process. The site is on a state list of hazardous waste sites that prohibits such exemptions.

That wouldn't apply to the five sites, however. Developing them would mean disturbing a great deal of potentially contaminated soil: from 1,400 to nearly 17,000 cubic yards, depending on the site, said Douglas Carstens, an environmental lawyer near [Los Angeles](#).

"Transparency is sorely needed," Carstens said. "So the cleanup is not just a bilateral negotiation between the project proponent and the city."

One of those sites is 2255 Taraval St. in the Outer Sunset neighborhood, where a former auto garage and laundromat left toxic residue behind.

The site is so clean "we could bring it down to the beach," said the project's [general contractor](#) one recent afternoon as a crew built a wooden frame on the property. The development will be a four-story, mixed-use building with 10 residential units.



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fumes at bay on the property. He asked that his name not be used because he wasn't authorized to speak publicly about the project.

He said the property now has a "serious vapor barrier and a probe buried under 2 feet of concrete." The equipment, though, will have to be tested every few years to ensure it continues to contain the hazards, he said.

"If there's gas, then they might have to put in a fan," he said.

That kind of uncertainty is precisely why contaminated sites should go through the state-mandated environmental review process, Drury said.

The state process allows the public to demand greater levels of cleanup so that measures such as vapor barriers — which are effective, but can fail — are not necessary.

Drury said the Green Street garage site is a case in point for why public involvement matters.

For years, the auto repair business stored gasoline in four large underground storage tanks. The tanks were removed in 2016, but crews later found they had leaked benzene and other hazardous substances into the soil and groundwater.

Nevertheless, last October the Planning Department considered a categorical exemption for a five-unit condo that developers planned to build on the site.

Drury protested. But rather than drop its effort to exempt the project, the city added a common-sense exemption to its options. Drury argued that the site remained significantly contaminated, pointing to the city's own records showing that benzene in the groundwater exceeded safety thresholds by about 900 times.

The city then tried a third tactic: announcing that the developer could investigate and clean the site without going through the public environmental review process.

Alarmed neighbors appealed to the Board of Supervisors.

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process.

This prompted Drury to fire off another written objection in April. He and the Green Street neighbors are still waiting for a response.

One of the neighbors who hired Drury last fall is Dr. Youjeong Kim, who lives across the street from the garage with her two children and husband, Ben Ellis.

The group of neighbors has spent many months and thousands of dollars trying to get the city to run the development through the state's environmental review.

“As a doctor and a parent it is really concerning and upsetting to me that of all places on Earth, we in San Francisco are going to skirt the law that is there to protect us,” Kim said. “If we hadn’t had the time and the resources to press this issue, they would have just exempted it.”

*San Francisco Chronicle staff writer Nanette Asimov and newsroom developer Evan Wagstaff contributed to this report.*

*Cynthia Dizikes is a San Francisco Chronicle staff writer. Email: [cdizikes@sfchronicle.com](mailto:cdizikes@sfchronicle.com)  
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# EXHIBIT P

# ZACKS & FREEDMAN

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October 30, 2015

## VIA HAND DELIVERY

President London Breed  
c/o Angela Calvillo, Clerk of the Board  
San Francisco Board of Supervisors  
1 Dr. Carlton B. Goodlett Place  
City Hall, Room 244  
San Francisco, CA 94102

Re: Appeal of CEQA Categorical Exemption Determination  
Planning Case No. 2006.0508V  
Building Permit Application No. 2015.07.16.1729  
1026 Clayton Street

Dear President Breed and Honorable Members of the Board of Supervisors:

This office represents appellant Chris Durkin, the adjacent neighbor to the north of the proposed project at 1026 Clayton Street (PBA No. 2015.07.16.1729, the "Project"). The Project is an attempt to surreptitiously legitimize an illegal, unpermitted roof-deck and stairs located in the mandatory rear-yard setback area.

The Appellant opposes the above-captioned Project, *inter alia*, on the grounds that the Project's categorical exemption determination ("CatEx") violates the California Environmental Quality Act ("CEQA"). Pursuant to San Francisco Administrative Code Section 31.16, Appellant hereby appeals the October 2, 2015 CatEx. A true and correct copy of the CatEx is attached hereto as **Exhibit A**. A true and correct copy of the proposed Project permit is attached hereto as **Exhibit B**. A copy of this letter of appeal will be concurrently submitted to the Environmental Review Officer.

The Project site is a Potential Historical Resource, built ca. 1910. The Project received a CatEx (under an unspecified Guidelines section) for a "Deck . . . **not visible from any immediately adjacent public right-of-way.**" (CatEx, Step 4, Question 5: Proposed Work Checklist, emphasis added.) However, the proposed structure **is highly visible** from the adjacent right of way. (See **Exhibit C**.)

Additionally, the Project violates Planning Code Section 134 and cannot be approved. Because the deck and stairs were illegally constructed in the mandatory rear-yard open space, they cannot be approved without a zoning variance. A variance was issued nine years ago for this purpose, but it became "deemed void and cancelled" because "a Building Permit [had] not been issued within

~~Ryan~~ 5 zulpc.com

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President London Breed  
October 30, 2015  
Page 2

three years from the effective date of [the variance] decision.” (Variance Decision, Case No. 2006.0508V, attached as **Exhibit D**.)

The CatEx describes the Project as follows: “To clarify DBI records for work related to garage roof deck and stairs completed under permit number 2007.06.26.51111, and signed off by DBI inspector on 8/1/2007.” However, permit number 2007.06.26.51111 did not authorize a “roof deck and stairs.” (See **Exhibit E**.) Rather, it was a permit for re-roofing. It did not reference a deck or a variance, and it was never reviewed by the Planning Department. A related permit, number 2007.05.04.0498, likewise was for re-roofing only, did not reference a deck or a variance, and was never reviewed by the Planning Department. (See **Exhibit F**.) In fact, neither permit application checked Box 19, “DOES THIS ALTERATION CREATE DECK . . . ?”

The construction of a roof-deck and related stairs has never been authorized or completed under a prior permit. Therefore, the CatEx’s description of the Project is fatally erroneous.

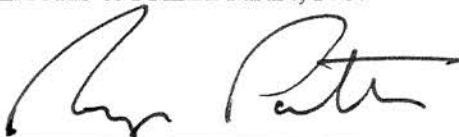
Moreover, the Project will have likely significant adverse environmental impacts, including enlarging a nonconforming structure – intensifying massing in an area which is statutorily required to remain open space – casting shadow on adjacent properties, and altering the visible portion of a Potential Historical Resource. (See Declaration of Patrick Buscovich, S.E.)

Appellant reserves the right to submit additional written and oral comments, bases, and evidence in support of this appeal to the City up to and including the final hearing on this appeal and any and all subsequent permitting proceedings or approvals for the Project. Appellant requests that this letter and exhibits be placed in and incorporated into the administrative record for Case No. 2006.0508V.

Appellant respectfully requests that the Board of Supervisors revoke the CatEx determination and require further environmental review pursuant to CEQA. If the CatEx determination is upheld, Appellant is prepared to file suit to enforce Appellant’s and the public’s rights.

Very truly yours,

ZACKS & FREEDMAN, P.C.

A handwritten signature in black ink, appearing to read 'Ryan J. Patterson', written over a horizontal line.

Ryan J. Patterson  
Attorney for Chris Durkin



President London Breed  
October 30, 2015  
Page 3

cc: Sarah Jones, Environmental Review Officer  
San Francisco Planning Department  
1650 Mission Street, Suite 400  
San Francisco, CA 94103  
[Sarah.B.Jones@sfgov.org](mailto:Sarah.B.Jones@sfgov.org)

Encl.

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