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BY HAND DELIVERY

February 5, 2020

Angela Calvillo, Clerk of the Board of Supervisors San Francisco City Hall, Room 244 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102 (Original, 2 hard copies and \$640 appeal fee)

Lisa Gibson, Environmental Review Officer San Francisco Planning Department 1650 Mission Street, Suite 400 San Francisco, CA 94103-2479 Lisa.gibson@sfgov.org (By email only)

FEB-5 P 4:04 WARD OF SUPBOUS read by lu

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 Ms. Calvillo:

Philip Kaufman ("Appellant") hereby appeals<sup>2</sup> the San Francisco Planning Department's January 9, 2020 issuance of a Final Mitigated Negative Declaration (FMND) (Exhibit B) pursuant to the California Environmental Quality Act ("CEQA") for a proposed project at 2417 Green Street ("Project"), despite two unanimous findings of the Board of Supervisors that the Project "**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>3</sup> The Planning Commission approved the Preliminary Mitigated Negative Declaration (PMND) (Exhibit C) for the Project in violation of CEQA, and in violation of the City's current

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

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

<sup>&</sup>lt;sup>3</sup> San Francisco Administrative Code section 31.16

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Slope & Seismic Hazard Zone Protection Act ("SSPA")<sup>4</sup> as well as previous versions of the Slope Protection Act ("SPA"). Mr. Kaufman timely filed an appeal of the preliminary negative declaration with the Planning Commission during the public comment period.

This appeal seeks to save an historic home on a steep hill in San Francisco from a dangerous excavation that jeopardizes the safety of the historic Coxhead House and its brick foundations. The historic Coxhead House will likely be irreparably harmed by the adjacent, speculative development at 2417 Green Street.

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 downslope Developer 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. The permits for the proposed Project, which have been suspended by DBI and now have expired, must be revoked pending proper CEQA review, which will undoubtedly require safety revision to the plans per the San Francisco's Building Code including the SSPA, which will require new permits.

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 on a steep slope immediately adjacent to, uphill and above the proposed Project. The Developer has prepared drawings for construction excavations up to the zero setback property line showing a 13 foot deep excavation into the land of 2417 Green up to the Coxhead House's 128 year old fragile, tall, unreinforced brick foundation. The plans approved by the Planning Department for permit 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 Building Code, Section 3307.

The City's own Final Mitigated Negative Declaration ("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). The FMND further 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). In other words, the City's own analysis

<sup>&</sup>lt;sup>4</sup> San Francisco Ord. 121-18.

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concludes that the Project may result in structural damage to the Coxhead House, and even possible "death." Yet, the FMND's "mitigation measure" is that "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 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 of the Coxhead House, and that no adequate protection measures have been proposed to address this existential threat regardless of strict predevelopment standards (Exhibit D).

We urge the Board of Supervisors to reject the FMND and direct staff to prepare an environmental impact report ("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 <u>before</u> 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." (*Concerned Citizens of Costa Mesa v. 32nd Dist. Agr. Assn.*, 42 Cal. 3d 929, 935 (1986).)

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 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).

Planning Staff ignored the Commission's clear directives. In a document dated January 9, 2020 (although it was not released until January 14, 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 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 Exhibit B to 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.

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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. 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). Mr. Kaufman wants to ensure that his home and family do not meet with the same fate.

#### A. PROJECT DESCRIPTION

The developer, Christopher Durkin, proposes a large project at 2417 Green Street. Mr. Kaufman's home, at 2421 Green Street, like 2417, is on the property line immediately adjacent to the proposed Project. Mr. Kaufman's home is the historically significant "Coxhead House," constructed in 1893 by noted architect Ernest Coxhead as his own home. Ernest Coxhead was the father of the First Bay Tradition of architecture and the home is one of the most architecturally historically significant residences in the City.

The proposed Project would construct one- and three-story horizontal rear additions; and construct third and fourth floor vertical additions above the existing single-family dwelling. The floor area would increase from approximately 4,118 square feet to approximately 5,115 square feet and would include a one-bedroom Accessory Dwelling Unit measuring approximately 1,023 square feet on the first floor. The Project also proposes the partial excavation of the rear yard for a sunken terrace, façade alternations, and interior modifications, including the underground expansion toward 2421 Green of the existing basement level garage that will physically accommodate three additional vehicles.<sup>5</sup> Finally, the property is on a steep slope, and would require "excavation of approximately 408 cubic yards of soil and rock to a depth of 13 feet below grade."<sup>6</sup>

#### B. HISTORY

The planning staff has twice attempted to exempt the proposed Project entirely from CEQA review. The Board of Supervisors has twice 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>7</sup>

<sup>&</sup>lt;sup>5</sup> Although the Project application states that the garage is intended to accommodate two cars, the actual expansion creates space for up to four cars.

<sup>&</sup>lt;sup>6</sup> Second exemption under CEQA at p. 1-2.

<sup>&</sup>lt;sup>7</sup> Motion M18-012, pp. 3-4 (amended February 6, 2018) (Exhibit A).

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

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>8</sup> This, of course, was the exact finding made by the Board of Supervisors. Despite the Board of Supervisors ruling, the Planning Staff 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>9</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

<sup>&</sup>lt;sup>8</sup> Communities for a Better Environment v. South Coast Air Quality Management Dist. (ConocoPhillips) (2010) 48 Cal. 4th 310, 319-320.

<sup>&</sup>lt;sup>9</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 Audobon 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 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.

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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." Commissioner Diamond stated that even a proposed accessory dwelling unit and additional parking do not justify excavation that poses a risk to the adjacent homes. 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."

Despite the Commission's unanimous vote to eliminate excavation to reduce 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 geotechnical engineer of excavation, shoring and underpinning plans.

Finally, the Commission expressed concern of Mr. Durkin's long history of notices of violation. During the pendency of these proceedings, Mr. Durkin, has racked up at least five separate Notices of Violation ("NOVs") for "work without a permit," removing two chimneys without a permit, leaving gaping holes in the roof and other unauthorized construction activity. The roof was left open during an entire rainy season, dilapidating the house. Ultimately, 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.

#### C. 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: 4H:1V Slope 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.

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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).

Projects subject to the SSPA must submit reports by both a licensed geotechnical engineer and a licensed geologist identifying areas of potential slope 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 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 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, the Project proposed at 2417 Green Street is clearly subject to the SSPA (Exhibit D). 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 408 cubic yards of excavation.

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 (<u>https://s3.amazonaws.com/sfplanninggis/Slopes+Poster\_lowRes70DPI.pdf</u>) (Exhibit F). The Project site is also on the City's 1987 map of "areas of potential landslide hazard." (Exhibit G) conspicuously posted at SFDBI's Permit Approval Department. Finally, the Project site is on the "Blume map" of landslide locations (Exhibit H)<sup>10</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". No maps have been relegated to oblivion.

As a result, 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 I).

<sup>&</sup>lt;sup>10</sup> Despite the fact that the older Blume map was not referenced in the SSPA in 2018, the site's presence on the other maps is sufficient to confirm applicability of the SSPA.

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

The Preliminary MND unremarkably concluded that the Project is subject to the SPA or the SSPA and therefore must comply with their requirements to safeguard the slope, structural support, and adjacent properties. However, mysteriously, 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 illogically removed most of the mitigation measures contained in the Preliminary MND – despite the Planning Commission's unanimous decision that <u>additional</u> safeguards were necessary to ensure slope stability. The PMND clearly stated at pages 59-60 (Exhibit C):

"The project site 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). 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 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 (Exhibit B):

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<sup>11</sup>. On August 23, 2019, the building department documented that this

<sup>&</sup>lt;sup>11</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. (Exhibit H). Therefore, since Planning staff contends that the SPA rather than the newer SSPA applies to the Project, there should be no

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.

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 mitigating measures contained in the Preliminary MND.

This determination must be reversed and the Project must be found to be subject to the SSPA.

#### D. 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>12</sup> Put simply, "if there is a disagreement among experts over the significance of an effect, the agency is to treat the effect as significant and prepare an EIR."<sup>13</sup> The purpose of the EIR is to analyze significant environmental

question that the Project is subject to the safeguards of the SPA. Yet, Planning staff somehow reach the exact opposite conclusion.

<sup>&</sup>lt;sup>12</sup> 14 CCR § 15064(f)(1); *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-15.

<sup>&</sup>lt;sup>13</sup> Sierra Club v. County of Sonoma, 6 Cal.App.4th at pp. 1316–1317; Moss v. Cty. of Humboldt (2008) 162 Cal. App. 4th 1041, 1049.

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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. 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). Nevertheless, the city refuses even to require the Project to comply with the San Francisco Seismic Hazard Zone Protection Act. Instead. the MND refers to "during construction" merely stating: "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 "deferred" mitigation.<sup>14</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.
- b. 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>15</sup> Any inconsistencies between a proposed project and applicable plans must be discussed in an EIR<sup>16</sup>. A Project's inconsistencies with local plans and policies

<sup>&</sup>lt;sup>14</sup> Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296, 308-309.

<sup>&</sup>lt;sup>15</sup> Pocket Protectors v. Sacramento (2005) 124 Cal.App.4th 903.

<sup>&</sup>lt;sup>16</sup> 14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist.* (2009) 176 Cal. App. 4th 889, 918.

constitute significant impacts under CEQA.<sup>17</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.

- c. HISTORIC IMPACTS: The MND finally admits the historical significance of the Coxhead House, as established by Architectural Historian Carol Karp, AIA. 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. Also, the MND ignores entirely the impact that the massive expansion will have upon access to light and air from 24 windows at the Coxhead House, which greatly contribute to its architecturally historic significance. 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, there is no distinction in CEQA law between primary and secondary views of historic coxhead House, and to propose feasible alternatives and mitigation measures to reduce the impacts.
- d. 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. The developer proposes to excavate over 400 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. An EIR is required to professionally analyze the Project and report to avoid environmental impacts.
- e. 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..."

<sup>&</sup>lt;sup>17</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.

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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 since 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.

#### D. INACCURATE PROJECT DESCRIPTION.

The Planning Commission has voted unanimously to grant discretionary review of the Project and directed the Developer to substantially redesign the Project to reduce or eliminate excavation and to reduce impacts to the historic Coxhead House. As a result, the Project will have to be redesigned to allow new permits. The suspended permits have now expired because there has been no work under them for more than 6 months. 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>18</sup> "An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient [CEQA document]."<sup>19</sup>

There is no question that the MND fails to accurately describe the Project. The Planning Commission has directed the Developer to substantially redesign the Project. Therefore, the Project described in the MND is not the Project that will be approved. 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>&</sup>lt;sup>18</sup> Christward Ministry v. Superior Court (1986) 184 Cal.App.3d 180; CEQA Guidelines §15071(a). <sup>19</sup> County of Invo 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.

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#### E. 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.

Sincerely,

Richard Drury Lozeau Drury LLP

cc: Supervisor Catherine Stefani Supervisor Aaron Peskin

# 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-overbasement 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

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

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

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

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

WHEREAS, 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; and

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

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

Clerk of the Board BOARD OF SUPERVISORS

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

WHEREAS, 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; and

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

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

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

MOVED, That In light of this information, the 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

Clerk of the Board BOARD OF SUPERVISORS

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	Clerk of the Board BOARD OF SUPERVISORS Page 4
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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.



#### City and County of San Francisco Tails

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

**Motion: M18-012** 

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

	Mitigated Negative Declaration	1650 Mission St. San Francisco, CA 94103-2479
PMND Date:	June 26, 2019; amended on January 9, 2020 (amendments to the initial	Decention
	study are shown as deletions in <del>strikethrough</del> and additions in <u>double</u> <u>underline</u> )	Reception: 415.558.6378
Case No.:	2017-002545ENV	Fax:
Project Title:	2417 Green Street	415.558.6409
BPA Nos.:	201704285244	Planning
Zoning:	RH-1 [Residential-House, One Family] Use District	Information:
	40-X Height and Bulk District	415.558.6377
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	

#### **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** 

<u>January</u> 9, 2020 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 <u>85</u>-<del>83</del><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 (upslope) 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

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

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.

	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

Table 1 - Summary of Existing and Proposed Building Characteristics

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.

<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.

<sup>3</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

- 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 threestory 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 <u>96 98</u>. 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.

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	8-000739PRJ Modification of a single-family home and addition of an accessory dwelling unit	
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 2014-00064		Modification of a single-family home	Under construction

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

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

	Applicable	Not Applicable
Discuss any variances, special authorizations, or changes proposed to the planning code or zoning map, if applicable.	$\boxtimes$	
Discuss any conflicts with any adopted plans and goals of the City or region, if applicable.		
Discuss any approvals and/or permits from city departments other than the planning department or the Department of Building Inspection, or from regional, state, or federal agencies.		

#### 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.

<sup>4</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.

#### 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.

<sup>5</sup> 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.

	Land Use/Planning		Greenhouse Gas Emissions		Hydrology/Water Quality
	Aesthetics		Wind		Hazards & Hazardous Materials
	Population and Housing		Shadow		Mineral Resources
$\boxtimes$	Cultural Resources		Recreation		Energy
	Tribal Cultural Resources		Utilities/Service Systems		Agriculture and Forestry Resources
	Transportation and Circulation		Public Services		Wildfire
	Noise		<b>Biological Resources</b>	$\boxtimes$	Mandatory Findings of Significance
	Air Quality	$\boxtimes$	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

<sup>6</sup> SB 743 is available at: 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.

<sup>7</sup> Public Resources Code section 21099(d).

<sup>&</sup>lt;sup>8</sup> California Code of Regulations, Title 14, Division 6, Chapter 3.

<sup>9</sup> Public Resources Code section 21099(d)(1).

<sup>10</sup> 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.

<sup>11</sup> 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.

<sup>12</sup> 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.

<sup>13</sup> 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.

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

# Impact 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.

Тор	vics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
2.	POPULATION AND HOUSING. Would the project:					
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)?					
b)	Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing?					

### 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

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.

<sup>14</sup> U.S. Census, 2017,

https://www.census.gov/quickfacts/fact/table/sanfranciscocitycalifornia,sanfranciscocountycalifornia/HSD310217#vie wtop, accessed January 31, 2019.

<sup>15</sup> City of San Francisco, 2015, San Francisco General Plan 2014 Housing Element, April, http://www.sfplanning.org/ftp/General\_Plan/2014HousingElement-AllParts\_ADOPTED\_web.pdf, accessed November 6, 2017.

<sup>16</sup> 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.

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

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
3.	CULTURAL RESOURCES. Would the project:					
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?					
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?					
c)	Disturb any human remains, including those interred outside of formal cemeteries?					

## Impact 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

<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 Registereligible 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 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>

<sup>22 2421</sup> 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>&</sup>lt;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 <u>60</u>. 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<u>–65</u>, 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 <u>Monitoring By and</u> 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 <u>and construction</u> team, <u>geotechnical engineer</u>, and <u>contractor</u>, as applicable) will <u>shall</u> be subject to ongoing <u>monitoring by and</u> coordination <del>requirements</del> 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

<sup>&</sup>lt;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.

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

<u>Structural and geotechnical observation and inspection shall be provided onsite during</u> <u>construction.</u>

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 <u>60</u>.

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.

<sup>&</sup>lt;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

<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 vard 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 characterdefining 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 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

<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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
4.	TRIBAL CULTURAL RESOURCES. Would the project:					
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:					
	<ul> <li>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</li> </ul>					
	<ul> <li>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.</li> </ul>					

## 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.

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# 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.

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

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, lowdensity 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

<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>&</sup>lt;sup>31</sup> Updated February 14, 2019. Available at https://sfplanning.org/project/transportation-impact-analysis-guidelinesenvironmental-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.

<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.

<sup>34</sup> 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 and 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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
6.	NOISE. Would the project result in:					
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					
b)	Generation of excessive groundborne vibration or groundborne noise levels?			$\boxtimes$		
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?					

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.

Construction Equipment	Noise Level (dBA, Leq at 50 feet)	Noise Level (dBA, Leq at 100 feet)
Jackhammer (Pavement Breaker) <sup>1</sup>	88	82
Hoe ram	90	94
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

Table 3 – Typical Noise Levels from Construction Equipment

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 <u>60</u>.

### 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

<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

<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/revguid ance.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.

Тор	ics;	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
7.	AIR QUALITY. Would the project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?			$\boxtimes$		
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?					
c)	Expose sensitive receptors to substantial pollutant concentrations?			$\boxtimes$		
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?					

### 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.

<sup>39 &</sup>quot;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, accessed November 15, 2017.

	Construction Thresholds	Operational	Thresholds	
Pollutant	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Maximum Annual Emissions (tons/year)	
ROG	54	54	10	
NOx	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		

Table 4 – Criteria Air Pollutant Significance Thresholds

*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 (NOx). 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 NOx, 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 (PM10 and PM2.5).*<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, accessed February 19, 2019.

<sup>42</sup> PM10 is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or smaller. PM2.5, 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.

<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, 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

<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, longterm 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/crnr/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  $\mu$ g/m<sup>3</sup> (micrograms per cubic meter) should be revised to a level within the range of 13 to 11  $\mu$ g/m<sup>3</sup>, with evidence strongly supporting a standard within the range of 12 to 11  $\mu$ g/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  $\mu$ g/m<sup>3</sup>, as supported by the U.S. EPA's assessment, although lowered to 10  $\mu$ g/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  $\mu$ g/m<sup>3</sup>.<sup>56</sup>

<sup>51</sup> Ibid. Footnote 63, page 67.

<sup>52 54</sup> Federal Register 38044, September 14, 1989.

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

<sup>54</sup> 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.

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

<sup>56</sup> 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 the 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 particular 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 windblown 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 PM2.5 concentrations to state and federal standards of 12  $\mu$ g/m3 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

<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 <u>35</u>, 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 a would not generate toxic air contaminants, including diesel particulate matter,

<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).

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 10,0000 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.

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

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

The Bay Area Air Quality Management District (air district) has prepared guidelines and methodologies for analyzing GHGs. These guidelines are consistent with CEQA Guidelines

<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.

<sup>61</sup> 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.

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

<sup>63</sup> 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.

<sup>64</sup> 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 (MTCO2E)); by 2020, reduce emissions to 1990 levels (approximately 427 million MTCO2E); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO2E). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxideequivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

<sup>65</sup> 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 MTCO2E).

<sup>66</sup> 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.

<sup>67</sup> 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.

<sup>68</sup> 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

<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 S-3-05, 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.

Тор	vics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No _Impact	Not _Applicable
9.	WIND. Would the project:					
a)	Create wind hazards in publicly accessible areas of substantial pedestrian use?			$\boxtimes$		

### 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.

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.

<sup>73</sup> 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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
10.	SHADOW. Would the project:					
a)	Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space?					

## 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 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-thansignificant 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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
11.	<b>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?					
b)	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?					

<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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
12. Wo	UTILITIES AND SERVICE SYSTEMS. uld the project:					
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?					

<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, accessed May 20, 2016.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?					
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?					
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?					
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?					

# Impact 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 <u>less than</u> 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

<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.

<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

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.

<sup>78</sup> San Francisco Planning Department, Agreement for Disposal of San Francisco Municipal Solid Waste at Recology Hay Road Landfill in Solano Count, Final Negative Declaration, Planning Department Case No. 2014.0653, May 21, 2015, 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.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
13. PUBLIC SERVICES. Would the project:					
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?					

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

<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, 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.

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

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
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?					
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					
f)	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?					

# Impact 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.

Тор	ics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact_	Not Applicable
15.	GEO	DLOGY AND SOILS. Would the project:					
a)	adv	ectly or indirectly cause potential substantial erse effects, including the risk of loss, injury, eath involving:					
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.					
	ii)	Strong seismic ground shaking?		$\boxtimes$			
	iii)	Seismic-related ground failure, including liquefaction?		$\boxtimes$			
	iv)	Landslides?		$\boxtimes$			
b)	Res <sup>a</sup> tops	ult in substantial soil erosion or the loss of soil?			$\boxtimes$		
c)	uns resu or o	ocated on geologic unit or soil that is table, or that would become unstable as a ilt of the project, and potentially result in on- ff-site landslide, lateral spreading, sidence, liquefaction or collapse?					
d)	18-1 crea	ocated on expansive soil, as defined in Table -B of the Uniform Building Code (1994), ating substantial direct or indirect risks to life roperty?					
e)	the disp	ve soils incapable of adequately supporting use of septic tanks or alternative wastewater posal systems where sewers are not available the disposal of waste water?					
f)		ectly or indirectly destroy a unique contological resource or site or unique					

geologic feature?

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>8283,84</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

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

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

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

<sup>&</sup>lt;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 nonsequential 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

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

<sup>&</sup>lt;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

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Green Street. This would be a significant impact. Implementation of Mitigation Measure M-GE-1, Ongoing <u>Monitoring By and</u> 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 <u>Monitoring by and</u> 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 <u>and construction</u> team, <u>geotechnical engineer</u>, and <u>contractor</u>, as applicable) will <u>shall</u> be subject to ongoing <u>monitoring by and</u> coordination <del>requirements</del> 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.

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

<u>Structural and geotechnical observation and inspection shall be provided onsite</u> <u>during construction.</u>

 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

<sup>&</sup>lt;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>&</sup>lt;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.

<sup>92</sup> 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.

<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.

Тор	ics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
16.		DLOGY AND WATER QUALITY. the project:					
a)	dischaı	any water quality standards or waste ge requirements or otherwise ntially degrade surface or groundwater ?					
b)	interfei recharg	ntially decrease groundwater supplies or re substantially with groundwater ge such that the project may impede able groundwater management of the					
c)	of the s alterati througl	ntially alter the existing drainage pattern site or area, including through the on of the course of a stream or river or h the addition of impervious surfaces, in a r that would:					
	(i)	Result in substantial erosion or siltation on- or off-site;					$\boxtimes$
	(ii)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;					
	(iii)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or					
	(iv)	Impede or redirect flood flows?					$\boxtimes$
d)		d hazard, tsunami, or seiche zones, risk of pollutants due to project inundation?					
e)	water o	et with or obstruct implementation of a quality control plan or sustainable lwater management plan?					

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)

<sup>95</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>96</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, accessed February 19, 2019.

<sup>97</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 n\_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.

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

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.

<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 that the soil sediments within the foundation and garage expansion excavation are non-hazardous:

<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 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 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

106 Ibid.

<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>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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
18.	MINERAL RESOURCES. Would the project:					
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				$\boxtimes$	
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?					

#### Impact 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.

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

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
19.	ENERGY. Would the project:					
a)	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?					
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			$\boxtimes$		

## 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.

		Less Than			
		Significant			
	Potentially	with	Less Than		
	Significant	Mitigation	Significant	No	Not
Topics:	Impact	Incorporated	Impact	Impact	Applicable

20. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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. Would the project:

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?			
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?			
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			
d)	Result in the loss of forest land or conversion of forest land to non-forest use?			
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or forest land to non-forest			

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

use?

<sup>109</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.

land designated as prime farmland, unique farmland, or Farmland of Statewide Importance to nonagricultural 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.

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

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, 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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
22.	MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:					
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?					
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.)					
c)	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?					

 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 <u>Monitoring By and</u> 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 <u>and construction</u> team, geotechnical engineer, and contractor, as applicable) will shall be subject to ongoing <u>monitoring by and</u> 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.

<u>Pursuant to planning department policy, any memoranda and/or reports prepared by the project</u> <u>sponsor and/or a consultant working for the project sponsor shall adhere to the planning</u> <u>department's protocols of objectivity.</u> 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 <u>60</u> through 65 <u>66</u>), impacts related to the release of hazardous matter (addressed under Impact HZ-2 on page 74 <u>72</u>), 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 is 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.

<u>As discussed under Impact GE-1 on pages 60–66, to ensure that the potential for adverse effects related</u> 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.

<u>As addressed under Impact C-GE-1 on page 67, environmental impacts related to geology and soils are</u> 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.

Lisa Gibson Environmental Review Officer for John Rahaim Director of Planning

DATE\_\_\_\_\_

#### 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 Game 24,2019

### 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]

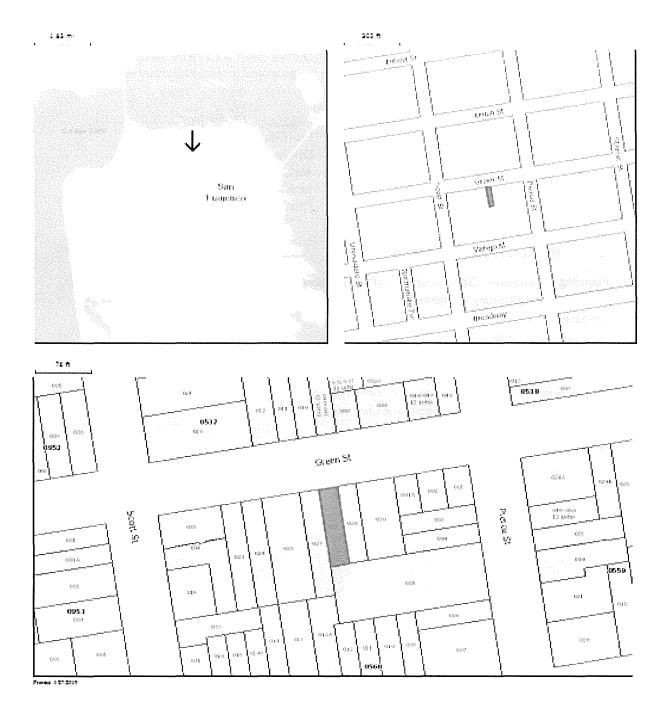


Figure 1 – Project Site Location

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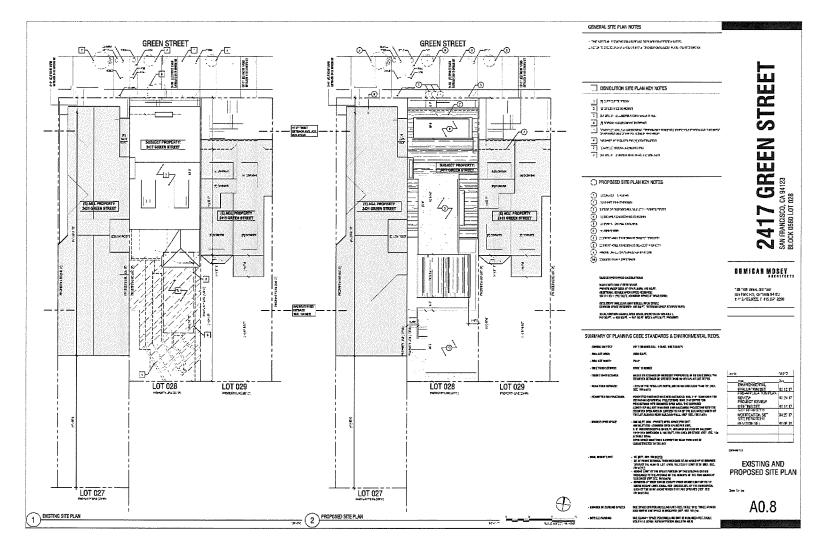
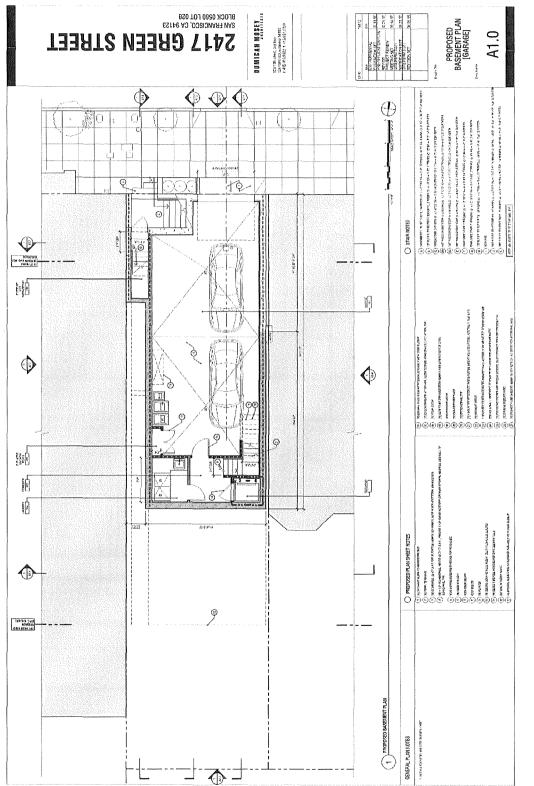
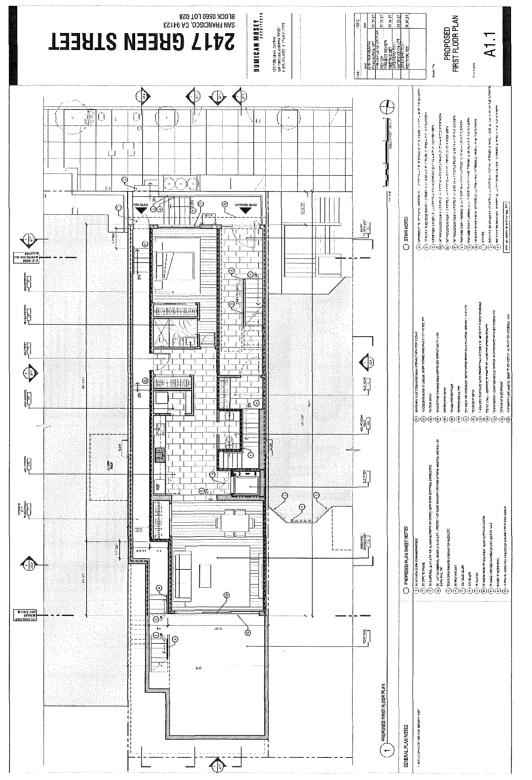


Figure 2 – Existing and Proposed Site Plans

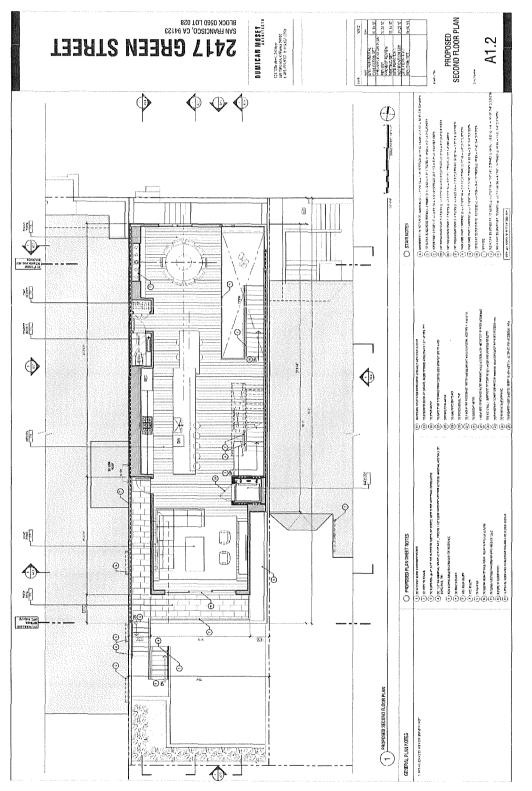
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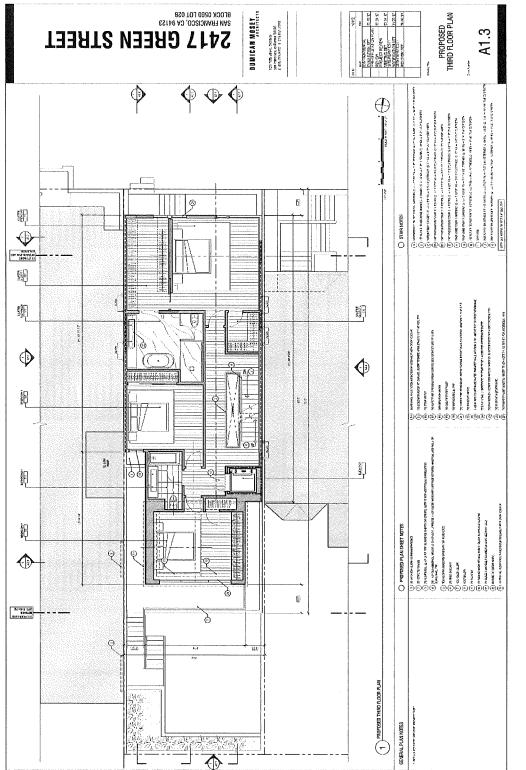




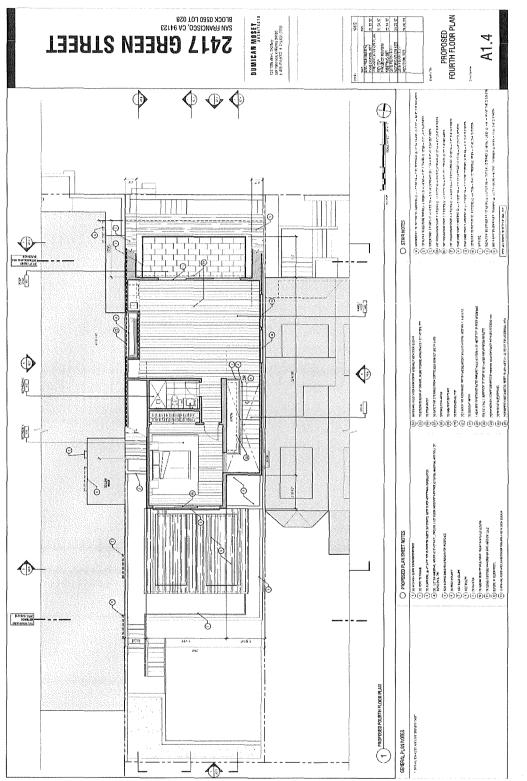
### Figure 4 – Proposed First Floor Plan



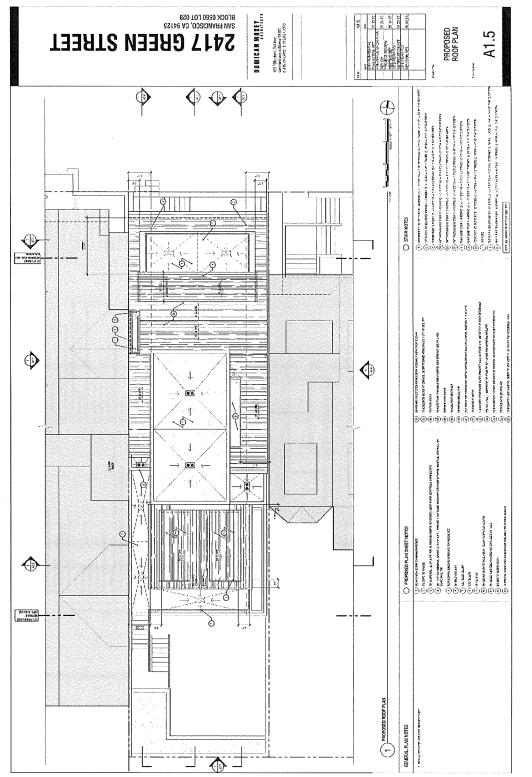




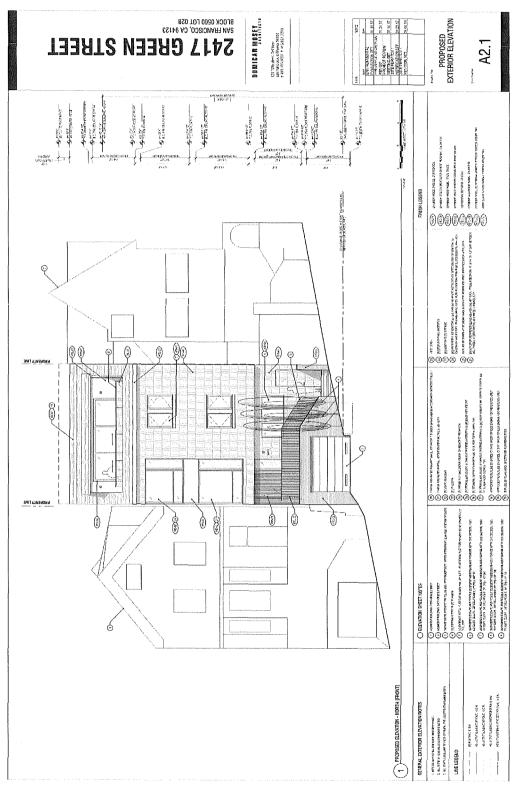
## Figure 6 – Proposed Third Floor Plan



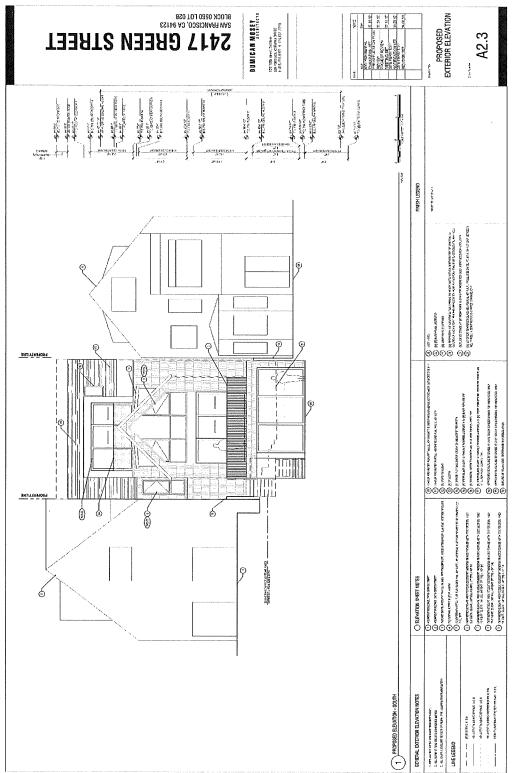
# Figure 7 – Proposed Fourth Floor Plan



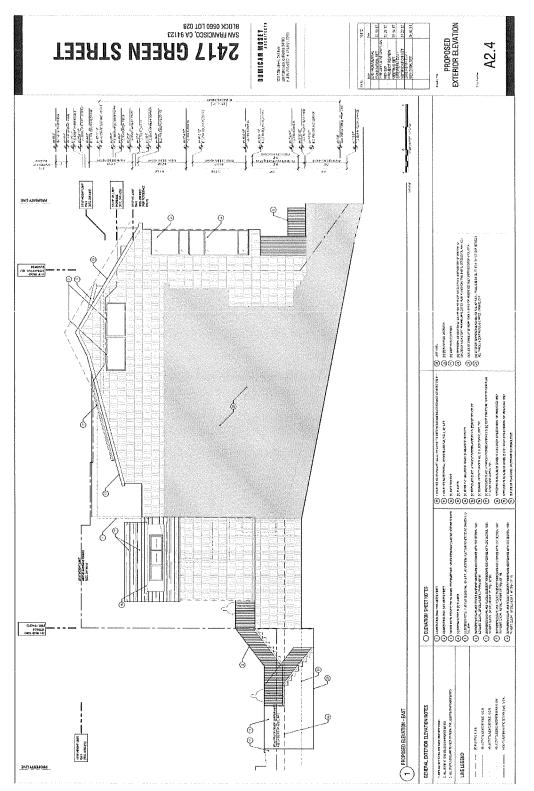




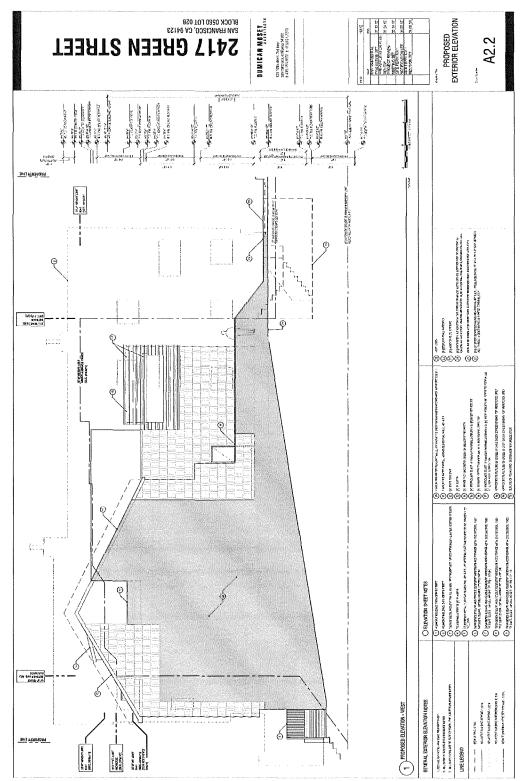
# Figure 9 – Proposed North (Front) Elevation



# Figure 10 – Proposed South (Rear) Elevation







# Figure 12 – Proposed West Elevation

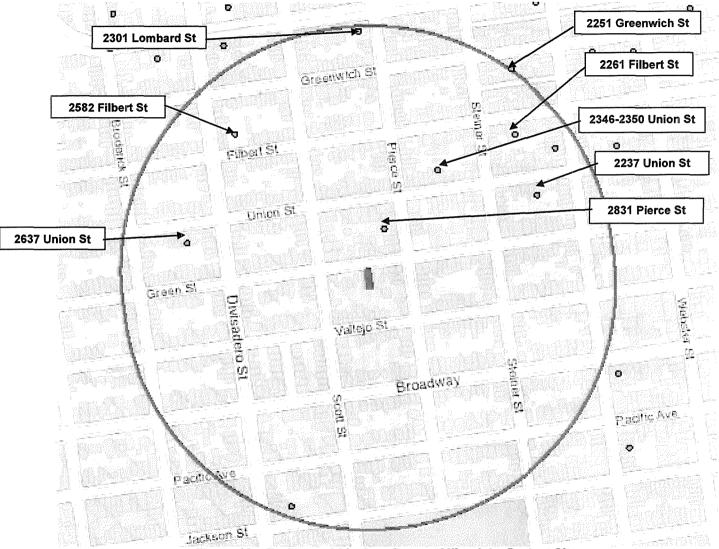


Figure 13 – Projects within One-Quarter Mile of the Project Site

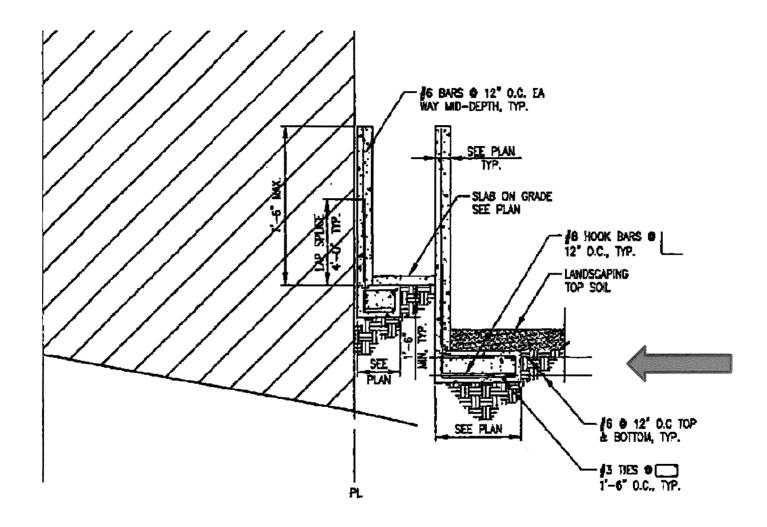


Figure 14 – Detail 3 on Sheet S4.1 of Building Permit Application No. 201705116316

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### EXHIBIT C



### SAN FRANCISCO PLANNING DEPARTMENT

June 26, 2019 2017-002545ENV

0560/028

2,500 square feet

(415) 407-0486

2417 Green Street 201704285244

40-X Height and Bulk District

Chris Durkin, 2417 Green Street, LLC

San Francisco Planning Department

Jeanie Poling – (415) 575-9072 jeanie.poling@sfgov.org

### **Preliminary Mitigated Negative Declaration**

RH-1 [Residential-House, One Family] Use District

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

Reception: 415.558.6378

Fax: 415.558.6409

Planning Information: **415.558.6377** 

DDU	IECT	DESCRIPTION:	
F IND		DEGUNIFINDIS.	

Date:

Case No.:

BPA No .:

Block/Lot:

Project Sponsor

Lead Agency:

Staff Contact:

Lot Size:

Zoning:

Project Title:

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.

www.sfplanning.org

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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 (upslope) 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

<sup>&</sup>lt;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.

	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

Table 1 – Summary of Existing and Proposed Building Characteristics

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

2

Case No. 2017-002545ENV

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).

<sup>2</sup> 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."

<sup>3</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\_

- 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 threestory 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.

Address	Planning Department Case No.	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	5-2350 Union 2017-007518PRJ Addition of five new accessory dwelling units to an apartment building		
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

Table 2 – Projects within One-Quarter Mile of the Project Sit	Table 2 -	- Projects	within	<b>One-Quarter</b>	Mile	of the	<b>Project Site</b>
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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

	Applicable	Not Applicable
Discuss any variances, special authorizations, or changes proposed to the planning code or zoning map, if applicable.		
Discuss any conflicts with any adopted plans and goals of the City or region, if applicable.		
Discuss any approvals and/or permits from city departments other than the planning department or the Department of Building Inspection, or from regional, state, or federal agencies.		

### 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

<sup>4</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.

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.

<sup>5</sup> 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.

	Land Use/Planning		Greenhouse Gas Emissions		Hydrology/Water Quality
	Aesthetics		Wind		Hazards & Hazardous Materials
	Population and Housing		Shadow		Mineral Resources
$\boxtimes$	Cultural Resources		Recreation		Energy
	Tribal Cultural Resources		Utilities/Service Systems		Agriculture and Forestry Resources
	Transportation and Circulation		Public Services		Wildfire
	Noise		<b>Biological Resources</b>	$\boxtimes$	Mandatory Findings of Significance
	Air Quality	$\boxtimes$	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

<sup>6</sup> SB 743 is available at: 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.

<sup>7</sup> Public Resources Code section 21099(d).

<sup>&</sup>lt;sup>8</sup> California Code of Regulations, Title 14, Division 6, Chapter 3.

<sup>9</sup> Public Resources Code section 21099(d)(1).

<sup>10</sup> 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.

<sup>11</sup> 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.

<sup>12</sup> 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.

<sup>13</sup> 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.

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

### Impact 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.

Тор	pics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
2.	POPULATION AND HOUSING. Would the project:					
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)?					
b)	Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing?					

### 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

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.

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

<sup>15</sup> City of San Francisco, 2015, San Francisco General Plan 2014 Housing Element, April, http://www.sfplanning.org/ftp/General\_Plan/2014HousingElement-AllParts\_ADOPTED\_web.pdf, accessed November 6, 2017.

<sup>16</sup> 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.

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

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
3.	CULTURAL RESOURCES. Would the project:					
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?					
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?					
c)	Disturb any human remains, including those interred outside of formal cemeteries?					

# Impact 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

<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 Registereligible 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 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>

<sup>22 2421</sup> 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>&</sup>lt;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 CEOA 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

<sup>&</sup>lt;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.

<sup>&</sup>lt;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 everchanging 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

<sup>&</sup>lt;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.

<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.

Тор	ics:	Potentially Significant Impact	Less Than Signlficant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
4.	TRIBAL CULTURAL RESOURCES. Would the project:					
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:					
	<ul> <li>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</li> </ul>					

Topics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.					

# Impact 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.

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

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, lowdensity 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.

<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>&</sup>lt;sup>31</sup> Updated February 14, 2019. Available at https://sfplanning.org/project/transportation-impact-analysis-guidelinesenvironmental-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 and 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.

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

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
6.	NOISE. Would the project result in:					
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					
b)	Generation of excessive groundborne vibration or groundborne noise levels?			$\boxtimes$		
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?					

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.

Construction Equipment	Noise Level (dBA, Leq at 50 feet)	Noise Level (dBA, Leq at 100 feet)
Jackhammer (Pavement Breaker) <sup>1</sup>	88	82
Hoe ram	90	94
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

Table 3 – Typical Noise Levels from Construction Equipment

*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

<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/revguid ance.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 operation, and cumulative operational noise impacts would be less than significant.

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

#### 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 was adopted by the air district on April 19, 2017. The 2017 Clean Air Plan was adopted by the air district on April 19, 2017. The 2017 Clean Air Plan was adopted by the air 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.

	Construction Thresholds	Operational	Thresholds
Pollutant	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NOx	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 app	blicable

Table 4 – Criteria Air Pollutant Significance Thresholds

*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>quot;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, accessed November 15, 2017.

oxides of nitrogen (NOx). 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 NOx, 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 (PM10 and PM2.5).*<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

<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, accessed February 19, 2019.

<sup>42</sup> PM10 is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or smaller. PM2.5, termed "fine" particulate matter, is composed of particles that are 2.5 microns or less in diameter.

<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, 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.

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

<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, longterm 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  $\mu$ g/m<sup>3</sup> (micrograms per cubic meter) should

<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/crnr/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.

<sup>51</sup> Ibid. Footnote 63, page 67.

<sup>52 54</sup> Federal Register 38044, September 14, 1989.

<sup>53</sup> 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  $\mu$ g/m<sup>3</sup>, with evidence strongly supporting a standard within the range of 12 to 11  $\mu$ g/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  $\mu$ g/m<sup>3</sup>, as supported by the U.S. EPA's assessment, although lowered to 10  $\mu$ g/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  $\mu$ g/m<sup>3</sup>.<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)

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

 $https://www3.epa.gov/ttn/naaqs/standards/pm/data/20110419 pmpa final.pdf,\ accessed\ February\ 19,\ 2019.$ 

<sup>54</sup> U.S. EPA, Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards. "Particulate Matter Policy Assessment," April, 2011,

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

<sup>56</sup> 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 the 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 particular 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 windblown 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 PM2.5 concentrations to state and federal standards of 12  $\mu$ g/m3 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

<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 a 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.

<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 10,0000 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

<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.

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

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

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

<sup>61</sup> 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.

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

<sup>63</sup> 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

<sup>64</sup> 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 (MTCO2E)); by 2020, reduce emissions to 1990 levels (approximately 427 million MTCO2E); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO2E). 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.

<sup>65</sup> 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 MTCO2E).

<sup>66</sup> 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.

<sup>67</sup> 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.

<sup>68</sup> 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. 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. Therefore not exceed

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

<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.

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.

Τομ	pics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
9.	WIND. Would the project:					
a)	Create wind hazards in publicly accessible areas of substantial pedestrian use?			$\boxtimes$		

## 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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
10.	SHADOW. Would the project:					
a)	Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space?					

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-thansignificant 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)

<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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
11.	<b>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?					
b)	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?					

# 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.

Торі	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
	UTILITIES AND SERVICE SYSTEMS.					
.a)	uld the project: 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?					
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?					
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?					
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?					
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?					

Impact 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, 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

<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 <u>less than</u> 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

<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 Count, Final Negative Declaration, Planning Department Case No. 2014.0653, May 21, 2015, 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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
13.	PUBLIC SERVICES. Would the project:					
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?					

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.

<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, accessed May 23, 2018.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
14.	BIOLOGICAL RESOURCES. Would the project:					
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special- status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?					
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?					
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?					
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					
f)	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?					

# Impact 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.

Тор	ics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
15.	GE	OLOGY AND SOILS. Would the project:					
a)	adv	ectly or indirectly cause potential substantial rerse effects, including the risk of loss, injury, leath involving:					
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.					
	ii)	Strong seismic ground shaking?		$\boxtimes$			
	iii)	Seismic-related ground failure, including liquefaction?					
	iv)	Landslides?		$\boxtimes$			
b)		ult in substantial soil erosion or the loss of soil?					
c)	uns resi	ocated on geologic unit or soil that is table, or that would become unstable as a ılt of the project, and potentially result in on- ff-site landslide, lateral spreading,					

subsidence, liquefaction or collapse?

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?					
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?					
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?					

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

<sup>&</sup>lt;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

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

<sup>&</sup>lt;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

<sup>&</sup>lt;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)

<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>&</sup>lt;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

<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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
16.	HYDROLOGY AND WATER QUALITY. Would the project:					
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?					
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?					

Тор	lics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
c)	of the s alterat throug	ntially alter the existing drainage pattern site or area, including through the ion of the course of a stream or river or h the addition of impervious surfaces, in a er that would:					
	(i)	Result in substantial erosion or siltation on- or off-site;					$\boxtimes$
	(ii)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;					
	(iii)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or					
	(iv)	Impede or redirect flood flows?					$\boxtimes$
d)		d hazard, tsunami, or seiche zones, risk e of pollutants due to project inundation?					$\boxtimes$
e)	water	ct with or obstruct implementation of a quality control plan or sustainable dwater management plan?					

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, 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.

<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 n\_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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
17.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or					

proposed school?

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?					
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					
g)	Expose people or structures, either directly or directly, to a significant risk of loss, injury or death involving wildland fires?					

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

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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

<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 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-l 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

<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

104 Ibid.

<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>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.

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

#### Impact 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.

		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	Νο	Not
Тор	ics:	Impact	Incorporated	Impact	Impact	Applicable
19.	ENERGY. Would the project:					
a)	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?					
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			$\boxtimes$		

## 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.

		Less Than Significant			
	Potentially	with	Less Than		
	Significant	Mitigation	Significant	No	Not
Topics:	Impact	Incorporated	Impact	Impact	Applicable

**20. AGRICULTURE AND FORESTRY RESOURCES:** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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. **Would the project:** 

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?			
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?			

<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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?					
d)	Result in the loss of forest land or conversion of forest land to non-forest use?					$\boxtimes$
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?					

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.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
21.	WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a)	Substantially impair an adopted emergency response plan or emergency evacuation plans?					$\boxtimes$

<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, accessed October 23, 2017.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?					
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?					
d)	Expose people or structure to significant risks including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?					$\boxtimes$

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.

Тор	ics;	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
22.	MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:					
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?					

<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:

 $http://www.fire.ca.gov/fire\_prevention/fire\_prevention\_wildland\_zones\_maps.$ 

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
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.)					
c)	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?					

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; Sun 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>

#### 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

<sup>&</sup>lt;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 is 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.

#### 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

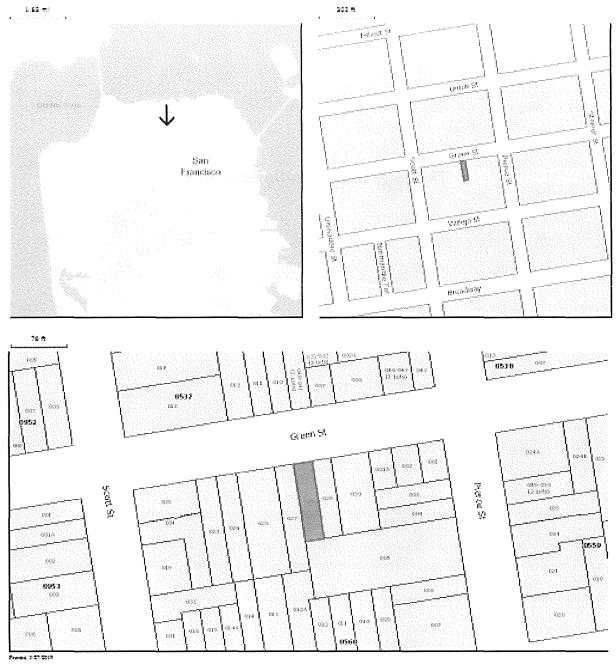
DATE June 24, 2019

#### 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.





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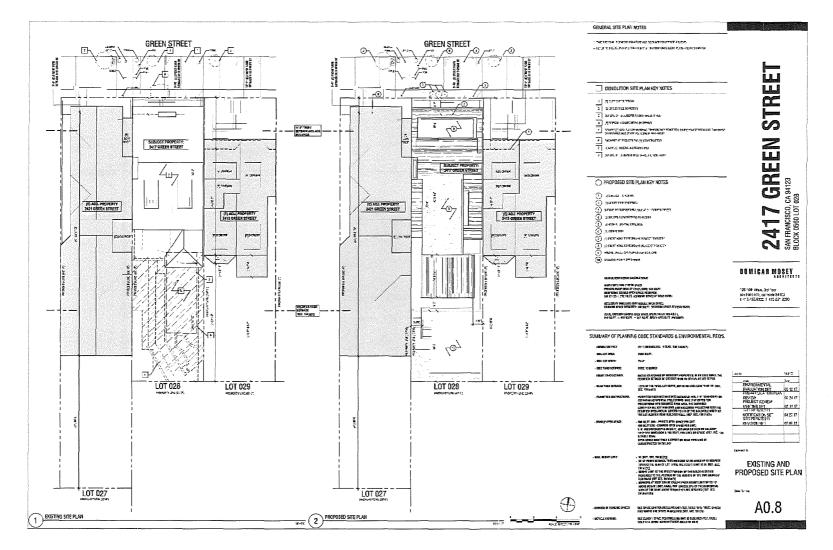
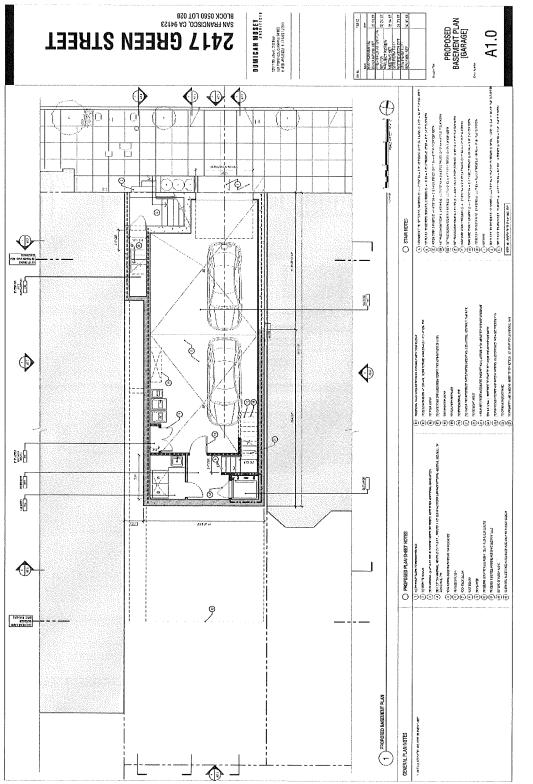
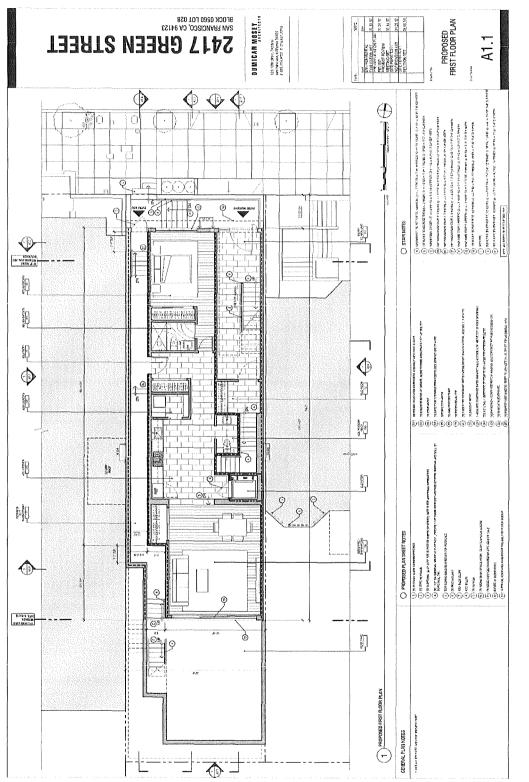


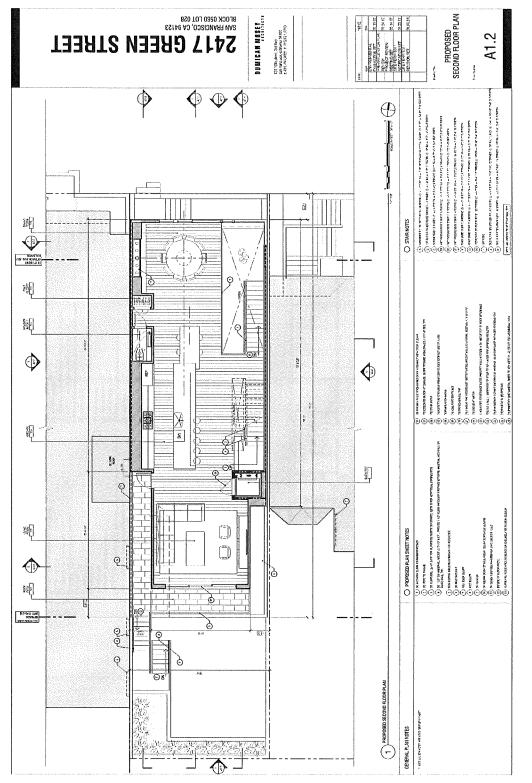
Figure 2 – Existing and Proposed Site Plans



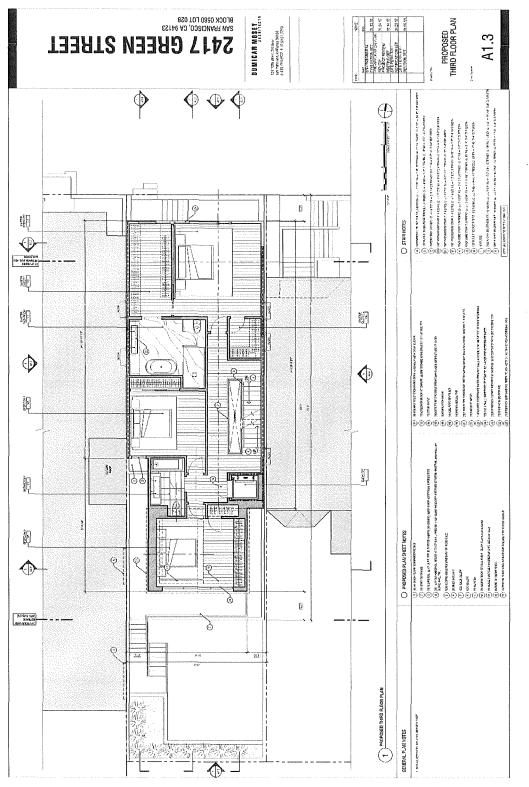




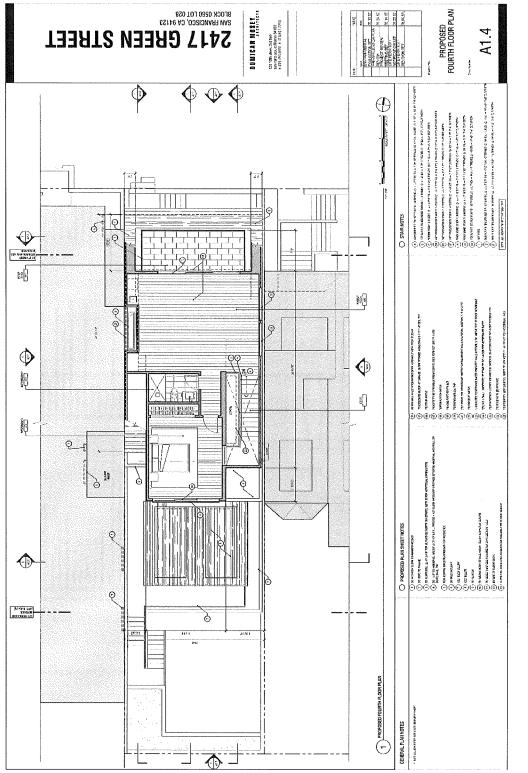
### Figure 4 – Proposed First Floor Plan



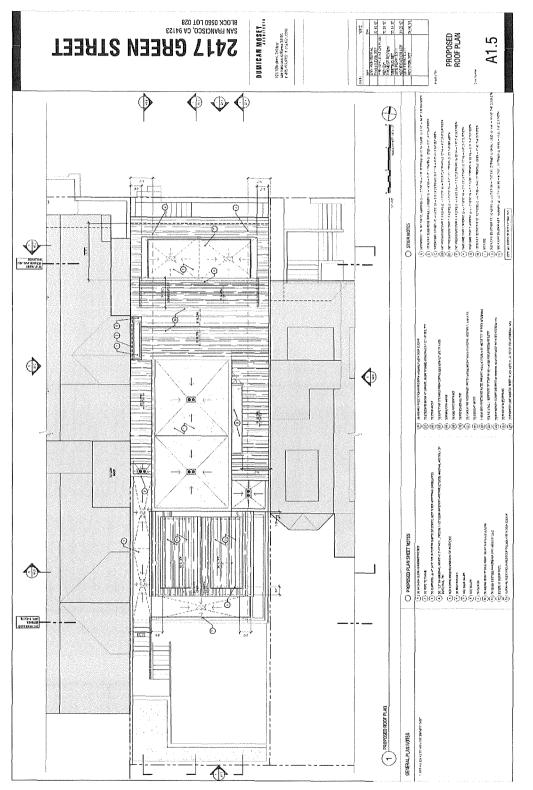
## Figure 5 – Proposed Second Floor Plan



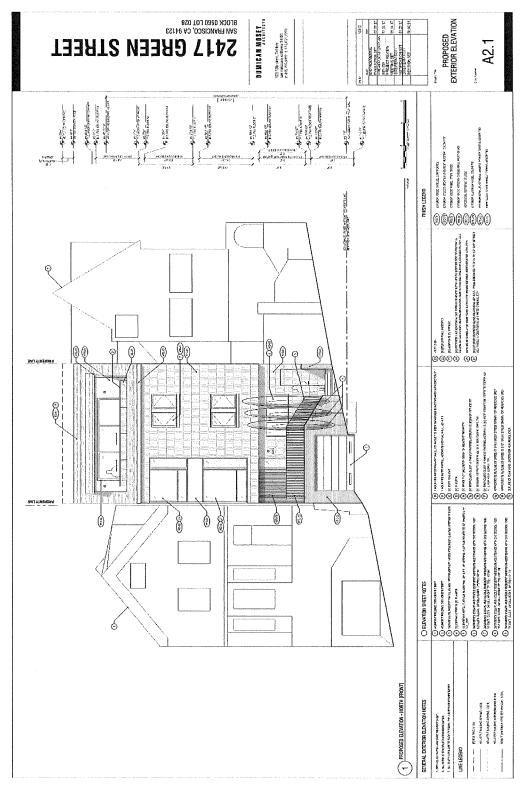




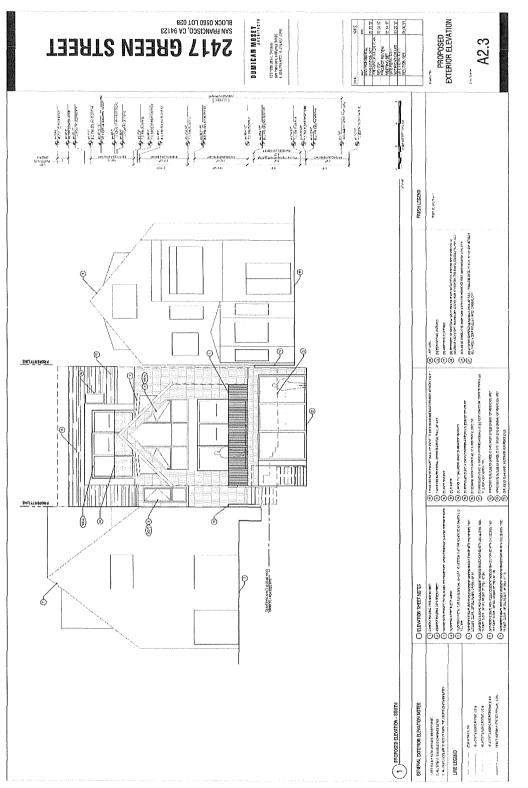




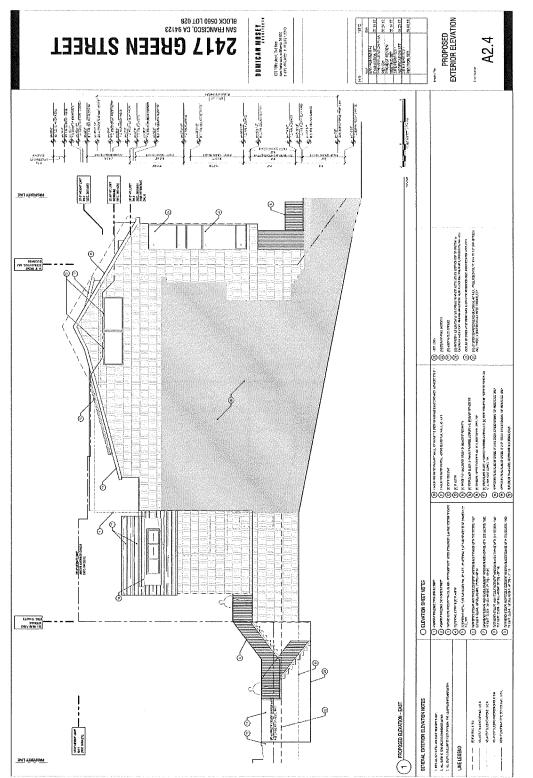




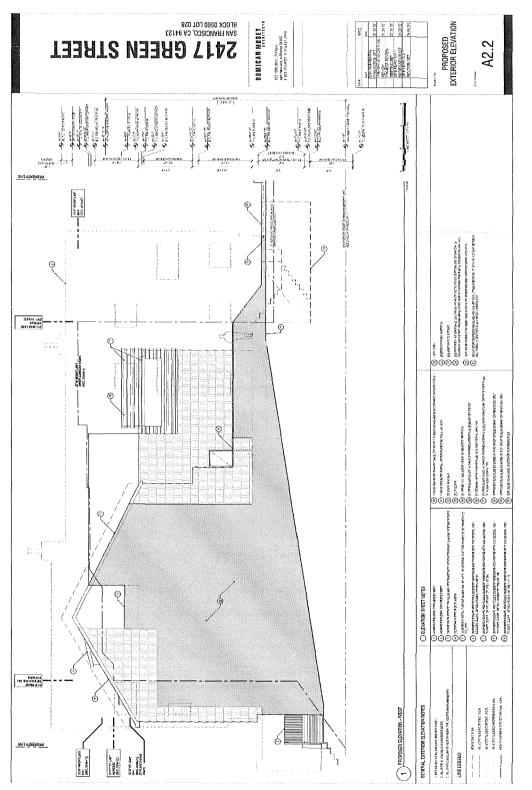
# Figure 9 – Proposed North (Front) Elevation



# Figure 10 – Proposed South (Rear) Elevation



### Figure 11– Proposed East Elevation



### Figure 12 – Proposed West Elevation

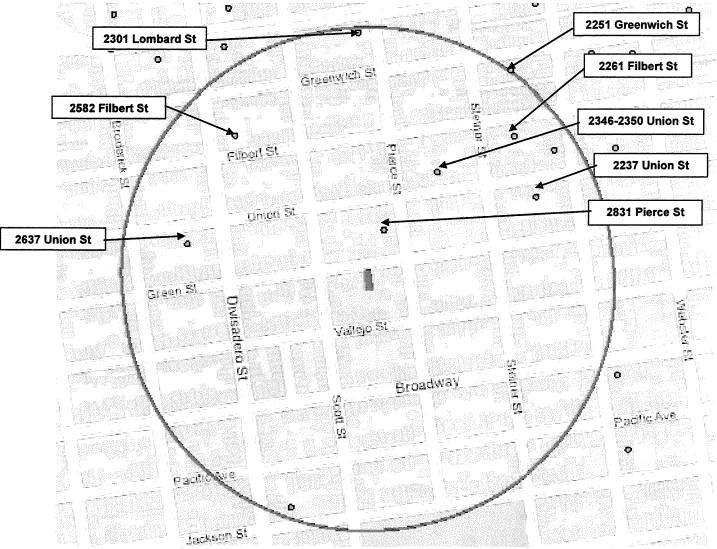


Figure 13 – Projects within One-Quarter Mile of the Project Site

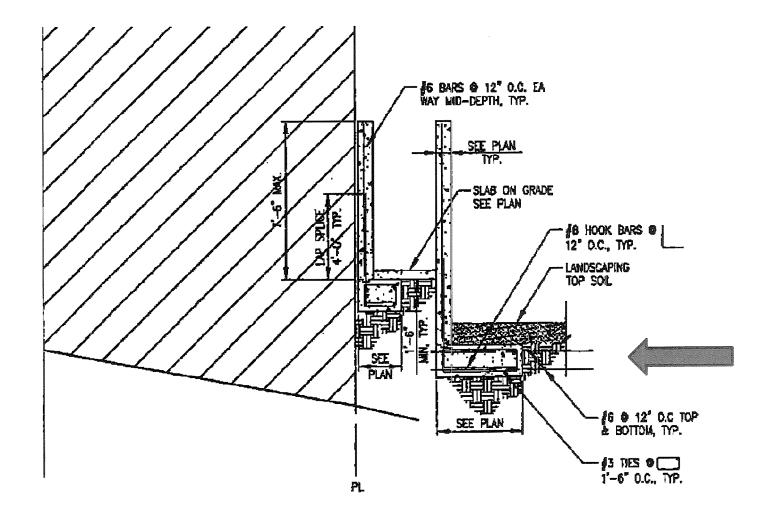


Figure 14 – Detail 3 on Sheet S4.1 of Building Permit Application No. 201705116316

### 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

January 25, 2020

Lozeau Drury LLP 1939 Harrison Street Oakland, CA 94612

Attention: Richard Drury, Esq.

Subject: 2417 Green Street Project, San Francisco

RE: Slope & Seismic Hazard Zone Protection Act, MND Appeal

Dear Richard:

This letter and its attachments address the questions you have raised in your e-mail of 1/22/20 (copy attached) about the City's Slope Protection Ordinances (SPA and SSPA). Rather than quote from the attachments (which are portions of Exhibits from the 1/8/20 report I wrote for the Planning Commission), underlined in red are details you are concerned about. Before discussing the attachments I should give an overview of how the City Planning Department (CPD) and developers operate, taken from my experience in design/construction, particularly foundation underpinning and shoring in San Francisco, with CPD and DBI interface, since the late 1950s.

CPD is staffed by full time employees who are not licensed design professionals (architects and engineers) as would occur with those who prepare EIRs (Environmental Impact Reports). EIRs are avoided by CPD like the plague because it takes approval of projects out of their hands with no benefits. To that end, with these conditions, CPD employees make statements 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 is currently in full force and effect, Exhibit E); and (4) waiving calculations and detailing necessary for permits under 2016 SFBC §1803.5.7 (excavations near property lines) and compliance with 2016 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 of the 1/8/20 report) 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: "Landslide Hazard Areas are colored 'Red'" (Information Sheet No. S-05, page 1, Exhibit E [and maps illustrated in Exhibit C]); and "...or falls within certain mapped areas of the City...." (Ordinance No. 121-18 Amended in Board 5/8/18, SFBC §106A.4.1.4.1 "Creation", page 2, Exhibit E).

The next issue that affects the SSPA is topography. References to property that slopes at an inclination of 4 units horizontal to 1 unit vertical uses the word "average" which can be argued forever as the Project's advocates will do. 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 in 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 (1/8/20 report, Exhibit E) the map is unintelligible, however enlarged it shows, with brown shading, average 4h:1v areas. It can be accessed on SFDBI's website at https://s3.amazonaws.com/sfplanninggis/Slopes+Poster\_lowRes70DPI.pdf. The CPD slope map shows about the same oblong area shaded brown as the maps reproduced in 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 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 in order to conceal the Project's extent.

The add in your e-mail should be modified as follows:

- From: "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).8283,84 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."
- To: The project site is located within an area of potential landslide hazard zone as identified by the well known 1987 map posted at 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.

Based on many years of experience in San Francisco, I believe you will only get arguments from CPD on behalf of developers, however the Board of Supervisors is very much aware of SPA and SSPA as they have sponsored the Ordinances. An appeal to the Board of Supervisors must be timely filed.

Note that Ordinance No. 121-18, on page 1 (Exhibit E) is also tied to CEQA so the SSPA should have been fully covered in a proper Initial Study. Non-compliance with the SSPA will eventually be corrected in an EIR because of the following facts.

(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.]

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.)

What I see is that CPD glossed over the results of the Planning Commission hearing which I attended. They do what the developer's lawyers tells them to do; another example is that no EIR was ordered for Oceanwide Center where the second tallest building in San Francisco is being constructed, one block from Millennium Tower (the same lawyers). CPD produces writings that are not signed and stamped by licensed engineers as required by Business & Professions Code §6735. I always generate all relevant technical documentation for not only immediate need but for posterity, but still, no topographical survey (orthocontour map) exists for the subject Project. CPD and the developer are holding onto the "suspended" approved permit applications (1/8/20 report, Exhibit K) but if the Project is cut back like the PC indicated it would (no windows blocked, no excavation), new permit applications would be necessary. Several years ago, at a meeting at Zach's office, foundation detail calculations and drawings were supposed to be under preparation by Holmes Culley but all we ever saw the developer do is connected to what CPD has approved and DBI rubber stamped "approved".

With an EIR qualified design professionals will review the Project and ask for, to begin with, a topographical survey (orthocontour map). The Kaufmans will have input to the EIR which, although the PC indicated they would with an MND, it will never happen. All that the Kaufmans will ever see, timely, will be from the developer unless the Board of Supervisors returns the Project to CP for an EIR or directly orders an EIR. Ultimately, if that fails, and the developer is allowed to proceed with his existing plans or something like them, 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 currently included in the already very weak geotechnical reporting for the Project. Especialy important now, in the SSPA (Exhibit E), the civil/geotechnical Engineer of Record must complete under oath, under penalty of perjury, a questionaire about excavation, shoring, and underpinning.

ready very with hibit E), the civil/geom jury, a questionaire about excavily Yours truly, Lawrence B. Karp No. 25389 CIVIL OF CALIFORM (E.C.). in ΰ No 45 ũ LAWRENCE B. KARP CONSULTING ENGINEER

Subject: Slope and Seismic Hazard Zone Protection Act From: Richard Drury <richard@lozeaudrury.com> Date: 1/22/2020, 4:13 PM To: "Lawrence B. Karp" <lbk@lbkarp.com> CC: xiaomu <xiaomu@aol.com>, Peter Kaufman <walrusassoc@aol.com>



### Dr. Karp:

I am having difficulty understanding the staff report concerning the Slope and Seismic Hazard Zone Protection Act (SSPA). In the original Preliminary MND, the document stated that 2417 Green Street is within the "landslide hazard zone" and therefore subject to the SSPA. However, the staff reversed that position and amended the Final MND to conclude that the site is not within the mapped area subject to the SSPA.

I don't understand this conclusion. I reviewed your comment letters and there is a map that appears to clearly show 2417 Green as being within the mapped area subject to the SSPA. The staff report suggests that the map may have changed.

### Questions:

1. Is 2417 Green within a mapped area subject to the SSPA? If so, what is the relevant map? Is there a current map that shows the parcel's location on the map?

2. Is 2417 Green on a property the exceeds an average slope of 4H:1V? If so, the SSPA applies regardless of the map.

I want to lay out the issue in our CEQA appeal to the Board of Supervisors. It may also be worth appealing to the Board of Appeals. I have attached the relevant discussion from the PMND below. Thank you. Richard

### Initial Study Page 60: Delete:

The project site in a landslide hazard zone and thus is not subject to the additional requirements of the Slope Protection Act (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 threemember 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.

### Add:

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).8283,84 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.

Page 63

Delete:

**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.

(These change are described on pp. 60-63 of the revised Initial Study attached to the PC Staff Rpt.).

Richard Drury Lozeau Drury LLP 1939 Harrison Street, Suite 150 Oakland, CA 94612 (510) 836-4200 richard@lozeaudrury.com TO PROTECT ARCHITEC HISTORICAL RESO ENVIRONMENTA

INADEQUATE MITIGATED NEGATIVE DECLARATION 2417 GREEN STREET PROJECT, SAN FRANCISCO ALLOWED UNDERMINING NEIGHBOR'S BRICK FOUNDATION NO SURVEY OR SHORING OR UNDERPINNING BY DEVELOPER TO PROTECT ARCHITECTURALLY & STRUCTURALLY UNIQUE HISTORICAL RESOURCE AT 2421 GREEN STREET ENVIRONMENTAL IMPACT REPORT REQUIRED

LAWRENCE B. KARP CONSULTING ENGINEER

### LAWRENCE B. KARP CONSULTING GEOTECHNICAL ENGINEER

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

> SOIL MECHANICS, GEOLOGY GROUNDWATER HYDROLOGY CONCRETE TECHNOLOGY

January 8, 2020

C&CSF Planning Commission Myrna Melgar, President City Hall, Room 400 San Francisco, CA 94102

Subject:

2417 Green Street Project [Block 560 - Lot 028] Allowed Undermining of Neighbor's Brick Foundations No Survey or Shoring or Underpinning was Required of Developer To Protect the Architecturally and Structurally Unique Historical Coxhead House at 2421 Green Street. Grossly Inadequate Mitigated Negative Declaration. Environmental Impact Report Required

Dear President Melgar and Members of the Commission:

One person ("Senior Planner") in the Planning Department, without credentials or qualifications or demonstrated knowledge, issued a Preliminary Mitigated Negative Declaration "PMND" (a worthless formal document declaring no negative impact will result from the subject project due to "mitigation") because the building department, who has already permitted the project based solely on approval by the Planning Department, will somehow timely "mitigate", in the future, construction damages.

The project involves major new construction immediately adjacent to the original Coxhead House that will (1) block views to and from the historic hillside house, built in 1892-93, at 2421 Green, and (2) as shown on the developer's approved and unchanged plans, will undermine the tall brick foundations of 2421 Green because advance, reviewable, preventative and protective engineering and construction measures to brace, shore, and underpin have been refused by the developer.

What could the senior planner be thinking? For (A) the only way to mitigate the blocking of views to and from the historic architecture is NOT block the views, and for (B) preventing damage to the 128 year old brick foundations of the neighboring historic building would be NOT to excavate and undermine that which has already started, but to properly design construction in advance for review and approvals. Both these situations were the instructions the Board of Supervisors, after unanimously deciding the project would likely damage the adjacent historic resource, handed the project back to the Planning Department when they reversed the misplaced Categorical Exemption devised by the Planning Department for the project, and returned the project for a genuine environmental evaluation. Unfortunately, they assumed uncorrupted qualified persons would perform the assessment under State of California standards. That has not happened, instead the result is a wholly inadequate PMND.

An Environmental Impact Report "EIR", as required by the California Environmental Quality Act "CEQA", must be independently performed which will ensure participation of independent qualified and licensed professional architects and engineers. An EIR must be based on the full record; the CEQA process does not involve discarding reports and facts as the Planning Department has repeatedly done despite the orders unanimously voted on 1/9/18 by the Board of Supervisors.

100 TRES MESAS, ORINDA CA 94563 (415) 860-0791 fax: (925) 253-0101 e-mail: lbk@berkeley.edu

### For the Categorical Exemption, the Planning Department had the developer devise a "geotechnical report" having nothing substantive about protection of the historic brick foundation of 2421 Green. That failing at the Board of Supervisors, for her review, the Senior Planner had the developer issue a new "geotechnical report" abandoning the Slope Protection Act and adding Patrick Drumm as a co-signer.

The 1/12/17 geotechnical report by Christian Divis was revised on 4/25/19. The senior planner had newly licensed engineer, Stephan Leung, new at DBI, perform a limited review of the Divis/ Drumm report, but the subject matter relating to what the Board of Supervisors was concerned about (damage to the historic resource by interfering with its surroundings and undermining of its foundations), the Senior Planner withheld from Leung, who had never been to the site, plus the lack of engineering for the protection of the 129 year old steep hillside foundations for 2421 Green. The undersigned carefully reviewed Leung's *ex-parte* report on 7/5/19 and detailed where Leung was coordinating with only the Senior Planner, and the report was found to be sorely lacking (Exhibit A).

The 4/25/19 Divis/Drumm report has nothing in it about undermining the 1892 brick foundations at 2421 Green affected by excavations at 2417 Green shown on the owner/developer's drawings, nor does it have any engineering for shoring and underpinning and design/construction recommendations to protect historic 2421 Green. The cast of characters explains why there is nothing substantive related to the site and building conditions of 2421 Green. Portions of the 4/25/19 report (Exhibit B) relevant to the missing or otherwise totally inadequate response to the Project's foundation aspects were returned by the Board of Supervisors' to the Planning Dept. In the interim between the Divis and Divis/Drumm reports, on 5/10/17 Divis wrote DBI approving developer Durkin's drawings with NO bracing, shoring, and underpinning to protect 2421 Green despite ID of site being subject to the <u>Slope Protection Act</u> in Divis' 1/12/17 report (Exhibit C). These are the exact defects that caused the Board of Supervisors to unanimously vote return of the Project to the Planning Department.

The report, revised on 4/25/19, commissioned by the developer in coordination with the Senior Planner, is signed by Christian Divis with the addition of Patrick Drumm from Fremont, a geologist, not a professional engineer, whose non-engineering education at the West Virginia University, a coal mining school; his self-serving résumé (Exhibit D) has nothing relevant about shoring and underpinning adjacent foundations on steep slopes in San Francisco, that are all subject to SF's mandatory <u>Slope Protection Act</u> (Exhibit E) which the superceding report never mentions.

Drumm's résumé neglects to discuss his involvement with 125 Crown Terrace, expressed in his 9/19 & 9/20/13 reports for the site (Exhibit F) which resulted in the spectacular hillside foundation failure. The report for 2417 Green that Drumm endorsed by co-signing is true to form with Drumm's involvement with 125 Crown Terrace. Drumm's 9/20/13 report for the 125 Crown Terrace Project also endorsed and contained inadequate civil engineering recommendations in support of his client's political purposes. Geologists are prohibited from practicing civil engineering and its branches (geotechnical and structural engineering): Business & Professions Code §7839 (Exhibit G).

Drumm's sporadic political involvement in San Francisco buildings consistently result in failures (and lawsuits) for lack of shoring and underpinning. An investigation by the City attorney found complaints to the State about Drumm after the failure of 125 Crown Terrace. That construction was approved by the Planning Dept. on 10/25/12 (2012.1051.DDD-P/A 2011.10.06.6315) with Drumm's political help to obtain a building permit that preceded total building failure due to defective shoring, which complaint contains the following paragraph critical of Drumm for practicing civil engineering:

LAWRENCE B. KARP CONSULTING ENGINEER

### Planning Commission RE: 2417 Green - Failing Mitigated Negative Declaration, 1/8/20 Page 3 of 3

"Specifically, the geologist's illegal and deceitful practice of civil engineering recently caused a disaster with the collapse of soil/rock and partial shoring at 125 Crown Terrace. San Francisco, a steep hillside location, on December 17, 2013. The geologist responded to an August 13, 2013 geotechnical engineering letter to the owner about foundation drawings that was written by a licensed civil engineer (the same engineer who had written the soils report for the location) that stated a civil engineer should "review the final grading, underpinning, and shoring plans prior to construction."

The same lack of proper survey, shoring, and protection at 2421 Green that Divis and Drumm risk for Christopher Durkin, owner/developer of 2417 Green, caused Murphy & O'Brien's house at 125 Crown Terrace to fall off its steep Twin Peaks hillside location, a highly publicized event (Exhibit H). Another failed Project of Drumm's was for another San Francisco developer on another steep slope at the south face of Mount Davidson at 287 Cresta Vista Drive, below 19 Sherwood Court. Drumm's 12/24/15 civil engineering (type) report failed to ensure that the contractor would be required to install adequate shoring. Instead, Drumm inexplicably recommended "surface survey points to monitor possible deep-seated movements", a useless non-sequitur ignoring improper shoring that allowed the excavation to proceed out of control. Drumm recommendations and the overexcavated slope (Exhibit I) ended in hillside slippage which caused the house at 19 Sherwood Court to move laterally, necessitating the occupant family to move to a hotel until the hillside was stabilized. Litigation was necessary to eventually cause repair of the building's foundation system and substructure support.

### The Senior Planner's MND has no value because there is no technical basis by qualified professionals and it has no chance to succeed in mitigation because the plan is to block views to and from 2421 Green Street and leave repair of any disaster or damage to others.

Within the Planning Dept's 9/11/19 report to the Planning Commission the senior planner ridicules the neighbor's geotechnical (soil and foundation) engineer who has written several reports on engineering defects of the subject Project, none of which have been corrected by the owner/contractor/designer. Strange to see staff with absolutely no education, experience, or expertise in architecture/engineering let alone stabilization of 127 year old hillside brick foundations criticize, without any professional help, the neighbor's engineer having a combination of over 60 years education and a perfect experience record in shoring and underpinning in San Francisco. The senior planner does not know what she is doing, having never designed anything or done anything other than to obstruct CEQA. Her total lack of understanding of standard architectural and engineering issues is a severe detriment to the City.

The senior planner's lack of knowledge of architectural/engineering design is appalling. Her ignorance of the gravamen of the comprehensive report the undersigned provided to the Planning Commission on 1/17/19 (Exhibit J) is astounding. Ideas in her advice to the Planning Commission were infused, with improper motive, by the owner/developer of 2417 Green who has a vested speculative interest in avoiding shoring and underpinning and who willing forego the expense letting others, such as insurance companies, assume the risks by resuming temporarily suspended permits (Exhibit K); those permits should have been revised or revoked long ago.

### **Conclusion: Clearly Required Permit Revocation and EIR**

The Mitigated Negative Declaration is grossly inadequate. An independent Environmental Impact Report, terms consistent with the California Environmental Quality Act, must be ordered focusing on the adjacent historic architecture and vulnerable hillside brick foundation aspects of the environment upslope from the Project.

Yours truly,	SED ARCHURA	PROFESSION	NIN PROFESSION
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### **INDEX of EXHIBITS**

- A. Engineering critique 7/5/19 (for SFDBI) of geotechnical review prepared for and submitted to Planning Department 5/16/19; no site visit by reviewer, failed to recognize necessary shoring and underpinning were missing and lack of provisions of Slope Protection Act.
- B. Pages of 4/25/19 Divis/Drumm report said in preface to have detailed recommendations. There are no detailed recommendations as required, particularly for shoring and underpinning (Protection of Adjoining Property; shoring and underpinning per 2016 SFBC §3307.
- C. Divis letter 5/10/17 approving drawings; 1/12/17 report pages re: Slope Protection Act (SPA) referring to "future geotechnical studies", but Divis/Drum 4/25/19 report has zero about SPA.
- D. Divis/Drumm report 4/25/19 "we anticipate bedrock" without exploration for lateral support and without engineering recommendations for shoring/underpinning neighboring foundations.
- E. Required "additional review for structural integrity and effect on slope stability" for construction on properties subject to Slope Protection Act (includes 2417-2421 Green) since 2008, with 2018 Ordinance (SPA or more formally "Slope & Hazard Zone Protection Act").
- F. Reports ("Civil Engineering", B&PC §6731) 9/19 and 9/20/13 written by 2417 Green report cosigner Patrick Drumm before shoring and building failure at 125 Crown Terrace owned by Murphy.
- G. Business & Professions Code sections prohibiting geologists from practicing civil engineering, civil engineering defined, and civil engineers being exempt from the geologists act.

Photographs of 125 Crown Terrace after foundation and building failure due to lack of shoring.

Report 12/22/15 of civil engineering prepared by 2417 Green Street report cosigner Patrick Drumm before slippage of hillside above at 287 Cresta Vista Drive and below 19 Sherwood Court, San Francisco, due to lack of adequate shoring. Litigation ensued for repair.

- Engineering critique 1/17/19 (for Planning Commission) of design drawings prepared by owner/contractor Christopher Durkin for the 2417 Green Street project, approved for building permit by Christopher May of the City & County of San Francisco Planning Department (CPD) 10/10/17 (Exhibits 2 & 4). Design drawings without any topographical survey disregard the Slope Protection Act (excavation, shoring, underpinning), 2016 San Francisco Building Code §1803.5.7 (1/9/18 report; excavation near neighboring foundations, and 2016 SFBC §3307 protection of adjoining property), and California Civil Code §832 (legal requirement of excavator/developer to continuously maintain lateral and subjacent support to adjoining land).
- K. Permits as of 1/8/20 for 2417 Green Street owner/contractor to excavate below 2421 Green Street without survey, shoring, underpinning. Permit Applications 2017.1002.0114 and 2017.0511.6316 have been [temporarily] suspended and may be reinstated without compliance with the Slope Protection Act and compliance with Protection of Adjoining Property (2016 SFBC §§1803.5.7, 3307; shoring and underpinning) at any time (these permits were based on improper approval for building permit by Christopher May of CPD 10/10/17; see Exhibit J, parts 2 & 4). Permits should have been revoked long ago, but SFCPD (and SFDBI due to SFCPD), failed to act).

LAWRENCE B. KARP CONSULTING ENGINEER

H.

I.

J.

### EXHIBIT C



### 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@gmall.com

> 12 January 2017 Project: 17-120101-01

> > Prepared by:

Instran EXP. 12.31.17 GE2694

UNAUTHORGED USE OF THIS DOCUMENT IS STRICTLY PROHIBITED BY ANYONE OTHER THAN THE SPECIFIC CLIENT AND PROJECT

Divis Consulting, Inc. | 378 Park Street, San Francisco, CA 94110 | t (415) 420-3498 | f (415) 494-8027

2417 Green Street, LLC 12 January 2017 17-120101-01



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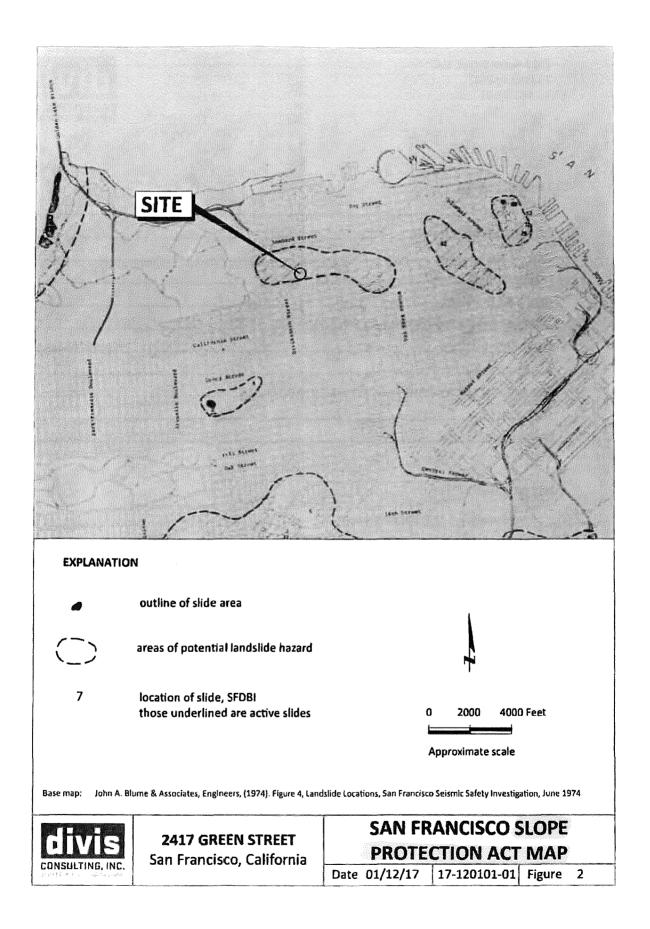
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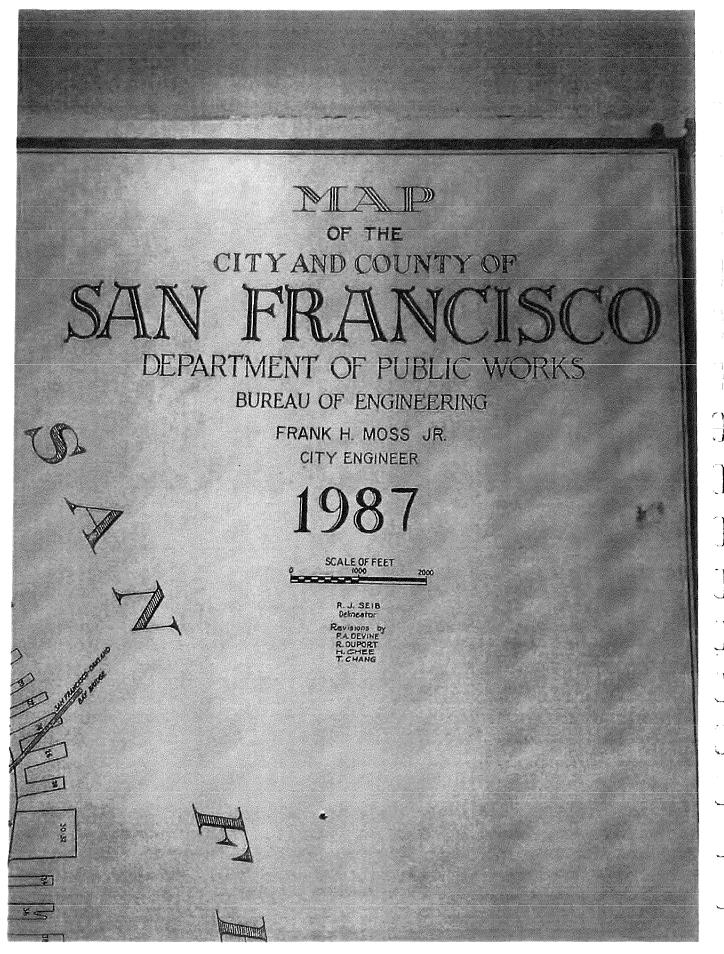
### LIST OF FIGURES

FIGURE 1	-	SITE LOCATION MAP
FIGURE 2		SLOPE PROTECTION ACT MAP
FIGURE 3	-	CALIFORNIA SEISMIC HAZARDS MAP
FIGURE 4	-	GEOLOGIC MAP
FIGURE 5	-	FAULT MAP
FIGURE 6	•	SEISMIC DESIGN

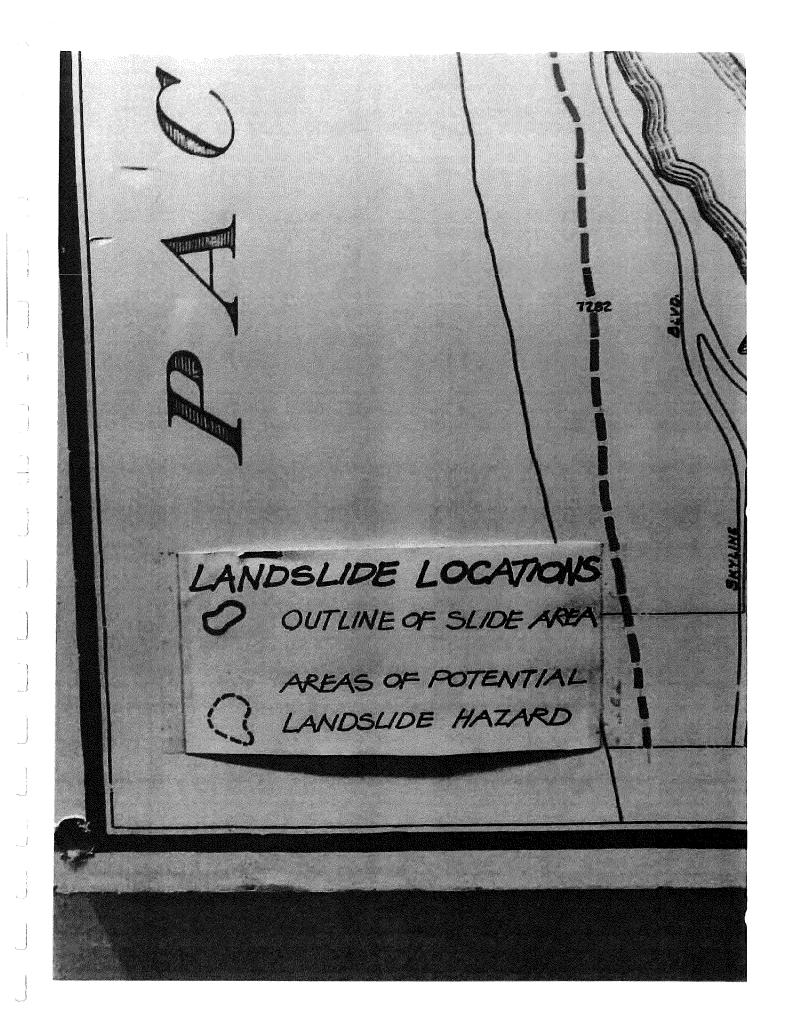
### APPENDICIES

APPENDIX A - IMPORTANT INFORMATION REGARDING YOUR GEOTECHNICAL REPORT





(From Attachment J of report to Board of Supervisors 1/9/18)



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### EXHIBIT E

https://sfdbi.org/slopeprotection

Visit our new website SF.gov

### **Department of Building Inspection**

### **Slope Protection**

### **Questions? Contact SSPA**

1660 Mission Street- 1st Floor San Francisco, CA 94103-2414 (415) 558-6360

dbi.slopeprotection@sfgov.org

### Helpful Links

- Ordinance 121-18
- Information Sheet S-19
- Slope & Seismic Protection Checklist

The Slope Protection Act was passed by the Board of Supervisors in 2008 and required construction of new buildings or structures and certain other construction work on properties subject to the Slope Protection Act undergo additional review for structural integrity and effect on slope stability.

The legislation was amended and renamed the Slope & Selamic Hazard Zone Protection Act in 2018. The amended Slope & Seismic Hazard Zone Protection Act applies to all property within San Francisco that exceeds an average slope of 4H:1V (25%) or falls within certain mapped areas of the City, except those properties already subject to the Edgehill Mountain Slope Protection Area or the Northwest Mt. Sutro Slope Protection Area.

Seismic Hazard Zone Map



### Slope Map



### What is being impacted?

- 1. Properties are subject to the requirements of this ordinance if: (1) any portion of the property lies within the areas of the "Earthquake Induced Landslide Zones" in the Seismic Hazard Zone Map, release by the California Department of Conservation, Division of Mines and Geology, dated November 17, 2000 or (2) the property exceeds an average slope of 4 horizontal to 1 vertical (4H:1V) per Topographic Map of San Francisco: 4H:1V Slope dated July 25, 2018; and
- 2. Proposed construction involves the following: (1) construction of a new building or structure having over 1,000 square feet of new projected roof area; (2) horizontal or vertical addition having over 500 square feet of new projected roof area; (3) shoring; (4) underpinning: (5) grading, including excavation or fill, of over 50 cubic yards of earth materials; or (6) or any other construction activity that, in the opinion of the Building Official, may have a substantial impact on the slope stability.

### Projects Exempted from SSPA Ordinance:

The following projects are exempted from the SSPA Ordinance and do not require completion or submittal of the SSPA Checklist:

Proposed construction without plans.

in se

 Proposed construction without structural alterations or grading with less than 50 cubic yards of earth materials.

### What do I need to do?

If your property lies within areas specified in Item 1 and your proposed construction involves activities indicated in Item 2, you will be required to submit additional reports by a license professional identifying areas of potential slope instabilities, defining potential risks of development due to geological and geotechnical factors, and recommending appropriate slope instability mitigation strategies. Additionally, your project may require a third party peer review to provide additional and specialized expertise to supplement the Department of Building Inspection plan review; the Building Official may also elect to establish a Structural Advisory Committee to review the proposed project.

For more details on SSPA requirements, please reference information Sheet S-19.

City and County of San Francisco Department of Building Inspection



Edwin M. Lee, Mayor Tom C. Hul, S.E., C.B.O., Director

### INFORMATION SHEET

NO. S-05		
DATE	:	May 20, 2015
CATEGORY	;	Structural
SUBJECT	:	Geotechnical Report Requirements
PURPOSE		The purpose of this Information Sheet is to establish the permit work scope which will require the submittal of a geotechnical report.
REFERENCE	:	San Francisco Building Code (SFBC) State of California Department of Conservation Division of Mines and Geology (CDMG) Seismic Hazard Zones Map for San Francisco, released November 17, 2000. [Note: Map is posted near 1660 Mission St. 2 <sup>nd</sup> Floor Counter. "Liquefaction zones" are colored "Green," or Seismic Hazard Zones Map Indices listing property street addresses and/or blocks and lots which are in the potential landslide and liquefaction zones (see Attachments 1&2)] Figure 4 of the San Francisco Seismic Safety Investigation report prepared by URS/John A. Blume & Associates, Engineers, June 1974. (Note: Map is posted near 1660 Mission St. 2 <sup>nd</sup> Floor Counter. "Landslide Hazard Areas" are colored "Red")

### DISCUSSION

### (A) Permit requiring geotechnical report

.

The following permit application submittal will require a geotechnical report:

- 1. New Building (with the exception of one-story storage or utility occupancy, including storage shed and garage)
- 2. Horizontal Additions if the footprint area increases more than 50% of the existing square footage
- 3. Horizontal and Vertical Additions increase more than 1000 square feet of projected roof area within the Landslide Hazard Areas (see Reference) per SFBC Section 106A.4.1.4.3 and per SFBC Section 106A.4.1.4.4.

[See SECTION (C) page 3]

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Technical Services Division 1660 Mission Street – San Francisco CA 94103 Office (415) 558-6205 – FAX (415) 558-6401 – www.sfdbi.org

### INFORMATION SHEET

- 4. Any of the following grading (per SFBC Section J104.3):
  - a) Cut section is greater than 10 feet in vertical height.
  - b) Cut slope is steeper than 2 horizontal to 1 vertical.
  - c) The tops of cut banks are separated from any structure or major improvement by a distance, measured horizontally, less than the height of the bank.
  - d) More than 5000 cubic yards are involved in grading.
  - e) Grading performed at a site located within Earthquake Fault Zones, Seismic Hazard Zones, Landslide Zones (see Attachment 1), or Liquefaction Zones (see Attachment 2) as shown in the most recently published maps from California Geological Survey.
- 5. Slope of fill is steeper than two units horizontal to one unit vertical (50 percent slope) specified per SFBC Section J107.6, or deviate from the stipulated provisions in SFBC Section J107 Fills.
- 6. Any footings on/or adjacent to slopes steeper than one unit vertical in three units horizontal without clearances as indicated per SFBC Section 1808.7 and Figure 1808.7.1.
- 7. The design soil lateral loads are less than the minimum design requirements specified in Section 1610 Soil Lateral Loads.
- 8. The design load bearing value used exceeds values stipulated for Class 4 or 5 soil materials in SFBC Table 1806.2 Presumptive Load-Bearing Values.
- 9. Special foundation including but not limited to piles, piers, base isolation and any design not covered by code, excluding piers supporting a fence, sign or isolated post.
- 10. As required per Building Code:
  - a) Expansive soil per SFBC Section 1803.5.3.
  - b) Drainage system as an alternative to the requirements per SFBC Section J109 Drainage and Terracing.
  - c) Water Table per SFBC Section 1803.5.4 to determine whether the existing ground-water table is above or within 5 feet below the elevation of the lowest floor level where such floor is located below the finished ground level adjacent to the foundation, unless waterproofing is provided in accordance with SFBC Section 1805.
  - d) Ground improvement, including soil mix grouting and chemical soil grouting.
  - e) Where shallow foundations will bear on controlled low-strength material (CLSM), a geotechnical investigation shall be conducted per SFBC Section 1803.5.9 Controlled lowstrength material.
  - f) Where geological investigation is deemed necessary per SFBC Section 1803 Geotechnical Investigations.
- 11. Permit scope subject to mandatory structural advisory review under SFBC Section 106A.4.1.2 Edgehill Slope Protection Area, Section 106A.4.1.3 Northwest Mt. Sutro Slope Protection Area.
- 12. All structures utilizing Modal Response Spectrum Analysis in accordance with ASCE 7-10 Section 12.9 Modal Response Spectrum Analysis.

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### (B) Submittal requirements for geotechnical report (if required)

GEOTECHNICAL:

- Provide original letter wet signed by geotechnical consultant, who is a licensed civil or geotechnical engineer, stating that they have reviewed and approved final structural plans. (Note: In addition to the licensed geotechnical or civil engineer, a licensed geologist is also required for properties subject to the Slope Protection Act [See SECTION (C) BELOW]).
- 2. Provide two (2) sets of original geotechnical reports and one (1) CD-ROM: SOILS REPORTS: Effective November 1, 2011, DBI will no longer accept soils reports solely in "hard" copy format. Two (2) "hard" copies and one (1) copy on a CD-ROM in Adobe 'PDF' format are required. After DBI review, one "hard" copy will be returned to the applicant with a 'Received' stamp. DBI will retain its copy, and the CD-ROM will be sent to the State Department of Conservation, as required by state law.
- Geotechnical report shall be in accordance with SFBC Section 1803.2 through Section 1803.6 and Section J104.3.
- 4. Civil engineers experienced in geotechnical engineering are authorized to practice geotechnical engineering. This includes preparing or reviewing soils reports.

### (C) Projects subject to the Slope Protection Act (SFBC Section 106A.4.1.4)

Scope. Properties are subject to these requirements where any portion of the property lies within the areas of "Earthquake-Induced Landslide" in the Seismic Hazard Zone Map, released by Callfornia Department of Conservation, Division of Mines and Geology, dated November 17, 2000 (see Attachment 1), or amendments thereto; or within the "Landslide Hazard Areas" mapped as "Landslide Locations" in Figure 4 of the San Francisco Seismic Safety Investigation report prepared by URS/John A. Blume & Associates, Engineers, June 1974; or any successor map thereto. (see Reference)

Sites that are deemed stable by the geologist and where the geologist has mapped the site underlain by bedrock at depth shallower than the proposed depth of excavation are not required to be explored to depths specified in Section 1803.5.6.

Proposed construction work that is subject to these requirements includes the construction of new buildings or structures having over 1000 square feet of new projected roof area, and horizontal or vertical additions having over 1000 square feet projected roof area of newly constructed addition. In addition, these requirements shall apply to the following activity or activities, if determined by the plan reviewer that the proposed work may have a substantial impact on the slope stability of any property, such as: shoring, underpinning, excavation or retaining wall work; grading, including excavation or fill, of over fifty (50) cubic yards of earth materials; or any other construction activity. Such determination by plan reviewer shall be verified by supervisor or manager.

If required as above, permit applications submitted to the Department of Bulkling Inspection for construction shall include report(s) prepared and signed by both a licensed geologist and a licensed geotechnical or civil engineer identifying areas of potential slope instability, defining potential risks of development due to geological and geotechnical factors, and drawing conclusions and making recommendations regarding the proposed development. These reports shall undergo design review by a licensed geotechnical or civil engineer. Such design review shall verify that appropriate geological and geotechnical issues have been considered and that appropriate slope instability mitigation strategies, including drainage plans if required, have been proposed.

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**Procedure to request for Structural Advisory Committee (SAC).** After reviewing all submitted information pursuant to Section 106A.4.1.4.4, the plan reviewer may request that the permit application be subject to review by a Structural Advisory Committee (SAC), as defined by Building Code Section 105A.6. Such request will be reviewed by Supervisor or Manager and needs to be approved by Deputy Director.

Site Permit Processing. For projects that may be subject to the Slope Protection Act, plan reviewer should request design professional to stipulate on plan the acknowledgement that: Addendum plan review may determine the project is subjecting to compliance with the Slope Protection Act that requires submittal of Geological and Geotechnical report(s) per SFBC Section 106A.4.1.4.4. Two (2) hard copies and one (1) CD\_ROM of the report(s) shall be submitted to DBI upon request, prior to issuance of the structural or foundation addenda.

5/20/15 Tom Coller Tom C. Hui, S.E., C.B.O.

Director Department of Building Inspection

Attachments: Seismic Hazard Zones Map Indices

Addresses in LANDSLIDE ZONES
 <u>www.sfdbi.org/IS\_S05\_Addresses\_Landslide\_Zones\_Attachment01</u>
 Addresses in LIQUEFACTION ZONES

www.sfdbi.org/IS S05 Addresses Liquefaction Zones Attachment02

This information Sheet is subject to modification at any time. For the most current version, visit our website at http://www.sidbi.org

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Technical Services Division 1660 Mission Street – San Francisco CA 94103 Office (416) 558-6205 – FAX (415) 558-6401 – www.sfdbi.org FILE NO. 171284

1

AMENDED IN BOARD 5/8/2018

1	[Building Code - Slope and Seismic Hazard Zone Protection Act]
2	
З	Ordinance amending the Building Code to revise the <u>renamed</u> City's Slope <u>and Seismic</u>
4	Hazard Zone Protection Act by clarifying the scope of its application to properties
5	exceeding an average slope of <u>25%4:1</u> grade, updating the map references, mandating
6	review by the Department of Building Inspection's Structural Advisory Committee
7	and/or a third party peer review under specified circumstances, and re-enacting and
8	modifying a paragraph in the scope section regarding the type of proposed
9	construction that triggers application of the Act which that was omitted inadvertently in
10	the adoption of the 2016 Code; affirming the Planning Department's determination
11	under the California Environmental Quality Act; and directing the Clerk of the Board of
12	Supervisors to forward this ordinance to the California Building Standards
13	Commission upon final passage.
14	NOTE: Unchanged Code text and uncodified text are in plain Arial font. Additions to Codes are in single-underline italics Times New Roman font.
15	Deletions to Codes are in <u>strikethrough italies Times New Roman font</u> . Board amendment additions are in <u>double-underlined Arial font</u> .
16	Board amendment deletions are in strikethrough Arial font. Asterisks (* * * *) indicate the omission of unchanged Code
17	subsections or parts of tables.
18	
19	Be it ordained by the People of the City and County of San Francisco:
20	Section 1. General Findings.
21	(a) The Planning Department has determined that the actions contemplated in this
22	ordinance comply with the California Environmental Quality Act (California Public Resources
23	Code Sections 21000 et seq.). Said determination is on file with the Clerk of the Board of
24	Supervisors in File No. 171284 and is incorporated herein by reference. The Board affirms
25	this determination.
1	

Supervisors Peskin; Safai, Cohen, Sheehy BOARD OF SUPERVISORS

(b) On March 21, 2018, the Building Inspection Commission considered this ordinance at a duly noticed public hearing pursuant to Charter Section D3.750-5.

Section 2. California Health and Safety-Code Section 17958.7(b). No finding is required under California Health and Safety Code Section 17958.7 because the ordinance does not amend a "building standard" as defined in Section 18909 of that Code.

Section 3. The Building Code is hereby amended by revising Section 106A.4.1.4, to read as follows:

 10
 106A.4.1.4 The Slope and Seismic Hazard Zone Protection Act. This Section of the San

 11
 Francisco Building Code shall be known as the Slope and Seismic Hazard Zone Protection Act.

 12
 106A.4.1.4.1 Creation. The Slope and Seismic Hazard Zone Protection Act shall apply

 13
 to all property within San Francisco that exceeds an average slope of 25%4 horizontal to 1

<u>vertical grade or falls within certain mapped areas of the City</u>, except those properties already
 subject to the Edgehill Mountain Slope Protection Area or the Northwest Mt. Sutro Slope
 Protection Area. For purposes of this Section "property" shall mean a legal lot of record.
 Heightened review of certain permit applications, as provided in this section, shall be given to
 all property subject to this Act.

**106A.4.1.4.2 Purpose.** Because landslides, earth movement, ground shaking,20drainage issues, and subsidence are likely to occur on or near steeply sloped properties and21- within other defined areas causing severe damage and destruction to public and private22- improvements, the Board of Supervisors finds that the public health, safety, and welfare, is23best protected if the Building Official causes permit applications for the construction of new24buildings or structures and certain other construction work on property subject to the Slope25and Seismic Hazard Zone Protection Act to undergo additional undergo additional be peer-

reviewed for structural integrity and effect on *hillside or* slope stability. The requirements for projects subject to the Slope *and Seismic Hazard Zone* Protection Act are in addition to all other applicable laws and regulations, including any and all requirements for environmental review under the California Environmental Quality Act; compliance with the requirements contained herein does not excuse a project sponsor from compliance with any other applicable laws and regulations.

7 106A.4.1.4.3 Scope. (a) Properties are subject to these requirements where; (1) any 8 portion of the property either (1) exceeds an average slope of 25% grade or (2) lies within the areas of "Earthquake-Induced Landslide" in the Selsmic Hazard Zone Map, released by the 9 10 California Department of Conservation, Division of Mines and Geology, dated November 17, 11 2000, or amendments thereto or (2) the property exceeds an average slope of 4 horizontal to 12 1 vertical slope or within the "Landslide Hazard Areas" mapped as "Landslide Locations" in Figure 13 4 of the San Francisco Scismic Safety Investigation report prepared by URS/John A. Blume & 14 Associates, Engineers, June 1974, or any successor map thereto.

- (b)\_Proposed construction work that is subject to these requirements includes the construction
   of new buildings or structures having over 1,000 square feet of new projected roof area and horizontal
- 17 or vertical additions having over 500 square feet of new projected roof area. In addition, these
- 18 requirements shall apply to the following activity or activities if, in the opinion of the Building Official,
- 19 *the proposed work may have a substantial impact on the slope stability of any property\_shoring,*
- 20 underpinning excavation or retaining wall work; grading, including excavation or fill, of over 50
- 21 <u>cubic vards of earth materials; or any other construction activity that, in the opinion of the Building</u>

Official, may have a substantial impact on the slope stability of any property.

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106A.4.1.4.4 Mandatory submittal <u>and review</u> of reports <del>and geotechnical</del> engineering review by the Structural Advisory Committee; review by other City officials. (a) All permit applications submitted to the *Department of Building Inspection* <u>Central</u>

1	Permit Bureau for construction work on properties subject to the Slope and Seismic Hazard Zone
2	Protection Act shall include report(s) prepared and signed by both a licensed geologist and a
3	licensed geotechnical engineer identifying areas of potential slope instability, defining potential
4	risks of development due to geological and geotechnical factors, including information
5	required by this section 106A.4.1.4.4 and Departmental guidelines and regulations, and
6	drawing conclusions and making recommendations regarding the proposed development.
7	These reports shall undergo design review by a licensed geotechnical engineer be submitted to and
8	reviewed by the Structural Advisory Committee, as defined by Building Code Section
9	105A.Gundergo review as deemed appropriate by the Building Official or by their designated
10	staff. Such design review shall involve an internal review by Departmental staff. The Building
11	Official, in their discretion, may require third party peer review from a licensed geotechnical
12	engineer. After third party peer review, the Building Official, in their discretion, may establish
13	a by the Structural Advisory Committee, as defined by Building Code section 105A.6, to review
14	the project. If there is a history of landslides in the vicinity of the project, the Building Official
15	shall require third party peer review and establish a Structural Advisory Committee to review
16	the project. For purposes of the preceding sentence, "vicinity" shall mean any property
17	tangent to the subject project site that also appears on the current version of the California
18	Department of Conservation's Seismic Hazard Zone Map identified in section 106A.4.1.4.3.
19	The Building Official's or the Building Official's designee's decision(s) concerning the level of
20	review for a particular project or activity shall: (1) be in writing, (2) identify Departmental staff
21	involved in the decision, (3) be consistent with the criteria set forth in the Slope and Seismic
22	Hazard Zone Protection Act and any Departmental guidance adopted under section
23	106A.4.1.6, and (4) describe the basis for the decision.
24	(b) All such project reviews required under section 106A.4.1.4.4(a) shall verify that
25	appropriate geological and geotechnical issues have been considered and that appropriate

1	slope instability mitigation strategies, including drainage plans if required, have been
2	proposed. Review also shall consider any other factors relevant to mitigation slope instability,
3	including, but not limited to, the ground slope, soil type at the project site, the geologic
4	conditions, the history of landslides in the vicinity, the nature of the planned excavation and
5	construction, the proximity and type of adjacent construction, and the effect that construction
6	activity related to the proposed project will have on the safety and stability of the subject
7	property and properties within the vicinity of such property.
8	(c) No permits as specified above for properties subject to the Slope and Seismic Hazard Zone
9	Protection Act that involve review by the Structural Advisory Committee shall be issued unless
10	and until the Building Official has consulted with and received a written communication from
11	representatives of the Departments of Planning and Public Works, and the Fire Department, each of
12	whom has made a visit to the site for which the project is proposed, and the Building Official has
13	received a written report from the Structural Advisory Committee concerning the safety and integrity of
14	the proposed design and construction. As part of its review, the Structural Advisory Committee shall
15	make findings concerning the review criteria and analysis set forth in this section 106A.4.1.4.4
16	and Departmental guidelines and regulations regarding slope and seismic hazardsconsider
17	the effect that construction activity related to the proposed project will have on the safety and
18	stability of the property subject to the Slope and Seismic Hazard Zone Protection Act and
19	properties within the vicinity of such property.
20	106A.4.1.4.5 Structural Advisory Committee and mMandatory denial by the Building
21	Official. After reviewing all submitted information pursuant to Section 106A.4.1.4.4, the Director, in
22	h <del>is or her sole discretion, may require that the permit application be subject to review by a Structural</del>
23	Advisory Committee, as defined by Building Code Section 105A.6. When subject to such Structural
24	Advisory Committee review, no permits shall be issued unless and until the Building Official has
25	consulted with and received a written communication from representatives of the Department of

Supervisors Peskin; Safai, Cohen, Sheehy BOARD OF SUPERVISORS

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Planning, Department of Public Works and Fire Department, each of whom has made a visit to the site
 for which the project is proposed, and the Building Official has received a written report from the
 Structural Advisory Committee concerning the safety and integrity of the proposed design and
 construction. As part of its review, the Structural Advisory Committee shall consider the effect that
 construction activity related to the proposed project will have on the safety and stability of the property
 subject to the Slope and Seismic Hazard Zone Protection Act and properties within the vicinity of such
 property.

In the event that the *Building Official establishes a* <u>Building Official establishes a</u>
Structural Advisory Committee, *and such Committee* <u>and such Committee</u> determines that there
is a reasonable likelihood that the proposed design and construction would result in unsafe
conditions or would increase the likelihood of hillside *or slope* instability, and such unsafe
conditions or instability cannot be mitigated to the satisfaction of the Committee, the Building
Official shall deny the permit. The Building Official's decision to deny the permit is appealable
only to the Board of Appeals.

106A.4.1.4.6 Regulations to implement the Slope and Seismic Hazard Zone 15 Protection Act. The Building Official is hereby authorized to adopt rules, regulations, 16 17 administrative bulletins, or other written guidelines to assist the Department in implementing 18 this Section 106A.4.1.4, provided that any such guidance shall be in addition to the criteria set 19 forth in section 106A.4.1.4.4 or elsewhere in this Act and shall not conflict with or diminish any 20 of the permit review criteria in this Building Code, including, but not limited to, requirements for 21 applicants to demonstrate that a project site is not subject to the Slope Protection Act. Such 22 guidance may provide objective criteria to exempt certain projects and activities from 23 discretionary third party peer or Structural Advisory Committee review where the soil at the 24 project site is dune sand or Colma Formation and the project or activity presents 25 circumstances that would not necessitate more extensive review.

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Section 4. Effective Date. This ordinance shall become effective 30 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board of Supervisors overrides the Mayor's veto of the ordinance

Section 5. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors
intends to amend only those words, phrases, paragraphs, subsections, sections, articles,
numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal
Code that are explicitly shown in this ordinance as additions, deletions, Board amendment
additions, and Board amendment deletions in accordance with the "Note" that appears under
the official title of the ordinance.

Section 6. Directions to the Clerk. The Clerk of the Board of Supervisors is hereby
directed to forward a copy of this ordinance to the California Building Standards Commission
upon final passage.

APPROVED AS TO FORM: DENNIS J. HERRERA, City Attorney

By: IOHN D. MALAM

Deputy City Attorney n:Vegaha\as2017\1700718\01273467.docx

Supervisor Peskin BOARD OF SUPERVISORS City and County of San Francisco Department of Building Inspection



London N. Breed, Mayor Tom C. Hui, S.E., C.B.O., Director

Attachment A

# SLOPE AND SEISMIC HAZARD ZONE PROTECTION CHECKLIST

# A COPY OF THIS DOCUMENT SHALL BE SUBMITTED WITH THE PERMIT APPLICATION

JOB ADDRESS \_\_\_\_\_\_ ADDENDUM NO. \_\_\_\_\_ ADDENDUM NO. \_\_\_\_\_

OWNER NAME \_\_\_\_\_\_ OWNER PHONE NO. \_( )

1: PROPERTY LOCATION			3: PROPOSED CONSTRUCTION			
	YES	NO	CONSTRUCTION OF NEW BUILDING OR STRUCTURE HAVING OVER 1000 SQFT OF NEW PROJECTED ROOF AREA	YES	NO []	
EARTHQUAKE INDUCED LANDSLIDE AREA ON THE STATE OF CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND			HORIZONTAL OR VERTICAL ADDITIONS HAVING OVER 500 SQFT OF NEW PROJECTED ROOF AREA	YES □	NO 	
GEOLOGY (CDMG) SEISMIC HAZARD ZONES MAP FOR SAN FRANCISCO, RELEASED NOVEMBER 17, 2000.			SHORING	YES	NO □	
			UNDERPINNING	YES	NO D	
2: AVERAGE SLOPE OF PROPERTY			GRADING, INCLUDING EXCAVATION OR FILL, OF OVER 50 CUBIC YARDS OF EARTH MATERIAL	YES	NO □	
PROPERTY EXCEEDING AN AVERAGE SLOPE OF 4H: IV (25%) GRADE			CONSTRUCTION ACTIVITY LISTED BELOW DETERMINED BY THE BUILDING OFFICIAL THAT MAY HAVE A SUBSTANTIAL IMPACT ON THE SLOPE STABILITY:			
(APPLICANT WILL NEED TO INCLUDE PLANS	YES		RETAINING WALL:	YES	NO D	
AND/OR INCLUDE A SURVEY VERIFYING THE SLOPE OF THE PROPERTY)			OTHERS:	YES	NO □	

# SECTION 4: LICENSED DESIGN PROFESSIONAL VERIFICATION AND SIGNATURES

Under penalty of perjury, I certify that the information provided on this form is based on my personal review of the building and its records, or review by others acting under my direct supervision, and is correct to the best of my knowledge.

Prepared by:	Engineer/Architect of Record	[Architect/Engineer Stamp Here]
Telephone	Email	
Signature	Date	

# FOR DBI USE ONLY

# ASSIGNMENT OF REVIEW TIER

# EXEMPTED: Reports per Section E and Third Party Peer Review Not Required

If the box in Section 1 "Property Location" <u>AND</u> the box in Section 2 "Average Slope of Property" are marked "No" <u>OR</u> if all the boxes in Section 3 "Proposed Construction" are marked "No", reports per Section E and Third Party Peer Review are exempted by the SSPA.

# TIER I: Reports per Section E Required but Third Party Peer Review Not Required

If the box in Section 2 "Average Slope of Property" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes" <u>AND</u> the property does not lie within any areas of potential landslide hazard, DBI shall require mandatory submittal of reports per Section E only.

# TIER II: Reports per Section E and Third Party Peer Review Required

If the box in Section 2 "Average Slope of Property" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes" <u>AND</u> the property lies within the areas of potential landslide hazard, <u>DBI</u> shall require mandatory submittal of reports per Section E and require the permit application be subject to a third party peer review. At the discretion of the SSPA Review Committee, the peer review may be followed by the establishment of a Structural Advisory Committee (SAC) with the project reassigned to Tier III.

If the DBI Plan Review Engineer (or the SSPA Review Committee, if established), in their discretion, determines from the submitted documents that the project has a substantial impact on the slope stability of the site or creates a potential for earthquake induced landslide hazards, DBI may require that the third party peer review be followed by the establishment of a Structural Advisory Committee (SAC) and re-assigned the project to Tier III.

# TIER III: Structural Advisory Committee (SAC) Review

If the box in Section 1 "Property Location" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes", DBI shall require mandatory submittal of reports per Section E and require the permit application be subject to review by a Structural Advisory Committee (SAC), as defined by SFBC Section 105A.6.

Tier assigned by:			Phone: (415)
		DBI Plan Review Engineer	
Comment:			
			ana yaya a sa

City and County of San Francisco Department of Building Inspection



London N. Breed, Mayor Tom C. Hui, S.E., C.B.O., Director

# INFORMATION SHEET

NO. S-19	
DATE	: October 2, 2018
CATEGORY	: Structural
SUBJECT	: Properties Subject to the Slope and Seismic Hazard Zone Protection Act (SSPA) Ordinance
PURPOSE	: The purpose of this Information Sheet is to clarify the permit process for projects subject to the Slope and Seismic Hazard Protection Act (SSPA).
REFERENCE	<ul> <li>2016 San Francisco Building Code (SFBC)</li> <li>State of California Department of Conservation Division of Mines and Geology (CDMG) Seismic Hazard Zones Map for San Francisco released November 17, 2000.</li> <li>Ordinance No. 121-18: Slope and Seismic Hazard Protection Zone Act (effective 6/23/2018)</li> <li>Topographic Map of San Francisco: 4H:1V Slope dated July 25, 2018.</li> </ul>
DISCUSSION	:

#### A. Project and Properties Subject to Slope and Seismic Hazard Zone Protection Act (SSPA) Ordinance:

- 1. Properties are subject to the requirements of this ordinance if: (1) any portion of the property lies within the areas of the "Earthquake Induced Landslide Zones" in the Seismic Hazard Zone Map, release by the California Department of Conservation, Division of Mines and Geology, dated November 17, 2000 or (2) the property exceeds an average slope of 4 horizontal to 1 vertical (4H:1V) per Topographic Map of San Francisco: 4H:1V Slope dated July 25, 2018 ; and
- 2. Proposed construction involves the following: (1) construction of a new building or structure having over 1,000 square feet of new projected roof area; (2) horizontal or vertical addition having over 500 square feet of new projected roof area; (3) shoring; (4) underpinning; (5) grading, including excavation or fill, of over 50 cubic yards of earth materials; or (6) or any other construction activity that, in the opinion of the Building Official, may have a substantial impact on the slope stability.

Technical Services Division 1660 Mission Street – San Francisco CA 94103 Office (415) 558-6205 – FAX (415) 558-6401 – www.sfdbi.org

#### B. Projects Exempted from SSPA Ordinance:

The following projects are exempted from the SSPA Ordinarice and do not require completion or submittal of the SSPA Checklist:

- 1. Proposed construction without plans.
- Proposed construction without structural alterations or grading with less than 50 cubic yards of earth materials.

# C. Permit Submittal and SSPA Checklist:

In addition to the Department of Building Inspection (DBI) requirements and guidelines for permit submittal and review, the SSPA shall not conflict with or diminish any other submittal or review criteria's established in the SFBC, DBI guidelines or regulations.

- 1. Applicants shall include plans illustrating the slope of the property, and/or provide a survey verifying the accuracy of the slope of the property by a Land Surveyor licensed in the State of California.
- 2. Applicants shall complete all sections of the SSPA Checklist and have the SSPA Checklist attached onto the plans.
- A DBI Plan Reviewer shall review all permits and verify completeness and accuracy of the SSPA Checklist.

#### D. Guidelines for Completing the SSPA Checklist:

1. Completing Section 1:

Applicants shall mark the appropriate box in Section 1 "Property Location" to determine whether the subject property falls within the Earthquake Induced Landslide Hazard Zones in San Francisco.

2. Completing Section 2:

Applicants shall mark the appropriate box in Section 2 "Average Slope of Property" to identify whether the average slope of the subject property exceeds 4H:1V.

3. Completing Section 3:

Applicants shall mark all appropriate boxes in Section 3 "Proposed Construction" associated with the proposed construction. If required, a DBI Plan Reviewer shall mark the box associated with "Others" indicating additional scope of work that may have a substantial impact on the slope stability of the site or create a potential for earthquake induced landslide hazards.

4. Completing Section 4:

The licensed design professional of record shall provide and complete all information required in Section 4 "Licensed Design Professional Verification and Signatures" and affix their professional stamp and signature in the allocated box.

# E. Additional Reports Required for Properties Subject to SSPA Ordinance:

In addition to the SSPA Checklist, project sponsors for properties subject to the SSPA ordinance shall include a geotechnical investigation conducted in accordance with SFBC Section 1803.2 and report(s) prepared and signed by both a license geologist and a license geotechnical engineer in accordance with SFBC Section 1803.6. In addition, the report(s) shall address the following per SFBC Section 106A.4.1.4.4:

- 1. Identifying areas of potential slope instabilities.
- 2. Defining potential risks of development due to geological and geotechnical factors, including, but not limited to, ground slopes, soil types, geological conditions and history of landslides in the vicinity.
- 3. Making recommendations regarding the appropriate slope instability mitigation strategies, including drainage plans if required.

#### F. Assignment of a Project Review Tier and Establishment of a SSPA Review Committee

1. After review of the SSPA Checklist and submittal documents, a DBI Plan Review Engineer shall assign a Review Tier to the project based on the following guidelines:

# EXEMPTED: REPORTS PER SECTION E AND THIRD PARTY PEER REVIEW NOT REQUIRED

If the box in Section 1 "Property Location" <u>AND</u> the box in Section 2 "Average Slope of Property" are marked "No" <u>OR</u> if all the boxes in Section 3 "Proposed Construction" are marked "No", reports per Section E and Third Party Peer Review are exempted by the SSPA.

#### TIER I: REPORTS PER SECTION E BUT THIRD PARTY PEER REVIEW NOT REQUIRED

If the box in Section 2 "Average Slope of Property" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes" <u>AND</u> the property does not lie within any areas of potential landslide hazard, DBI shall require mandatory submittal of reports per Section E only.

# TIER II: REPORTS PER SECTION E AND THIRD PARTY PEER REVIEW REQUIRED:

If the box in Section 2 "Average Slope of Property" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes" <u>AND</u> the property lies within the areas of potential landslide hazard, DBI shall require mandatory submittal of reports per Section E and require the project be subject to a third party peer review.

If the DBI Plan Review Engineer (or the SSPA Review Committee, if established), in his or her (its) discretion, determines from the submitted documents that the project has a substantial impact on the slope stability of the site or creates a potential for earthquake induced landslide hazards, DBI may require that the third party peer review be followed by the establishment of a Structural Advisory Committee (SAC) and re-assigned the project to Tier III.

#### TIER III: STRUCTURAL ADVISORY COMMITTEE (SAC) REVIEW

If the box in Section 1 "Property Location" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes", DBI shall require mandatory submittal of reports per Section E and require the permit application be subject to review by a Structural Advisory Committee (SAC), as defined by SFBC Section 105A.6.

- 2. In circumstantial conditions where a project or property present complex challenges, the DBI Plan Review Engineer may request the assistance of the SSPA Review Committee. The Committee will meet to determine the Review Tier applicable to the subject project. The Director shall appoint the members of the SSPA Review Committee where the Committee shall comprise of no less than three (3) DBI Engineers with the following minimum gualifications appointed by the Director:
  - a. A Supervising Engineer licensed as a Structural Engineer in California.
  - b. A Supervising Engineer licensed as a Civil Engineer in California.
  - c. A Plan Review Engineer licensed as a Geotechnical Engineer in California.

#### G. Discretionary Third Party Peer Review

The DBI Plan Review Engineer (or SSPA Review Committee, if established), in his or her (its) discretion, may require a Third Party Peer review by a licensed geotechnical engineer.

The Third Party Peer Review shall provide additional and specialized expertise to supplement DBI review. The Third Party geotechnical engineer will meet with the Engineer of Record (EOR) and with the Plan Review Engineer as needed throughout the review process. If a SSPA Review Committee is established, the Plan Review Engineer shall provide the Committee with regular updates, as necessary, and any reports or findings.

Review by the Third Party geotechnical engineer is not intended to replace quality assurance measures ordinarily exercised by the EOR. Responsibility for the design remains solely with the EOR and the burden to demonstrate conformance of the design to the intent of the SFBC provisions and DBI guidelines or regulations reside solely with the EOR. The responsibility for conducting the plan review resides with the DBI Plan Review Engineer with assistance from the SSPA Review Committee if one is established.

The Third Party geotechnical engineer shall be licensed as a Geotechnical Engineer in California and shall be a recognized expert in the relevant field of geotechnical and geological engineering, and possess other areas of knowledge and experience relevant to the project.

The DBI Plan Review Engineer (or SSPA Review Committee, if established) shall select the Third Party geotechnical engineer. The Project Sponsor then may engage the Third Party geotechnical engineer as a consultant for assistance as appropriate. The Third Party geotechnical engineer shall have no conflict of interest with respect to the project and shall not be considered part of the design team for the project. The responsibility of the Third Party geotechnical engineer is to assist DBI in ensuring compliance of the design with the SFBC. The Third Party geotechnical engineer will be contracted with DBI and his or her responsibility shall be to DBI.

DBI will be responsible for the payment and other expenses for the professional service of the Third Party geotechnical engineer. The Third Party geotechnical engineer shall provide to the Plan Review Engineer (or the SSPA Review Committee, if established) a written copy of his or her proposed scope of work of their contract and associated fees. The proposed scope of service in the contract and any changes proposed to be made thereto shall be approved by the Plan Review Engineer (or the SSPA Review Committee, if established).

#### H. Structural Advisory Committee (SAC) Review

After a Third Party Peer Review, the Plan Review Engineer (or SSPA Review Committee, if established) in his or her (its) discretion, may establish a Structural Advisory Committee (SAC), as defined by SFBC Section 105A.6, to review the project and advise on matters pertaining to the design and construction of the project that may affect the slope stability of the site or create a potential for earthquake induced landslide hazards.

During review required under SFBC Section 106A4.1.4.4, the SAC shall verify that the project sponsor considered appropriate geological and geotechnical issues and proposed appropriate slope instability mitigation strategies, including drainage.

SAC review shall also consider other factors relevant to mitigate slope instabilities, including, but not limited to, ground slopes, soil types, geologic conditions, history of landslides in the vicinity, nature of construction, proximity and type of adjacent construction, and effects of the construction activity on the safety and stability of the subject property and properties within the vicinity.

DBI will be responsible for the payment and other expenses for the professional services of the SAC members. The SAC members shall provide to the Plan Review Engineer (or the SSPA Review Committee, if established) a written copy of his or her proposed scope of work of their contract and associated fees. The proposed scope of service in the contract and any changes proposed to be made thereto shall be approved by the Plan Review Engineer (or the SSPA Review Committee, if established).

# I. Communication with City Planning, Public Works and the Fire Department:

No permits as specified above for properties subject to the SSPA ordinance that involve review by the Structural Advisory Committee (SAC) shall be issued unless and until DBI has consulted with and received written communication from representatives of the Departments of City Planning, Public Works, and the Fire Department, each of whom has made a visit to the site for which the project is proposed, and DBI has received a written report from the Structural Advisory Committee (SAC) concerning the safety and integrity of the proposed design and construction.

#### J. Mandatory Denial by DBI:

In the event that DBI establishes a Structural Advisory Committee (SAC) and such Committee determines that there is a reasonable likelihood that the proposed design and construction would result in unsafe conditions or would increase the likelihood of hillside or slope instability, and such unsafe conditions or instability cannot be mitigated to the satisfaction of the Committee, DBI shall deny the permit. DBI's decision to deny the permit is appealable only to the Board of Appeals.

# K. Tracking Permits Subject to SSPA Ordinance:

- 1. MIS shall enable PTS/SFPermit to flag permits subject to the SSPA ordinance.
- 2. MIS shall enable PTS/SFPermit to generate a report on assignment of Review Tiers of permits subject to the SSPA ordinance.

10/2/2018

Gary Ho, S.E., Senior Engineer Manager, Permit Services Department of Building Inspection

Date:

Daniel Lowrey

Deputy Director, Permit Services Department of Building Inspection

Tom C. Hui, S.E., C.B.O.

10/2/18 DAte

Tom C. Hui, S.E., C.B.O. Director Department of Building Inspection

Attachment A: Slope and Seismic Hazard Zone Protection Checklist

This Information Sheet is subject to modification at any time. For the most current version, visit our website at http://www.sfdbi.org

City and County of San Francisco Department of Building Inspection



London N. Breed, Mayor Tom C. Hui, S.E., C.B.O., Director

Attachment A

# SLOPE AND SEISMIC HAZARD ZONE PROTECTION CHECKLIST

#### A COPY OF THIS DOCUMENT SHALL BE SUBMITTED WITH THE PERMIT APPLICATION

JOB ADDRESS \_\_\_\_\_\_ ADDENDUM NO. \_\_\_\_\_ ADDENDUM NO. \_\_\_\_\_

OWNER NAME \_\_\_\_\_ OWNER PHONE NO. ( )

1: PROPERTY LOCATION			3: PROPOSED CONSTRUCTION			
			CONSTRUCTION OF NEW BUILDING OR STRUCTURE HAVING OVER 1000 SQFT OF NEW PROJECTED ROOF AREA	YES	NO □	
EARTHQUAKE INDUCED LANDSLIDE AREA ON THE STATE OF CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND GEOLOGY (CDMG) SEISMIC HAZARD ZONES MAP FOR SAN FRANCISCO, RELEASED NOVEMBER 17, 2000.		NO	HORIZONTAL OR VERTICAL ADDITIONS HAVING OVER 500 SQFT OF NEW PROJECTED ROOF AREA	YES	NO □	
			SHORING	YES □	NO □	
			UNDERPINNING	YES	NO □	
2: AVERAGE SLOPE OF PROPERTY			GRADING, INCLUDING EXCAVATION OR FILL, OF OVER 50 CUBIC YARDS OF EARTH MATERIAL	YES	NO □	
PROPERTY EXCEEDING AN AVERAGE SLOPE OF 4H:1V (25%) GRADE	YES		CONSTRUCTION ACTIVITY LISTED BELOW DETERMINED BY THE BUILDING OFFICIAL THAT MAY HAVE A SUBSTANTIAL IMPACT ON THE SLOPE STABILITY:			
(APPLICANT WILL NEED TO INCLUDE PLANS ILLUSTRATING SLOPE OF THE PROPERTY AND/OR INCLUDE A SURVEY VERIFYING THE SLOPE OF THE PROPERTY)		NO	RETAINING WALL:	YES D	NO □	
			OTHERS:	YES	NO □	

# SECTION 4: LICENSED DESIGN PROFESSIONAL VERIFICATION AND SIGNATURES

Under penalty of perjury, I certify that the information provided on this form is based on my personal review of the building and its records, or review by others acting under my direct supervision, and is correct to the best of my knowledge.

Prepared by	Engineer/Architect of Record	[Architect/Engineer Stamp Here]
Telephone	Email	
Signature	Date	

# FOR DBI USE ONLY

# ASSIGNMENT OF REVIEW TIER

# EXEMPTED: Reports per Section E and Third Party Peer Review Not Required

If the box in Section 1 "Property Location" <u>AND</u> the box in Section 2 "Average Slope of Property" are marked "No" <u>OR</u> if all the boxes in Section 3 "Proposed Construction" are marked "No", reports per Section E and Third Party Peer Review are exempted by the SSPA.

#### TIER I: Reports per Section E Required but Third Party Peer Review Not Required

If the box in Section 2 "Average Slope of Property" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes" <u>AND</u> the property does not lie within any areas of potential landslide hazard, DBI shall require mandatory submittal of reports per Section E only.

# TIER II: Reports per Section E and Third Party Peer Review Required

If the box in Section 2 "Average Slope of Property" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes" <u>AND</u> the property lies within the areas of potential landslide hazard, DBI shall require mandatory submittal of reports per Section E and require the permit application be subject to a third party peer review. At the discretion of the SSPA Review Committee, the peer review may be followed by the establishment of a Structural Advisory Committee (SAC) with the project reassigned to Tier III.

If the DBI Plan Review Engineer (or the SSPA Review Committee, if established), in their discretion, determines from the submitted documents that the project has a substantial impact on the slope stability of the site or creates a potential for earthquake induced landslide hazards, DBI may require that the third party peer review be followed by the establishment of a Structural Advisory Committee (SAC) and re-assigned the project to Tier III.

#### TIER III: Structural Advisory Committee (SAC) Review

If the box in Section 1 "Property Location" <u>AND</u> any boxes in Section 3 "Proposed Construction" are marked "Yes", DBI shall require mandatory submittal of reports per Section E and require the permit application be subject to review by a Structural Advisory Committee (SAC), as defined by SFBC Section 105A.6.

Tier assigned by:				Phone:	(415)
		DBI Plan Review Engineer		ser	
Comment:					
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# City and County of San Francisco Tails Ordinance

City Hall I Dr. Ceriton B. Goodlett Place San Francisco, CA 94102-4689

File Number: 171284

Date Passed: May 15, 2018

Ordinance amending the Building Code to revise the renamed City's Slope and Seismic Hazard Zone Protection Act by clarifying the scope of its application to properties exceeding an average slope of 4:1 grade, updating the map references, mandating review by the Department of Building Inspection's Structural Advisory Committee and/or a third party peer review under specified circumstances, and re-enacting and modifying a paragraph in the scope section regarding the type of proposed construction that triggers application of the Act that was omitted inadvertently in the adoption of the 2016 Code; affirming the Planning Department's determination under the California Environmental Quality Act; and directing the Clerk of the Board of Supervisors to forward this Ordinance to the California Building Standards Commission upon final passage.

April 16, 2018 Land Use and Transportation Committee - AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE

April 16, 2018 Land Use and Transportation Committee - RECOMMENDED AS AMENDED

April 24, 2018 Board of Supervisors - CONTINUED ON FIRST READING

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

May 08, 2018 Board of Supervisors - AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE

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

May 08, 2018 Board of Supervisors - PASSED ON FIRST READING AS AMENDED

Ayes: 11 - Breed, Cohen, Fewer, Kim, Peskin, Ronen, Safal, Sheehy, Stefan, Tang and Yee

May 15, 2018 Board of Supervisors - FINALLY PASSED

Ayes: 11 - Breed, Cohen, Fewer, Kim, Peskin, Ronen, Safai, Sheehy, Stefani, Tang and Yee File No. 171284

I hereby certify that the foregoing Ordinance was FINALLY PASSED on 5/15/2018 by the Board of Supervisors of the City and County of San Francisco.

ant S. CA

Angela Calvillo Clerk of the Board

Mal 9.211 Mark E. Farrell

Mayor

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Date /

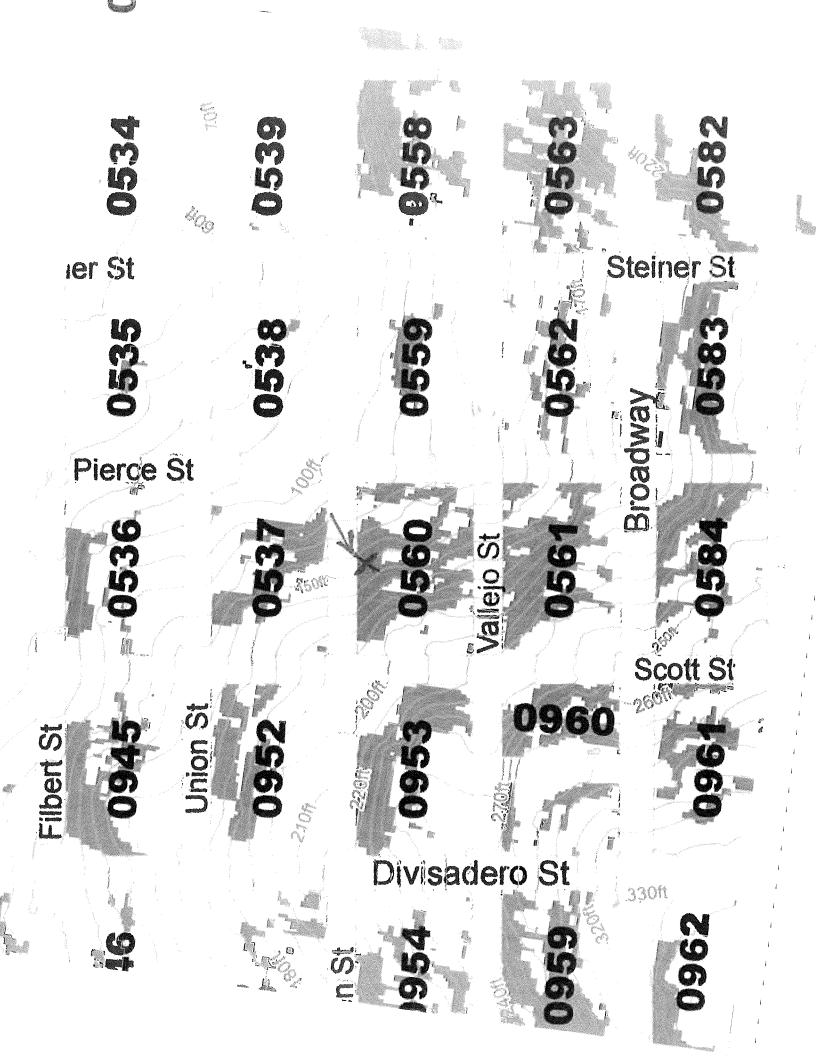
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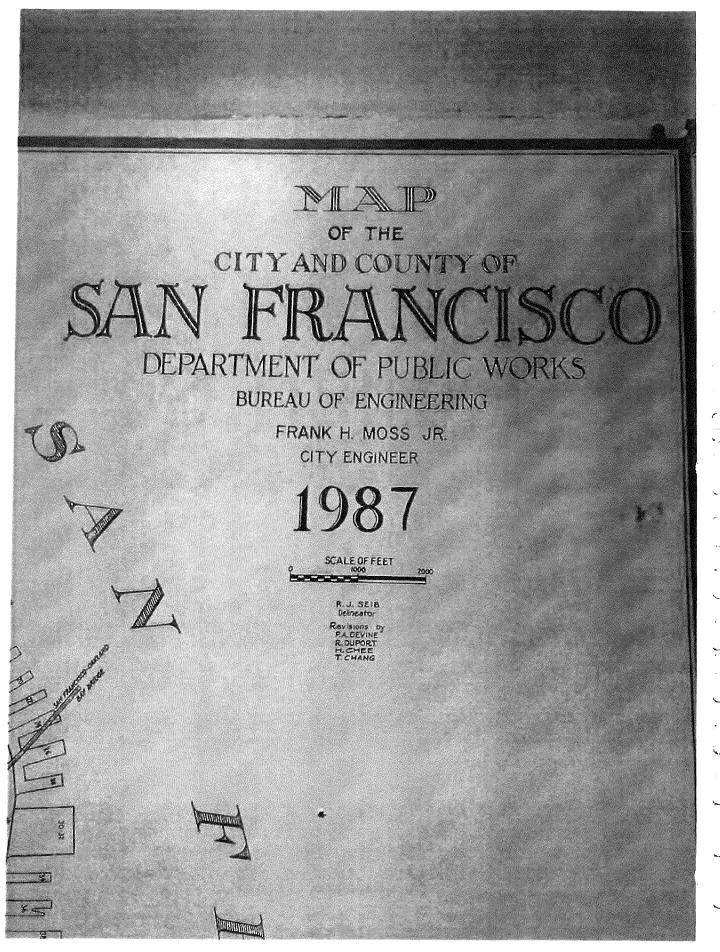
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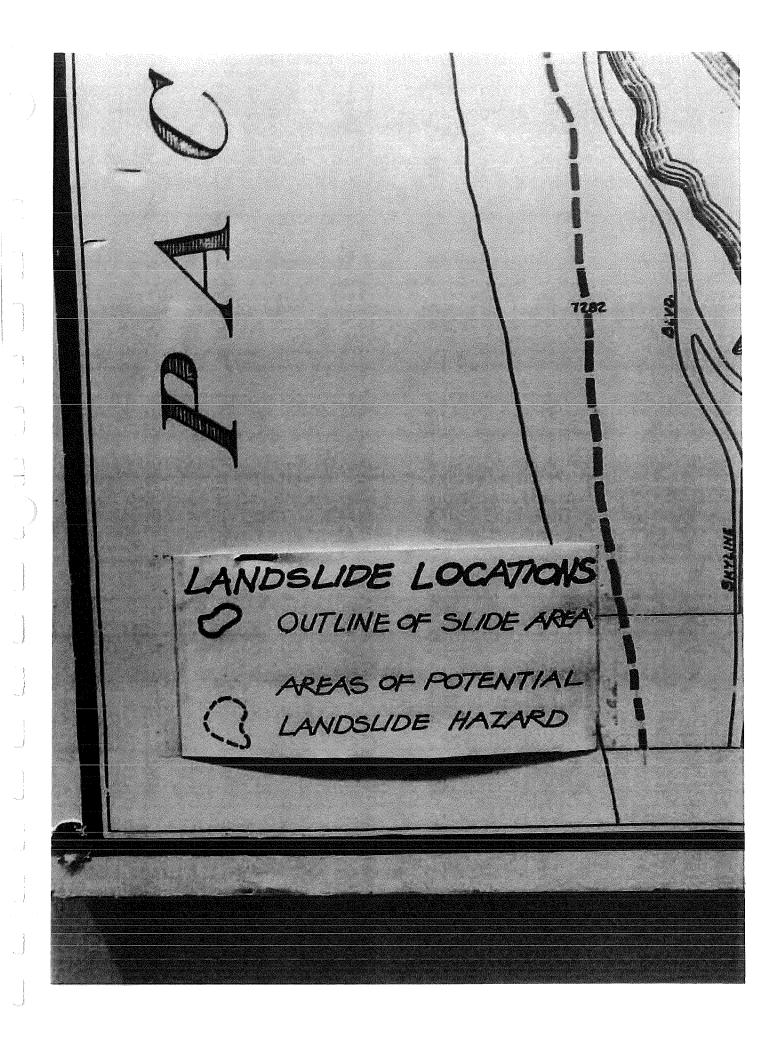


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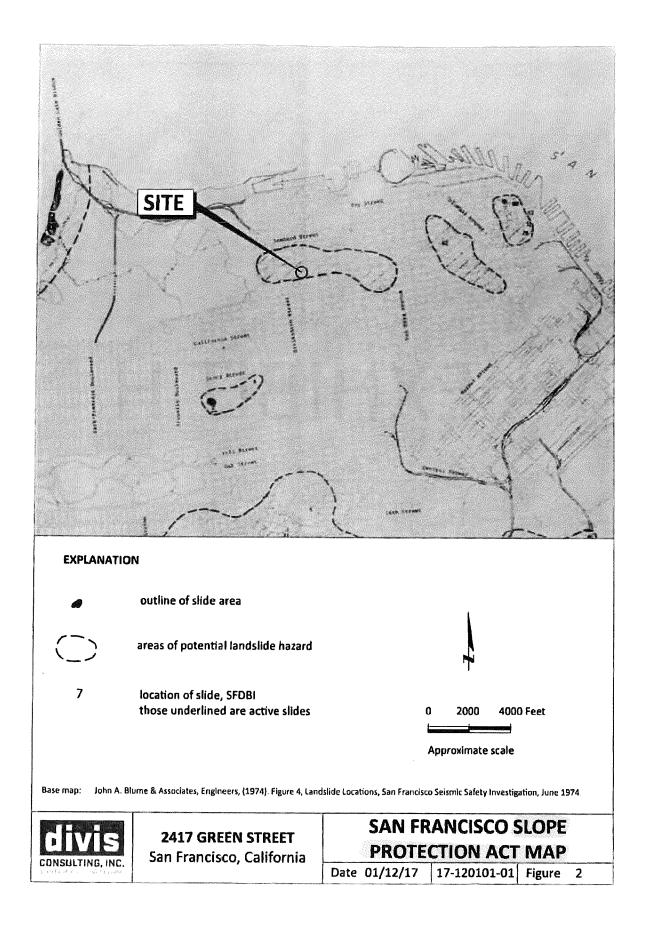


(From Attachment J of report to Board of Supervisors 1/9/18)



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# EXHIBIT H



# EXHIBIT I



# 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:

EXP. 12.31.17 tra GE2694

UNAUTHORIZED USE OF THIS DOCUMENT IS STRICTLY PROHIBITED BY ANYONE OTHER THAN THE SPECIFIC CLIENT AND PROJECT

Divis Consulting, Inc. | 378 Park Street, San Francisco, CA 94110 | t (415) 420-3498 | f (415) 494-8027



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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 [~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 that 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 by 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.



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		

# TABLE 1GRADATION REQUIREMENTS FOR CAPILLARY MOISTURE BREAK

# 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

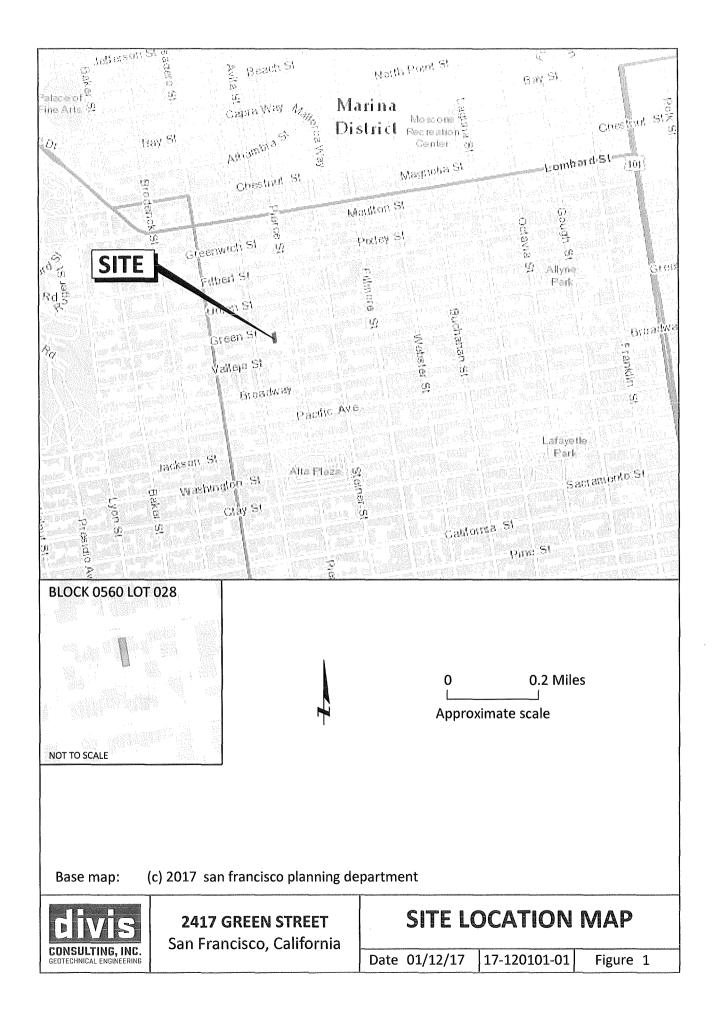
For design in accordance with the 2013 San Francisco Building Code (SFBC), we preliminarily recommend Site Class D (stiff soil) be used. Site seismic design factors are presented on Figure 6. The factors presented should be considered preliminary until checked by your structural engineer.

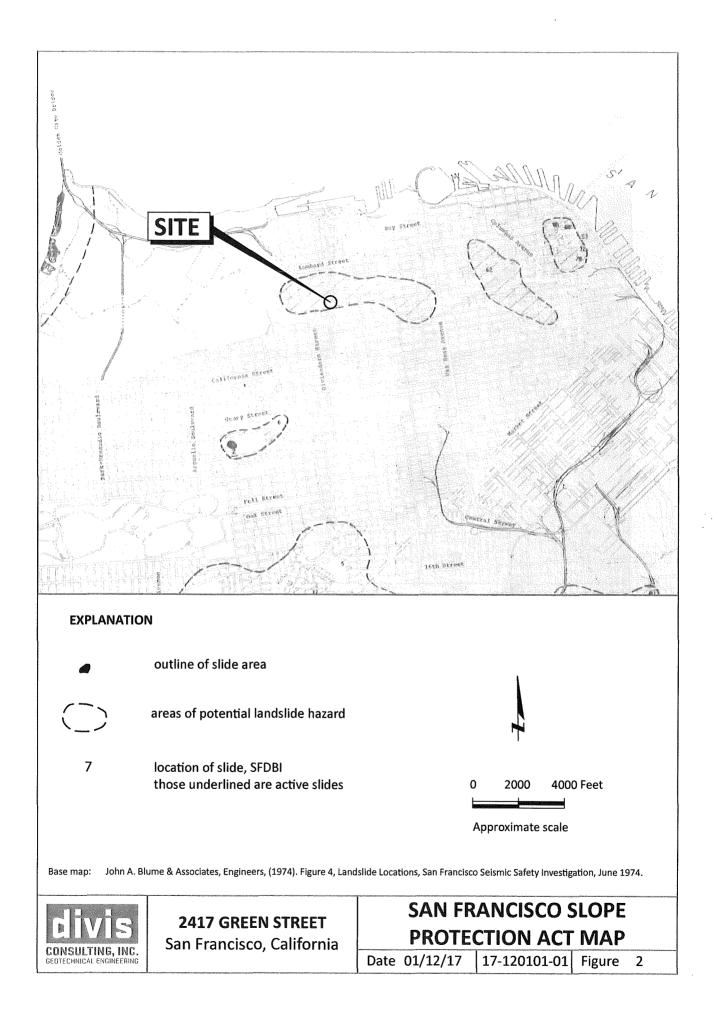
# LIMITATIONS

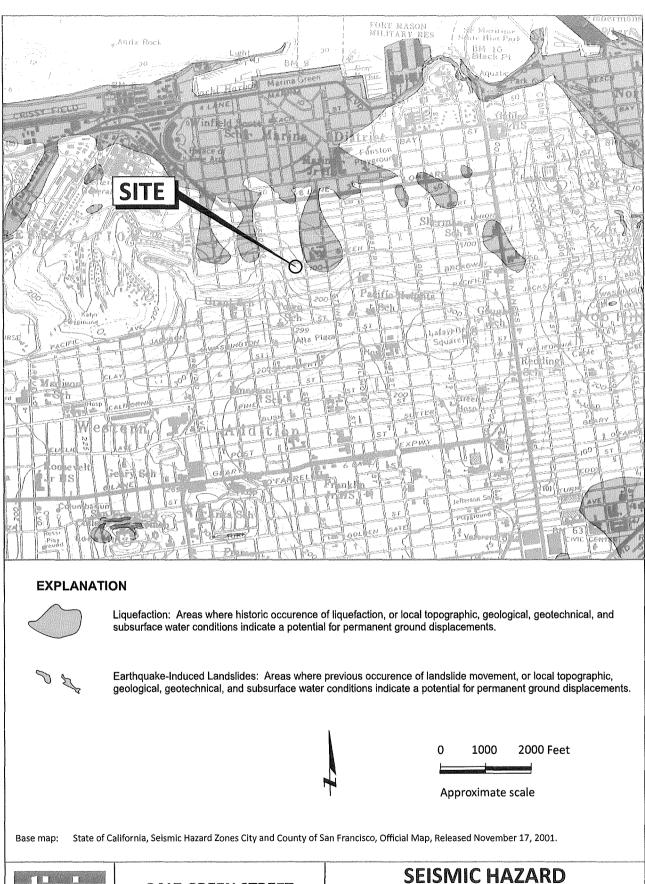
This preliminary geotechnical study has been conducted in accordance with the standard of care commonly used as state-of-practice in the profession. No other warranties are either expressed or implied. A final geotechnical report based on a site specific field study and/or appropriate available onsite 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



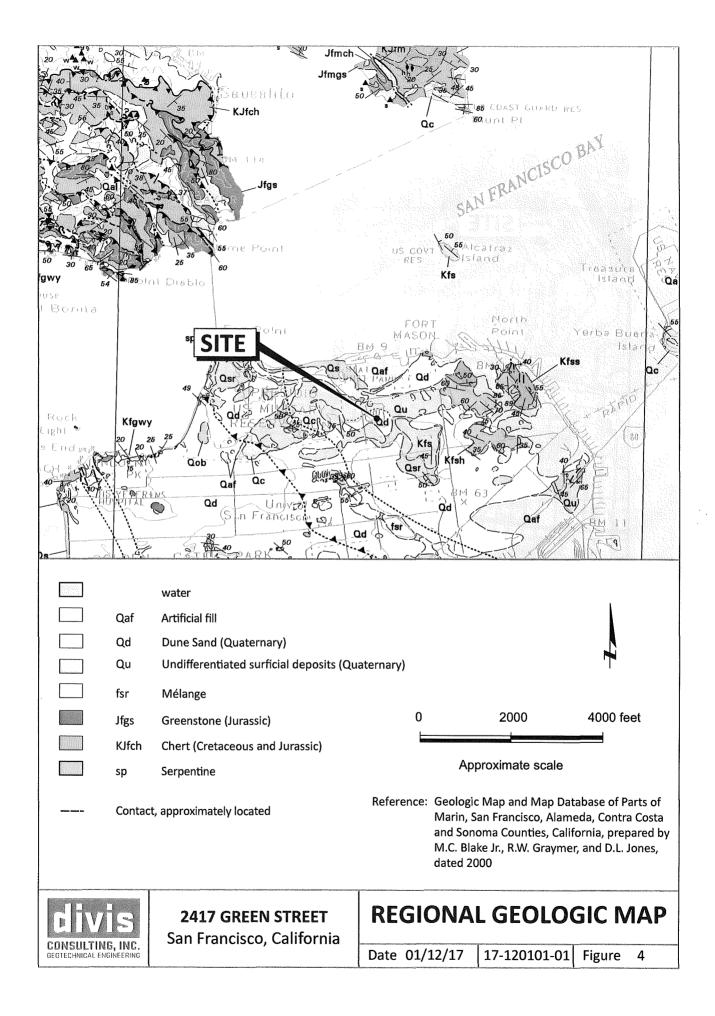


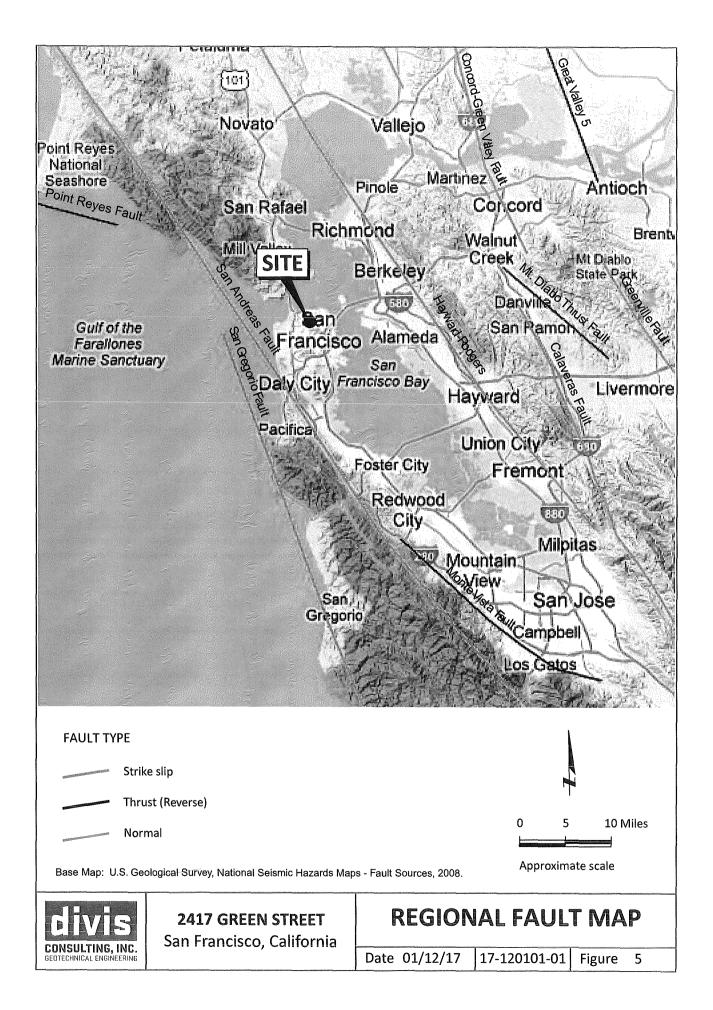


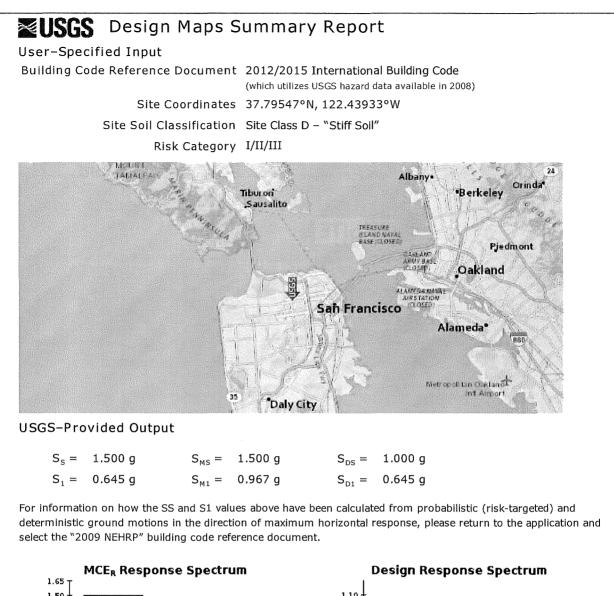
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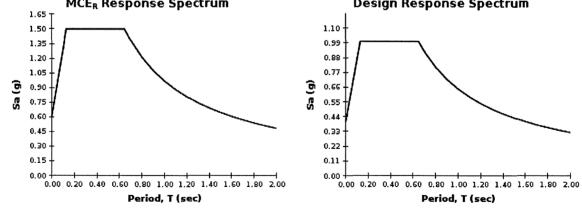
**2417 GREEN STREET** San Francisco, California

# ZONE MAP Date 01/12/17 17-120101-01 Figure 3

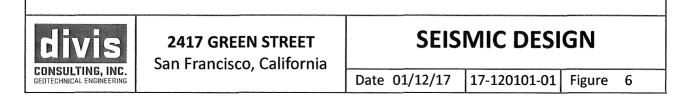








Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.





# 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 tors 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 geotecbnical 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 *geoenviron-mental* 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 Geotechncial 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 www.asfe.org

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*Preliminary Recommendation: Approve with Conditions* 

SPEAKERS:	Same as item 13a.	2020 CCD
ACTION:	Approved with Conditions	2020 FEB - 5 P 4: 08
AYES:	Diamond, Fung, Johnson, Kopp	el, Melgar, Moore BARD OF SUPERMEARE recid bio in
ABSENT:	Richards	reall of supervision
<b>RESOLUTION:</b>	<u>20618</u>	recht by lo certsors

14. 2019-020070CUA

#### (J. HORN: (415) 575-6925)

<u>2100 MARKET STREET</u> – southwest corner of the intersection of Market, Church and 14<sup>th</sup> Streets, Lot 041 in Assessor's Block 3542 (District 8) – Request a **Conditional Use Authorization**, pursuant to Planning Code Sections 303, 303.1, 703.4 and 764 to establish a Formula Retail Financial Services use (dba "Sterling Bank") within a vacant 2,999 square foot commercial retail space at the ground floor of an existing seven-story mixed use building within a Upper Market Neighborhood Commercial Transit District, Market and Octavia Area Plan, and 60/65-X and 40-X Height and Bulk Districts. This action constitutes the Approval Action for the project for the purposes of CEQA, pursuant to San Francisco Administrative Code Section 31.04(h).

Preliminary Recommendation: Disapprove

SPEAKERS:

- = Jeff Horn Staff report
  - + Walter Parsley Project presentation

+ Steve Adams – Project presentation

- + Robert Sammons Support
- + Joseph Titi Support
- + Kent Mirkhani Support
- + Paul Miller Support
- + Brian Springfield Support
- + Gwen Kaplan Support
- + Stephen Cornell Support
- + Corey Smith Support

ACTION: AYES: ABSENT:

15a.

Diamond, Fung, Johnson, Koppel, Melgar, Moore

ABSENT: Richards RESOLUTION: 20619

2017-002545ENV

#### (J. POLING: (415) 575-9072)

<u>2417 GREEN STREET</u> –2,500-square-foot project site on the south side of Green Street between Pierce Street and Scott Street; Lot 028 of Assessor's Block 0560 – **Appeal of Preliminary Negative Declaration** for the proposed expansion of an existing single-family home. The project would lower building floor plates by approximately two 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.

Approved with standard Conditions and findings read into the record.

Page **11** of **14** 

The project site is located in a RH-1 (Residential-House, One Family) Use District and 40-X Height and Bulk District.

*Preliminary Recommendation: Uphold the Preliminary Mitigated Negative Declaration* (Continued from canceled hearing on November 14, 2019)

SPEAKERS:

= Jeanie Poling – Staff report

= Chris May – Staff report

- Richard Drury – Appeal of PMND, DRP No. 1

- Speaker – DRP No. 2

- Louise Bea – DRP No. 3

+ Chris Durkin – Project presentation

+ Eric Dumican – Design presentation

+ Tom Tunney - PMND Appeal

+ Pat Buscovich – Foundation work

- Dan Heffernan – Opposition

- Paul Wermer – Opposition

- Speaker – Opposition

- Francis Dave Ryan - Opposition

- Paul Grippaldi – Risk is reward

+ Howard Epstein - Support

+ Robert Funston – Support

- Robert Lazzara – Opposition

- Christine Pelosi – Opposition

- Dr. Lawrence Karp – Rebuttal

- Phillip Kaufman – Rebuttal

ACTION: Upheld PMND AYES: Diamond, Fung, Johnson, Koppel, Melgar

NAYS: Moore

ABSENT: Richards

RESOLUTION: 20620

15b. 2017-002545DRP-03

#### (C. MAY: (415) 575-9087)

<u>2417 GREEN STREET</u> – south side of Green Street, between Pierce and Scott Streets; Lot 028 in Assessor's Block 0560 (District 2) – Request for **Discretionary Review** of Building Permit Application No. 2017.04.28.5244 proposing to construct one- and three-story horizontal rear additions, construct 3<sup>rd</sup> and 4<sup>th</sup> floor vertical additions, and lower all floor plates in the existing single-family dwelling by approximately two feet. The floor area would increase from approximately 4,118 square feet to approximately 5,115 square feet and would include a one-bedroom accessory dwelling unit measuring approximately 1,023 square feet on the first floor. The project also proposes the partial excavation of the rear yard for a sunken terrace, façade alterations, and interior modifications including the expansion of the existing basement level garage to accommodate another vehicle within a RH-1 (Residential, House, One-Family) Zoning District and 40-X Height and Bulk District. This action constitutes the Approval Action for the project for the purposes of CEQA, pursuant to San Francisco Administrative Code Section 31.04(h).

*Preliminary Recommendation: Take Discretionary Review and Approve as Revised* (Continued from canceled hearing on November 14, 2019)

SPEAKERS:

Same as item 15a.

u: Ou Superasors ROARD A ecia LOZEAU DRURY LLP 410 12TH ST STE 250 OAKLAND, CA 94607-4486 510-836-4200 12473 11-4288/1210 4082 DATE Feb. 5, 2020 PAY TO THE ORDER OF 2/2 an Francisco P Dest \$ anomo ~ Hundred For f Security Featuros Details on Back, DOLLARS 1 Wells Fargo Bank, N.A. California wellsfargo.com FOR 2417 Green Street Mitigeted Nog. Dec 2017-002545 ENV MP