EMERYVILLE PLANNING COMMISSION

STAFF REPORT

Agenda Date: February 24, 2022
Report Date: February 17, 2022

TO:	Planning Commission
FROM:	Community Development Department Miroo Desai, Senior Planner Chadrick Smalley, Economic Development and Housing Manager
SUBJECT:	**58Fifty Shellmound Life Sciences Tower (UPDR21-004)**
PROJECT LOCATION:	5850 Shellmound Way (APN: 49-1493-6)
OWNER:	Shellmound Christie Corporation 5850 Shellmound Way Emeryville, CA 94608
APPLICANT:	CA/SCC 5850 LS, JV, LLC (Mike Lee) 130 East Randolph Suite 2011 Chicago, IL 60601
PROJECT DESCRIPTION:	A second study session to review a proposed 14-story, 265-foot-high building accommodating 388,090 square feet of life science use ("Research and Development") with approximately 10,000 square feet of ground floor retail/amenity space at 5850 Shellmound Way. The project includes demolition of an existing 61,000 square foot office building. *This study session will primarily focus on the issue of mix of uses.*
GENERAL PLAN:	Mixed Use with Residential and Major Transit Hub
ZONING DISTRICT:	Mixed Use with Residential (MUR); Transit Hub Overlay (TH); and Pedestrian Priority Zone (PP)
ENVIRONMENTAL STATUS:	To be determined

RECOMMENDED COMMISSION ACTION:

1) To hear a presentation of the proposed project.
2) To provide direction and comment to the applicant and staff

PROJECT BACKGROUND

The Planning Commission reviewed this proposal at a study session on August 26, 2021 (See Attachment 1 for August 26, 2021 staff report). One of the key policy questions that the Planning Commission needs to address is regarding the mix of uses.

As the project parcel size is between 1 and 5 acres, the proposal needs to include a mix of uses, one of which must be residential, is required by Section 9-3.303(b)(2)b of the Planning Regulations. A single use may be allowed with a conditional use permit provided that the following finding can be made in addition to the findings required for the conditional use permit:

> That the applicant has convincingly demonstrated that it is infeasible to develop a project with a mix of use groups on the site. (Section 9-3.303(c)(1))

Economic Development and Housing Division staff has been working a consultant to peer review the applicant's analysis of the feasibility of housing on this site.

This study session focuses on this issue and requests the Commission to provide direction on whether the Commission is in a position to make the above finding before the applicant moves forward with their Research and Development project.

As the project includes a General Plan Amendment (GPA), the City Council will also review this issue and provide input at a study session scheduled for March 15, 2022. The reason for the GPA is that the General Plan Land Use Map shows a revised location of Shellmound Way that is approximately 150 feet north of the existing location, and the project has not been designed to comply with the relocation of Shellmound Way as shown in the General Plan. This issue is discussed under "Staff Comments and Discussion" in the attached August 26, 2021, staff report.

PLANNING COMMISSION AUGUST 26, 2021 COMMENTS

Three public comments were received from the residents of Christie Commons and Pacific Park Plaza, who raised concerns regarding the proposal's height, increased traffic, wind impacts, and the need to provide amenities that would benefit the community. They also questioned the applicant's explanation of why housing was not possible at this site. The Commissioners were not opposed to the proposed life sciences tower, and offered a number of suggestions, including adding retail and/or community-oriented ground floor active uses; providing the neighborhood's residents with amenities that they could use; and doing a preliminary traffic study now to assess how mitigations could be incorporated into the design at this early stage. However, they all expressed skepticism at the applicant's claim that a residential use is infeasible at this site, as stipulated in the Mixed Use with Residential (MUR) zoning regulations. They directed the

applicant to provide a comprehensive analysis at the next study session of why residential use is not viable at this site.

DISCUSSION

In response to the Commission's direction, the applicant has prepared the attached "Emeryville Residential Analysis" (Attachment 2). The applicant' analysis provides an overview of the Emeryville residential market (including supply and rent trends and a summary of recent multifamily residential developments), a comparison of the Emeryville residential market to the broader regional residential market and area projects, and a feasibility analysis comparing the development of the 5850 Shellmound site with 244 dwelling units (i.e., the residential mixed-use project previously proposed for this site) under three scenarios: A "base case" assuming standard Planning Regulation requirements (including 29 affordable units), a "reduced affordable" scenario assuming the provision of 20 affordable units, and a "removal of permitting fees" scenario that eliminates all permit fees to reduce development costs by $11.1 million.

The conclusion of the applicant's analysis is that construction of a 244 unit mixed-use residential building at 5850 Shellmound is likely infeasible under all three presented scenarios, due in part to the expected "Return on Cost" rates, which range from 4.76% to 5.09% at Year 2 of project operations. The applicant states that capital partners require Return on Costs of near 6%.

In simplified terms, the applicant's analysis says that the current estimates of development costs and rents do not result in a residential project that is profitable enough for investors to provide the capital necessary to build it.

To evaluate the validity of the applicant's conclusions, staff retained the services of Economic and Planning Systems, Inc. ("EPS") to conduct an independent review of the applicant's analysis (see Attachment 3). EPS reviewed the applicant's assumptions underlying their analysis, the applicant's methodology and mathematics. EPS' key findings are:

- EPS concurs with the applicant's assessment that a building that mixes residential and life science laboratories in a vertical format is unlikely to be market supportable or financeable.

- EPS finds the applicant's feasibility assessment of a 244-unit residential project with ground-level retail to be reasonable and concurs with the finding the project is infeasible in today's market.

- EPS developed an independent proforma financial analysis to calculate supportable land value and tested feasibility under various market conditions, finding that a significant market shift would be necessary for a multifamily residential project at 5850 Shellmound to meet land price expectations.

As noted above, the applicant's conclusion that residential is infeasible is due to the current rents relative to development costs and the expectations of capital providers. EPS evaluated each of the applicant's assumptions underlying this conclusion, as follows:

Rents
EPS reviewed current rents for multifamily projects in Emeryville delivered over the last ten years, including Parc on Powell, 3900 Adeline, Emme Apartments and Avalon Public Market. The analysis found that the applicant's estimated rents are 15% above current rents and that because 5850 Shellmound would be new and well-equipped with tenant amenities, this assumption is reasonable.

Development Costs
EPS reviewed construction cost data to determine whether the applicant's assumptions for development costs are reasonable and found that the applicant's estimate is lower than data indicates. Specifically, the applicant estimates construction costs at $99 million to $106 million, and utilizes the $99 million figure for the development scenarios tested. The data reviewed by EPS suggests construction costs would be in the range of $113 million.

To address land costs, EPS reviewed sales data for sites with MUR zoning in Emeryville between 2016 and 2021. This analysis suggests per-acre land values between $11.3 million and $28.4 million. The applicant's analysis relies on a land purchase price of $22 million which is approximately $14.8 million per acre, within the range of recent transactions.

Investor Requirements
As noted above, the applicant's analysis asserts that projects must yield nearly 6% Return on Cost to be attractive to capital investors. EPS states that certain residential projects in the region can attract investor interest with Return on Cost as low as 5% in inflation adjusted terms, however, the applicant's base case development scenario shows the residential project does not meet this 5% threshold until 2028-2029 (the fourth year of operations) and therefore 5% in real terms is unlikely, therefore, the applicant's conclusion is supportable.

Summary
In summary, EPS' review indicates that the applicant's analysis demonstrates that development of a 244-unit, mixed use residential building at 5850 Shellmound is infeasible at this time, due to the combination of rents, development costs and investor requirements.

Further Considerations and Qualifiers
The analyses described above apply to a specific development proposal (the 244-unit building previously proposed) at a particular point in time (now). The analyses did not test whether a smaller or larger residential project may be feasible; however, it seems likely the 244-unit proposal was advanced in the prior application precisely because it maximizes yield and is the highest and best residential use of the property.

Rents, development costs, and investor requirements can all change both relative to each other and in absolute terms over time. Because of the number of variables and their interplay with each other, it is not possible to predict when market conditions will arrive that make residential development financially feasible; however, EPS has provided sensitivity analyses that can gauge the magnitude of market shifts required for residential project feasibility using the assumptions proposed by the applicant and confirmed by EPS.

These analyses suggest that an increase in rents of 15% over the applicant's estimated rents (or, 30% over current market rents), without changing any other assumptions, would yield a residual land value commensurate with the applicant's estimated purchase price of $22 million and is a potentially feasible project. As another example, rents that are 10% over the applicant's estimated rents (or 25% over market rents) in combination with construction costs at $350 per square foot (i.e. removing the contingency assumed in the applicant's analysis) result in a project that is potentially feasible at a slightly lower land cost ($19 million).

Finally, the factors that contribute to the infeasibility of development of residential at this property also apply more broadly to the East Bay region. Construction costs, rents and investor requirements are relatively consistent for the inner East Bay, which prompts the question of whether other cities in the area are seeing a slowdown in residential development. According to data provided by Costar (a commercial real estate data service), from February 2021 to January 2022 there were only 14 multifamily project starts in Alameda County, and five of those were 100% affordable housing projects. Affordable housing projects are developed in a different market context due to the unique sources of capital available for these projects. Between August 2021 and January 2022 (i.e. the last six months), only four market rate mid- or high-rise multifamily rental projects have broken ground in Alameda County. By comparison, in 2019 there were 21 market rate project starts. This data evidences a current slowdown in residential development in the region.

ISSUE TO BE CONSIDERED

Mix of Uses

The project is primarily a single use proposal (Research and Development) with some ground floor "active" uses of clinics and medical laboratories. All of these uses are included in the "Office Mixed Use Group" at Section 9-2.804, so they are not considered a "mix of uses". The proposal does not include residential use.

Given the above analysis, does the Commission feel that excluding residential use at this location is appropriate and that the Commission can make the finding that the applicant has convincingly demonstrated that it is infeasible to develop a project with a mix of use groups on the site?

PERMITS AND PROCESS

Permits Required: The project will require a conditional use permit for a development of one to five acres in the MUR Zone without a mix of uses, for a Research and Development use in the MUR Zone, and for bonus FAR and height. A design review permit for new construction will also be required, based on an evaluation of the project's conformance with the Emeryville Design Guidelines.

Process: Regardless of comments received at the study session, the project will need to undergo a permit review process. Submission of a formal application and additional project information and analysis may raise issues not identified in this report. These will be identified and addressed in the staff report when the project is brought back to the Commission for a hearing and decision.

RECOMMENDATION:

After hearing a presentation from the applicant and receiving public testimony, staff requests that the Planning Commission provide comment on the issue noted above and any other issues identified by the Commission.

Attachments:

1. August 24, 2021, Planning Commission Study Session Staff Report
2. Emeryville Residential Analysis, CA Ventures, December 2021
3. 5850 Shellmound Residential Feasibility Review, Economic and Planning Systems, February 10, 2022

EMERYVILLE PLANNING COMMISSION

STAFF REPORT

Agenda Date: August 26, 2021
Report Date: August 19, 2021

TO:	Planning Commission
FROM:	Community Development Department Miroo Desai, Senior Planner
SUBJECT:	**58Fifty Shellmound Life Sciences Tower (UPDR21-004)**
PROJECT LOCATION:	5850 Shellmound Way (APN: 49-1493-6)
OWNER:	Shellmound Christie Corporation 5850 Shellmound Way Emeryville, CA 94608
APPLICANT:	CA/SCC 5850 LS, JV, LLC (Mike Lee) 130 East Randolph Suite 2011 Chicago, IL 60601
PROJECT DESCRIPTION:	A study session to review a proposed 14-story, 265 foot high building accommodating 388,090 square feet of life science use ("Research and Development") with approximately 10,000 square feet of ground floor retail/amenity space at 5850 Shellmound Way. The project includes demolition of an existing 61,000 square foot office building.
GENERAL PLAN:	Mixed Use with Residential and Major Transit Hub
ZONING DISTRICT:	Mixed Use with Residential (MUR); Transit Hub Overlay (TH); and Pedestrian Priority Zone (PP)
ENVIRONMENTAL STATUS:	To be determined
RECOMMENDED COMMISSION ACTION:	1) To hear a presentation of the proposed project. 2) To provide direction and comment to the applicant and staff

BUILDING SITE AND SURROUNDINGS

The building site is a 64,682 square foot (1.485 acre) parcel on the northeast corner of Christie Avenue and Shellmound Way. To the south, across Shellmound Way, are retail and office buildings including a La-Z Boy Furniture store and a vacant office building. To the north lie commercial buildings including the Public Market, while the Hyatt House hotel is located to the east along Shellmound Street. To the west is the Wells Fargo bank and commercial buildings (See Sheet 17 of attached plans).

The existing building was built in 1979 and has been used continuously for office space until 2018-2019.

PROJECT PROPOSAL

The project involves demolition of the existing 61,000 square foot office building and construction of a new 14-story, 265-foot building accommodating 378,090 gross square feet of office/laboratory space and 10,000 square feet of ground floor clinics and non-research laboratory space. The project also includes 160,225 square feet of parking and loading uses, which is not considered "floor area".

The building lobby occurs off Christie Avenue as does the entrance to parking and loading. Loading occurs within the building on the ground floor and 431 vehicular parking spaces are provided on five levels of parking. The remaining ground floor uses include 10,000 square feet of clinics, medical offices and non-research medical laboratories along with 22,890 square feet of laboratory support space and back of house functions. (See Sheets 21 and 26). Sheet 22 illustrates typical floor plans whereas Sheet 23 provides an east-west sectional view. The building reaches a roof height of 240 feet with an additional 25 feet accommodating mechanical support equipment. Since the building would have continuous exterior cladding from the ground to the top of the mechanical level, it would appear to be 265 feet tall, although the "official" building height would be 240 feet, as measured to the top of the roof. Sheet 19 provides an illustration of heights of surrounding high rise buildings.

An amenity terrace for tenants is provided on the fifth level (16,000 square feet) and approximately 19,800 square feet of open space is provided on the ground level in the form of a plaza at the corner of Christie Avenue and Shellmound Way and open space fronting Shellmound Way, of which approximately 4,000 square feet is in the public right-of-way (See Sheets 21, 22 and 26).

The design of the building is preliminary at this time with renderings of the massing shown in Sheets 19, 28, 29, and 30. The potential cladding for the life science building is an aluminum and glass curtain wall system while a custom perforated metal system is contemplated for the garage cladding (See Sheet 19). Some Precedent Images are shown on Sheet 13.

CONFORMITY TO GENERAL PLAN AND PLANNING REGULATIONS

General Plan

Shellmound Way Relocation: General Plan Land Use Map shows a revised location of Shellmound Way that is approximately 150 feet north of the existing location. The project would need a General Plan Amendment as the project has not been designed to comply with the location of Shellmound Way in the General Plan. This issue is discussed further below under "Staff Comments and Discussion".

Land Use: The General Plan Land Use Diagram (Figure 2-2) classifies the project site as "Mixed Use with Residential", which is described as (Section 2.4): "One or more of a variety of residential and non-residential uses including but not limited to offices, retail and hotel. On larger sites, a mix of residential and non-residential uses is required; on smaller sites, a single use may be permitted." The project provides a mix of commercial uses but it does not provide residential as one of the uses. Please see further discussion under Zoning District below.

Planning Regulations

Zoning District

The base zoning district for the site is "Mixed Use with Residential" (MUR), which allows for a variety of commercial uses as well as multiunit residential use.

The site is also in the Transit Hub (TH) overlay zone where all parking requirements are reduced by 50% and in Pedestrian Priority (PP) which calls for wider sidewalks. This is further discussed below.

Use Classification: The proposed project is classified as a "Research and Development" Industrial use type, and the proposed ground floor uses are classified as "Clinics and Medical Offices" and "Medical Laboratories (non-research)", both of which fall under the Commercial and Institution use type of "Health Care". In the MUR Zone, Research and Development requires a conditional use permit, whereas Clinics and Medical Offices, and "Medical Laboratories (non-research), are permitted by right.

Mix of Uses Required: As the parcel size is between 1 and 5 acres, a conditional use permit and mix of uses, one of which must be residential, is required by Section 9-3.303(b)(2)b of the Planning Regulations. A single use may be allowed with a conditional use permit provided that the following finding can be made:

> That the applicant has convincingly demonstrated that it is infeasible to develop a project with a mix of use groups on the site. (Section 9-3.303 (b)(c))

The applicant's rational for not including residential use in the project is outlined on Sheet 1. In summary, the applicant states that a lack of interest from investors for a residential use due to construction costs, relatively low rents, concern for future rent controls by the State of California,

and proximity to a railway line make a residential use infeasible at this site. Please see Staff Comments below regarding proximity of the site to the railroad.

Floor Area Ratio (FAR)

The Floor Area Ratio for the site is 3.0 and can be increased to a bonus FAR of 6.0 with a conditional use permit and the provision of increased affordable housing impact fee and community benefits. The proposed FAR for the project is almost exactly 6.0 (388,090/64,682). The project will require 100 bonus points for FAR.

Height

The site falls within the 75/100+ foot height district, which can be increased to a bonus height of over 100 feet with a conditional use permit. The proposed height of the building is 240 feet. The project therefore will require 100 bonus points for height.

Bonus Points

Pursuant to Section 9-4.204, the project requires 100 bonus points, the greatest of the number of points required for FAR (100) and height (100).

For non-residential projects, pursuant to Section 9-4.204(d), the applicant will need to obtain half of the bonus points (50) by paying an additional affordable housing impact fee. As such, the applicant will need to pay an additional 100 percent of the affordable housing impact fee at the time of building permit issuance. For reference, the current affordable housing impact fee is $4.83 per square foot, so the applicant would need to pay $9.66 per square feet to obtain 50 bonus points if the building permit were issued today. This calculates to approximately $3.75 million. The actual fee required will be whatever is in effect at the time that the building permit is issued.

The remaining 50 bonus points must be earned through the provision of community benefits, pursuant to Section 9-4.204(e). Possible benefits include additional public open space, zero net energy, public improvements, utility undergrounding, and a contribution to the City's small business fund. The applicant has not yet specified exactly how the remaining bonus points will be obtained, and has suggested providing additional public open space and public improvements.

Parking and Loading

Vehicular Parking: Typically research and laboratory businesses need space for laboratory and office on a half and half basis, and the City has used this criterion for other such projects including the recently approved BMR Emeryville Center of Innovation project. In addition, the project also proposes 5,000 square feet of Clinics and Medical Offices" use and 5,000 square feet of "Medical Laboratories (Non-Research)" use that have different estimated parking demands.

As the site is in Transit Hub (HB) overlay zone, all estimated demands for parking are reduced by half. Therefore, the estimated parking demand for Office is 1.2 spaces per 1,000 square feet;

for Research and Development it is 0.75 space per 1,000 square feet; for Clinics and Medical Offices it is 1.5 spaces per 1,000 square feet; and for Medical Laboratories (Non-Research) it is 2 spaces per 1,000 square feet.

Section 9-4.404 (c) requires that, for all non-residential uses with area-based estimated parking demands, the first 1,500 square feet be subtracted from gross square footage of the use. Allowing for this exclusion brings the Research and Development square footage to 376,590 (378,090-1,500); brings Clinics and Medical Offices to 3,500 square feet; and brings Medical Laboratories (Non-Research) to 3,500 square feet.

The estimated parking demand for the office space (188,295 square feet) is 226.0 spaces (1.2 spaces per 1,000 square feet of office space (188,295 x 1.2/1000); and for Research and Development space the estimated demand is 141.2 spaces (0.75 spaces per 1,000 square feet (188,295 x 0.75/1000). The estimated demand for parking for clinics and medical offices is 5.25 (3,500 x 1.5/1000) and for medical laboratories (non-research) is 7.0 (3,500 x 2/1000). This brings the total estimated parking demand of 379.5.

There is no minimum parking requirement and the maximum allowed is 10% more than the estimated demand. So, the maximum parking permitted is 417.45 or 417 spaces.

The applicant is proposing 431 spaces. However, the intention of the applicant was to comply with the maximum permitted parking. Sheet 26 outlines the applicant's parking calculations and they do not match staff calculations because they do not account for 1,500 square feet exclusion and they assume and they 60-40 division between office and lab use instead of 50-50 division. To comply with the maximum permitted parking would require reducing the amount of parking provided by 14 spaces.

Bicycle Parking: The project will trigger one short-term and one long term bicycle parking space for every ten automobile parking spaces indicated as the estimated parking demand. As the estimated demand is 759 spaces, 76 long term bicycle parking and 76 short term parking spaces will be required. (Note that there is no Transit Hub Overlay reduction for bicycle parking since the intent of this overlay zone is to encourage alternative transportation such as bicycles.)

A bicycle parking room (presumably for long term parking) is indicated on the ground floor, although its design and number of bicycle parking spaces is not indicated. The applicant is not showing provision of any short term bicycle parking spaces at this preliminary stage.

Loading: The project will trigger 2 medium loading spaces and 1 large loading space. The plans show three medium sized loading spaces and one large loading space.

Open Space

Section 9-4.303(a)(3) requires new commercial buildings or additions that exceed 100,000 square feet to provide a minimum area of common open space and/or Privately Owned Public Open Space (POPOS) that totals at least five percent of the gross floor area. Included in this requirement, the developer must provide a minimum area of POPOS that totals at least one

percent of the gross floor area. For the proposed project (388,090 square feet of commercial space) this equals 19,405 square feet of open space, including a minimum of 3,881 square feet of POPOS.

Sheet 21 shows publicly accessible open space of approximately 4,035 square feet. However, a portion of this open area is in the public right of way. The applicant needs to provide clarification whether 3,935 square feet of open space (POPOs) will be accommodated entirely on its property. On level 5, 16,000 square feet of amenity/open space is proposed, which is less than what is required (19,405square feet).

Sidewalk Design Guidelines

Pursuant to the Emeryville Design Guidelines provisions for sidewalks in Pedestrian Priority Zones, the project is required to provide a 12-foot wide sidewalk with a minimum 8-foot clear pedestrian pathway and a 4-foot landscaped area (including a 6-inch curb). In addition, Christie Avenue is a Green Street that requires a minimum of 15-foot sidewalk. The project complies with these dimensions. (See Sheet 21).

Stormwater and WELO Plans

The project will need to submit stormwater plans and show compliance with Water Efficient Landscaping Ordinance (WELO).

ENVIRONMENTAL REVIEW

A traffic report and visual simulations will be prepared for the project. At this time, we do not have enough information to determine the project's CEQA status.

STAFF COMMENTS AND DISCUSSION

The project was reviewed at the August 11, 2021 Development Coordinating Committee meeting. Outlined below are staff comments discussed at the meeting.

Shellmound Way Relocation and Pedestrian-Bicycle Path:

In 2007, prior to the adoption of the General Plan, a traffic analysis was conducted for the Powell-Christie area which recommended that Shellmound Way be relocated about 150 feet to the north of its current location in order to improve circulation in the area, provide simplified access to the property at 5801 Christie Avenue, and create a larger development parcel south of Shellmound Way. When the General Plan was adopted in 2009, it included this relocation of Shellmound Way.

During 2017-2018, the Planning Commission held three study sessions on a residential proposal at 5850 Shellmound Way. On January 25, 2018, the Planning Commission recommended amending the General Plan to modify the location of Shellmound Way such that it is consistent with its existing configuration.

On March 5, 2018, the Bicycle/Pedestrian Advisory Committee (BPAC) recommended that the proposed General Plan Amendment include an east-west pedestrian and bicycle path in the approximate location where the General Plan currently shows the relocated Shellmound Way. The City Council considered the proposed General Plan Amendment on March 6, 2018, and continued the item, directing staff to bring back a General Plan Amendment that includes the path as recommended by the BPAC. The applicant for the 5850 Shellmound Way residential project incorporated the General Plan Amendment into its proposal, to modify the location of Shellmound Way such that it is consistent with its existing configuration, and to add an east-west pedestrian and bicycle path in the approximate location where the General Plan currently shows the relocated Shellmound Way. That applicant also offered 10 feet along the northern property line to be dedicated for this path with the anticipation that an additional 10 feet would be added in the future from the adjacent City-owned parcel to the north, to allow for construction of a standard 20-foot pedestrian and bicycle path.

Staff advised the current applicant to include this General Plan Amendment and provide 10 feet to accommodate this new bicycle pedestrian path. This is shown on Sheet 21 of the attached plans.

Justification for Single Use:

As noted above, one of the reasons the applicant has cited for not including residential use in their proposal is Design Guideline I-33, which states that "In general, buildings directly adjacent to a freeway or railway should not contain residential uses." However, this guideline also includes a list of mitigation measures for buildings that do contain residential uses such as providing appropriate level of sound/vibration insulation; providing landscape buffers; using double doors with perimeter weather stripping and providing mechanical ventilation, among others. (Please see Page 56-57 of Emeryville Design Guidelines).

There are a number of residential projects adjacent to the railroad or freeway that have been approved and constructed since adoption of the Design Guidelines, with the Sherwin Williams project, and the Bayview Apartments, at 6701 Shellmound Street ("Nady" site), both currently under construction, being the most recent.

The applicant needs to provide a feasibility analysis of why a residential project on this site is not viable, including assumptions made for rents, and the basis on which the applicant believes that the State of California intends to introduce rent control. Staff also notes that a 244-unit residential project was proposed on this site in 2018 by the same applicant, and that the applicant has chosen not to withdraw that application. Again, the applicant has two pending projects on this site: the previously submitted residential project, and this new nonresidential project that is based on the premise that a residential use on this site is not feasible.

Building Division and Alameda County Fire Department Comments:

Attached to this staff report are preliminary comments for the project in regard to the applicable Building and Fire Code issues.

Next Steps

The applicant will hold a community meeting and the project will be agendized for review by the Bicycle Pedestrian Advisory Committee. As the project includes a General Plan Amendment that requires City Council approval, a study session will also be scheduled with the Council.

ISSUES TO BE CONSIDERED

1. Mix of Uses

The project is primarily a single use proposal (Research and Development) with some ground floor "active" uses of clinics and medical laboratories. All of these uses are included in the "Office Mixed Use Group" at Section 9-2.804, so they are not considered a "mix of uses". The proposal does not include residential use.

Does the Commission feel that excluding residential use at this location is appropriate? If so, what kind of documentation would be needed to make the finding that "the applicant has convincingly demonstrated that it is infeasible to develop a project with a mix of use groups on the site"?

2. Bonus Points

Does the Commission have any suggestions for the type of community benefits that the project should provide to obtain bonus points?

3. Design and Other Issues

Does the Commission have any comments on the preliminary design and concept?

PERMITS AND PROCESS

Permits Required: The project will require a conditional use permit for a development of one to five acres in the MUR Zone, for a Research and Development use in the MUR Zone, and for bonus FAR and height. A design review permit for new construction will also be required, based on an evaluation of the project's conformance with the Emeryville Design Guidelines.

Process: Regardless of comments received at the study session, the project will need to undergo a permit review process. Submission of a formal application and additional project information and analysis may raise issues not identified in this report. These will be identified and addressed in the staff report when the project is brought back to the Commission for a hearing and decision.

RECOMMENDATION:

After hearing a presentation from the applicant and receiving public testimony, staff requests that the Planning Commission provide comment on the issues noted above and any other issues identified by the Commission.

Attachments:

General Plan Land Use Map
Pages 56-57 of Emeryville Design Guidelines
Comments from AC Fire and Building Division
Project Plans

ATTACHMENT 1
General Plan Land Use Map

ATTACHMENT 1: GENERAL PLAN LAND USE DIAGRAM

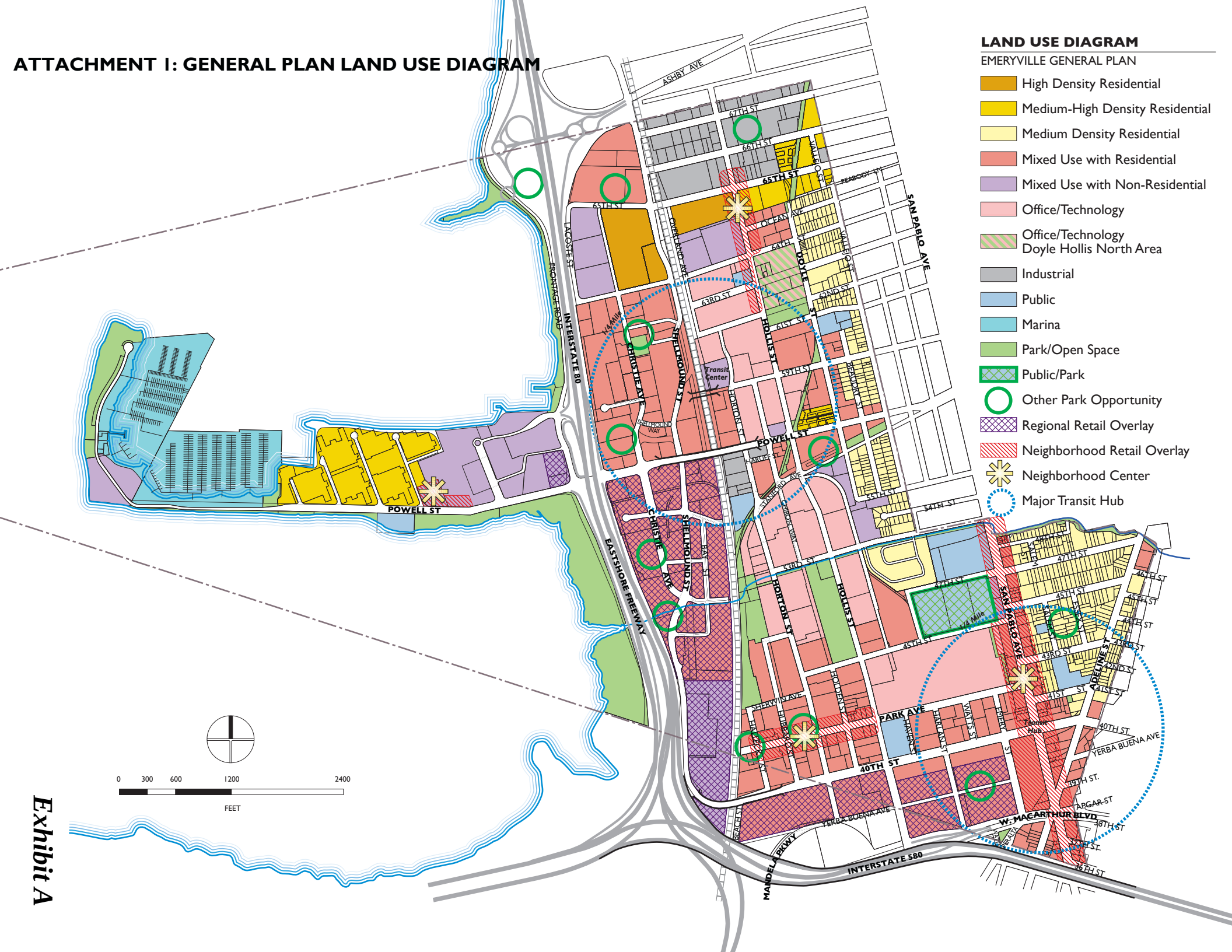
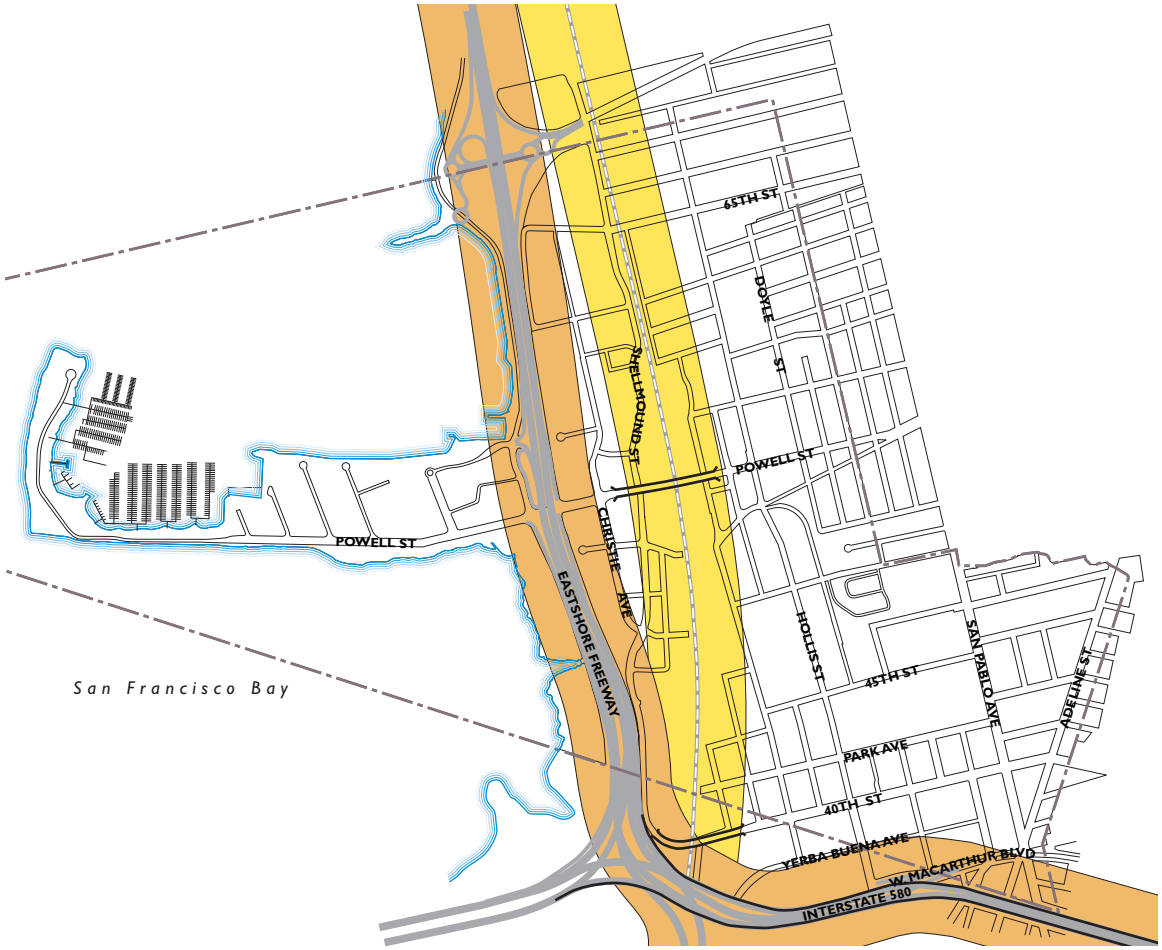


Exhibit A

ATTACHMENT 2

Pages 56-57 of Emeryville Design Guidelines



FREEWAY/RAILWAY ADJACENT

With Emeryville's exceptional accessibility to freeways and the railway line come potential impacts, specifically: noise, air pollutants, obstructed views, and disruption to vehicle and pedestrian mobility. Careful site planning and building design can help reduce these impacts.

I-32 Consider land use compatibility in developments near freeways or railroads.

I-33 In general, buildings directly adjacent to a freeway or railway should not contain residential uses. Where such buildings do contain residential uses:

- Set back buildings from the freeway and buffer with landscaping, open space, and/or off-street parking to provide a visual barrier to the freeway or railway.
- Consider screening from the freeway in the selection and location of planting materials.
- Locate residential units higher than the freeway to avoid obstructed views and air pollutants.
- Offer appropriate level of sound/vibration insulation in windows and walls. Facades should be constructed with substantial weight and insulation. Construct exterior walls with soundboard underlayer or resilient layer.
- Use double doors and/or solid core doors with perimeter weather stripping and threshold seals.

- Limit glass in windows facing the noise source to reduce impacts. Windows should include screens to reduce dust and particulate from entering open windows.
- Mechanically ventilate units that directly face the freeway or provide comfortable temperatures and noise attenuation through some other means, so that residents can leave windows closed, maintain adequate heating and cooling, and ensure good air quality.

DESIRABLE

These commercial and hotel uses in and around the Marketplace are better suited directly adjacent to noisy locations, such as the railroad.

DESIRABLE

Hotels are also an acceptable use adjacent to the freeway in Emeryville, permitting short-term stays and tall buildings that enjoy views of the bay.

ATTACHMENT 3

Comments from AC Fire and Building Division

Alameda County Fire Department

Fire Prevention Bureau

Plan Review Comments

1333 Park Ave., Emeryville, California 94608 (510) 596-3759 Fax (510) 450-7812

Address	**5850 Shellmound Way.**	**PLN #**	UPDR21-0004		
Business	CA Ventures				
Job Description	Proposed Emeryville Life Science Tower				
Fire Contact	Cesar Avila, Deputy Fire Marshal	**Date:**	**7/22/2021**	**Review**	**1**

WITH CUSTOMER FOR RESPONSE

Re-submittal Required. A re-submittal is required for this project. Submit your response to the Planning department.

CORRECTIONS/CLARIFICATIONS REQUIRED.

Include an itemized response to each comment and where in the submittals the specific change or information can be found.

The proposed project lacks details and information. Please see the following review comments:

1. On Design Guidelines Sheet – Please add a Fire Life and Safety to the General Guidelines. Please describe your fire access and fire protection systems as well as life safety measures proposed for this submittal.
   Response: _____

2. Proposed Tower meets the definition of a High Rise – Highest Occupiable Floor is 240 feet from the lowest level of fire department access – please include language indicating the following building required features: Automatic Fire Alarm System (manual fire alarm boxes required on the 11th fl. and above) , Smoke Control System, Standpipe System, Redundant Fire Pumps, Secondary Water Supply, Fire Command Center, Emergency Power Generator, Emergency Voice-Alarm Communication System, Emergency Responder Radio Coverage
   Response: _____

3. Include language describing how Labs fume exhaust system will function. Please describe how the smoke control system will interact with the required labs exhaust system.
   Response: _____

4. Please include language and site plan indicating how the project complies with 2019 CFC Chapter 5 Section 503.1.1. Fire Apparatus Access Roads. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. Note: ACFD increases the distance from 150 to 200 feet according to 2019 CFC Section 503 Exception 1.1.

Response: _____

5. Fire Hydrants – please indicate location of existing and proposed fire hydrants. Hydrants shall be located within 400' of all exterior walls at grade level. Measurement shall be taken indicating fire hose lay.
   Response: _____

6. Fire Hydrants – please indicate location of existing and proposed fire hydrants. Hydrants shall be located within 400' of all exterior walls at grade level. Measurement shall be taken indicating fire hose lay.
   Response: _____

7. Aerial Fire Apparatus Access Roads shall be a minimum of 26 feet wide exclusive of shoulders in the immediate vicinity of the building or portion thereof. Aerial Fire Apparatus Access Road shall be located not less than 15 feet and not greater than 30 feet from the building and shall be positioned parallel to one entire side of the building. Overhead utilities and power lines shall not be located over the road or between the road and the building. Please indicate how the proposed project will comply with the Aerial Fire Apparatus Access Road requirements.
   Response: _____

8. Appendix/Chemical Storage Sheet is blank. Provide details of hazardous material on the plans. (amounts, classification, how it will be stored, etc.). At this point in the project detailed information is probably not known. However, there are limitations that should be noted. Please indicate how the project will comply with 2019 California Building Code Section 414 Hazardous Material. Please specify how the proposed tower will comply with 2019 CBC Table 414.2.2 Design and Number of Control Areas. Please describe how the project will comply with 2019 CBC Sections 415, 421, 453.
   Response: _____

9. Provide the turning radius for the entrance to parking shown on the east side of the building.
   Response: _____

10. On the plans show the required secondary water supply (Sec. 403.3.3 of the 2019 California Fire Code)
    Response: _____

11. The proposed building requires a fire flow of 1500gpm for a duration of 4 hours. This calculation could change depending on changes to building square footage or fire hose stream requirement.
    Response: _____

12. On the plans show the location of the fire sprinkler riser. Show location of the FDC. FDCs shall be located within 100' of the nearest fire hydrant.
    Response: _____

13. On the plans provide occupancy classifications for each floor. On the building cross section plans, labs are shown on the 1, 4th and 11th floors. Please clarify if lab suites are to be on each floor.
    Response: _____

14. On the plans show the location of the required fire pump room. (Section 403.3.4 of the 2019 California Fire Code)
    Response _____

15. On the plans show the location of the required fire command center. (Section 403.4.6 of the 2019 California Fire Code)
    Response: _____

16. On the plans show the location of the standby and emergency power equipment room. (Section 403.4.8.1 of the 2019 California Fire Code)
    Response: _____

17. The rooftop terrace is over the allowed square footage of Section 317.2 of the 2019 California Fire Code. Provide a detail clearly showing landscaping for this area.
    Response: _____

18. Provide details of the landscape area for the tower roof. Per Design Guidelines, E-Building Form and Articulation it states: The roof of the parking garage will feature landscaped tenant amenity terrace with intensive green roof planted areas, **and the tower roof** will include extensive green roofing as equipment layouts allow.
    Response: _____

19. On the plans show how the elevators comply with Section 453.8 of the 2019 California Building Code.
    Response: _____

20. At this time it cannot be determined if egress requirements are met as not enough information is provided on the plans. Please provide an Egress Plan Section.
    Response: _____

21. On the plans please clarify the use of the specialty lab/lab support room.
    Response: _____

22. Is the garage going to be provided with car lifts? If there are car lifts show them on the plans.
    Response: _____

DATE: AUGUST 18, 2021

BUILDING DIVISION COMMENTS: LIFE SCIENCE TOWER 5850 SHELLMOUND (UPDR21-004)

1. Identify seismic risk category per CBC Table 1604.2. It appears that this building at a minimum should be designed as a risk category 3. Please consider total occupant load as well as hazardous material quantities.
2. Ground Floor:
    a. Designate areas which service high rise facilities to show there is enough space on the ground floor. Generator rooms, secondary water supply, etc. as it appears there is not sufficient back of house area to service the building.
    b. North-East stair doesn't lead anywhere and appears to discharge into landscaping. Provide a clear an unobstructed path to the public right of way per CBC 1028.5 and clarify if the intent is to direct occupants over the property line.
    c. The building south stair does not meet the exit discharge lobby exception per CBC 1028.1 exception 1 as the exterior of the building is not readily visible from the point of termination. Please revise the lobby or stair layout.
    d. Garage Floor plan:
3. The parking garage appears to have only 1 exit. Show compliance with CBC table 1006.2.1 and 1006.3.3 as a single exit will not be sufficient for this structure.
4. It appears the parking garage does not have access to the elevators located in the laboratory portion of the building. Clarify the accessible route provided in the parking structure.
5. The Lab/Office portion of floors 2-5 does not provide a circular egress path to the interior exit stairs similar to the upper floors. There is a large portion of the building with access to only 1 exit plan North of the stair. Justify this layout as occupants cannot egress through the parking structure.
6. Please address the following regarding the 5th floor:
    a. Based on the floor area shown this story appears to require 3 exits per CBC Table 1006.3.2.
    b. The terrace space is a large assembly space that must comply with CBC 1029.2. Clearly show how direct access to exits will be provided either with exit features or through the office lobby space.
    c. Section page 21/32: Amenity space shown in section is not shown on the floor plans. Clarify on the floor plan the intent of this space and provide a general occupant load calculation on the story to justify the number of exits provided.

ATTACHMENT 4

Project Plans

SOLOMON CORDWELL BUENZ

EMERYVILLE LIFE SCIENCES TOWER

CA VENTURES

08 – 04 – 2021

CUP Narrative | Non-Residential Use

The CA Ventures team has been involved in some capacity with the subject property since midway through 2018. The opportunity to acquire and develop the subject property into a residential project was initially marketed by Peter Katz of the Institutional Property Advisors (IPA) and brought to the residential-focused group of CA Ventures through Bill Schrader of the Austin Group. CA had a historical relationship with The Austin Group from developing student housing assets in Berkley. Over the course of 2018 through 2020, CA worked with the Austin group, the original architects (Johnson, Johnson Lyman) and the landowner to assess the residential designs, progress the project through the entitlement stages, and source capital for the eventual development.

Working through these stages over the course of two years, it became apparent that there were two issues presenting themselves that ultimately made a residential development on site infeasible. The first issue was that rental levels struggled to support the high construction costs in the market, and coupled with concerns around future rental controls in CA, there was no interest for residential at this location from a number of CA's capital partners. The team looked at alternative designs, including building a taller building with more density, and even went as far as to higher another architecture firm, Niles Bolton Associates, to completely re-design the building in the hopes of making the building more efficient. To the dismay of the residential team at CA, capital partners still were uninterested in residential on site.

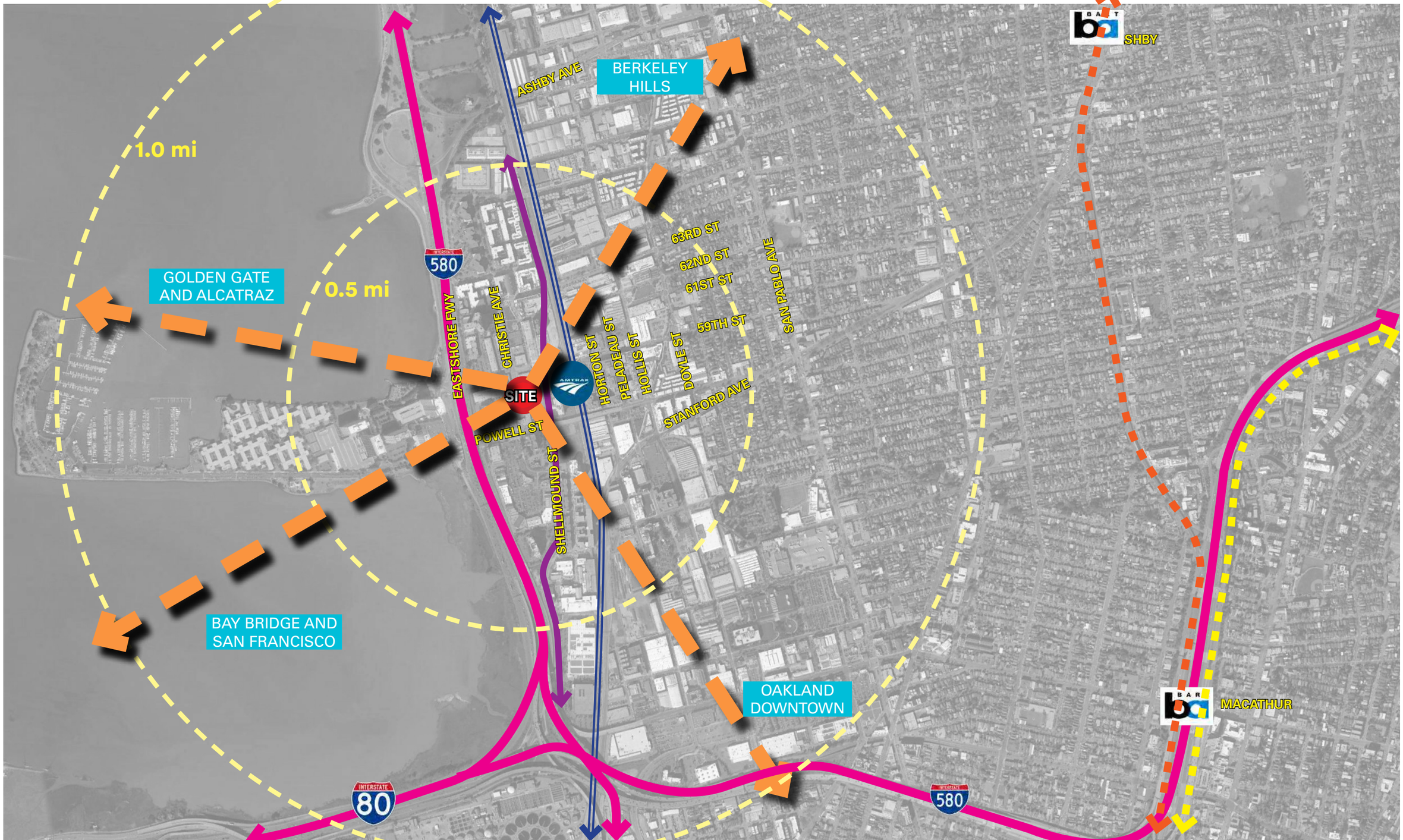
The second issue presenting itself was aspects of the Planning Code and Design Guidelines. Emeryville's own Design Guidelines (I-33) state that buildings adjacent to a freeway or railway should not contain residential uses. The diagram included for this item shows this zone cutting directly through the site which faces the freeway to the west and railway to the east. Additionally, the limit on the number of parking spaces within the Major Transit Hub halves the number of spaces that are typically allowed under the demand analysis. This resulted in a parking ratio well below the minimum threshold most investors and occupiers expect to see of 1 per unit and even further below the ideal ratio of 1.3 per unit. The project team worked with the planning commission toward obtaining a conditional use permit for increased parking, including hiring a traffic consultant to assess the traffic impact of increased parking spaces. Following multiple planning commission meetings, the planning commission had a mixed consensus regarding the additional parking (as ratified in the meeting minutes), and it was not certain whether a CUP for additional spaces would be granted.

Towards the end of 2020, after CA and the wider project group had been involved and working on the residential project for well over two years, a decision was made to stop pursuing a residential project on site. The lack of interest from investors and creditors due to the high construction costs, comparatively low rental levels, concerns around future rental controls in the State of California, concern about residential between the freeway and railway, and the lack of market standard parking spaces led the team to conclude that residential on site was an infeasible use.

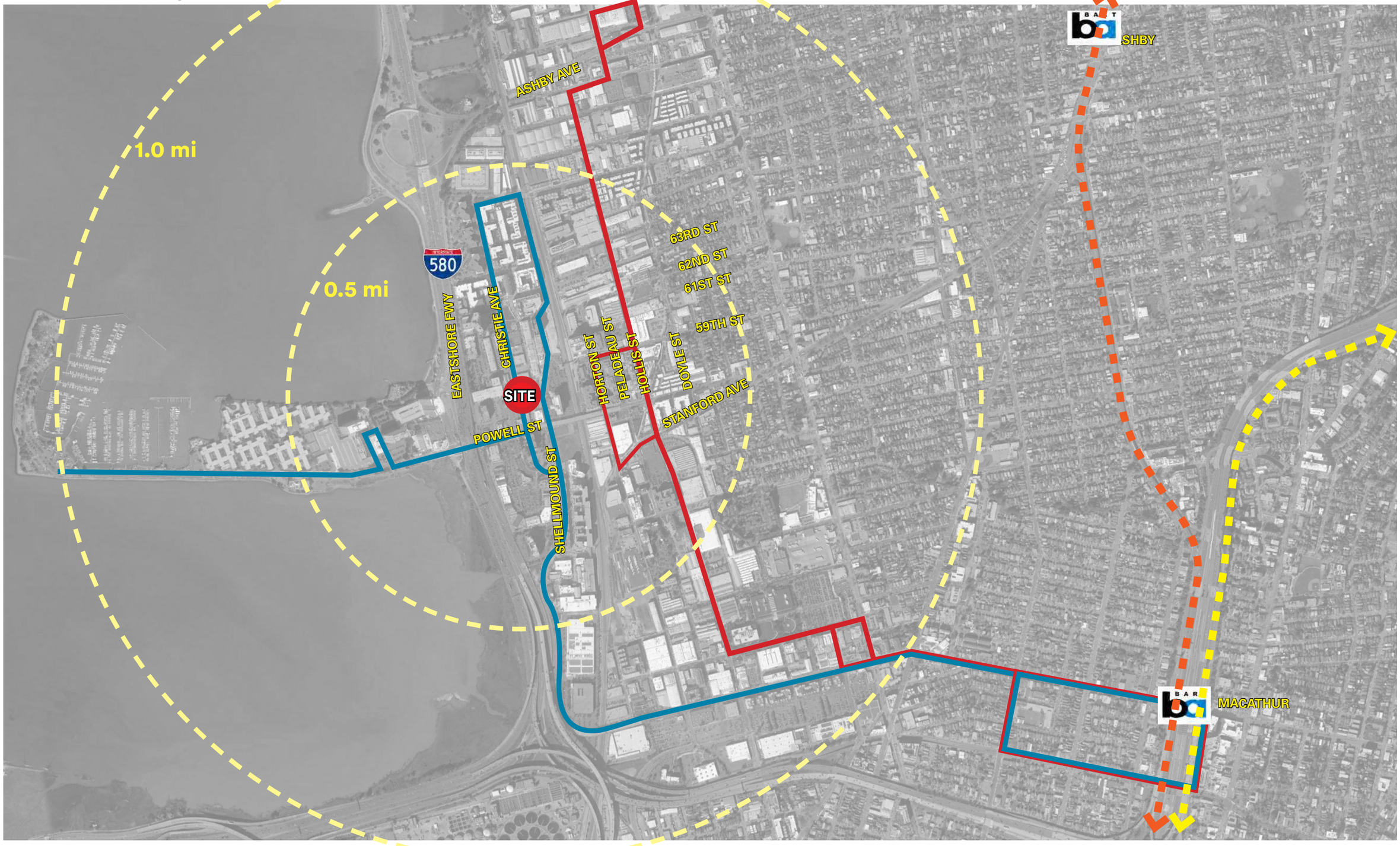
At the beginning of 2021, the Medical Office Building and Life Science group within CA re-engaged with the landowner to begin assessing the potential to develop a life science project on the subject property. When re-starting the process, we explored the potential of a life science building with office/laboratory usage on the lower floors, and residential above. However we quickly discovered that building residential units in the same tower as a life science occupier does not create an efficient use and design for either occupier. The site and its relatively small size also does not lend itself to being able to build multiple, separate buildings to accommodate a mix of residential and life science use. Furthermore, the land usage immediately adjacent to the site in each direct, while primarily zone MUR, is currently used for various commercial purposes including retail, office, and hotels. Given the attributes of the immediately adjacent area with primarily commercial office and industrial uses to the Northeast of the property, and combined with the office and laboratory uses provided within close proximity of the Amtrack station, a mix of uses as part offices and part research and development but without residential, presents the most natural fit for the site and likely highest and best use.

CONTEXT ANALYSIS

Context | Views & Main Connectivity



Context | Emery Go-Round

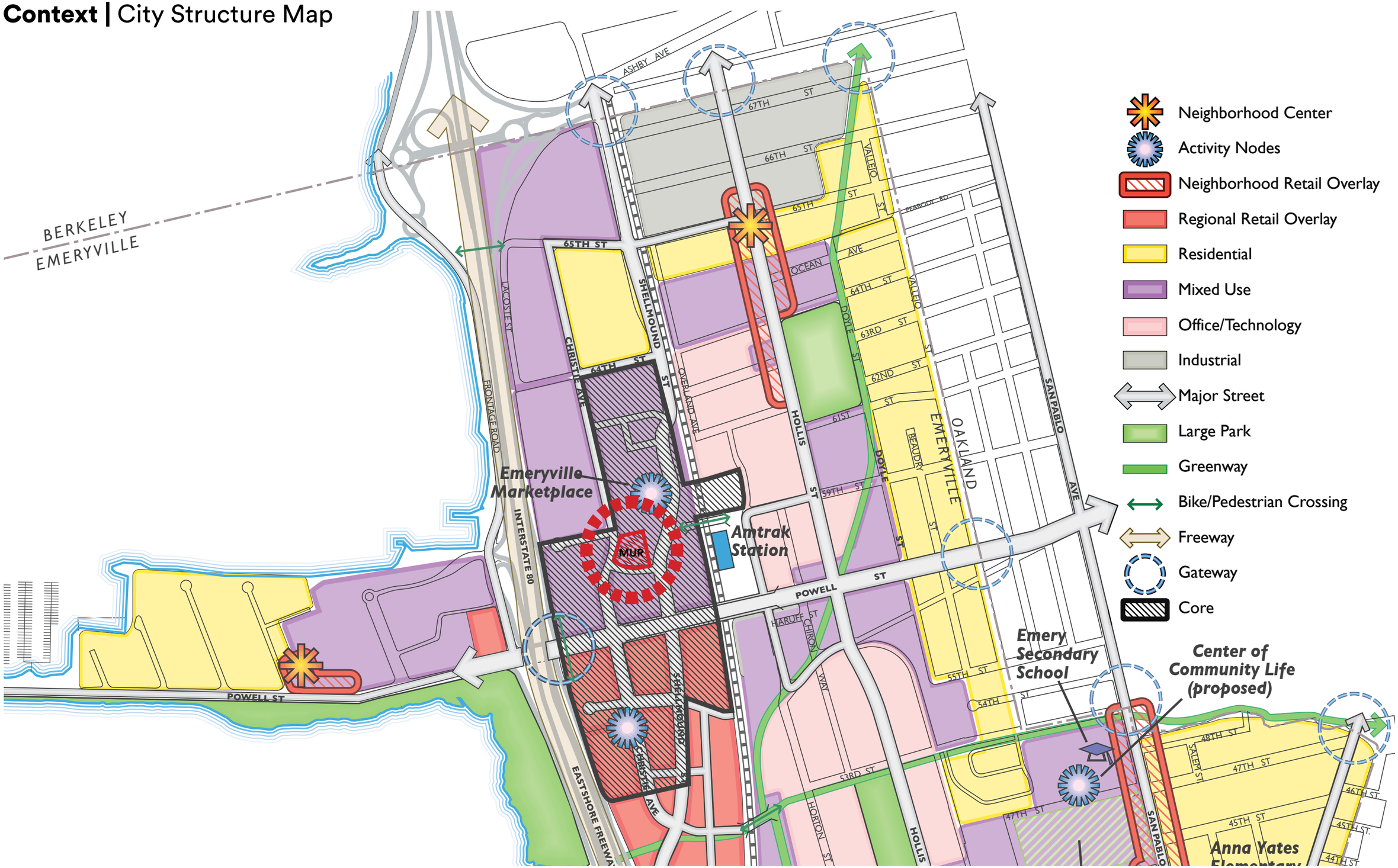


Context | Zoning Map

San Francisco Bay

NOT TO SCALE

Context | City Structure Map

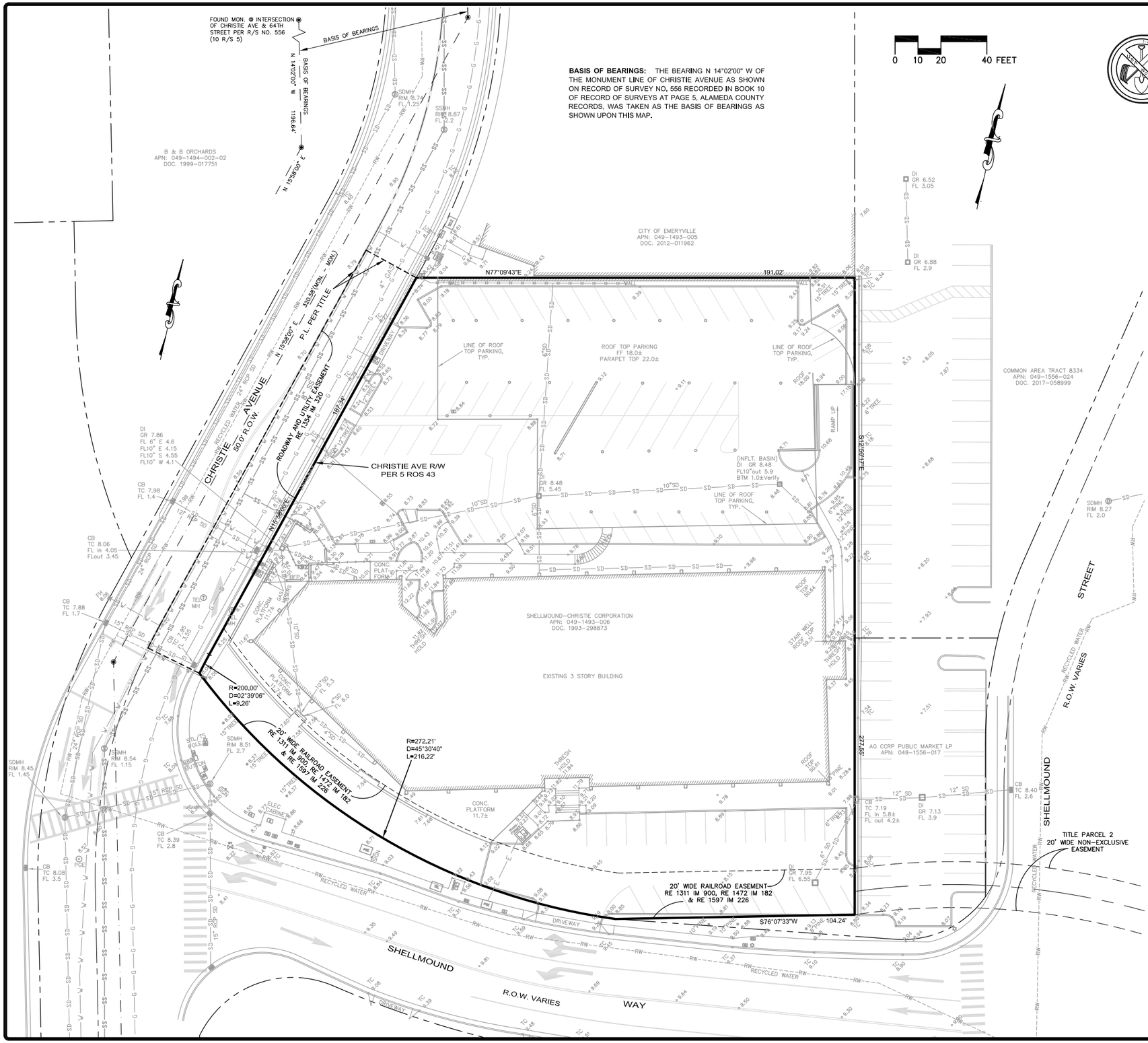


NOT TO SCALE

Context | Connectivity

NOT TO SCALE


W FRONTAGE RD
EASTSHORE FWY
59TH ST
SITE
SHELLMOUND WAY
POWELL ST
CHRISTIE AVE
SHELLMOUND ST



GENERAL NOTES:

THE SCOPE AND LIMIT OF THIS SURVEY WAS DEFINED IN MARCH BY BILL SCHRADER. USE OF THIS SURVEY IS LIMITED TO THE PROPERTY OWNER AS REFERENCED IN THE TITLE BLOCK AND CONSULTANTS FOR THE SPECIFIC PROJECT. OTHERS MAY NOT USE THIS MAP WITHOUT THE PERMISSION OF THE CLIENT AND HUMANN COMPANY. BOUNDARY AND BASIS OF BEARINGS ARE PER THE UNDERLYING RECORD MAP AS REFERENCED IN THE TITLE BLOCK HEREON.

TITLE REPORT FOR THIS SURVEY WAS PREPARED BY OLD REPUBLIC TITLE COMPANY, DATED AUGUST 2, 2018, ORDER NO, 0114000421-JQ.

THE ELECTRONIC FILE IF SUPPLIED, IS BEING DONE SO AS A COURTESY AND CONVENIENCE, AND IS SUBORDINATE TO THE PROVIDED SIGNED HARD COPY MAP WITH RESPECT TO CONTENT, ACCURACY AND QUALITY. HUMANN COMPANY MAKES NO WARRANTEE OR GUARANTEE, EXPRESSED OR IMPLIED FOR ANY COPIES OF THE DRAWINGS OR WORK ASSOCIATED WITH THE ELECTRONIC FILE BY OTHERS.

BUILDING(S) SHOWN HEREON CONTAINS DECORATIVE ARCHITECTURAL ELEMENTS ALONG ITS WALLS AND CORNERS WHICH ARE NOT NECESSARILY ACCOUNTED FOR IN THE BUILDING FOOTPRINT AS SURVEYED AND MAPPED. PRIOR TO THE PREPARATION OF WORKING DRAWINGS, THE ARCHITECT/DESIGNER SHOULD FIELD INSPECT ANY AREAS ON THE BUILDING WHERE AN ADDITION OR OTHER IMPROVEMENT IS EXPECTED TO OCCUR (IF SETBACKS OR OTHER CONSTRAINTS ARE AN ISSUE), AND CONSULT WITH THE SURVEYOR OR ENGINEER AS NEEDED.

TREES AND DRIP LINES AS SHOWN ARE LOCATED SUFFICIENTLY FOR GENERAL ARCHITECTURAL SITE PLANNING. ANY CONSTRUCTION ACTIVITY PLANNED IMMEDIATELY ADJACENT TO THE TREES OR DRIP LINES SHOULD BE REVIEWED WITH THE APPROPRIATE CONSULTANT. IF IT IS DETERMINED THAT DETAILED TREE AND/OR BRANCH MEASUREMENTS ARE NEEDED, FURTHER SURVEYING MAY BE NECESSARY AND SHOULD BE ARRANGED BY THE OWNER AND/OR CONSULTANT. SPECIES AS REFERENCED ON THE SURVEY SHOULD BE CONFIRMED BY A LICENSED ARBORIST OR LANDSCAPE ARCHITECT IF THE SPECIFIC TREE(S) IS SUSPECTED OF BEING A PROTECTED OR CRITICAL ONE(S).

DATUM: ELEVATIONS SHOWN HEREON ARE BASED UPON CITY PIN MONUMENT #14 LOCATED IN THE INTERSECTION OF 64TH STREET AND SHELLMOUND STREET. ELEVATION: 11.93 FT. (NAVD29).

LICENSED LAND SURVEYOR ERIC A. HUMANN No. 5452 STATE OF CALIFORNIA

E. A. Humann 01/04/2019

ERIC (RICK) A. HUMANN PLS 5452

REVISIONS

SCALE	1"=20'
DATE	01/04/2019
ENGINEER	H.N.
JOB NO.	18128

5850 SHELLMOUND WAY
BOUNDARY AND TOPOGRAPHIC SURVEY
PORTION OF SECTION 15, TOWNSHIP 1 SOUTH, RANGE 4 WEST, MOUNT DAABLO DASE & MERIDIAN

EMERYVILLE CALIFORNIA

HUMANN COMPANY INC.
SURVEYING - ENGINEERING
1021 BROWN AVE. LAFAYETTE, CA 94549
PH (925)283-8000 FAX (925)283-3578

SHEET T01
OF 1 SHEETS

JOB NO. 18128

ZONING HIGHLIGHTS

ZONING:	MUR - MIXED USE WITH RESIDENTIAL
ZONING OVERLAY:	TRANSIT HUGS & PEDESTRIAN PRIORITY ZONE
BASE FAR:	3.0 / 6.0 w/ BONUS
HEIGHT:	75 / 100+
SITE AREA:	64,862 SF

PROPOSED BONUS POINTS (100 REQUIRED):
- 50PTS AFFORDABLE HOUSING FEES +100% (REQ'D)
- 50PTS COMBINATION OF PUBLIC OPEN SPACE + PUBLIC IMPROVEMENTS

REQUIRED SETBACKS: NONE

STREETSCAPE REQUIREMENTS:
- GREEN STREET 15FT MIN SIDEWALK CORRIDOR AT CHRISTIE AVENUE
- PEDESTRIAN PRIORITY 12FT MIN SIDEWALK CORRIDOR AT SHELLMOUND WAY

EASEMENTS:
- RAILWAY 20' AT SOUTH PROPERTYLINE
- FUTURE 10' FOR BICYCLE PATH AT NORTH PROPERTYLINE

OPEN SPACE REQUIREMENTS: 5% OF GROSS FLOOR AREA (MIN 20FT-25FT DIM)

PASSENGER VEHICLES:

227	1.2 / 1000 SF FOR OFFICES (50% OF 2.4 BASE ALLOWANCE)
94	0.75 / 1000 SF FOR RESEARCH & DEVELOPMENT (50% OF 1.5 BASE ALLOWANCE)
30	1.5 / 1000 SF FOR CLINICS AND MEDICAL OFFICES (50% OF 3.0 BASE ALLOWANCE)
40	2.0 / 1000 SF FOR NON-RESEARCH MEDICAL LABORATORIES (50% OF 4.0 BASE
431	TOTAL PARKING ALLOWED +10% OF ESTIMATED DEMAND
	(REFER TO PROJECT DATA ON PAGE 27 FOR DETAILED PARKING CALCULATION)

BICYCLE PARKING REQUIREMENTS:
- LONG TERM 10% OF VEHICLE DEMAND
- SHORT TERM 10% OF VEHICLE DEMAND

2 - GENERAL GUIDELINES

A – SIDEWALKS AND LANDSCAPING

ALTHOUGH LANDSCAPE DESIGN HAS NOT YET BEEN CONSIDERED IN DETAIL THE PROJECT WILL PROVIDE UNOBSTRUCTED PEDESTRIAN PATHWAYS AND LANDSCAPING AREAS ON BOTH FRONTAGES AS APPROPRIATE FOR GREEN STREET CORRIDORS AND THE PEDESTRIAN PRIORITY ZONE

LANDSCAPE SPECIES, HARDSCAPE MATERIALS, STORMWATER RETENTION, AND LIGHTING DESIGN WILL BE DEVELOPED TO COMPLIMENT RECOMMENDATIONS OF THE DESIGN GUIDELINES.

B – PARKING AND ACCESS

PARKING IS ABOVE GRADE AT THE EAST SIDE OF THE SITE WITH ACTIVE USES AT GRADE FACING BOTH STREETS. CHRISTIE AVENUE IS THE ONLY VIABLE ACCESS POINT FOR BOTH PARKING AND LOADING DUE TO PROPERTY LINE CONFIGURATION AT SHELLMOUND WAY.

PARKING AND LOADING ENTRANCES ARE COMBINED AND THE LOADING IS BAY IS INTERNALIZED IN THE BUILDING TO MINIMIZE CONFLICTS WITH PEDESTRIANS, HOWEVER THE TURNING RADIUS FOR LARGE TRUCKS FROM CHRISTIE MAY REQUIRE THE SINGLE CURB CUT TO BE WIDER THAN THE STANDARD ALLOWANCE IN THE PLANNING CODE.

FACADE MATERIALS HAVE NOT YET BEEN CONSIDERED IN DETAIL HOWEVER, THE FACADE DESIGN OF THE PARKING GARAGE WILL BE COMPLIMENTARY TO THE RECOMMENDATIONS OF THE DESIGN GUIDELINES.

PEDESTRIAN ENTRIES ARE LOCATED ON BOTH CHRISTIE AVENUE AND SHELLMOUND WAY.

C – SITE PLANNING

DUE TO THE SHAPE OF THE SW CORNER OF THE SITE AND THE RAILROAD EASEMENT AT THE SOUTHERN EDGE OF THE SITE THE PROJECT SITE DESIGN ALLOWS FOR SUBSTANTIAL OPEN SPACE THAT IS VISIBLE AND ACCESSIBLE TO PEDESTRIANS AND BENEFITS FROM SUBSTANTIAL SOLAR EXPOSURE.

MECHANICAL & ELECTRICAL EQUIPMENT, TRASH STORAGE, AND LOADING ACTIVITIES ARE INTERNALIZED IN THE BUILDING AT THE GROUND FLOOR OR SCREENED FROM VIEW ON THE ROOF.

D – BUILDING MASSING

THE PROPOSED BUILDING STEPS DOWN FROM WEST TO EAST TO PROVIDE A VISUAL TRANSITION BETWEEN THE SIGNATURE TOWER AND SURFACE PARKING LOT TO THE EAST, AND THE BUILDING IS SET BACK FROM THE NORTH PROPERTY LINE TO ALLOW FOR A BIKE & PEDESTRIAN THRU-SITE CONNECTION TO CHRISTIE AVENUE.

THE CURVILINEAR FORM OF THE TOWER ALLEVIATES THE POTENTIAL FOR A ‘BLOCKY’ APPEARANCE, AND POTENTIALLY REDUCES WIND IMPACTS ON SURROUNDING SITES. FACADE MATERIALS HAVE NOT YET BEEN CONSIDERED IN DETAIL HOWEVER, THE INTENTION IS TO PROVIDE ARTICULATION AND TEXTURE AS A VISUAL MASS REDUCTION STRATEGY. NESTING THE PARKING GARAGE FORM INTO THE EAST SIDE OF THE TOWER BREAKS UP THE PROJECT INTO DISTINCT MASSING ELEMENTS AND THE TOP OF THE TOWER FACADE WILL INCLUDE FEATURE DETAILING TO SCREEN MECHANICAL EQUIPMENT AND SIGNAL THE END OF THE BUILDING.

THE DESIGN TEAM HAS PREPARED SOME INITIAL SHADOW DIAGRAMS WHICH INDICATE A MINIMAL IMPACT TO NEARBY RESIDENTIAL BUILDINGS OR PUBLIC OPEN SPACES.

E – BUILDING FORM AND ARTICULATION

CURVING THE TOWER PROVIDES VISUAL INTEREST ON THE SKYLINE WHILE ALSO CREATIVELY FITTING THE ODD SHAPE OF THE SITE CAUSED BY THE ANGLE OF CHRISTIE AVENUE AND SHELLMOUND WAY.

FACADES WILL TAKE QUEUES FROM THE EXISTING NEIGHBORHOOD IDENTITY AS THE DESIGN DEVELOPS, AND ARE INTENDED TO BE ARTICULATED TO PROVIDE A VARIETY OF VISUAL DEPTH AND PLAY OF LIGHT AND SHADOW. THE FACADE DESIGN SHOWN IN THESE 3D VIEWS IS VERY PRELIMINARY AND ONLY A PLACEHOLDER WHILE CONCEPTUAL DESIGN PROGRESSES. THIS FACADE IS NOT YET AN ACTUAL PROPOSAL.

THE ROOF OF THE PARKING GARAGE WILL FEATURE A LANDSCAPED TENANT AMENITY TERRACE WITH INTENSIVE GREEN ROOF PLANTED AREAS, AND THE TOWER ROOF WILL INCLUDE EXTENSIVE GREEN ROOFING AS EQUIPMENT LAYOUTS ALLOW.

LIFE SCIENCES BUILDINGS HAVE SPECIFIC FUNCTIONAL REQUIREMENTS FOR VENTILATION AND AIR CONDITIONING SYSTEMS HOWEVER, THE EQUIPMENT USED WILL BE AS ENERGY EFFICIENT AND LOW EMISSION AS FEASIBLE.

PEDESTRIAN ENTRANCES AT EACH STREET FRONTAGE WILL FLANK A PUBLICALLY ACCESSIBLE LANDSCAPED OPEN SPACE AND PLAZA AT THE STREET CORNER. ACTIVE GROUND FLOOR USES FACING EITHER SOUTH OR WEST WILL FEATURE ABUNDANT NATURAL LIGHT AND PROVIDE ‘EYES ON THE STREET’ AND ON THE OPEN SPACE.

G – OPEN SPACE

OPEN SPACE IS PROVIDED FOR BUILDING TENANTS IN THE FORM OF A +/- 16,000 SQFT LANDSCAPED AMENITY TERRACE ON THE ROOF OF THE PARKING GARAGE. THE TERRACE WILL BENEFIT FROM SIGNIFICANT SOLAR EXPOSURE AS WELL AS BEING SHIELDED FROM PREVAILING WINDS BY THE FORM OF THE TOWER.

PUBLIC OPEN SPACE IS PROVIDED IN SEVERAL LOCATIONS AT GRADE. THE NARROW SHAPE OF THE SITE AT THE STREET CORNER AND THE RAILROAD EASEMENT AT SHELLMOUND WAY CREATE +/- 10,000 SQFT OF WEST AND SOUTH FACING PUBLICALLY ACCESSIBLE LANDSCAPED OPEN SPACE WITH GREAT SOLAR EXPOSURE. LANDSCAPING, HARDSCAPE MATERIALS, AND FURNISHINGS WILL BE COMPLIMENTARY TO THE ADJACENT RIGHT OF WAY AND CONSISTENT WITH RECOMMENDATIONS OF THE DESIGN GUIDELINES.

OPEN SPACE AT THE EAST SIDE OF THE SITE BETWEEN THE BUILDING AND ADJACENT SURFACE PARKING LOT ON THE ADJOINING PROPERTY WILL BE LANDSCAPED BUT NOT PUBLICALLY ACCESSIBLE DUE TO LACK OF EYES ON THE STREET AVAILABLE IN THIS LOCATION. THE BICYCLE PATH SETBACK AT THE NORTH SIDE OF THE SITE WILL BE DESIGNED TO COMPLIMENT THE REST OF THE BICYCLE PATH NETWORK IN EMERYVILLE.

3 – AREA SPECIFIC, BUILDING, AND STREET TYPE GUIDELINES

PEDESTRIAN PRIORITY ZONE

SHELLMOUND WAY IS PROVIDED WITH A 12’ MINIMUM SIDEWALK CORRIDOR (20’ RAILROAD SETBACK)

GROUND FLOOR HEIGHTS VARY BETWEEN 18FT AND 25FT TALL AT STREET FACING ACTIVE USES.

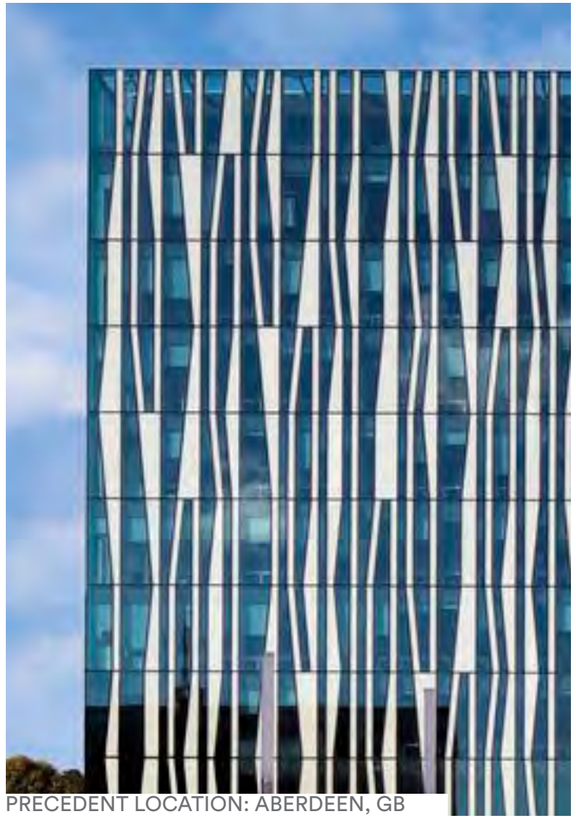
BUILDING IS SITED TO THE NORTHEAST OF STREET CORNER THEREFORE UPPER STORY SETBACKS ARE NOT NECESSARY TO ENSURE SUNLIGHT ACCESS TO THE STREETS.

GREENWAYS AND GREEN STREETS

MAIN BUILDING FACES CHRISTIE AVENUE WITH ADDITIONAL BUILDING ENTRANCES FACING SHELLMOUND WAY.

PUBLIC ORIENTED USES SUCH AS MAIN LOBBY, CAFE, AND COMMUNITY AMENITY SERVICES AT GROUND FLOOR FACE BOTH STREETS.

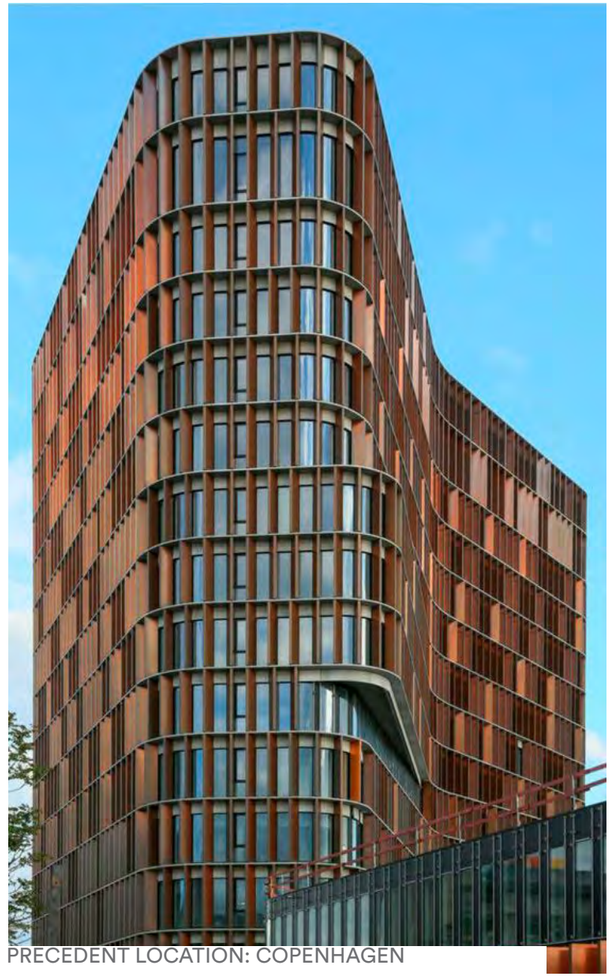
CHRISTIE AVENUE IS A GREEN STREET FEATURING A 15FT MINIMUM SIDEWALK CORRIDOR.



PRECEDENT LOCATION: ABERDEEN, GB

PRECEDENT LOCATION: BILBAO, SPAIN

PRECEDENT LOCATION: ST PETERSBURG, RUSSIA



PRECEDENT LOCATION: COPENHAGEN

PRECEDENT LOCATION: LOS ANGELES, CA

PRECEDENT LOCATION: SEOUL

PRECEDENT LOCATION: ARNHEM, NETHERLANDS

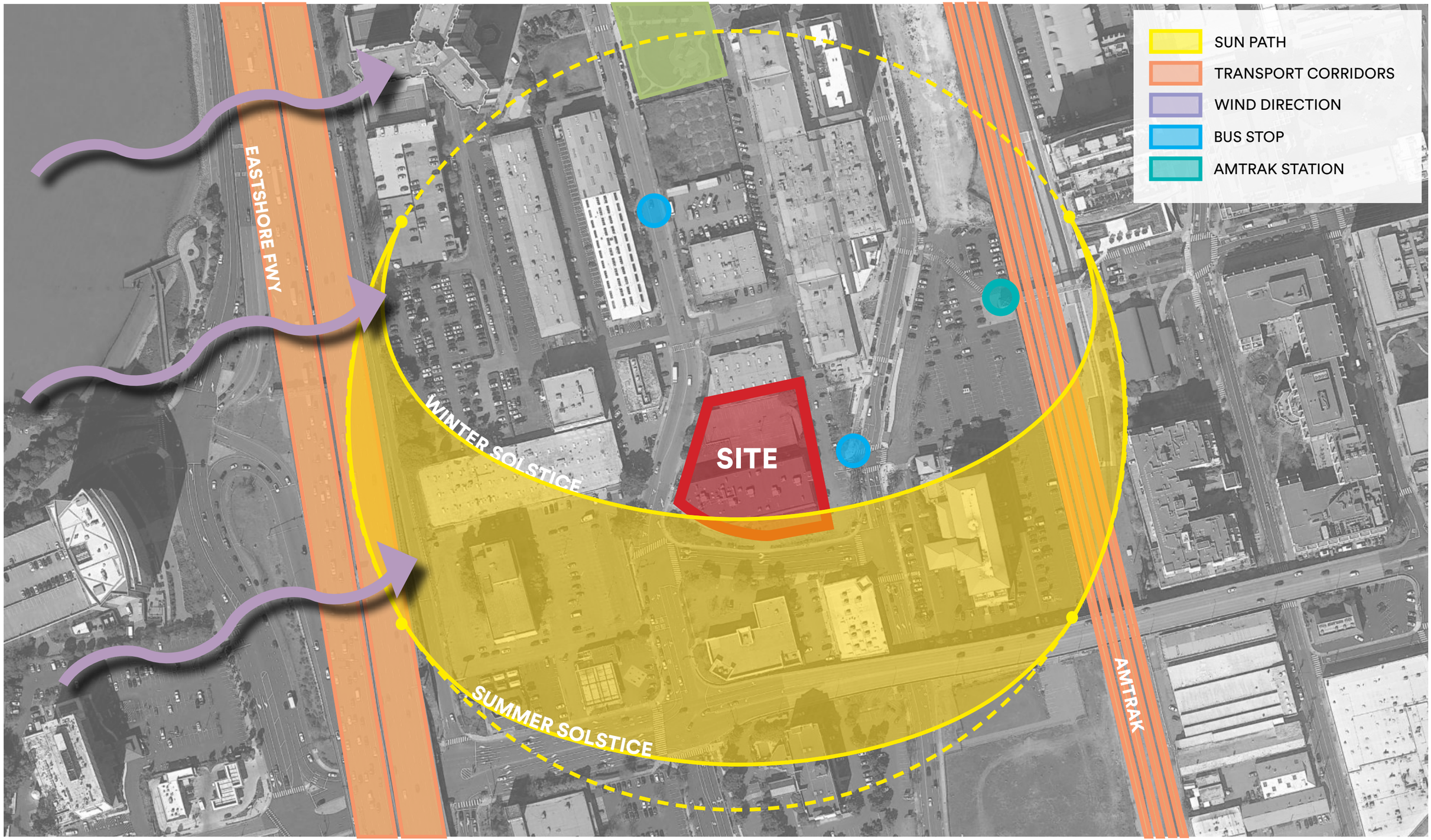
PRECEDENT LOCATION: VANCOUVER, BC

CONCEPT DESIGN DIAGRAMS

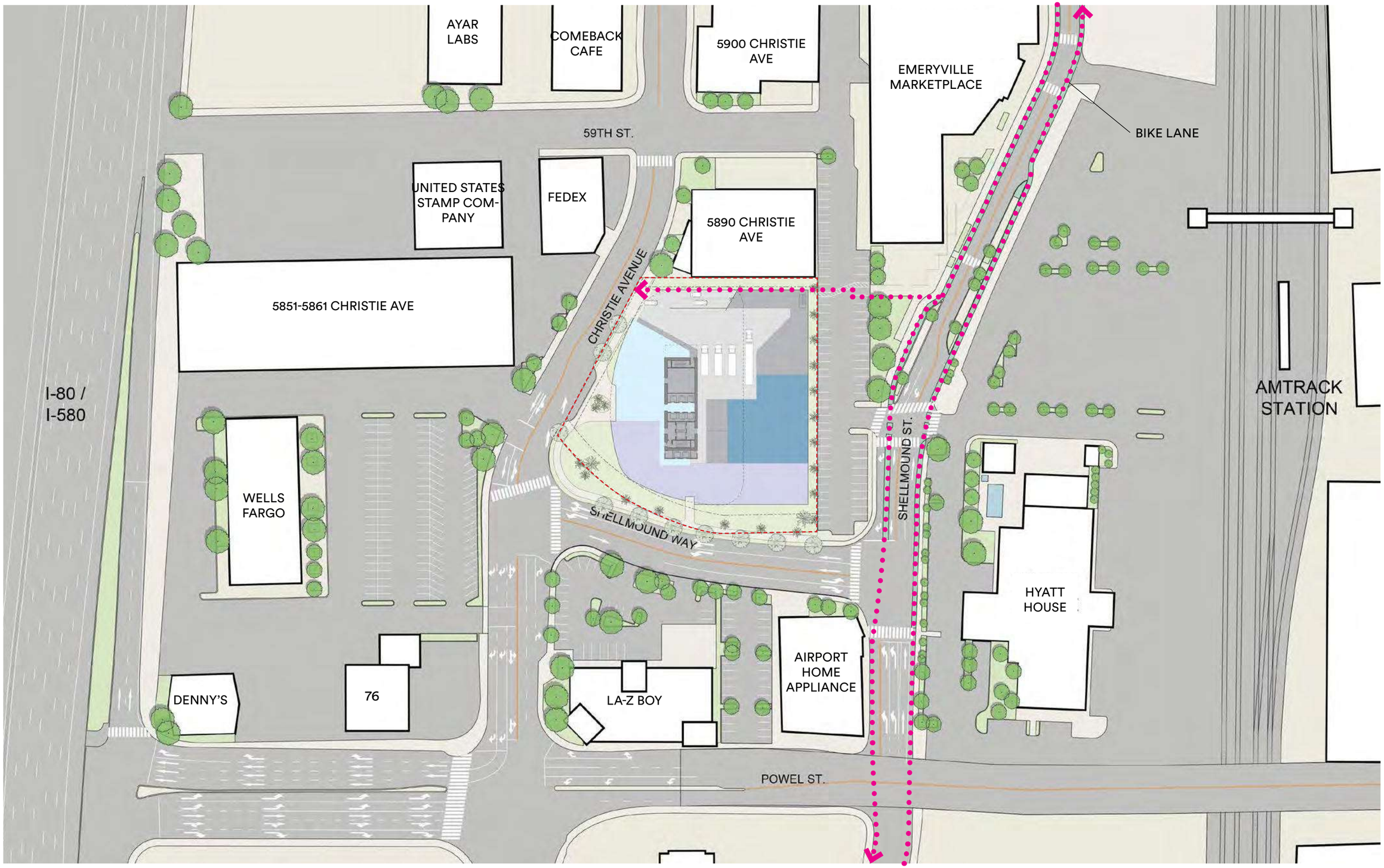
BUILDING CODE HIGHLIGHTS

CONSTRUCTION TYPE:	TYPE-1A NON COMBUSTIBLE W/ AUTOMATIC SPRINKLER SYSTEM	
HEIGHT:	240ft to ROOF / 265ft to TOS	
OCCUPANCIES:	L	LABORATORY
	B	RETAIL / COMMUNITY AMENITY
	S-2	ACCESSORY PARKING
SITE AREA:	64,862 sf	TOTAL SITE AREA
ESTIMATED AREAS:	553,725 sf	TOTAL GROSS BUILDING
(BUILDING CODE DEFINITIONS)	315,500 sf	USABLE OFFICE & LABORATORY SPACE
	68,000 sf	NON-OCCUPIED MECHANICAL SPACE
	10,000 sf	CLINICS & NON-RESEARCH LABORATORY
	160,225 sf	PARKING AND LOADING

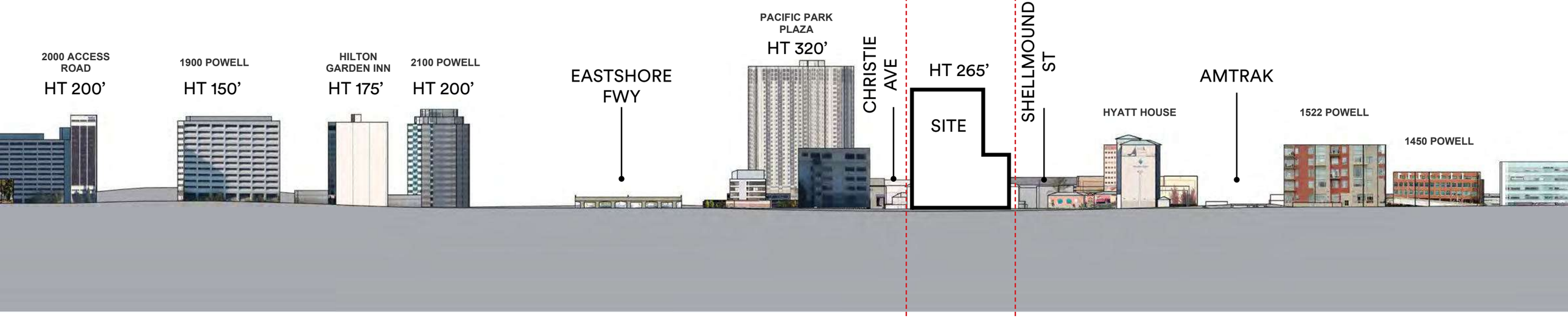
Site Environmental Analysis | Sun, Wind, Noise, Transit and Existing Open Spaces



Plans | Vicinity



Section | Neighborhood



PRECEDENT LOCATION: ST PETERSBURGE, RUSSIA

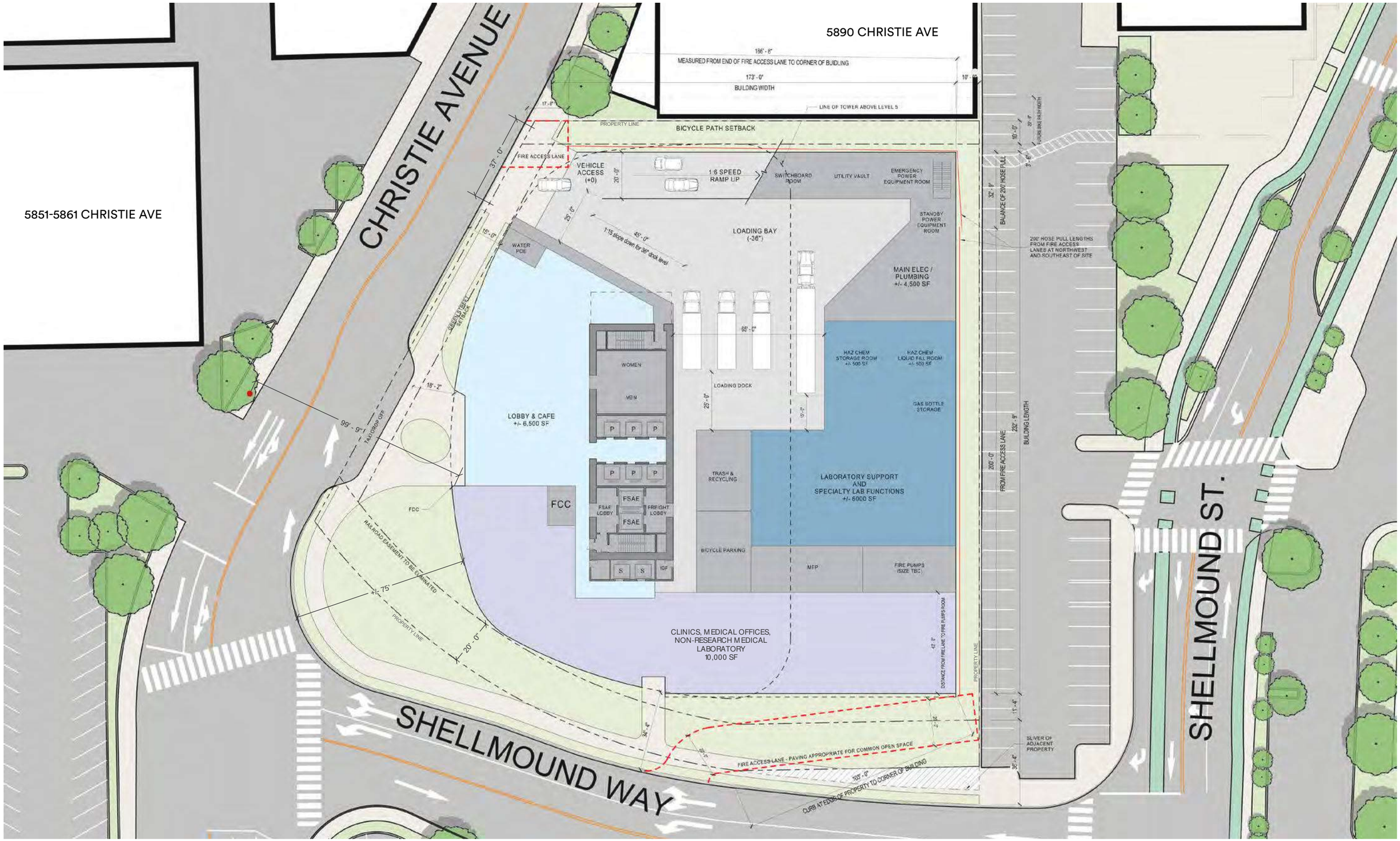
Perspective | Shellmound and Christie

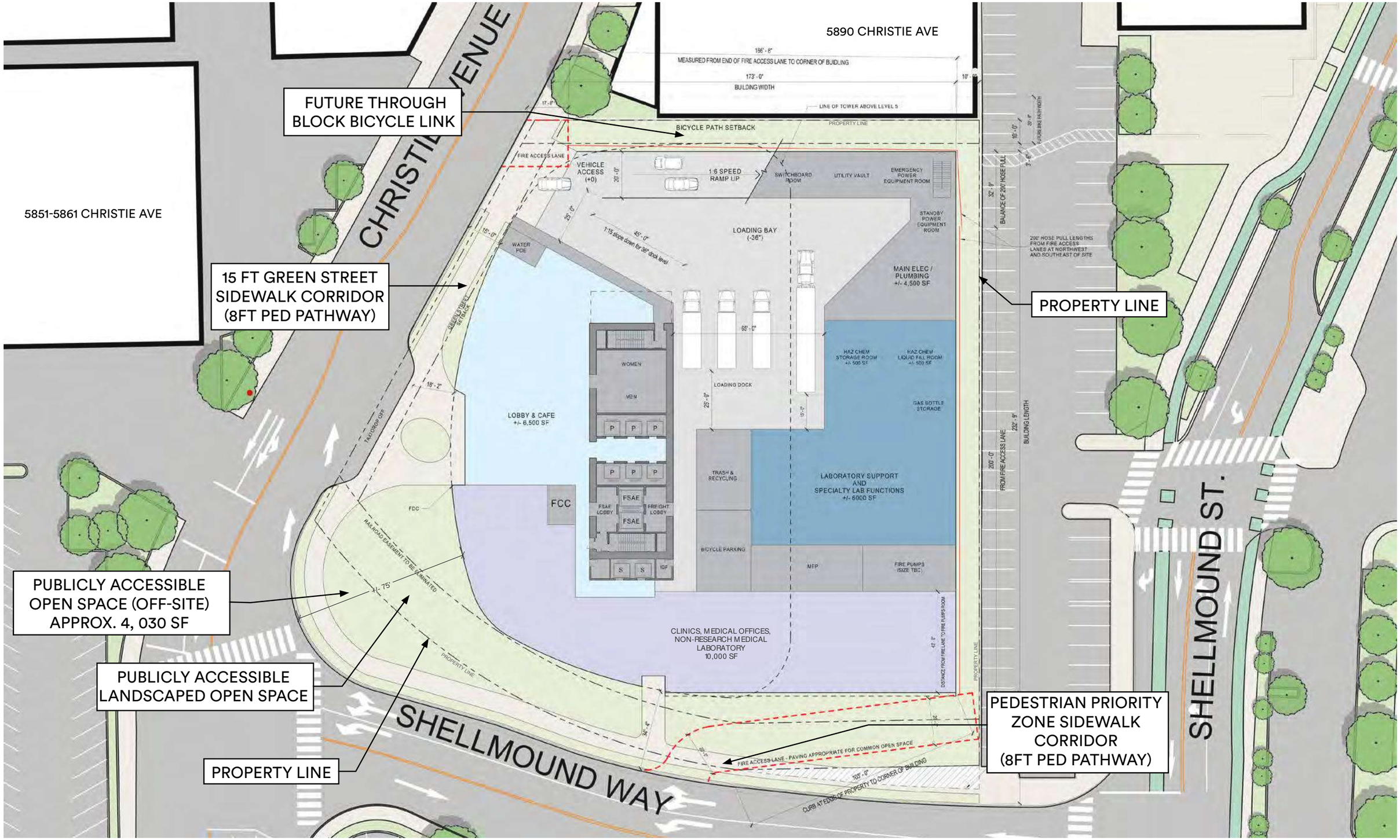
POTENTIAL TOWER CLADDING SHOWN IS ALUMINUM AND GLASS CURTAIN WALL SYSTEM

PRELIMINARY RENDERING OF PROPOSED BUILDING MASSING. PLEASE REFER TO DESIGN GUIDELINES PRELIMINARY RESPONSIVENESS NARRATIVE ON PAGES 11-12 FOR ADDITIONAL DESCRIPTION OF PROPOSED INTENT.

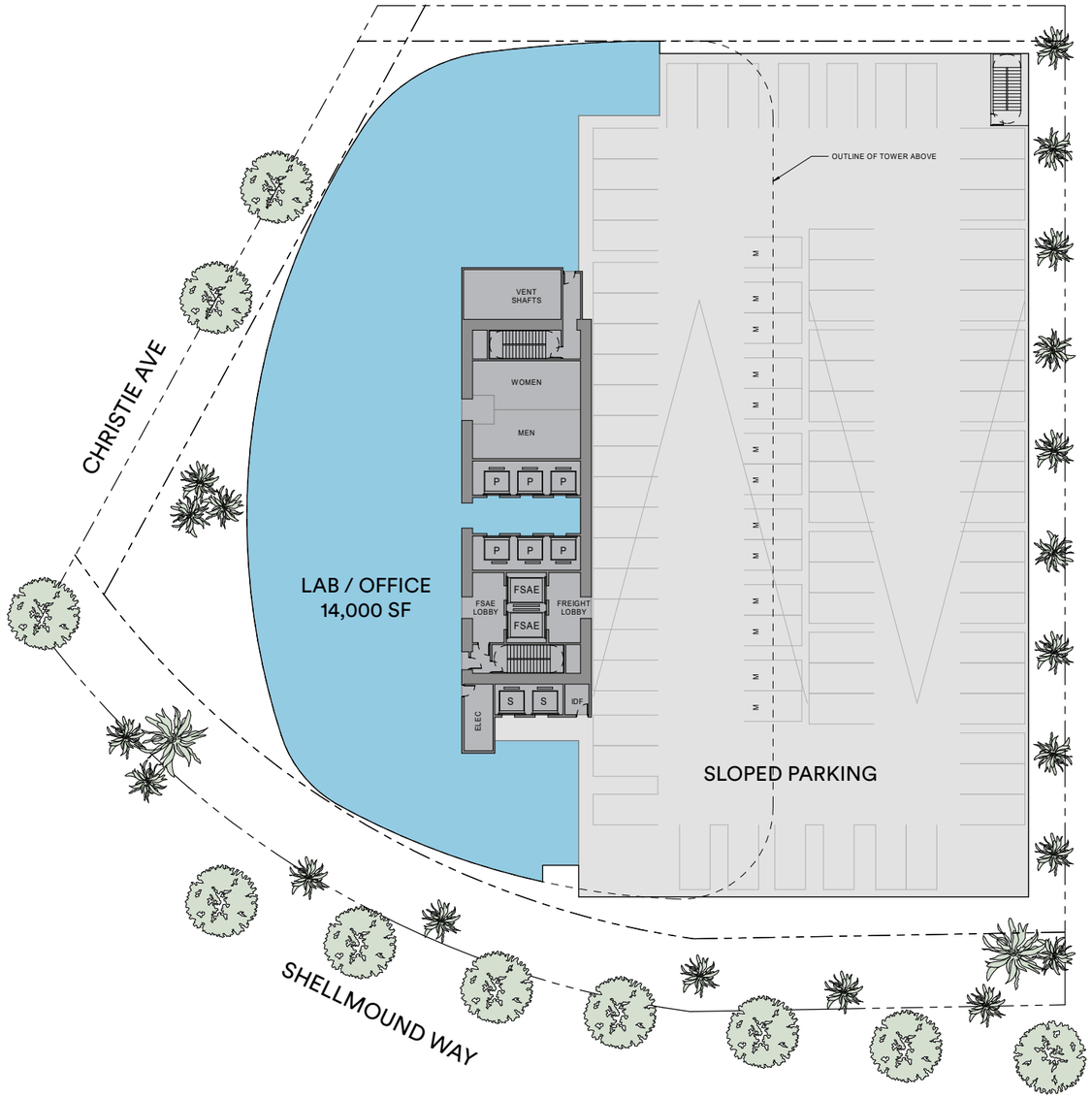
POTENTIAL GARAGE CLADDING SHOWN IS CUSTOM GRAPHIC PERFORATED METAL PANEL SYSTEM

Plans | Ground Floor

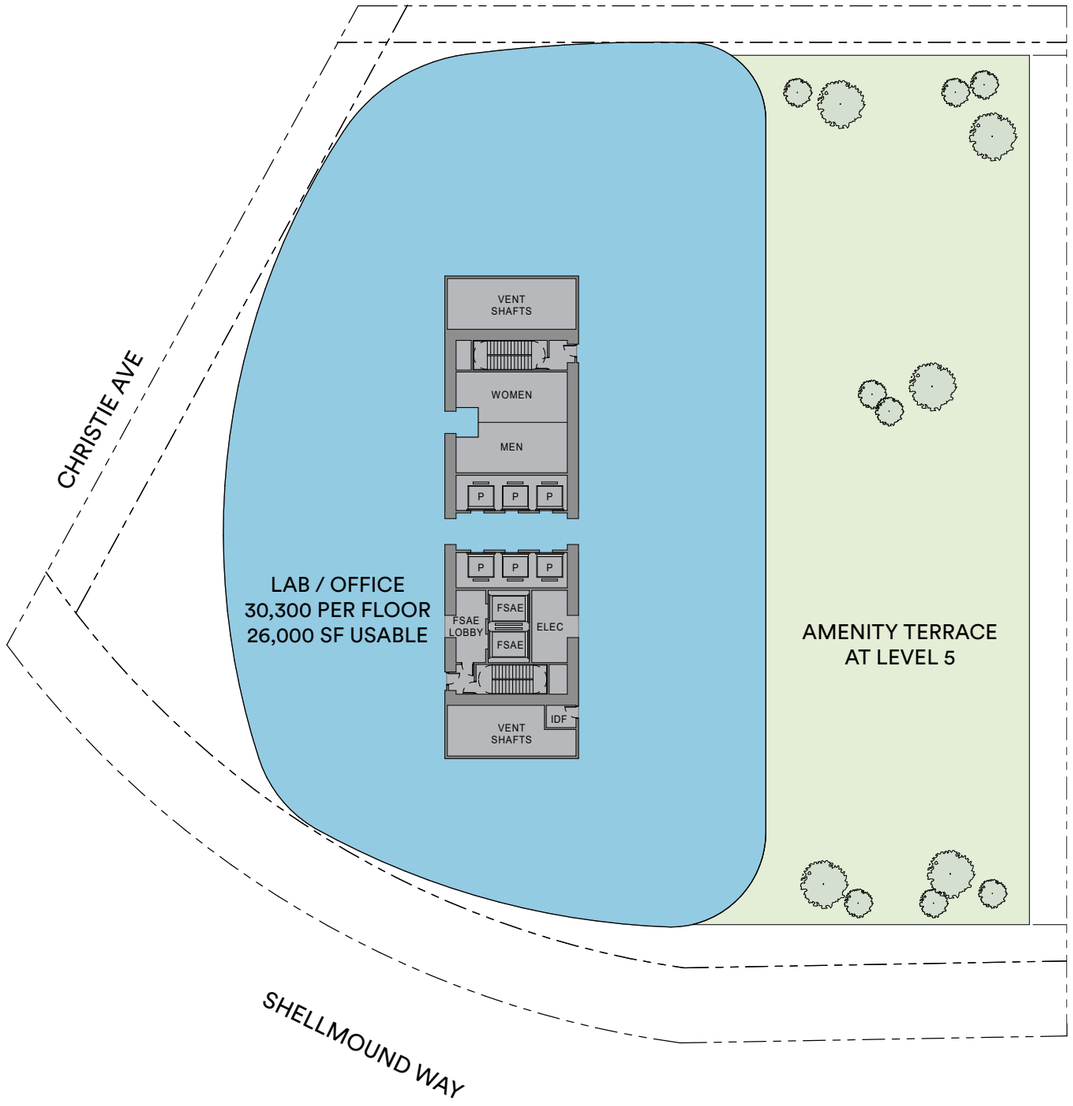



5851-5861 CHRISTIE AVE
CHRISTIE AVENUE
5890 CHRISTIE AVE
FUTURE THROUGH BLOCK BICYCLE LINK
15 FT GREEN STREET SIDEWALK CORRIDOR (8FT PED PATHWAY)
PROPERTY LINE
PUBLICLY ACCESSIBLE OPEN SPACE (OFF-SITE) APPROX. 4, 030 SF
PUBLICLY ACCESSIBLE LANDSCAPED OPEN SPACE
PROPERTY LINE
PEDESTRIAN PRIORITY ZONE SIDEWALK CORRIDOR (8FT PED PATHWAY)
SHELLMOUND WAY
SHELLMOUND ST.
166' - 8"
MEASURED FROM END OF FIRE ACCESS LANE TO CORNER OF BUIDLING
173' - 0"
BUILDING WIDTH
LINE OF TOWER ABOVE LEVEL 5
BICYCLE PATH SETBACK
PROPERTY LINE
FIRE ACCESS LANE
VEHICLE ACCESS (+0)
1:6 SPEED RAMP UP
SWITCHBOARD ROOM
UTILITY VAULT
EMERGENCY POWER EQUIPMENT ROOM
STANDBY POWER EQUIPMENT ROOM
LOADING BAY (-36")
45' - 0"
1:15 slope down for 36" drop level
WATER POE
MAIN ELEC / PLUMBING +/- 4,500 SF
65' - 0"
WOMEN
MEN
LOBBY & CAFE +/- 6,500 SF
LOADING DOCK
HAZ CHEM STORAGE ROOM +/- 500 SF
HAZ CHEM LIQUID FILL ROOM +/- 500 SF
GAS BOTTLE STORAGE
TAXI DROP OFF
FCC
FDC
FSAE
FSAE LOBBY
FREIGHT LOBBY
TRASH & RECYCLING
LABORATORY SUPPORT AND SPECIALTY LAB FUNCTIONS +/- 6000 SF
BICYCLE PARKING
MEP
FIRE PUMPS (SIZE TBC)
RAILROAD EASEMENT TO BE ELIMINATED
+/- 75'
CLINICS, MEDICAL OFFICES, NON-RESEARCH MEDICAL LABORATORY 10,000 SF
FIRE ACCESS LANE - PAVING APPROPRIATE FOR COMMON OPEN SPACE
103' - 0"
CURB AT EDGE OF PROPERTY TO CORNER OF BUILDING
BALANCE OF 200' HOSE PULL
200' HOSE PULL LENGTHS FROM FIRE ACCESS LANES AT NORTHWEST AND SOUTHEAST OF SITE
BUILDING LENGTH
200' - 0" FROM FIRE ACCESS LANE

Plans | Typical

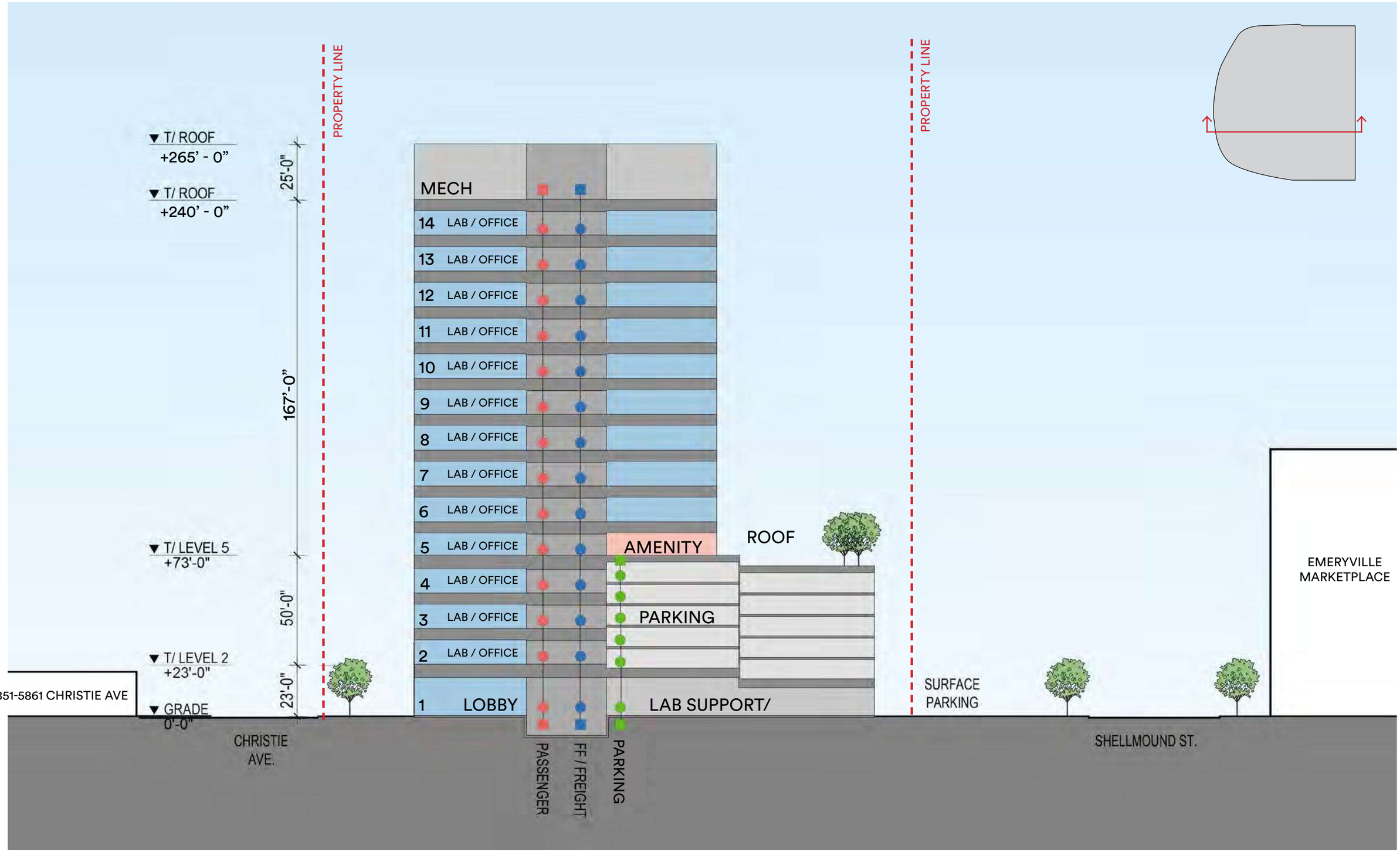


FLOOR PLAN - TYPICAL FLOOR 2-4

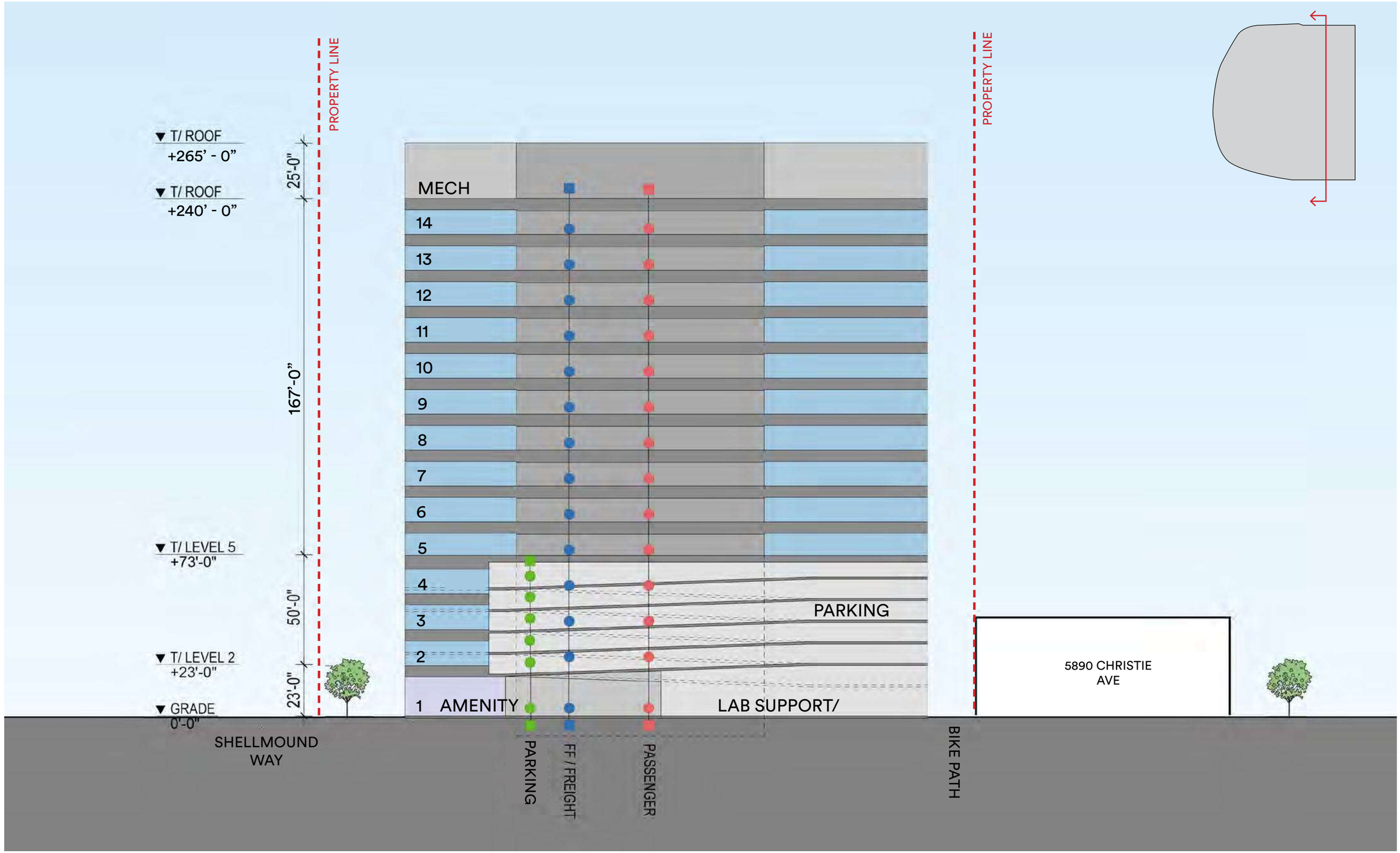


FLOOR PLAN - TYPICAL FLOOR 5-14

Section | E-W Building Section

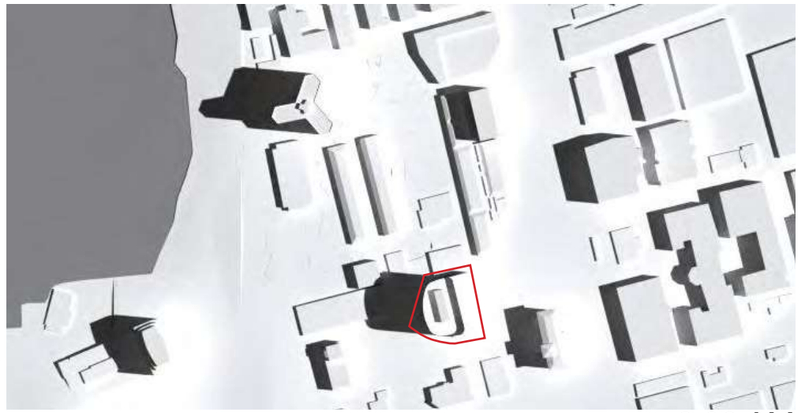


Section | N-S Building Section



Shadow Study | Summer and Winter Solstice

SUMMER SOLSTICE



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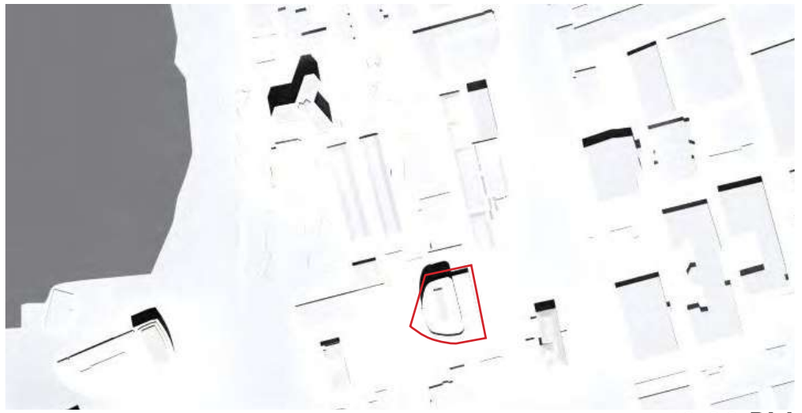

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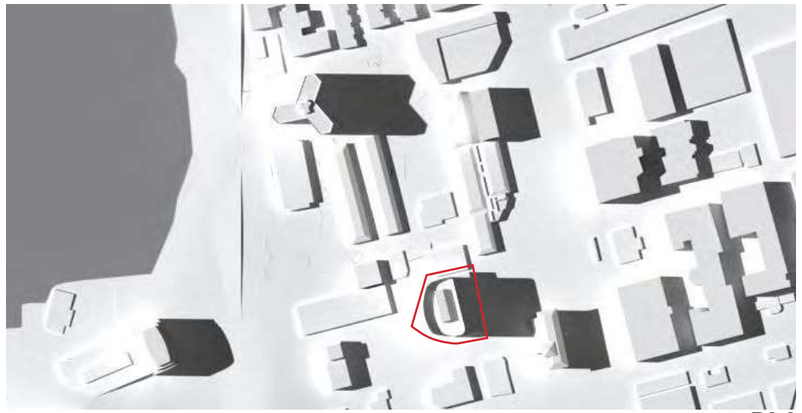

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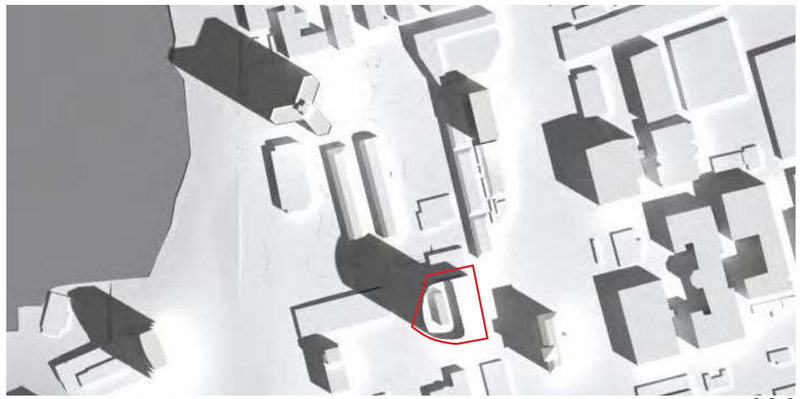
SPRING/FALL SOLSTICE



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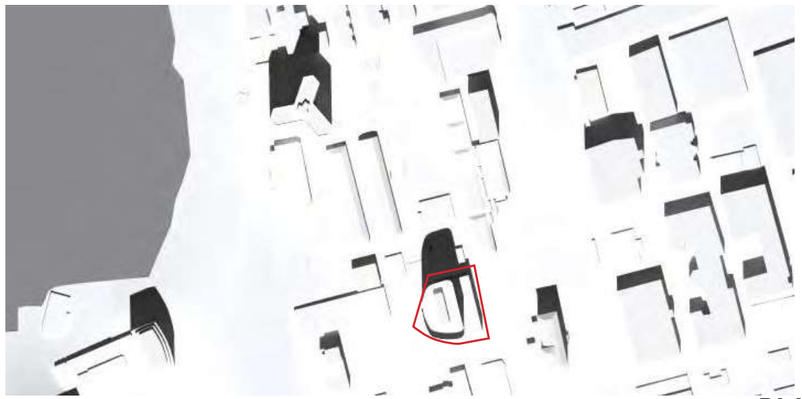

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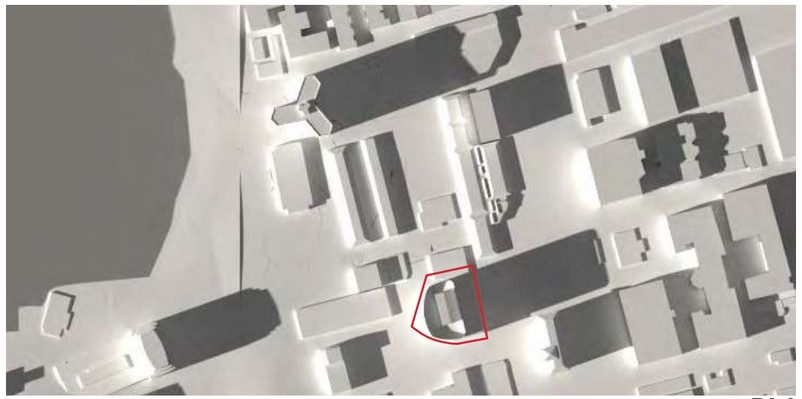

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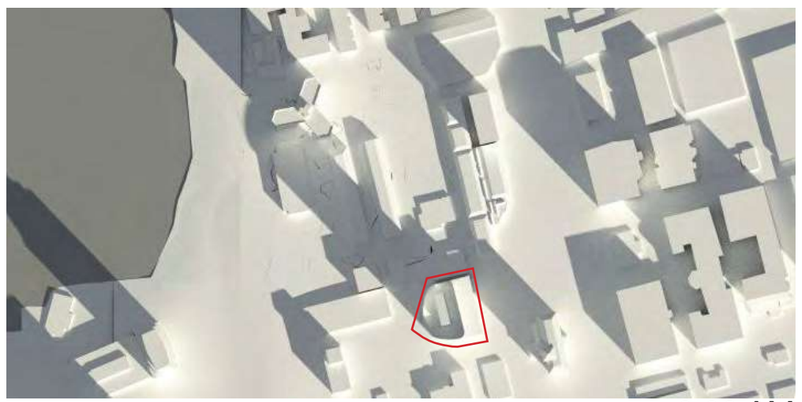
WINTER SOLSTICE



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Building Area Summary

EVERYVILLE LIFE SCIENCES TOWER

TOTAL SITE AREA: 64,682 sf

MAX FAR AREA: 388,090 sf

8/12/2021

ELEV	F/F		CLINICS + NON-RESEARCH LAB GSF	OFFICE/ LABORATORY GSF	FAR (1) GFA	PARKING (4) SPACES	PARKING (4) GSF	LOADING GSF	COMMON OPEN SPACE SF	PUBLIC OPEN SPACE ONSITE SF	TOTAL OPEN SPACE (3) SF
+265.00		TOS									
+240.00	25.0	ROOF									
+222.50	17.5	14		30,300	30,300						
+206.00	16.5	13		30,300	30,300						
+189.50	16.5	12		30,300	30,300						
+173.00	16.5	11		30,300	30,300						
+156.50	16.5	10		30,300	30,300						
+140.00	16.5	9		30,300	30,300						
+123.50	16.5	8		30,300	30,300						
+107.00	16.5	7		30,300	30,300						
+90.50	16.5	6		30,300	30,300						
+72.50	18.0	5		30,300	30,300				16,000		16,000
+56.00	16.5	4		17,400	17,400	91	30,900				
						85	29,400				
+39.50	16.5	3		17,400	17,400	85	29,400				
						85	29,400				
+23.00	16.5	2		17,400	17,400	85	28,900				
+0.00	23.0	1	10,000	22,890	32,890	0	2,400	9,825	2,340	13,435	19,805
			10,000 LAB GSF	378,090 GFA	388,090 GFA	431 SPACES	150,400 GSF	9,825 GSF	18,340 SF	13,435 SF	31,775 SF

NOTES 1. CALCULATIONS ARE BASED ON CONCEPTUAL DIAGRAMS AND ARE MEASURED PER PLANNING DEPARTMENT DEFINITIONS OF AREA

2. CONCEPTUAL DIAGRAMS DO NOT REFLECT INPUT FROM ENGINEERING OR OTHER DESIGN DISCIPLINES AND ARE SUBJECT TO CHANGE

3. TOTAL OPEN SPACE AT GRADE INCLUDES APPROX 4,030 SF OFF-SITE AT THE CORNER OF CHRISTIE AVENUE AND SHELLMOUND WAY

4. PARKING DEMAND CALCULATION IS BASED ON THE FOLLOWING:

-assume 60% of usable GSF is office use @ 1.2 cars per 1000sf = 227 cars

-assume 40% of usable GSF is laboratory use @ 0.75 cars per 1000sf = 95 cars

-assume 50% of ground floor Active Use GSF is non-research lab use @ 2.0 cars per 1000sf = 40 cars

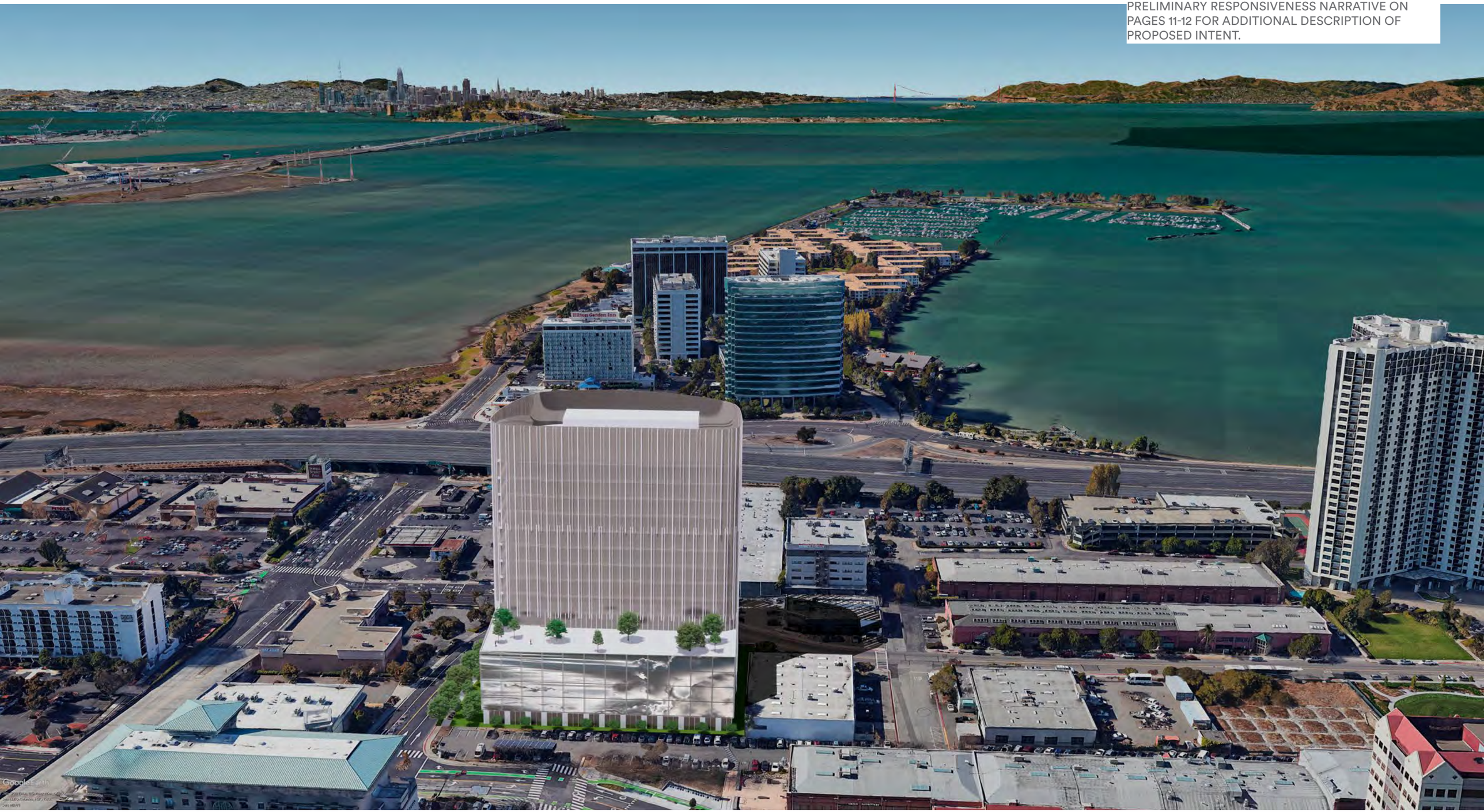
-assume 50% of ground floor Active Use GSF is medical clinic use @ 1.5 cars per 1000sf = 30 cars

-total demand is 392 spaces +10% = 431 total parking allowed

MASSING DIAGRAMS

Diagrams | View W toward SF

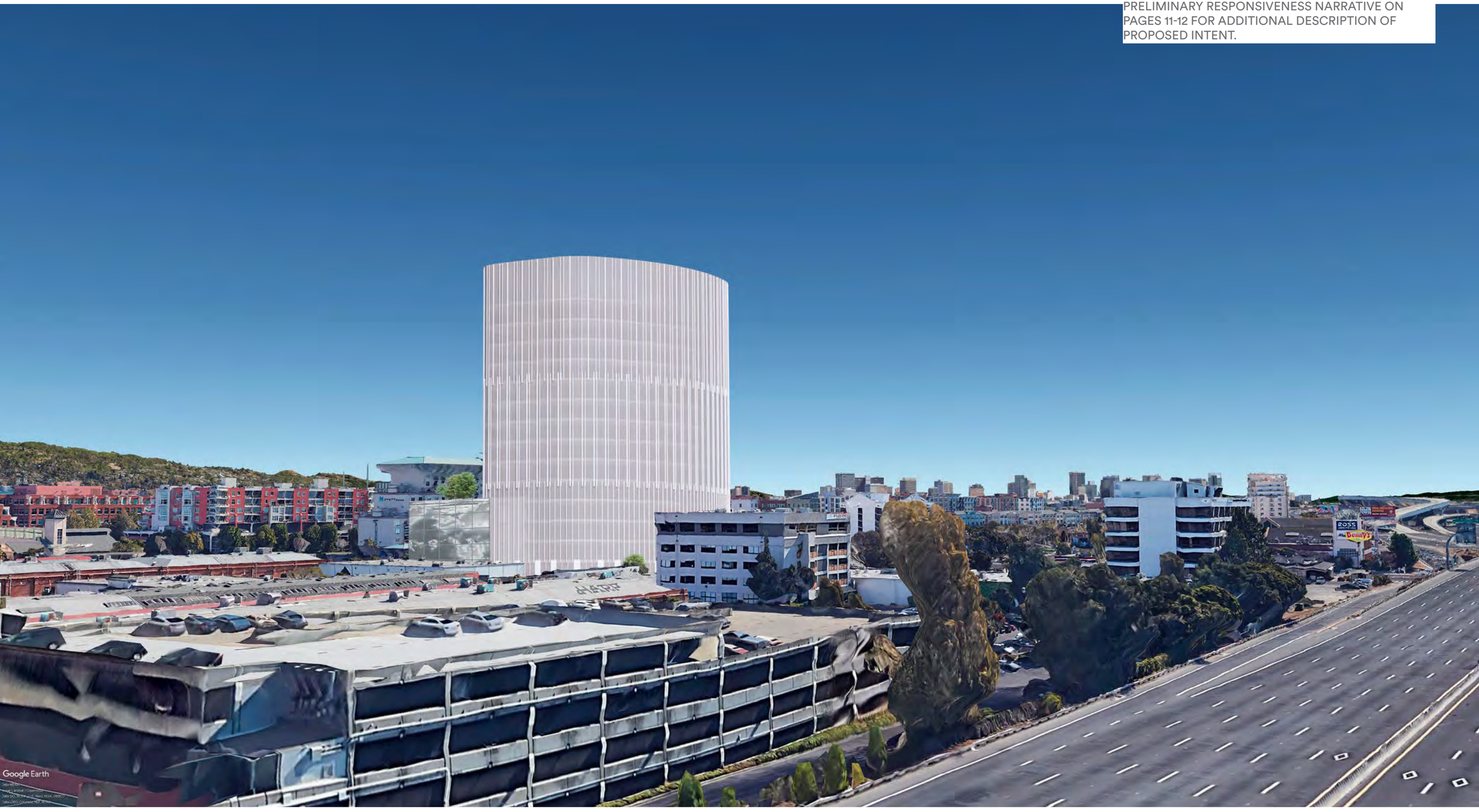
PRELIMINARY RENDERING OF PROPOSED BUILDING MASSING. PLEASE REFER TO DESIGN GUIDELINES PRELIMINARY RESPONSIVENESS NARRATIVE ON PAGES 11-12 FOR ADDITIONAL DESCRIPTION OF PROPOSED INTENT.



PRELIMINARY RENDERING OF PROPOSED BUILDING MASSING. PLEASE REFER TO DESIGN GUIDELINES PRELIMINARY RESPONSIVENESS NARRATIVE ON PAGES 11-12 FOR ADDITIONAL DESCRIPTION OF PROPOSED INTENT.

Diagrams | View S toward Oakland

PRELIMINARY RENDERING OF PROPOSED BUILDING MASSING. PLEASE REFER TO DESIGN GUIDELINES PRELIMINARY RESPONSIVENESS NARRATIVE ON PAGES 11-12 FOR ADDITIONAL DESCRIPTION OF PROPOSED INTENT.



DESIGN FOR A CHANGING WORLD

SOLOMON CORDWELL BUENZ

255 California Street
San Francisco, CA 94111
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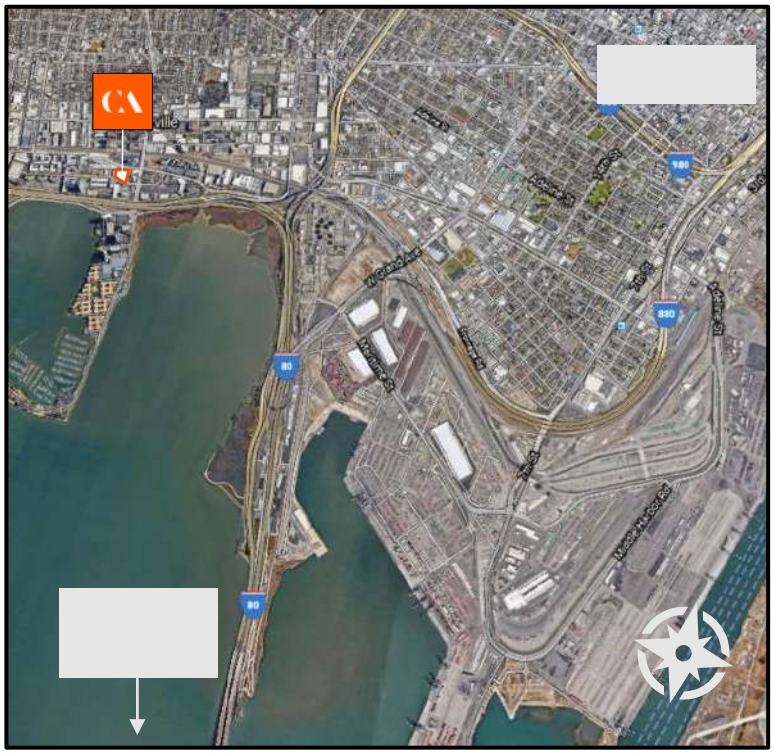

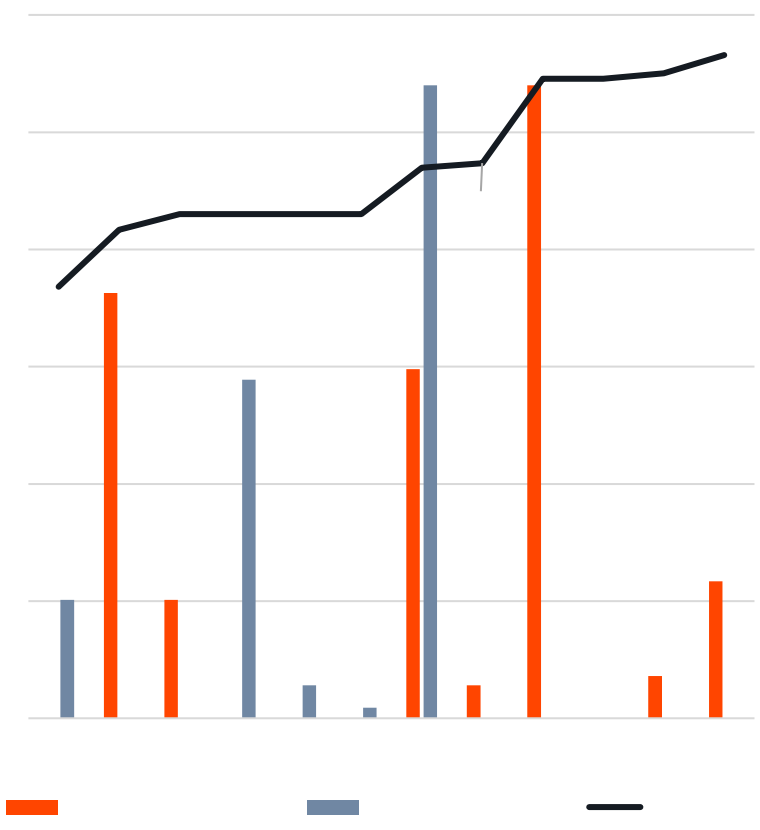

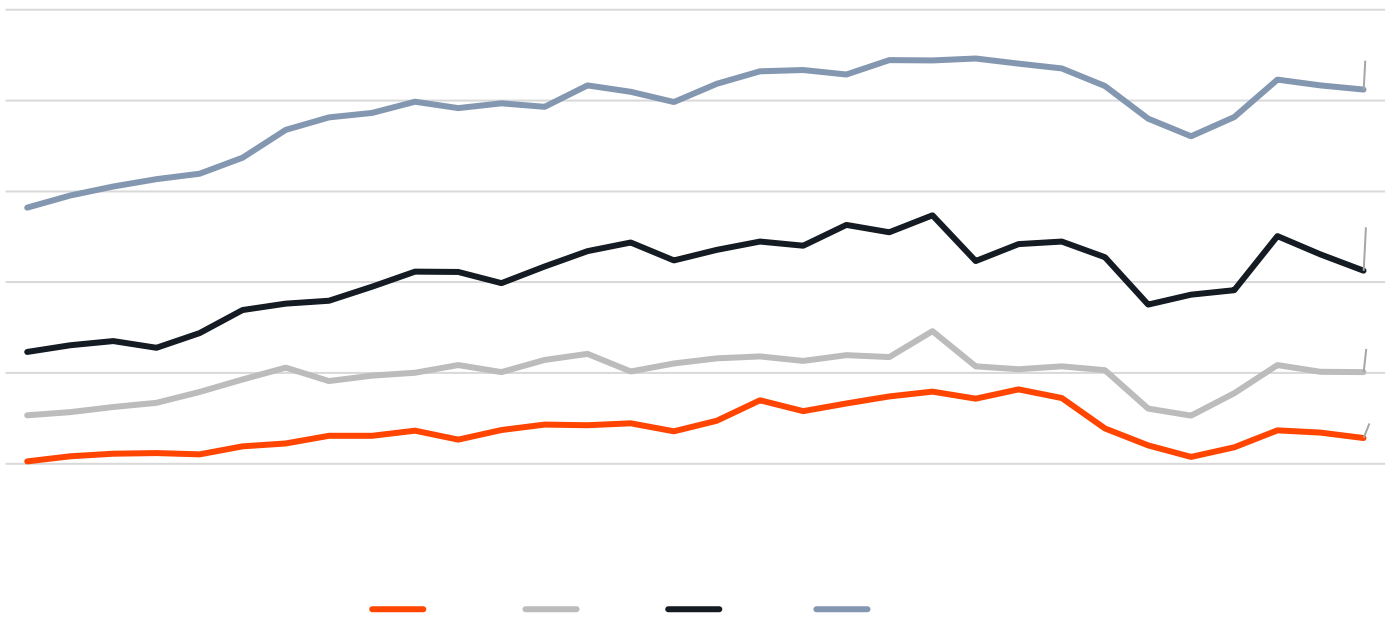

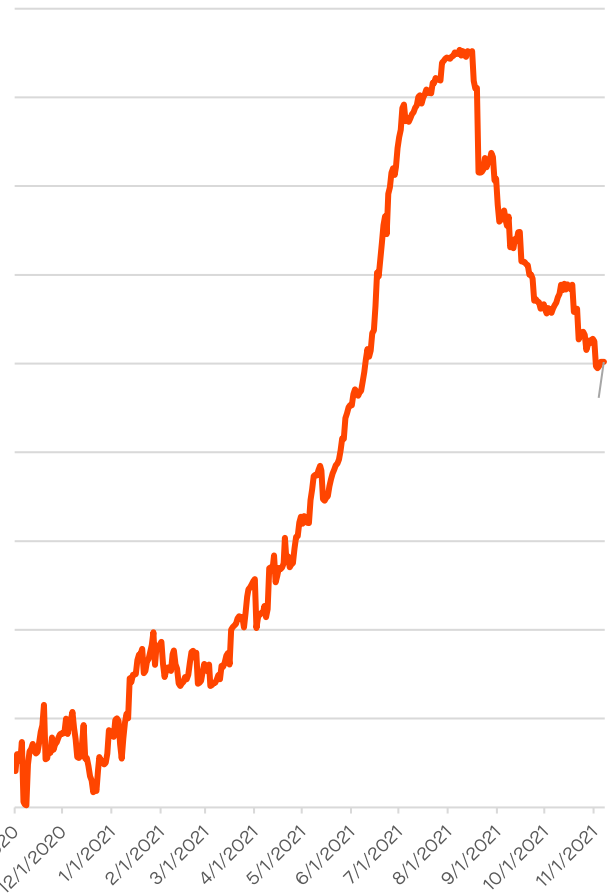
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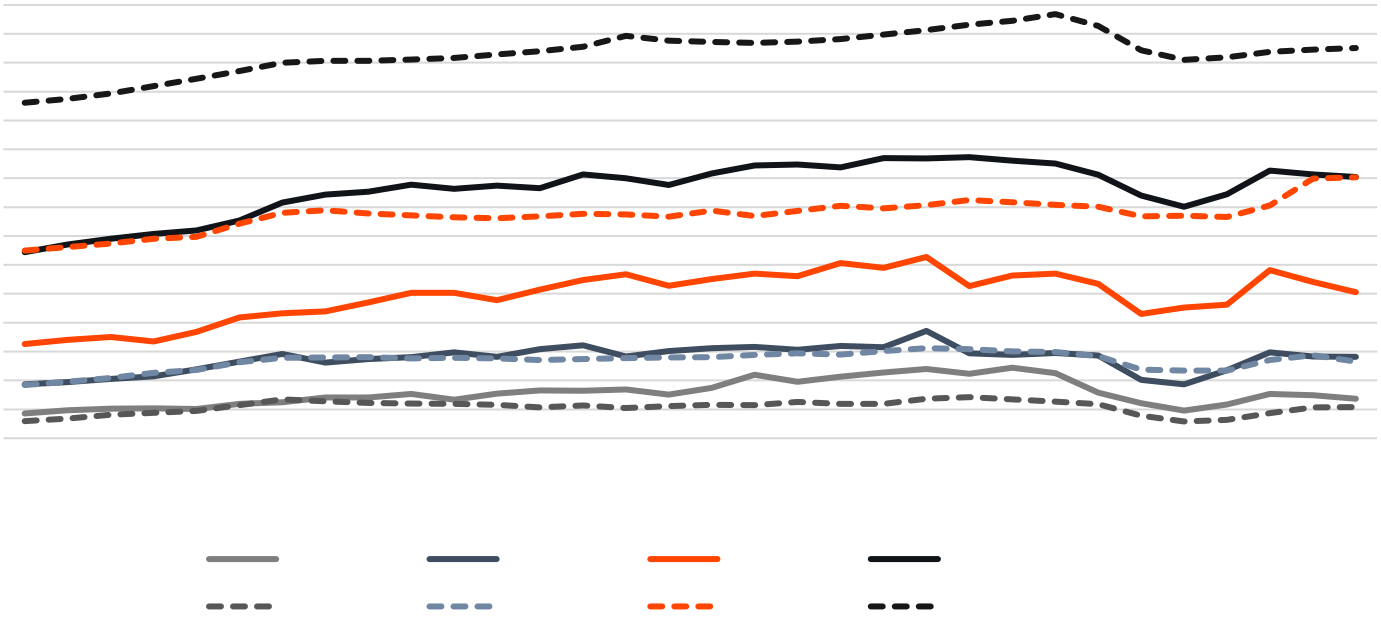
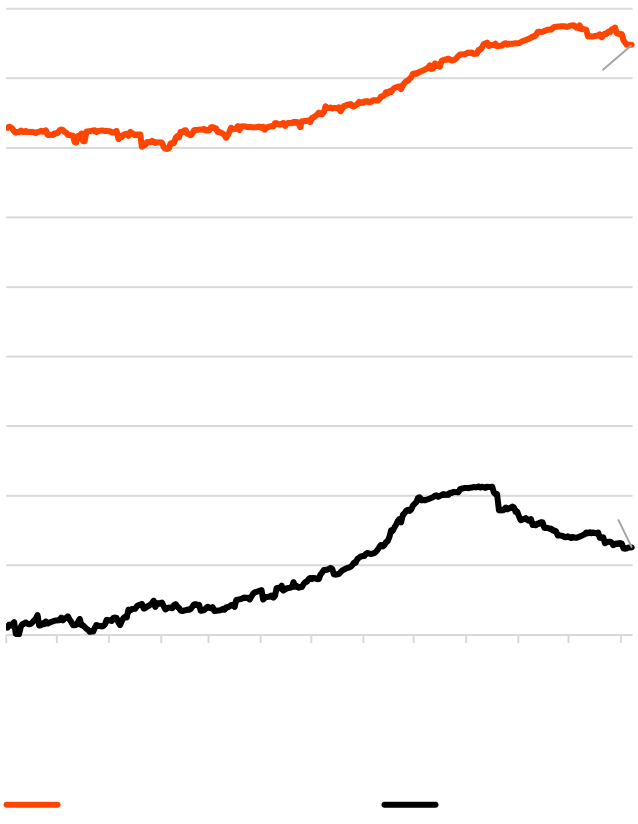
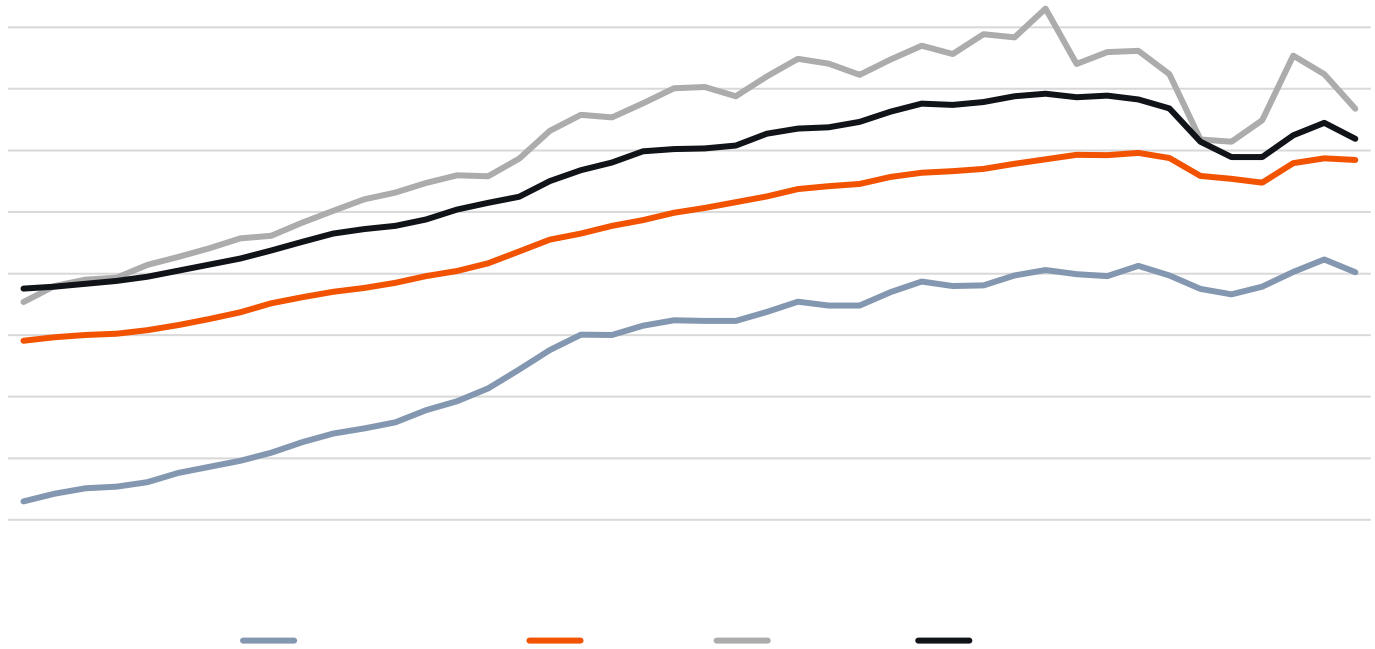
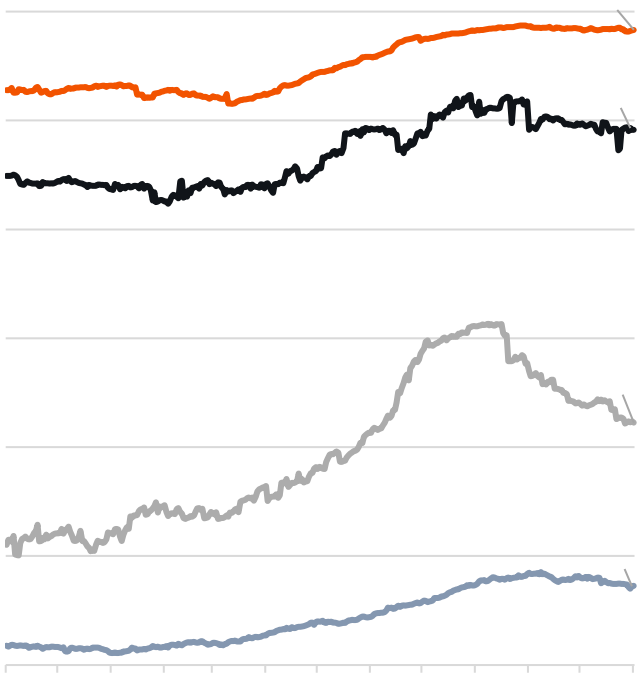
Emeryville
Shellmound St
Christie Ave
Powell St
Bay St
Pablo Ave
Accola Rd
580
80


Christie P









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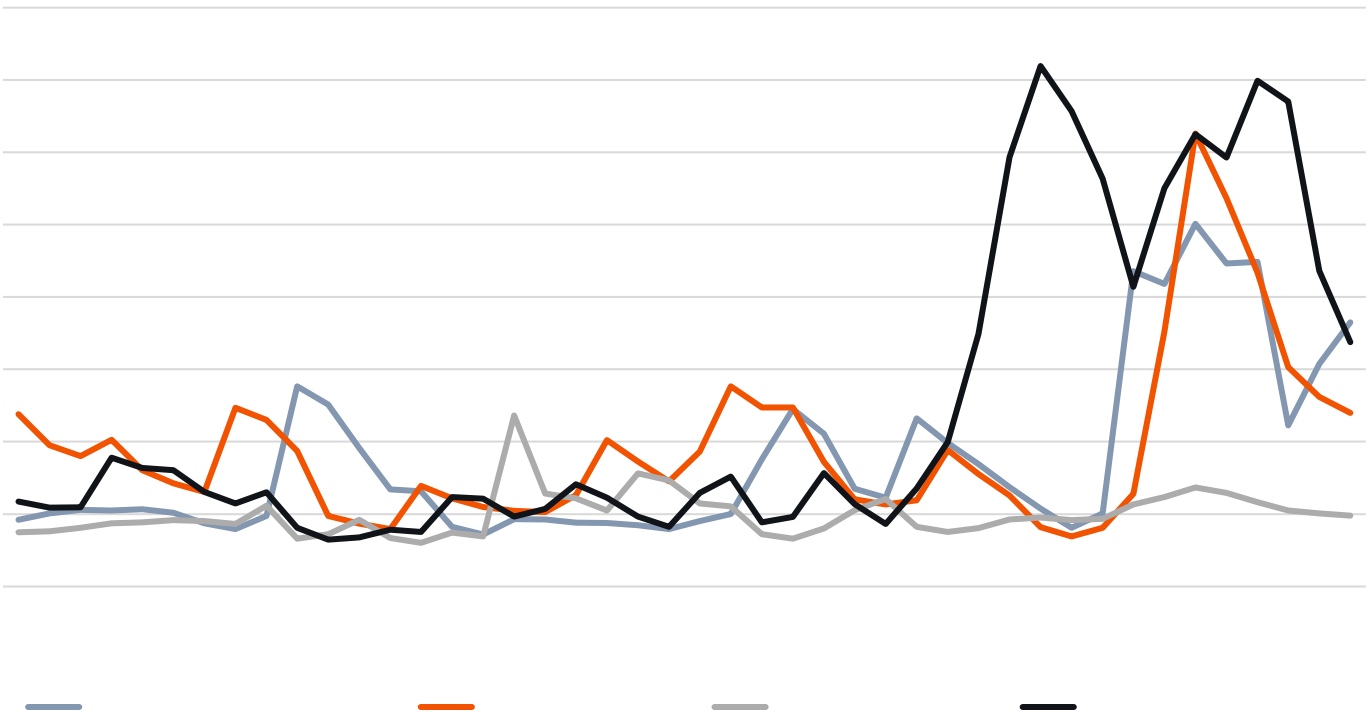

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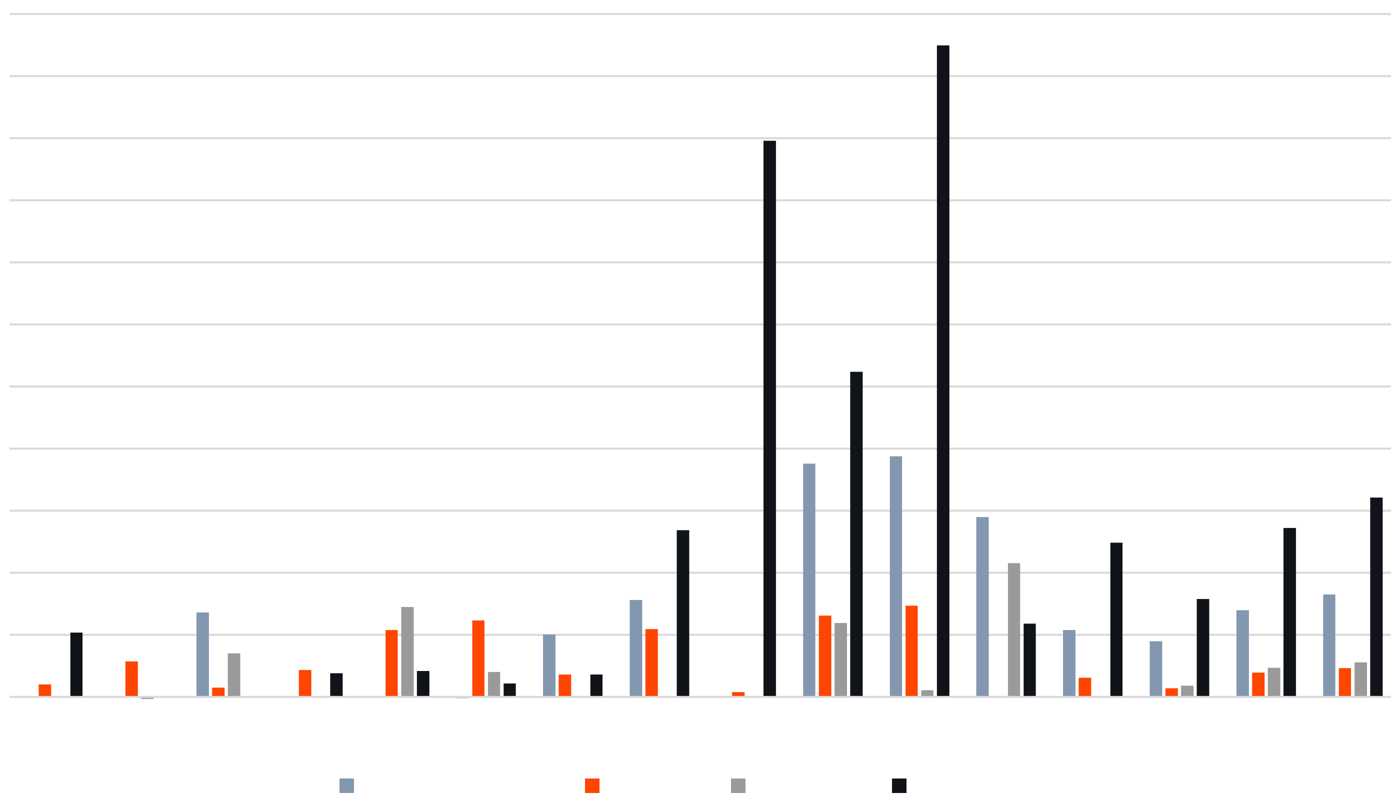


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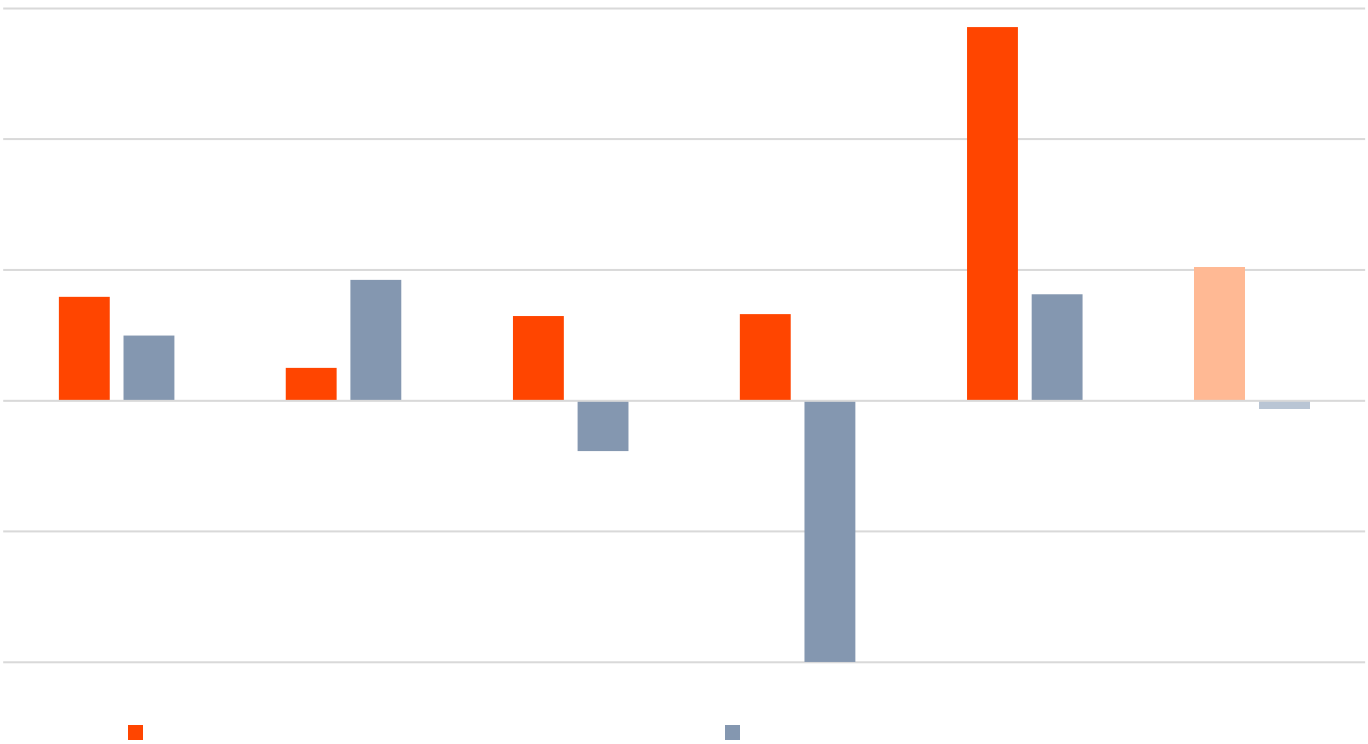
LINCOLN LANDING



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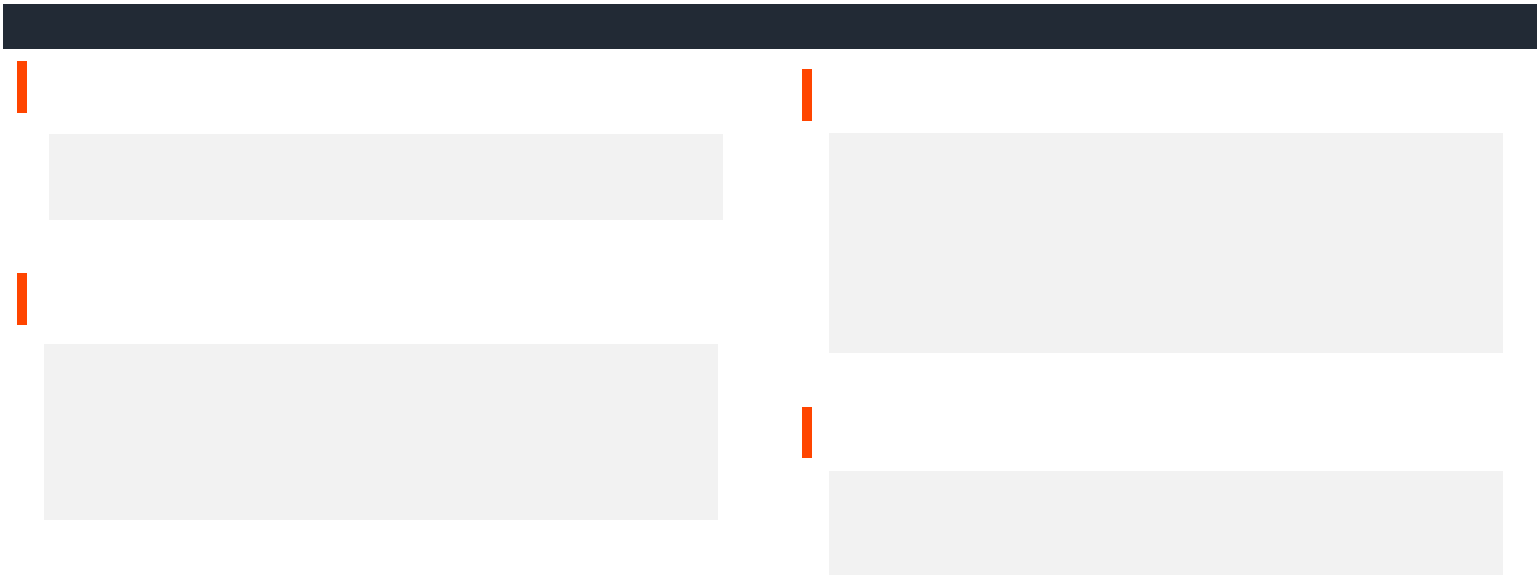

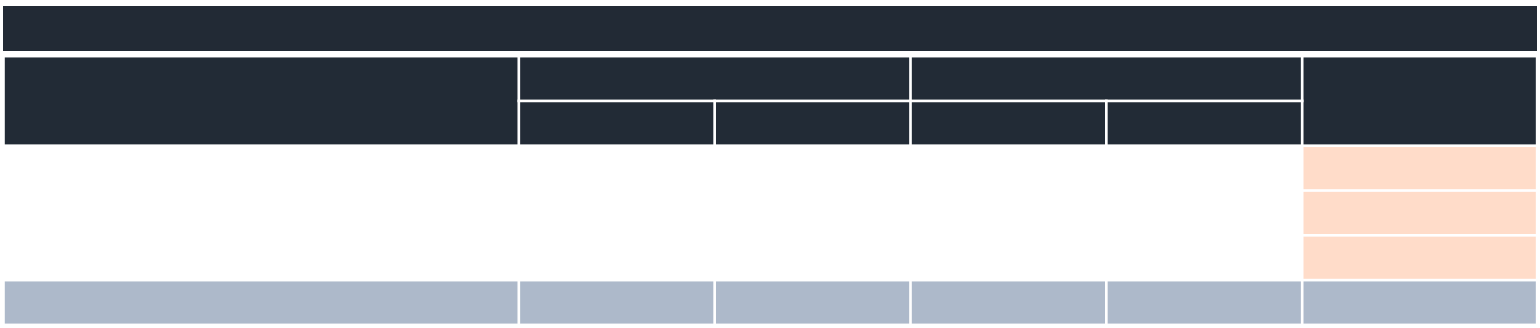

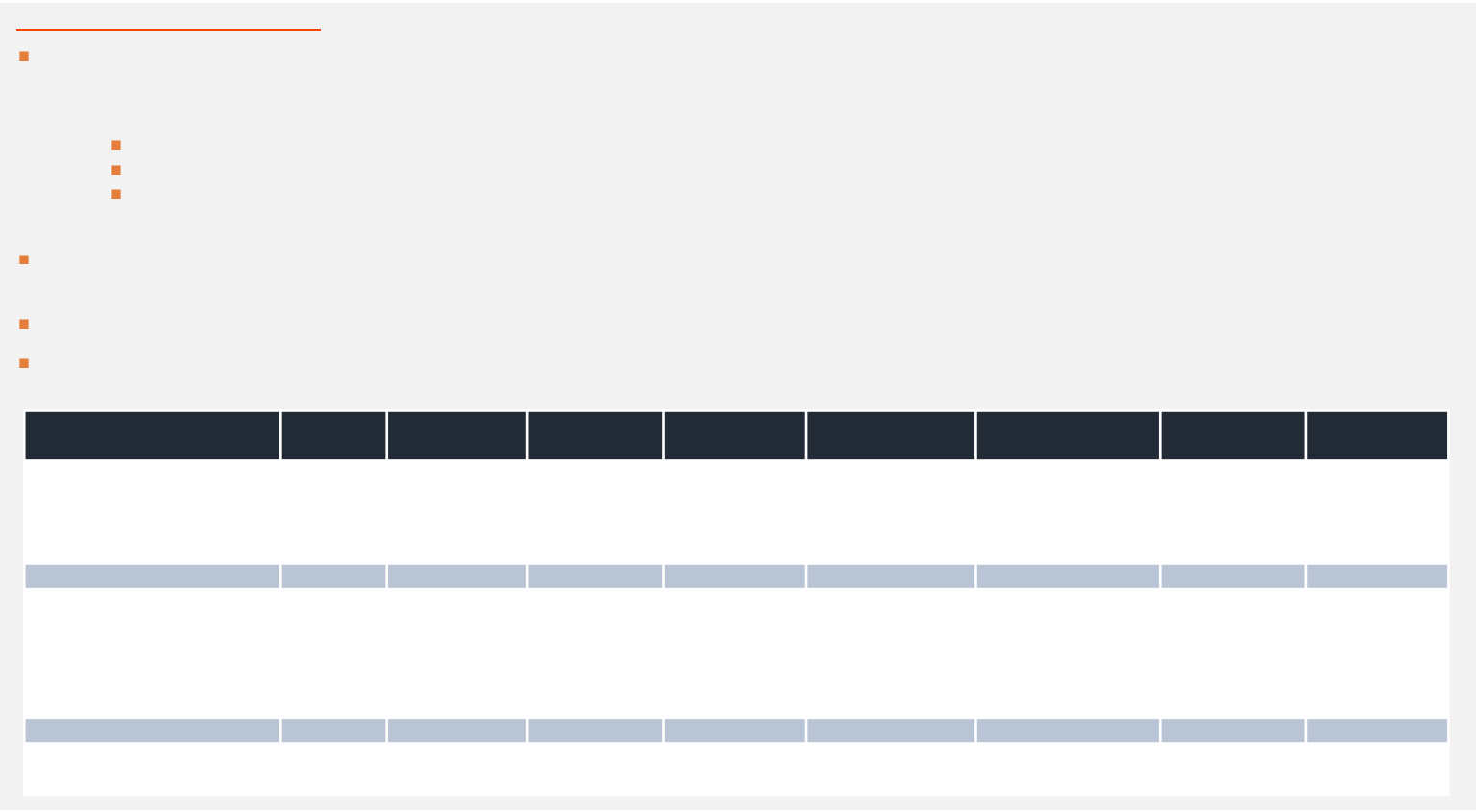

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EXIT ASSUMPTIONS

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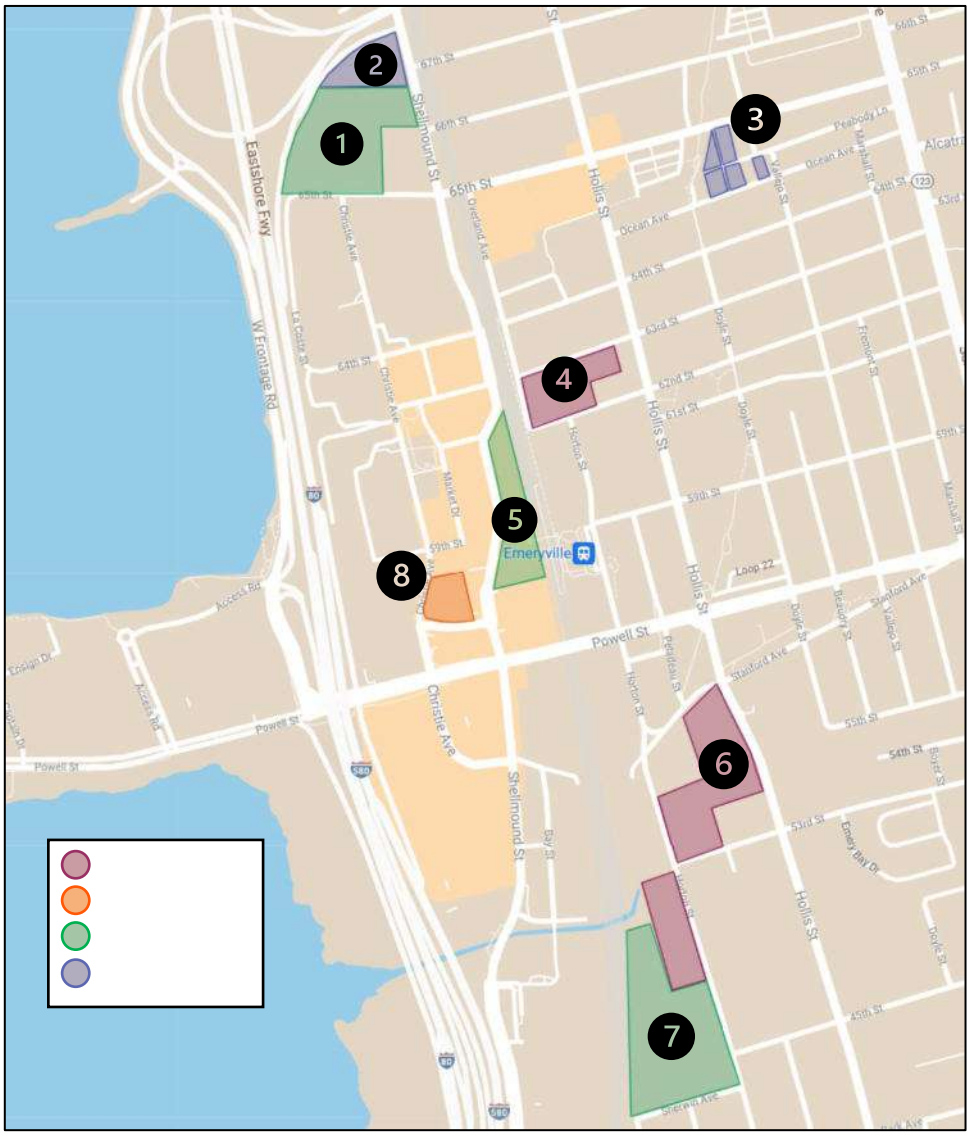
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Eastshore Fwy
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Shellmound St
65th St
Hollis St
Ocean Ave
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Powell St
Christie Ave
Loop 22
Stanford Ave
Doyle St
Frontage Rd
Access Rd
Bay St
Emery Bay Dr
Boyd St
Horton St
Peabody Ln
Marshall St
Valdez St
Fremont St
Market Dr
Overland Ave
Peardale St
Shellmound Ave

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MEMORANDUM

To: Chadrick Smalley, City of Emeryville

From: Benjamin C. Sigman and Chinmay Damle, Economic & Planning Systems

Subject: 5850 Shellmound Residential Feasibility Review

Date: February 10, 2022

The City of Emeryville is processing an application for redevelopment of 5850 Shellmound Way, where CA Ventures and Shellmound Christie Corp. (SCC) are proposing a 400,000-square-foot building on about 1.5 acres. The application for development proposes a 265-foot-tall building with 390,000 square feet of research and development space, 10,000 square feet of ground-floor clinics and other space, along with more than 400 parking spots. The site is located in the City's MUR (Mixed Use with Residential) zone, which requires development of residential land use.

Typically, development in the MUR zone must include two or more land uses, one of which must be residential. The applicant has indicated that residential use of the site is not feasible due to high construction costs and insufficient rental rates. To validate and document residential feasibility concerns, the applicant has provided the City an "Emeryville Residential Analysis" dated December 2021. In order to approve the non-residential project proposal, the City must find that "That the applicant has convincingly demonstrated that it is infeasible to develop a project with a mix of use groups on the site" (Section 9-3.303(c)). More simply put, the applicant must credibly demonstrate that development of residential real estate is infeasible at the site.

To assist the City in determining whether the applicant has sufficiently demonstrated the financial feasibility challenge facing residential development at the Shellmound Way site, the City engaged Economic & Planning Systems (EPS) to conduct a review of CA Ventures economic analysis. This memorandum provides a review that evaluates whether expected residential project revenue actually is insufficient to justify development costs, factoring in a market competitive rate of return on the investment. In doing so, EPS conducted a thorough review of the applicant's, including:

The Economics of Land Use

Economic & Planning Systems, Inc.
1330 Broadway
Suite 450
Oakland, CA 94612
510 841 9190 tel

Oakland
Sacramento
Denver
Los Angeles

www.epsys.com

- Assumptions concerning market value, development cost, and investment return;
- Methodology for estimating the financial feasibility; and
- Accuracy of the mathematics employed.

EPS reviewed documentation provided by the CA Venture's Emeryville Residential Analysis and cross-checked these data against third-party data sources, including real estate market data and construction cost data. EPS also confirmed the architecture of the financial model analysis and spot-checked calculations. Lastly, EPS developed its own in-house model to replicate elements of the applicant analysis and to stress test key assumptions.

EPS conducted this review based on information provided to EPS by CA Ventures in consultation with City staff, including:

- Emeryville Residential Analysis, December 2021 (attached).
- Supplementary information provided by CA Ventures, including residential market data detail, development program detail, and development budget detail.
- City staff analysis of permitting charges and development impact fees.

The EPS review of real estate market conditions and construction costs relied on data from CoStar Group and Marshall & Swift, respectively.

KEY FINDINGS

- **EPS concurs with CA Ventures assessment that a building that mixes residential and life science laboratories in a vertical format is unlikely to be market supportable or financeable.** While some large projects combine housing and laboratories in close proximity but in separate buildings, EPS has not identified any precedent for residential uses and laboratories within the same building envelope. Even office/residential vertical mixed-use projects are rare, and life sciences laboratory uses have additional, demanding requirements related to hazardous materials loading and storage, indoor air handling and quality, emergency egress, and other factors that make it unlikely to mix well with residential uses.
- **EPS finds the CA ventures feasibility assessment of a 244-unit residential project with ground-level retail to be reasonable and concurs with the finding the project is infeasible in today's market.** EPS reviewed revenue and cost assumptions and evaluated the investment returns projected by CA Ventures. The EPS review finds revenue estimates and development budget assumptions to be reasonable, based on comparison to third-party data sources. The analysis assumes land cost based on recent transactions and establishes a rational cost expectation for the land purchase, though it is possible that the landowner could reduce pricing expectations based on current market conditions. Nonetheless, absent a favorable shift in market conditions and/or landowner pricing flexibility, the project does not achieve a reasonable threshold of investment return.
- **EPS developed an independent proforma financial analysis to calculate supportable land value and tested feasibility under various market conditions, finding that a significant market shift would be necessary for a multifamily residential project at 5850 Shellmound to meet land price expectations.** Relying on optimistic rent levels

established by CA Ventures, cost analysis based on Marshall & Swift data, EPS soft cost assumptions, and permit/fee data from the City, EPS conducted a simple feasibility analysis that confirms the 244-unit project is unlikely to be feasible in today's market. Additional testing shows that a significant market evolution will be necessary to achieve feasibility in the absence of reduced land value expectations. To achieve a supportable land value of $22 million, market rents would need to increase 15 percent over the market-rate assumptions relied on by CA Ventures (about 30 percent over current market levels), without any change in construction costs. In reality, a combination of rent appreciation (relative to costs), reduced risk in the market (expressed as a lower return requirement), and an adjustment in land pricing expectations could combine to create financial conditions that support development, but that mixture of positive effects on feasibility is not foreseeable.

Potential Residential Uses

This review considers the potential for a residential rental development concept with ground-level retail. EPS concurs with the CA Ventures assertion that mixing life science/laboratory/office and residential in a vertical mixed-use project is highly unlikely to be marketable or financeable. EPS has not identified any precedent for laboratory and residential mixed use. Laboratory uses have demanding requirements related to hazardous materials loading and storage, indoor air handling and quality, emergency egress, and other factors that make it unlikely to mix well with residential uses.

This review analysis considers an 8-story, 244-unit residential program sited at on a roughly 1.5-acre site at 5850 Shellmound Way in Emeryville. The project would deliver rental units, with 12 percent of the total unit count provided as below-market-rate (BMR) units for very low- and low-income households. The analysis anticipates that the residential development will be built using a mix of construction types, including a three-story "Type I" reinforced concrete podium at the base, topped with five stories of "Type III" wood/steel framed construction above. The CA Ventures feasibility analysis reflects what likely is the highest and best residential use for the site, a project that requires the City density bonus and is market positioned for maximum revenue, though lower density residential concepts have not been tested by CA Ventures or EPS.

Value Assumptions

EPS reviewed market data provided by CA Ventures in the Emeryville Residential Analysis and compared those data with CoStar Group rent data for recently completed multifamily residential rental projects in Emeryville. EPS also evaluated operating cost factors and market capitalization rates that affect project valuation. Overall, EPS finds that the CA Ventures anticipated rent of $4 per square foot per month for market rate units is appropriate. This market-rate rent assumption anticipates that a new, well-amenitized project at 5850 Shellmound exceed rents observed in the market today by about 15 percent, which EPS believes is appropriately optimistic.

To assess market-rate rents, EPS searched for market-rate multifamily residential buildings delivered in the City of Emeryville between 2012-2021 (10 years). **Figure 1** presents the four major projects identified. These comparable projects range from 101 to 289 units and are well occupied with vacancy rates between about 2 percent and 6 percent.

Figure 1 Recently Built Multifamily Residential Rental Comparables

Property Name	Property Address	Number of Units	Stories	Year Built	Vacancy
Parc on Powell Apartments	1333 Powell St	173	4	2015	2.4%
3900 Adeline	3900 Adeline St	101	3	2016	4.4%
Emme Apartments	6350 Christie Ave	190	8	2015	2.0%
Avalon Public Market	6301 Shellmound St	289	7	2020	5.8%

EPS evaluated rent assumptions provided by CA Ventures to rents at the four comparable projects. The comparison shown in **Figure 2** shows market rents by unit type (e.g., studio vs. one-bedroom) to gauge the CA Ventures assumptions against third-party market data. The comparison reveals that CA Ventures revenue assumptions exceed current market conditions by about 15 percent overall.

Figure 2 Market-Rate Per-Square-Foot Monthly Rent Assumptions

Unit Type	CA Ventures	CoStar Group	CA Ventures Increase
Studio	$4.88	$4.19	16%
1-Bed	$4.29	$3.69	16%
2-Bed	$3.78	$3.25	16%
3-Bed	$3.83	$3.46	11%
Blended	**$3.98**	**$3.46**	**15%**

Sources: CA Ventures; CoStar Group & EPS

EPS considered the City's inclusionary housing requirement that 12 percent of the project's units be made available to very low- and low-income households.[1] The code requires that 8 percent of units be designated for very low-income households and 4 percent of units be designated for low-income households. Relying on the City's 2021 Income Limits and HUD allowances for utilities spending, EPS estimated affordable rents ranging from $1,145 to $1,623 per unit per month ($1.26 to $2.54 per square foot) for very low-income units and $1,865 to $2,650 per unit per month ($2.06 to $4.13 per square foot). When blended with market rate unit rents, EPS

[1] EPS understands from City staff that an 8-story, 244-unit residential project would utilize the City's density bonus program, which necessitates delivery of below-market-rate housing on site. Accordingly, the financial analysis does not consider a scenario in which the project pays an affordable housing fee in-lieu of delivering affordable units.

calculates the overall weighted average rent for the residential project at $3.74, almost exactly the overall blended rental rate of $3.73 presented in the CA Ventures analysis.

In addition to rental revenue, CA Ventures considers additional revenue to the project from optional renter services, retail space leasing, utilities billing (cost recovery), and parking. As is typical, the analysis also assumes project vacancy stabilizes at 5 percent. Also consistent with industry norms, the operational expenses borne by the project are about 30 percent of revenue.

Cost Assumptions

The CA Ventures analysis indicates that construction costs are anticipated to be roughly $308 to $328 per square foot, including parking areas, resulting in a total building construction budget of between $99 million and $106 million. EPS referred to cost Marshall & Swift Commercial Building Cost data to validate the cost estimate. Marshall & Swift (M&S) produces regularly updated cost metrics for commercial construction, with unique adjustment factory for construction type, location, building size, etc. The comparison of CA Ventures costs to M&S data reveals that the costs relied on by the CA Ventures analysis may be optimistic (i.e., below current market). EPS application of M&S costs to this residential project suggests that it could cost roughly 15 percent more to build than is assumed by CA Ventures. Their analysis relies on the lower cost estimate of $99 million in direct construction cost (2022$), while analysis of the building using M&S data reveals that the construction cost could be in the range of $113 million.

CA Venture supplied supplementary data to EPS concerning soft cost assumptions. These data revealed soft costs (excluding City, School District, and utility-provider permits and fees) equal to about 20 percent of anticipated hard constructions costs, which is consistent with typical soft cost budgets for this type of project. In addition, with input from City staff, EPS conducted a detailed review of City, school, and utility-provider permits and fees. Based on the review, EPS concludes that CA Ventures estimate of roughly $10.4 million is reasonable, with additional fees (e.g., City art fee) potentially increasing the total cost of permits and fees to closer to $10.6 million.

Financial Return Requirements

Feasible real estate development requires an expected return on investment to motivate investors to make the necessary at-risk investment in a project. The CA Ventures analysis cites the need for return on cost (i.e., yield) of 6 percent or an internal rate of return (IRR) of 18 percent. EPS finds that return thresholds for well-positioned residential multifamily projects in the Bay Area can be lower, with investors potentially accepting 5 percent return on cost (about 1 percentage point above the market capitalization rate) in real, inflation-adjusted returns. Though the CA Ventures analysis reveals return on cost eventually could exceed 5 percent, it does not occur until 2028-29 in their analysis, and thus the analysis reveals that the lower return requirement of 5 percent real return on cost is unlikely to be achieved. The projected return on investment likely is insufficient to attract the necessary financing.

Land Cost Assumption

The CA Ventures analysis includes an assumption concerning the anticipated land cost for the 5850 Shellmound site. The land price assumption reflects a prior (now expired) agreement with the landowner, and also is well defended by analysis of comparable land sales for residential sites and sites with MUR zoning in Emeryville. The analysis reveals transactions occurring between 2016 and 2021 with per-acre land values that range from $11.3 million to $28.4 million.

The roughly $14.8 million per acre ($22 million for the entire 1.5-acre site) assigned to 5850 Shellmound is at the lower end of the pricing range exhibited in the market in recent years. Though land pricing could adjust over time to reflect evolving market conditions that have reduced land values, EPS finds that land pricing tends to be "sticky," with owners commonly choosing to wait for market conditions to improve rather than dispose of an asset at a low point in the development cycle.

Estimating Methods and Calculations

EPS concurs with the framework of the CA Venture's feasibility analysis and did not identify technical issues related to the calculations presented. In order to further verify the results of the CA Ventures analysis, EPS conducted an independent analysis of financial feasibility. EPS developed a residential feasibility analysis using the well-accepted stabilized ("static") pro forma financial feasibility method, relying on a simplified model to estimate supportable land value (i.e., residual land value). In addition to verifying findings presented by CA Ventures, the EPS model also allows for sensitivity analysis, to determine what magnitude of market shift might make the project feasible in the future.

The EPS model relies on CA Ventures anticipated rents, M&S construction costs, and EPS assumptions concerning soft costs and a required rate of return. Key assumptions include the following:

- Blended rent of $3.74 per square foot, including market-rate and affordable housing;
- A real investment yield (return on cost) requirement of 5 percent;
- Site work cost of $10 per net land square foot;
- Direct construction cost of $350 per gross building square foot, including parking areas and the cost of a parking "stacker" system;
- Soft costs including architecture, engineering, other consulting, taxes and insurance, financing costs, marketing/leasing, and developer general and administrative costs (fee) equal to 19 percent of construction costs; and
- Other costs including cost contingency at 5 percent and permit charges and development fees of $10.6 million (about $43,300 per unit).

The EPS model solves for "residual land value" (i.e., the land price a developer is able to incur without compromising the financial viability of the project). The analysis calculates residual land value by deducting the project's development budget (excluding land) from with the project's market-supportable investment value. The market-supportable investment value reflects project's net operating income and yield return requirement.

The EPS model finds the residential project is infeasible in today's market. The residual land value calculation reveals that project's supportable investment value is insufficient to cover the anticipated development budget and also support land acquisition. In fact, the base analysis finds that supportable development value is insufficient to even cover the development budget excluding land, with the model producing a residual land value of -$5.5 million (See **Figure 3**).

Sensitivity Analysis

EPS conducted various feasibility tests to gauge the potential for residential project feasibility in the future:

- When the 5 percent cost contingency is removed from the development budget (a scenario in which construction cost $350 per square foot are assumed to be achievable), residual land value increases to about $1 million.
- Removing the cost contingency and assuming market-rate rents assumptions increase by 10 percent without any change in construction costs, residual land value increases to over $19 million, which is in the range of the the $22 million land value established by the CA Ventures analysis.
- Decreasing the yield requirement to 4.5 percent, reflecting potential downward pressure on market capitalization and returns requirements, potentially due to increasing confidence in the local market, increases residual land value to over $10 million.
- Combining the lower yield requirement of 4.5 percent with a 5 percent market rate rent (increase over base assumptions), without any change in construction costs, produces residual land value of $21 million.
- A 15 percent increase in market rate rents over base assumptions, without any increase in construction costs, increases residual land value to nearly $22 million.

The sensitivity results show various shifts in market conditions that result in supportable land value that match current land pricing expectations, and therefor suggest a feasible project. **Figure 3** presents the base EPS financial feasibility scenario, which results in a negative land value. **Figure 4** shows the 15 percent rent increase test, which takes market rents to about 30 percent over today's market without an increase in construction costs. In this scenario, residual land value increases to nearly $22 million.

While a feasible scenario is identified through sensitivity testing, it is unlikely that the necessary market conditions will materialize in the near future. To achieve a supportable land value of $22 million, market rents would need to increase 15 percent over the market-rate assumptions relied on by CA Ventures (about 30 percent over current market levels), without any change in construction costs. In reality, a combination of rent appreciation (relative to costs), reduced risk in the market (expressed as a lower return requirement), and an adjustment in land pricing expectations could combine to create financial conditions that support development, but that mixture of positive effects on feasibility is not foreseeable.

Figure 3 Base Residual Land Value Feasibility Scenario

DEVELOPMENT PROGRAM ASSUMPTIONS	ASSUMPTION/FACTOR		
Development Site (Square Feet)			64,904
Dwelling Units	164	DU / Acre	244
Gross Residential Building Area (Square Feet)	1,136	GBA / DU	277,108
Gross Retail Space (Square Feet)			8,662
Parking Area (Square Feet)			36,048
Total Gross Building Area (Square Feet)			321,818
Net Rentable Residential Area (Square Feet)	79%	Efficiency Factor	217,579
Net Rentable Retail Area (Square Feet)	100%	Efficiency Factor	8,662
Total Parking Spaces			270
Structured Parking Spaces	11%	of total parking	30
Stacker Parking Spaces	89%	of total parking	240

BUILDING VALUE	ASSUMPTION/FACTOR		PER GBA	TOTAL
Gross Potential Residential Rent	$3.74	per SF/Month	$30	$9,753,843
Other Income	5%	of GPR		$487,692
Gross Potential Retail Rent	$4.00	NNN per SF/Month	$1	$415,776
Gross Potential Parking Income (Residential)	$125	per Space/Month	$1	$360,000
Losses to Vacancy	5.0%	of Gross Income	-$2	-$550,866
Gross Residential Revenue			$33	$10,466,445
Operating Expenses (Residential Units)	$12,700	per Unit/ Year	-$10	-$3,098,800
Operating Expenses (Other)	3%	Non-Residential Income	$0	-$36,009
Net Operating Income (NOI)			$23	**$7,331,636**
Supportable Development Value	**5.0%**	**Project Yield Rate (on NOI)**	**$456**	**$146,632,726**

PROJECT DEVELOPMENT COSTS	ASSUMPTION/FACTOR		PER GBA	TOTAL
Construction Costs				
Basic Site Work	$10	per SF (Site)	$2	$649,040
Parking Podium - Type I	$142	Cost/SF (GBA)	$16	$5,134,317
Retail/Residential - Type I	$382	Cost/SF (GBA)	$111	$35,577,688
Resiential - Type III	$352	Cost/SF (GBA)	$211	$67,757,608
Parking Stacker System	$17,500	per Space	$13	$4,200,000
Total Construction Cost			*$352*	*$113,318,653*
Soft Costs				
Architecture and Engineering	4.0%	of Construction Cost	$14	$4,532,746
Other Soft Costs	2.0%	of Construction Cost	$7	$2,266,373
Taxes and Insurance	2.0%	of Construction Cost	$7	$2,266,373
Financing	4.0%	of Construction Cost	$14	$4,532,746
Marketing/Leasing	3.0%	of Construction Cost	$11	$3,399,560
Developer Fee	4.0%	of Construction Cost	$14	$4,532,746
Total Soft Costs			$67	*$21,530,544*
Other Project Costs				
Development Contingency	5.0%	of Construction & Soft Costs	$21	$6,742,460
Permits and Fees	$43,422	per DU	$33	$10,595,050
Total Other Costs			$54	*$17,337,510*
Total Project Cost			**$549**	**$152,186,707**

Residual Land Value		**-$5,553,980**
	per net acre	*-$3,727,527*

Figure 4 15% Rent Increase Residual Land Value Feasibility Scenario

DEVELOPMENT PROGRAM ASSUMPTIONS	ASSUMPTION/FACTOR		
Development Site (Square Feet)			64,904
Dwelling Units	164	DU / Acre	244
Gross Residential Building Area (Square Feet)	1,136	GBA / DU	277,108
Gross Retail Space (Square Feet)			8,662
Parking Area (Square Feet)			36,048
Total Gross Building Area (Square Feet)			321,818
Net Rentable Residential Area (Square Feet)	79%	Efficiency Factor	217,579
Net Rentable Retail Area (Square Feet)	100%	Efficiency Factor	8,662
Total Parking Spaces			270
Structured Parking Spaces	11%	of total parking	30
Stacker Parking Spaces	89%	of total parking	240

BUILDING VALUE	ASSUMPTION/FACTOR		PER GBA	TOTAL
Gross Potential Residential Rent	$4.26	per SF/Month	$35	$11,125,563
Other Income	5%	of GPR		$556,278
Gross Potential Retail Rent	$4.00	NNN per SF/Month	$1	$415,776
Gross Potential Parking Income (Residential)	$125	per Space/Month	$1	$360,000
Losses to Vacancy	5.0%	of Gross Income	-$2	-$622,881
Gross Residential Revenue			$37	$11,834,736
Operating Expenses (Residential Units)	$12,700	per Unit/ Year	-$10	-$3,098,800
Operating Expenses (Other)	3%	Non-Residential Income	$0	-$37,964
Net Operating Income (NOI)			$27	**$8,697,973**
Supportable Development Value	**5.0%**	**Project Yield Rate (on NOI)**	**$541**	**$173,959,458**

PROJECT DEVELOPMENT COSTS	ASSUMPTION/FACTOR		PER GBA	TOTAL
Construction Costs				
Basic Site Work	$10	per SF (Site)	$2	$649,040
Parking Podium - Type I	$142	Cost/SF (GBA)	$16	$5,134,317
Retail/Residential - Type I	$382	Cost/SF (GBA)	$111	$35,577,688
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Permits and Fees	$43,422	per DU	$33	$10,595,050
Total Other Costs			$54	*$17,337,510*
Total Project Cost			**$549**	**$152,186,707**

Residual Land Value		**$21,772,751**
	per net acre	*$14,612,675*