

April 6, 2021
Project No. 19-1694

Ms. Jewelle Kennedy
Ensemble Real Estate Investments
444 West Ocean Boulevard, Suite 650
Long Beach, California 90802

Subject: Response to Development Review Hearing Comments
Tasman East Redevelopment – Parcel 2
2354 Calle Del Mundo
Santa Clara, California

Dear Ms. Kennedy:

This letter presents our response to certain geotechnical aspects of Development Review Hearing (DRH) comments for the proposed residential building to be constructed at Parcel 2 in the Tasman East Redevelopment area in Santa Clara. Parcel 2 is located at 2354 Calle Del Mundo. We understand Mr. Ron Patrick, the owner of neighboring building at 5191 Lafayette Street, expressed concerns with the proposed development and its potential impact to his property and building at 5191 Lafayette Street.

PRELIMINARY AND FINAL GEOTECHNICAL INVESTIGATIONS

Previously, we performed a preliminary geotechnical investigation for the proposed residential building to be constructed at Parcel 2 to evaluate whether there are any adverse geotechnical or geological conditions that may affect site development and to provide preliminary information regarding foundation type and design proposed development. The results of our preliminary geotechnical investigation are presented in a report dated August 1, 2019.

We recommended a final geotechnical investigation be performed after project entitlement and prior to final design. The final geotechnical investigation should include drilling additional borings and/or cone penetration tests to supplement existing subsurface information and provide final geotechnical conclusions and recommendations regarding geotechnical aspects of the project, including appropriate foundation type(s) and design capacities, ground settlement(s) from weight of proposed building and seismic events, site grading and fill placement, and excavation support, as appropriate.

EXISTING SITE CONDITIONS

We understand the site is currently occupied by an abandoned industrial building and parking lot. The existing building abuts the western property line and the neighboring building at 5191 Lafayette Street. Information regarding the foundation type for the

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existing buildings at the site and at 5191 Lafayette Street is unknown. We anticipate both buildings are supported on shallow foundations, such as spread footings. We understand there is a possibility that both buildings share a common foundation (i.e. perimeter footing) along the common property line (western property line of 2354 Calle Del Mundo).

PROPOSED PROJECT

We understand plans are to construct a residential building at the site. The proposed residential building will consist of five levels of Type V wood-frame construction over three levels of concrete podium. The ground level will have a parking garage with stack parking lifts that extend into Level 2, bike storage, maintenance and utility rooms, and a lounge. Level 2 will have storage spaces, a leasing office, and residential units. Level 3 will consist of residential units and amenity spaces and Levels 4 through 8 will consist of residential units. The finished floor for the proposed residential building may be near existing grade or may be raised about 2-1/2 feet above existing grade. Construction of the stack parking lifts may include excavations for lift pit(s) that extend up 6 to 8 feet below finished floor. The lift pits, if any, will be located on the eastern side of the property and not adjacent to the building at 5191 Lafayette Street. We understand that the preliminary plan is to support the proposed residential building on a shallow foundation system, such as a mat foundation or spread footings.

GEOTECHNICAL CONCERNS RAISED BY 5191 LAFAYETTE STREET

We understand Mr. Ron Patrick raised concerns regarding the impact of the proposed residential building at Parcel 2 that will have on his building and property at 5191 Lafayette Street. His concerns relating to certain geotechnical aspects of the project and our responses to these concerns are presented in this section.

Comment #1: Protection of Neighboring Foundation Along Western Property Line

The building at 5191 Lafayette Street abuts the western property line of the site. How will the foundation and building at 5191 Lafayette Street be protected during excavation of the proposed building foundation.

Response to Comment #1

If as-built plans for the neighboring building foundation are not available, we recommend test pits be excavated along the western property line to confirm the type, dimension, and depth of the neighboring foundation; these pits should be excavated after project entitlement but before demolition and start of construction. The results of our preliminary geotechnical investigation indicate the site is underlain by clay to depths of 18 to 20 feet that is not susceptible to caving/piping because of its cohesion. Based on the test pit

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findings and the proposed excavation depths along the western property line, we can provide recommendations to protect the neighboring building and its foundation.

For a condition where excavation for the proposed foundation will bottom several feet (i.e. less than 4 feet) below the neighboring shallow foundation zone-of-influence (ZOI), we judge one feasible option to protect the neighboring foundation is to excavate a trench along the western property line and then fill this trench with lean concrete. Neighboring shallow foundation ZOI is defined by a 1.5:1 (horizontal to vertical) line projected down from bottom of neighboring shallow foundation. The trench will be excavated in slots and backfilled on same day of excavation with lean concrete. The trench should be at least 18 inches wide and bottom at least 2 feet below the planned bottom of excavation. The edge of the mat foundation should be set back 18 inches from the western property line to allow for construction of the lean concrete trench. This lean concrete trench serves to protect the neighboring foundation subgrade from being undermined during excavation for the proposed foundation.

Comment #2: Potential Shared Foundation Along Western Property Line

Mr. Patrick indicated the two existing buildings were built at the same time and there is a possibility that the two buildings share a common foundation along the property line. How will the foundation and building at 5191 Lafayette Street be protected during excavation of the building foundation.

Response to Comment #2

If as-built plans for the neighboring building foundation are not available, we recommend test pits be excavated along the western property line to confirm the type, dimension, and depth of the neighboring foundation; these pits should be excavated after project entitlement but before demolition and start of construction. Should the two buildings share a common foundation along the property line, we anticipate the project structural engineer will evaluate if the common foundation will be left in place or cut-off a certain distance from the property line.

For a condition where there is a common foundation and part of or the entirety of the common foundation will be left in-place, and excavation for the proposed foundation will extend below the ZOI of the common foundation, we judge the following may be installed to protect and prevent undermining of the neighboring foundation:

1. Install hand-excavated piers beneath the portion of the common foundation located within the site to underpin the common foundation. The underpinning piers should extend at least two feet below the bottom of excavation. The underpinning piers should be designed by a structural engineer with expertise in designing underpinning systems.

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2. Install lean concrete trench as described in our Response to Comment #1.

Comment #3: Settlement

Mr. Patrick expressed concerns regarding the potential for the proposed building to cause settlement of his building at 5191 Lafayette Street.

Response to Comment #3

At this time, the design of the proposed building is not close to being finalized. During schematic design phases of the project, we will get updated information regarding the foundation system selected, finished floor and foundation elevations, as well as foundation loads; at which time, we will perform analysis to evaluate induced settlement to neighboring building due to new building loads.

We trust that this letter provides you with the information you requested. If you have any questions, please call.

Sincerely yours,
ROCKRIDGE GEOTECHNICAL, INC.

 

Linda H. J. Liang, P.E., G.E.
Associate Engineer



April 7, 2021

Ms. Jewelle Kennedy
Ensemble Real Estate Investments
44 W Ocean Blvd # 650
Long Beach, CA 90802

Re: Lot Line Conditions –Tasman Parcel 2 Santa Clara
KPFF Project # 1001900465

Dear Jewelle:

As requested, below is a summary of our review of the proposed Tasman Parcel 2 residential development at 2354 Calle Del Mundo in Santa Clara, CA, including review of the “Issues raised by property owner of 5191 Lafayette adjacent to the proposed development at 2354 Calle Del Mundo” document dated March 17th, 2021.

- Existing buildings superstructure: The existing condition was described as two separate buildings, with separate walls, separated by approximately 4” of distance. Given this description, it is therefore not expected demolition of the existing superstructure at 2354 Calle Del Mundo would affect the adjacent existing superstructure at 5191 Lafayette. As is common architectural practice, it appears the roof level gap is protected by flashing to prevent water infiltration into the structural gap. The existence of this standard waterproofing protection does not necessarily imply a rooftop structural connection.
- It is not yet known if the two existing buildings share a common foundation. If each existing building has independent footings, the demolition of the existing building is expected to have little effect on the remaining adjacent existing structure. If the existing buildings share a common footing, the shared footing can be left in place (not demolished) and the new building can be constructed clear of the existing shared footings.
- Excavation to construct new foundation: The new building will have shallow foundations placed within the existing property line. Refer to corresponding geotechnical memo for earth retention recommendations relating to the installation of new shallow foundations.
- Clearance between the new building and existing property line will be provided as per ASCE 7 requirements. Note the required clearance is based on the structure height as measured where it adjoins the property line.

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We appreciate this opportunity to further clarify structural design for the new development at 2354 Calle Del Mundo.

Sincerely,

A handwritten signature in black ink, appearing to read "Mat Huizinga". The signature is fluid and cursive, with the first name "Mat" and last name "Huizinga" clearly distinguishable.

Matthew Huizinga
Associate

cc: Aldrin Orue, KPFF