

MEMORANDUM

TO: District of Columbia Zoning Commission

FROM: *JLS*
Jennifer Steingasser, Deputy Director, Development Review and Historic Preservation
Karen Thomas, Project Manager

DATE: September 26, 2022

SUBJECT: Public Hearing Report for Zoning Commission Case No. 22-06, Consolidated Planned Unit Development and Related Map Amendment from MU-12 to MU-9A, 899 Maine Ave. SW

I. RECOMMENDATION

The Office of Planning (OP) recommends the Commission **approve** this PUD and related map amendment application. On balance, the proposed development would not be inconsistent with the Comprehensive Plan text and maps and the Southwest Small Area Plan. The application includes requested flexibility as follows:

- PUD-related map amendment from MU-12 to MU-9A:

	Existing MU-12 Zone	Proposed MU-9A Zone	Increase
Floor-area Ratio	3.0 (IZ)	7.99 (IZ and PUD)	4.99
Gross floor area	172,089 GFA	458,644 GFA	286,555 GFA
Height	60 feet (PUD)	130 feet (PUD)	70 feet

- Side Yard:

Section	Required Standard	Requested Flexibility
G § 406 Side yard	21 ft. 8 ins required	9 ft (East side Yard)

and

- Design flexibility as summarized in this report.

II. BACKGROUND

At its April 28, 2022 public meeting, the Zoning Commission set down for a public hearing Zoning Commission case 22-06, a consolidated Planned Unit Development (PUD) request for this site by 801 Maine Avenue SW PJV, LLC with a PUD-related zoning map amendment from MU-12 to MU-9A. The application would allow the construction of mixed-use project at 899 Maine Avenue SW.

The subject site is approximately 57,363 square feet in area, at the prominent corner of 9th Street and Maine Avenue S.W. and is currently developed with a four-story office building, now occupied with temporary uses. The property also includes a one-level underground public parking garage with 83 parking spaces that supports the Wharf’s daytime office uses, as well as its evening and weekend events.

The site is located in an area characterized by mixed-use development along the Maine Avenue Waterfront and by row residences to the rear of the site fronting G Street. A description of the site is provided in the OP setdown report dated April 18, 2022 ([Exhibit 13](#)).

The proposal is slightly altered to address concerns expressed by the townhome residents and the ANC with respect to height at the rear facing G Street. That height was lowered from 110 feet to 90 feet. Based on those adjustments, the project now requires flexibility from the side yard provision. In addition, flexibility is requested to convert up to 15,000 SF of retail space to residential use or any other use permitted in the MU-9A zone. Other than this request, the building’s development parameters are essentially the same presented at setdown,

The community and neighbors have submitted their concerns with the proposal, which are referenced in relevant sections and in the Community Comments of this report.

III. RESPONSES TO OP AND ZONING COMMISSION COMMENTS FROM SETDOWN

The following summarizes OP and Zoning Commission comments from the time of setdown and their current status.

Table I

	Comment	Applicant Response	OP Analysis
ZC 1	Provide more explanation regarding the massing and perspectives from the townhomes	The Applicant submitted a massing study and visuals/perspectives from different areas east and west on G Street where there are existing townhomes. Further, the height at the northern portion of the building has been lowered to 90 feet; and the height of the southern portion of the building (fronting on Maine Avenue) has been increased to 130 feet, with a small section at the southeast corner remaining at 120 feet.	OP is satisfied that the Applicant provided the information for OP and the Commission’s review noted on Exhibit 15A2 – External renderings Sheets 9 - 16. These renderings are discussed further in this report.
ZC 2	Provide a breakdown of unit sizes including market rate and affordable	The Applicant submitted this information	OP references this information at Section VII of this report.

	Comment	Applicant Response	OP Analysis
OP 1	Resolution of items of requested flexibility noted in this report, including exterior details and materials, streetscape design	The Applicant met with OP to discuss design flexibility. Including the desire to present alternatives to the facade materials.	OP discussed the concerns of any reduction in the proffered number of IZ units. The Applicant agreed to retain the proffered number regardless of design changes. In addition, OP did not support the Applicant's desire to present alternative materials for the Commission's review.

IV. PROJECT DESCRIPTION

The application proposes the redevelopment of a site currently improved with an aged office building into a mixed-use structure consisting of:

- **7.99 FAR** ; 458,644 sf of gross floor area;
- **434,475 sf residential GFA**, (498 residential units) with 24,169 sf ground floor retail.
- **15% of the residential GFA**, (65,171 sf), to be affordable units for household with a maximum income of 60% MFI
- **15% of the penthouse habitable space** to be devoted to household units earning no more than 50% MFI.

The bulk of the massing proposed at a maximum density of 7.99 FAR would be experienced along the Maine Avenue frontage, consistent in height (130 feet) with the Wharf development. The placement of height and massing on the lot is deliberate as it considers the surrounding context, including that of the lower scaled townhomes, the Jefferson Middle School and the Wharf development immediately opposite.

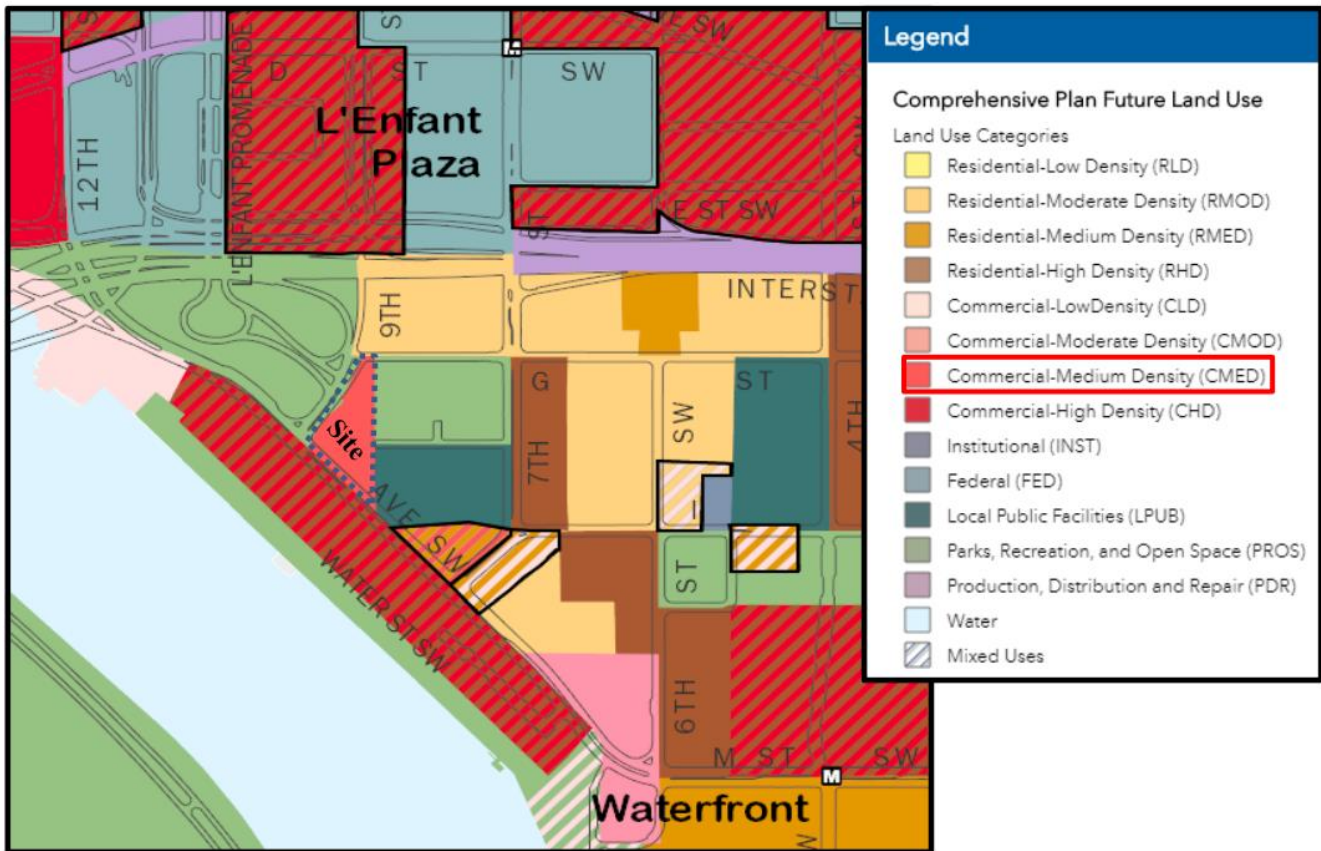
A complete description of the development is provided in the Applicant's supplemental statement [Exhibit 38](#).

V. PLANNING CONTEXT

Comprehensive Plan

Title 11 Subtitle X § 304.4(a) requires that a PUD, inclusive of a map amendment, be not inconsistent with the Comprehensive Plan. The Future Land Use Map (FLUM) and the General Policy Map (GPM) are to be interpreted in conjunction with relevant written goals, policies and action items in the Comprehensive Plan text, and further balanced against policies or objectives contained in relevant Small Area Plans and other citywide or area plans. As described below, the proposed PUD and map amendment on balance, would be not inconsistent with the map designations.

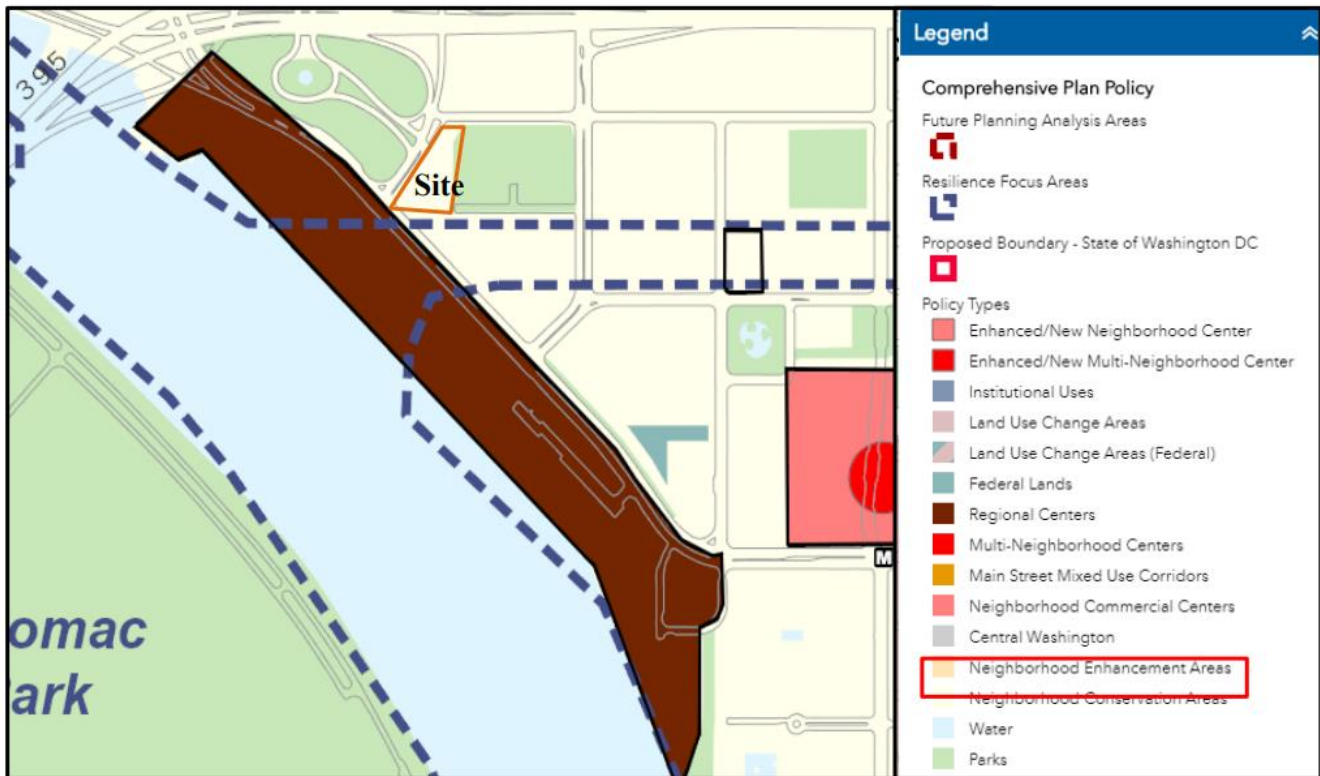
Generalized Future Land Use Map (FLUM) The Future Land Use Map (FLUM) indicates that the site is appropriate for Medium Density Commercial land uses.



This designation is used to define shopping and service areas that are somewhat greater in scale and intensity than the Moderate Density Commercial areas. Retail, office, and service businesses are the predominant uses, although residential uses are common. Areas with this designation generally draw from a citywide market area. Buildings are larger and/or taller than those in Moderate Density Commercial areas. Density typically ranges between a FAR of 4.0 and 6.0, with greater density possible when complying with Inclusionary Zoning or when approved through a Planned Unit Development. The MU-8 and MU-10 Zone Districts are consistent with the Medium Density category, and other zones may also apply. 227.12

The designation permits medium density commercial uses with up to 6.0 FAR. However, residential uses are also permitted. The proposed PUD MU-9A zone would provide the density for both commercial and residential use including affordable/IZ units within this section of the Waterfront.

Generalized Policy Map The Generalized Policy Map indicates that the property is within a Neighborhood Conservation Area.



The guiding philosophy in Neighborhood Conservation Areas is to conserve and enhance established neighborhoods, but not preclude development, particularly to address city-wide housing needs. Limited development and redevelopment opportunities do exist within these areas. The diversity of land uses and building types in these areas should be maintained and new development, redevelopment, and alterations should be compatible with the existing scale, natural features, and character of each area.

Densities in Neighborhood Conservation Areas are guided by the Future Land Use Map and Comprehensive Plan policies. Approaches to managing context-sensitive growth in Neighborhood Conservation Areas may vary based on neighborhood socio-economic and development characteristics. In areas with access to opportunities, services, and amenities, more levels of housing affordability should be accommodated. Areas facing housing insecurity (see Section 206.4) and displacement should emphasize preserving affordable housing and enhancing neighborhood services, amenities, and access to opportunities. 225.5

The Neighborhood Conservation Area does not preclude development, but density is guided by the FLUM and policies of the written policies of the Area Element, and Small Area Plan. The proposed Map Amendment would allow for new residential development on a site where none currently exists under a density that would not be inconsistent with that of the GPM. The PUD and map amendment will allow redevelopment with a mixed-use building that would be consistent with the heights and densities of the FLUM and existing density along Maine Avenue.

The additional density would support a range of uses, including multi-family residential for a diversity of residents within a high-opportunity area. Street-level retail would also support a range of transit options, including Metrorail, Circulator and Metrobus and would allow for continued pedestrian improvements along north Maine Avenue. On balance, the proposal would be not inconsistent with the GPM.

Analysis Through a Racial Equity Lens

The Implementation Element calls for “*the Zoning Commission to evaluate all actions through a racial equity lens as part of its Comprehensive Plan consistency analysis. 2501.8*” The direction indicates that the equity analysis is intended to be based on the policies of the Comprehensive Plan and part of the Commission’s consideration of whether a proposed zoning action is “not inconsistent” with the Comprehensive Plan. Equity is conveyed throughout the Comprehensive Plan, particularly in the context of zoning, where certain priorities stand out, including affordable housing, displacement, and access to opportunity. Environmental and sustainability considerations are also equally important to equity review.

The Comprehensive Plan recognizes that without increased housing, the imbalance between supply and demand drives up housing prices in a way that creates challenges for many residents, particularly low-income residents. The Comprehensive Plan further recognizes the importance of inclusionary zoning requirements in providing affordable housing opportunities for households of varying income levels.

This project would not displace residents. The site is developed with an underutilized former office building and would be redeveloped to provide not only affordable housing units, but also economic and environmental equity for lower-income residents that would not in the past have had access to high land-value development, which usually associates with environmental and health benefits, and overall access to goods and services ([See 2019 Housing Equity report, Page 13](#)). The project intends to dedicate up to 6,000 square feet to a grocery use and additional space for banking at the community’s request. This development’s location could bring diverse job opportunities for future employees who may live within the neighborhood or the proposed development.

The Comprehensive Plan’s Lower Anacostia/Near Southwest Element provides demographic data about this Planning Area:

Since 2000, over four million square feet of office space has been constructed in the Capitol Riverfront/Navy Yard area, and more than 6,000 new residential units have been built, with over 800 set aside as affordable units. Over 6,000 residents now live in the Capitol Riverfront/Navy Yard area, with that number expected to grow to 16,000 by 2020, making this the fastest-growing neighborhood in the District. 1900.8

Based on land availability, planning policies, and regional growth and development trends, the Lower Anacostia Waterfront/Near Southwest Planning Area will experience significant growth in population, households, and jobs over the coming decades. The population, which was 18,125 in 2017, is expected to grow to 40,200 in 2025, 48,997 in 2035, and 58,789 in 2045. The number of households is expected to increase from 10,083 to 33,915 in 2045. 1903.4

About 25 percent of the area’s housing stock consists of row houses and townhomes, which is similar to the District-wide level of 26 percent. However, the proportion of single-family detached homes in the Lower

Anacostia Waterfront/Near Southwest Planning Area is less than two percent, which is substantially less than the District-wide total of 11.9 percent. 1904.1

2019 Housing Equity Report: *Where people live and can afford to live matters too. Neighborhoods differ by the diversity and quality of the amenities they provide, ranging from safe streets, to vibrant retail, to green space. When neighborhoods have higher economic opportunities, less economic and racial segregation, and improved built environments, they foster improved physical and mental health for both adults and children.^{23, 24, 25} (Page 13)*

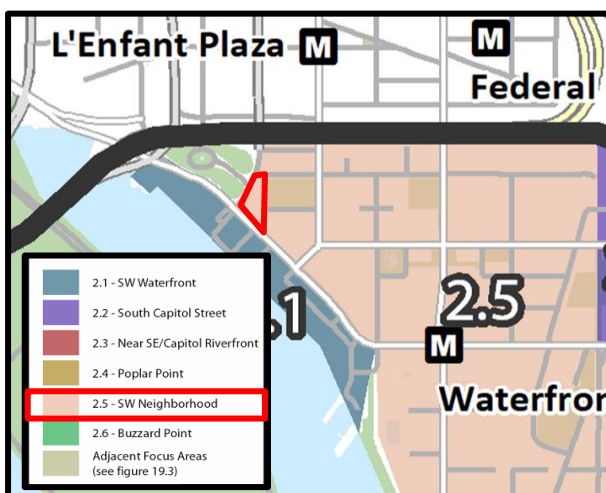
Additionally, according to the 2019 Housing Equity Report and the State Data Center, the LAW/NS Planning Area has 6% of the District’s affordable housing units, and ANC 6D, where this project would be located, has 6% of the affordable housing. The Planning Area’s goal is to create 7,960 new housing units and 850 new affordable housing units, and at the writing of the Equity report there were up to 910 affordable units in the pipeline. This project would significantly support that goal and help exceed the Planning Area’s goals.

The PUD would provide approximately 498 units of new housing with 15 percent of the residential GFA (65,171sf) to be set aside as affordable housing, for households earning no more than 60% MFI, which is more than would be required under a matter-of right MU-12 (21,500 sf), or up to three times more than required under the existing zone.

Environmental and sustainability considerations are also reflected in the location’s accessibility which would allow residents to have access to employment and other services. This development would also have the advantage of improved connectivity and pedestrian experience of the Wharf and other waterfront development for all residents.

As a LEED Platinum project, it would provide additional housing where lower income residents could benefit from the positive health impacts a LEED Platinum project would provide in addition to its proximity to a number of open spaces and parks – which is not always available to such income groups. When evaluated through a racial equity lens, on balance the project would not be inconsistent with the Comprehensive Plan.

Area Element of the Comprehensive Plan:



Lower Anacostia Waterfront and Near Southwest Area Element

The Lower Anacostia Waterfront/Near Southwest Planning Area includes a diverse mix of neighborhoods and architecture. New high-rise multi-family buildings dominate the Capitol Riverfront and the Wharf. The Southwest neighborhood is known for its mix of low- and high-density modernist buildings, and other areas closer to Capitol Hill maintain the historic row house blocks amid new construction. Throughout the area is a mix of high rise and affordable housing. 1900.3

While densities in new waterfront communities are likely to be higher than those in adjacent communities, they should not be visually overwhelming. This is particularly true where new development sites abut fine-grained row house neighborhoods that have existed for more than a century. Planning for large-scale development should be responsive to local concerns about traffic, crowd-control, displacement, community service impacts, and changing neighborhood character. 1906.3

The proposed development is located within the Lower Anacostia Waterfront and Near Southwest Area Element of the Comprehensive Plan, and specifically within the Southwest Neighborhood Policy Focus Area. The proposal would particularly further the following Area Element statements and policy objectives:

Policy AW-1.1.1: Conservation of Established Waterfront Neighborhoods Revitalize and preserve established neighborhoods in the Waterfront Planning Area while promoting infill development to provide new housing opportunities, including accessory dwelling units, to meet a range of affordability levels and housing needs. Continued investment in the existing housing stock and in established local commercial areas should be strongly encouraged. 1907.2

Policy AW-2.5.2: Southwest Neighborhood Plan Implement the policies and recommendations of the Southwest Neighborhood Plan. Use the Southwest Neighborhood Plan as a framework for guiding public investment and evaluating new development per plan recommendations and design guidelines. 1914.5

Policy AW-2.5.11: Affordable and Family-Sized Housing in Southwest Promote a mix of affordable and market rate residential units that better serve community needs in Southwest. Prioritize the creation of a greater number of affordable units than the Inclusionary Zoning requirement or more family-sized units as part of a community benefits agreement for any PUDs and by targets on District-controlled sites that exceed overarching affordable housing requirements. 1914.14

A. SMALL AREA PLAN - SOUTHWEST PLAN

The Applicant was asked to provide a more thorough analysis of the proposal's consistency with the Southwest Small Area Plan. This is provided at [Exhibits 38G and 38H](#). OP continues to support the proposal as being consistent with the Small Area Plan, including its design guidelines.

The Southwest Small Area Plan is framed around seven core concepts, with a vision and recommendations for each. The core concepts include:

- Model Community
- Green Oasis
- Thriving Town Center
- Vibrant Connections
- Modernist Gem
- Arts and Cultural Destination
- Optimized District Parcels

This project would identify with the design guidelines that were prescribed to enhance the character of the modernist architecture of the neighborhood. The neighborhood character is described within the Plan as having ...*a collection of Modernist Architecture and urban design, unlike any other District*

neighborhood. Nonetheless, ...Southwest still has the potential to evolve and dynamically change in certain areas, as it has done in recent years. (Southwest Neighborhood Plan, Page 79). Therefore, a main goal is to “Ensure that future development is compatible with the existing design of the community.” The design guidelines (Pages 81-83) are provided as follows:

- Encourage a mix of building heights.
- Achieve design excellence for high quality and timeless development.
- Promote variation in building frontages along streets with continuous massing.
- Enhance green space through landscaped perimeters and internal green or amenity spaces.
- Incorporate sustainable building and site design.
- Ensure parking is not a detractor.
- Maximize transparency and viability of ground floor uses along key commercial corridors.
- Encourage connectivity for pedestrians, bicycles, and vehicular access, including transit where feasible.

An Action item would “*apply the Design Guidelines contained in the Plan (pages 81 -83) to all new development achieved through the Planned Unit Development process.*”

OP supports the proposed design attempts to adhere to these guidelines including;

- The varied height and massing on the site, as it focuses the massing away from the townhomes on G Street towards Maine Avenue where it is more consistent with the Wharf development.
- Use of materials consistent with the newer development patterns on the Wharf buildings.
- The proposal for landscaped and art-infused courtyards for residents and neighbors, which would enhance the pedestrian experience along the perimeter of the site.

With the proposed 498 units, new residents would add support to the emerging “Wharf Town Center” that seems to be evolving in this area along with the other vibrant pockets within the Southwest neighborhood.

B. SUMMARY OF PLANNING CONTEXT ANALYSIS

Potential Inconsistencies with the Comprehensive Plan

In its decision-making, the Zoning Commission must make a finding of “not inconsistent with the Comprehensive Plan.” To do so, the Zoning Commission must consider the many competing, and sometimes conflicting, policies of the Comprehensive Plan, along with the various uses, development standards and requirements of the zone districts.... 224.8

On balance, the proposal would provide affordable housing within a high land-value neighborhood whereby lower-income households would be able to benefit from living within a neighborhood with ample transit opportunities to employment and education within walking distance. Where there are inconsistencies, including the policy to retain and remodel existing development rather than demolition, (Action LU-1.2.F § 305.3) in this instance remodeling would not be a preferred alternative since the current structure does not provide the height and density anticipated by the FLUM and as supported in the Lower Anacostia Waterfront/Far Southwest Element and the Southwest Small Area Plan.

VI. ZONING ANALYSIS

The site is currently zoned MU-12; the applicant is requesting a PUD-related zoning map amendment to the MU-9A zone, which is not inconsistent with the Comprehensive Plan. The only modification to the zoning table provided in OP’s setdown report would include the flexibility to the allow a side yard of 9 feet where 21 feet 8 ins is required. A revised **zoning table** is provided by the Applicant and included below for ease of reference.

Table II: Development Standards (Provided by Applicant – Exhibit 38A2 Sheet 11)

	<i>DEVELOPMENT STANDARDS</i>	PROPOSED	NOTES
LAND AREA	57,363 SF	57,363 SF	-
HEIGHT	130'	130'	-
PENTHOUSE HEIGHT	1:1 Setback	20'	-
FAR	FAR (IZ): 7.8 (447,431 SF) FAR (20% PUD INCREASE): 9.36 (536,917 SF)	7.99 FAR (458,644 SF)	-
RESIDENTIAL LOT OCCUPANCY	N/A	80% GROUND (45,852 SF) 74% LEVEL 1 (42,534 SF) 64% LEVEL 2 (36,583 SF) 69% LEVEL 3-9 (39,727 SF) 48% LEVEL 10-12 (27,307 SF) 43% LEVEL 13 (24,640 SF) 21% PENTHOUSE (12,085 SF)	-
REAR YARD	2.5" per 1' vertical distance from grade to highest point of parapet wall, but not less than 12'.	Calculated Minimum: 29' Rear yard provided: 81'	Measured from center-line of Maine Ave to the rear face of the building.
<u>SIDE YARD (SY1)</u>	None req'd. but if provided at least 2" wide for each 1' of height of bldg. but no less than 5'	Calculated Minimum: 21'-8" <u>Side yard provided varies: 9'-0" MIN.</u>	Measured from East property line. Relief/Flexibility Requested
SIDE YARD (SY2) AT LEVEL 1	None req'd. but if provided at least 2" wide for each 1' of height of bldg. but no less than 5'	Calculated Minimum: 21'-8" Side yard provided varies: 37'-10" MIN.	Measured from 9th property line.
OPEN COURT AT LEVEL 2	Min. width: 4 in./ft. of height of court, 10 ft min.	Height of court: 118'-6" Minimum width calculated: 39'-6" Width provided: 56'-0"	-
GAR	Min. green area ratio: 0.20	≥0.20	-

VII. REQUESTED ZONING FLEXIBILITY

A. The Applicant requests the following **zoning flexibility** through this PUD:

1. **PUD-related map amendment:** from MU-12 to MU-9A, resulting in:
 - a. An additional **70 ft.** of height
 - b. An additional **282,333 sq. ft.** of GFA¹

The proposed rezoning from the MU-12 to the MU-9A zone would not be inconsistent with the Comprehensive Plan's maps. The MU-9A zone would allow for additional density and generate more affordable residential units. Table II prior shows that the MU-9A zone would permit medium density mixed-use development with a maximum 7.8 FAR of FAR (with IZ = 447,431 sf) and 9.36 FAR (20% PUD increase = 536,917 sf). The proposed zone would allow essential neighborhood-serving commercial uses and residential uses, including market rate and affordable dwelling units. The project would provide additional GFA for IZ units beyond the MU-10 requirement (See Section [VIII PUD Benefits and Amenities \(g\)](#)).

The additional height and GFA to be provided through the map amendment would allow development of the site to the density anticipated by the FLUM and GPM and in character with new Wharf development along the Maine Avenue corridor. Flexibility would allow additional height towards Maine Avenue as preferred by G Street residents and GFA to support housing where none currently exists. The additional GFA would include up to 65,000 square feet for the provision of IZ units, up to 3 times more than could be provided under the existing zoning as a matter-of-right. Affordable housing targeted to lower-income families on this high-amenity corridor with a low percentage of low-income residents of color (as demonstrated in the Census Tract information) would be a boost to the IZ housing supply, as desired by the equity policies of the District's housing goals and the Comprehensive Plan.

The Applicant has noted that: "*greater affordable housing could be realized on the site by having the Applicant forego a PUD and instead pursue a map amendment that would be subject to the recently adopted IZ+ regulations, which are not applicable to PUDs. However, the ANC expressed to the Applicant that it would not be supportive of such a map amendment on the PUD Site, and desires the Applicant to pursue redevelopment through the PUD process.*"

OP supports flexibility for a map amendment for the subject property from the MU-12 to the MU-9A zone.

2. **Side Yard:** 21.75 ft. required; 9 ft. proposed to the east

The site's development area is limited by the irregular shape of the site which limits the width and depth of any proposed development. The proposed development would have an expanded footprint as the existing commercial building extending further into the yards towards the property line to compensate for the desire to limit the height at the rear of the building as desired by the neighbors. To do so and retain habitable interiors in the lower building on the lot, it was necessary to position the building further into the side yard towards the east. OP does not object to this design change to accommodate a lower building height fronting G Street, which is desired by the townhouse residents fronting G Street.

¹ 3.0 FAR with IZ x 57,363 land area = 172,089 sf GFA total; Less 24,169 sf non-residential proposed = 147,920 sf residential GFA permitted
This is compared to the 434,475 square feet of residential GFA proposed for the PUD (7.6 FAR of residential use).

Design Flexibility

In addition to the proposed PUD-related map amendment, the applicant requests the following design flexibility through this PUD:

1. **Number of Dwelling Units:** To provide a range in the approved number of residential dwelling units of plus or minus ten percent (10%);
2. **Affordable Units.** To vary the number and mix of inclusionary units if the total number of dwelling units changes within the range of flexibility requested, provided that the total square footage reserved for affordable units is no less than 15% of the residential gross floor area approved for the Project; and provided that the location and proportionate mix of the inclusionary units will substantially conform to the layout shown on the Approved Plans; and provided further that there are eight (8) three-bedroom units reserved for households with incomes not exceeding 60% of the MFI.
3. **Parking Configuration.** To make refinements to the approved parking configuration, including layout, number of parking spaces plus or minus ten percent (10%), and/or other elements, and to vary the allocation of residential and retail parking spaces, provided that the number of residential parking spaces shall not exceed a ratio of 0.6 spaces per unit.
4. **Conversion of Retail Space.** To convert up to 15,000 square feet of retail space to residential use or any other use permitted in the MU-9 zone, provided that for any such conversion that requires a modification of the building design, the Applicant shall file an application for a Modification of Consequence for the Commission's approval of the revised building design, and any additional residential square footage shall be subject to the IZ requirement approved for the PUD.
5. **Interior Components:** To vary the location and design of all interior components, including amenities, partitions, structural slabs, doors, hallways, columns, stairways, mechanical rooms, elevators, escalators, and toilet rooms, provided that the variations do not change the exterior configuration of the building.
6. **Exterior Materials and Color.** To vary the final selection of the exterior materials within the color ranges and material types as proposed on Sheet 54 of the Approved Plans (titled, "Material Palette"). In the event the Applicant desires to change the exterior materials, type or color, the Applicant shall file an application for a Modification of Consequence for the Commission's approval of the change of exterior materials.
7. **Exterior Details:** To make minor refinements to the locations and dimensions of exterior details that do not substantially alter the exterior design shown on the Plans. Examples of exterior details would include, but are not limited to, doorways, canopies, railing, skylights, and window locations.
8. **Signage:** To vary the font, message, logo, location, and color of the proposed signage, provided that the maximum overall dimensions and signage materials do not change from those shown on the Approved Plans
9. **Balconies.** To vary the number, configuration, and general design of the balconies proposed on the Maine Avenue façade to ensure compliance with the applicable requirements of the 2017 District of Columbia Construction Codes (Title 12 of the District of Columbia Municipal Regulations), so long as the design of the Maine Avenue façade remains substantially in conformance with the Approved Plans.

- 10. Streetscape Design:** To vary the location, attributes, and general design of the approved streetscape, including those streetscape improvements proposed within the "Art and Landscape Zone" indicated on Sheet 72 of the Approved Plans, subject to the review and approval of the Public Space Committee.
- 11. Sustainable Features:** To vary the sustainable elements of the Project, provided the total number of LEED points achieved by achievable for the PUD does not decrease below the minimum requirement for LEED Platinum.
- 12. Retail Use Types.** To vary the types of uses designated as "retail" use on the approved Plans to include the following use categories: (i) Retail (11-B DCMR § 200.2(bb)); (ii) Services, General (11-B DCMR § 200.2(cc)); (iii) Services, Financial (11-B DCMR § 200.2(dd)); (iv) Eating and Drinking Establishments (11- B DCMR § 200.2(i)); (v) Medical Care (11-B DCMR § 200.2(u)); and (vi) Arts, Design, and Creation (11-B DCMR § 200.2(e));
- 13. Retail Frontages.** To vary the final design of retail frontages of the building, including the location and design of entrances, show windows, signage, and size of retail units, in accordance with the needs of the retail tenants. Retail signage shall be located within the potential retail signage zone shown on Sheet S2 of the Approved Plans.

OP has no concerns with these requests for design flexibility.

VIII. PUD EVALUATION STANDARDS

The Zoning Regulations define a Planned Unit Development (PUD) as "A *plan for the development of residential, institutional, and commercial developments, industrial parks, urban renewal projects, or a combination of these, on land of a minimum area in one (1) or more zones irrespective of restrictions imposed by the general provisions of the Zoning Regulations, as more specifically set forth in Subtitle X, Chapter 3.*" (Subtitle B-28). The purpose and general standards for a Planned Unit Development are established in Subtitle X 300:

- 300.1 The purpose of the planned unit development (PUD) process is to provide for higher quality development through flexibility in building controls, including building height and density, provided that the PUD:
 - (a) Results in a project superior to what would result from the matter-of-right standards;
 - (b) Offers a commendable number or quality of meaningful public benefits; and
 - (c) Protects and advances the public health, safety, welfare, and convenience, and is not inconsistent with the Comprehensive Plan.*
- 300.2 While providing for greater flexibility in planning and design than may be possible under conventional zoning procedures, the PUD process shall not be used to circumvent the intent and purposes of the Zoning Regulations, or to result in action that is inconsistent with the Comprehensive Plan.*

Public Benefits and Amenities:

Subtitle X Section 305 of the Zoning Regulations discuss the definition and evaluation of public benefits and amenities. "Public benefits are superior features of a proposed PUD that benefit the surrounding

neighborhood or the public in general to a significantly greater extent than would likely result from development of the site under the matter-of-right provisions of this title” (§ 305.2). “A project amenity is one (1) type of public benefit, specifically a functional or aesthetic feature of the proposed development that adds to the attractiveness, convenience, or comfort of the project for occupants and immediate neighbors” (§ 305.10).

Section 305.5 lists several potential categories of benefit proffers, and states that “(a) project may qualify for approval by being particularly strong in only one (1) or a few of the categories in [that] section, but must be acceptable in all proffered categories and superior in many” (§ 305.12). The Commission “shall deny a PUD application if the proffered benefits do not justify the degree of development incentives requested (including any requested map amendment)” (§ 305.11).

The applicant’s most recent summary of project benefits and amenities (Exhibit 38A) provides additional information requested at setdown. Additional entitlements gained through the proposed PUD are summarized as follows:

Table III

	Matter-of-Right MU-12	Proposed PUD MU-9A	DIFFERENCE
Height:	60 ft.	130 ft.	70 ft.
FAR	3.0	7.99 (IZ PUD)	4.99
Gross Floor Area:	172,089 GFA	454,422 GFA	282,333 GFA
Affordable Housing	21, 500 GFA	65,171 GFA	43,671 GFA
Use:	Office	Residential/retail	Mixed-use

OP analysis of the proffers is summarized in the following table and detailed below. Where noted, additional information about proffers is needed prior to a final decision on the case.

Table IV

ITEM	MITI- GATION	PUBLIC BENEFIT	PROJECT AMENITY	REQUIRED	PROFFER
Urban Design, Architecture <i>X § 305.5(a)</i>	X	X	X	X	
Landscaping Open Space, Streetscape <i>X §§ 305.5(b)and (l)</i>	X	X	X	X	X
Site Planning, Efficient Land Utilization <i>X § 305.5 (c)</i>	X	X	X	X	
Commemorative Art <i>X § 305.5 (d)</i>		X	X		X
Housing and Affordable Housing <i>X §§ 305.5 (f) and (g)</i>	X	X	X	X	X

ITEM	MITI-GATION	PUBLIC BENEFIT	PROJECT AMENITY	REQUIRED	PROFFER
Environmental and sustainable benefits <i>X § 305.5 (k)</i>		X	X	X	X
Streetscape Plans <i>X § 305.5 (l)</i>	X	X	X	X	
Transportation Infrastructure <i>X § 305.5 (o)</i>	X	X	X	X	
Uses of Special Value to the Neighborhood <i>X § 305.5 (q)</i>		X	X	X	
Other <i>X § 305.5 (r)</i>					

(a) Superior urban design and architecture

(c) Site planning and efficient and economical land utilization

The development will replace currently underutilized land formerly dedicated mainly to office use and parking, with a mixed-use development consistent with Comprehensive Plan and Small Area Plan’s direction. The building is designed to reflect the site’s location across from the Wharf development, including as a gateway to the Maine Avenue entrance at 9th Street. The size, shape and proximity to the school and existing residential homes fronting the northside of G Street contribute to the buildable area and overall design, but one where the overall design is positively expressed through setbacks, height, material use and detailing of the façade. Ample sized balconies are included fronting 9th Street and where appropriate would be reviewed by DDOT’s Public Space to ensure it meets the required setbacks.

The height articulation seems to reduce the overall impact to the homes on G Street with the lower-level plaza area presenting an open-air recessed portion to the building as viewed from G Street, similar to many buildings in the Southwest neighborhood. At the ground level fronting 9th Street, it is presented as a two-story townhome level. The height at the rear is also intended to reduce shadows onto the Jefferson Recreation Field, while placing the bulk of the height away from the lower-scaled residential townhomes, north side of G Street, thereby relating the bulk of development with the 130-foot buildings at the south side of Maine. (*Site Shadow Study: Exhibit 38A4 Sheets 60, 61*)

The building articulation has also been refined. As shown on *Exhibit 38A4 -Sheets 50 and 51* of the updated plans, vertical elements, bay windows, and balconies at the corner of 9th Street and Maine Avenue have been modified detailing the masonry, composite metal panels and glazing system that would differentiate the base of the building from the residential elevations.

The PUD design would also satisfy the SWSAP Design Guidelines (Exhibit 38H) which encourage:

- Mix of high and low-rise buildings
- Views through and around buildings
- Variety of architectural character
- Greater mix of building and housing types

- Private open spaces in the form of courtyards
- Public facing open spaces created by setbacks
- Reduction of the “urban canyon” effect along corridors

The proposed development would satisfy the main guidelines including where there are views through and around the building with the provision of courtyards at G Street, 9th Street and Maine Avenue; reducing the urban canyon effect on both 9th Street and Maine Avenue through its ample courtyards. The proposed building design includes an artistic rendering on the east facing facade on the 90 feet portion of the building that would provide an interesting pedestrian experience. This combination of design strategies at the base and core of the building, including the color and change in material pattern, are intended to produce an integrated mixed-use building. (*Material Palette: Exhibit 38A4, Sheet 54*)

The PUD would be compatible in terms of height, FAR, and design, with existing surrounding development and would enhance the corner of Maine Avenue and 9th Street with its modern aesthetic. The courtyard/plazas would provide informal open spaces for an array of users and the east facing elevation would include a cultural amenity which would be finalized.

A detailed signage and storefront package/plan are also included in *Exhibit 38B* for the Commission’s review and approval prior to permitting, should the application be approved.

The Applicant has addressed in detail how the development would be consistent with the Southwest Small Area Plan outlined in its recent submission [Exhibits 38G: Evaluation of Consistency with the SWSAP and Exhibit 38H: SW Neighborhood Plan Design Guidelines](#)

(b) Superior landscaping, or creation or preservation of open spaces and (l) Streetscape plans

The project includes significant streetscape improvements including wider sidewalks, and street lighting fixtures ([Exhibit 38C](#)). The Project would provide new landscaping and seating around the site, including adjacent public space along Maine Avenue, public art, and other areas to be dedicated to seating.

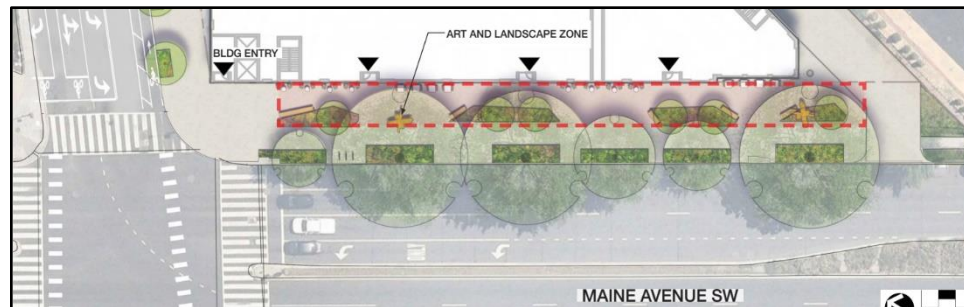


Exhibit 38A5 – Sheets 66, 72 - Portions of Streetscape Plan
Additional landscaping within public space shown would be either maintained and/or added to the Maine Avenue and 9th Street frontages.

This is consistent with SW Plan Recommendation MC.11: *Increase number of benches along sidewalks throughout Southwest to better serve residents of all ages and abilities.* The framework and design would also respect the design principles of the Small Area Plan, including Design Principle #4 - *Enhance green space through landscaped perimeters and internal green or amenity spaces.*

According to the GAR Scoresheet (Exhibit 38A5 Sheet 76) the proposal on the lot would include expansive green roof areas (on roof levels 10 and 14) for a total of up to 10,411 square feet that would provide amenity spaces for residents of the building. Six (6) new canopy trees on the lot would be planted to add to the well-known canopy coverage of Southwest neighborhoods. A combined total of 3,800 square feet of new landscaping and bioretention area would be included on the lot. New trees would be planted in public space.

(d) Commemorative works or public art

The Applicant has offered \$75,000 towards the design and installation of public art in the designated area shown as the Art and Landscape zone in the reproduction of the Streetscape Plan shown above.

The Applicant proposes to collaborate with the SWBID which would work with an established artist for the neighborhood and install the piece where appropriate, including with accordance with the SW Plan. A Certificate of Occupancy would not be issued without demonstration by the Applicant that the SWBID has completed or is in the process of working with an artist for the design fabrication and installation of the art piece in the desired location.

OP considers this a desirable public benefit commensurate with the vision under the Southwest Plan.

(f) Housing and (g) Affordable housing

The Project would replace an underutilized office building with approximately 498 new dwelling units, of which 75 units would be devoted to affordable housing. The Applicant will set aside 15% of the residential GFA of the Project, or approximately 65,171 square feet of GFA for affordable units reserved for households earning no more than 60% MFI. The Applicant will also set aside an amount of GFA equal to 15% of penthouse habitable space devoted to units at 50% MFI. This would exceed the number of units that could be provided under the site's existing MU-12 zoning, both as a matter-of-right or through a PUD. Additionally, the Project will provide eight, 3-bedroom units to accommodate family-sized households all dedicated as IZ units. This is consistent with the recommendation of the core concept of the Model Community of the Southwest Small Area Plan, including:

- SW Plan Recommendation MC.4: *Retain the neighborhood's 19% subsidized units by establishing targets that exceed IZ thresholds for future development on publicly owned land and in future PUDs.*

As shown in Table III, consistent with this recommendation, the proposed IZ far exceeds regular IZ set asides that would be required under the existing MU-12 zoning.

- SW Plan Recommendation MC.6: *As part of the PUD process, prioritize affordable units that exceed IZ requirement or fewer affordable units, but larger in size to better serve families.*

The project would provide greater amounts and larger units solely devoted to IZ. That is, the Project would provide eight (8) three-bedroom IZ units, which is the total of all three-bedroom units within the project. The figures in the following tables are based on information supplied in the application.

(Exhibit 38A2 – Sheet 32: IZ Unit Mix)

Inclusionary Zoning SQFT Requirements	
Residential GFA	434,475 SF
15% of Residential GFA for IZ	65,171 SF
Estimated Efficiency	84%
Penthouse GFA	5,334 SF
15% of Penthouse GFA for IZ	800 SF
Estimated NSF to be provided for IZ	55,616 SF

Inclusionary Zoning Unit Mix						
Unit Type	IZ Units	IZ Unit SQFT	IZ Unit %	Market Units	Market Unit %	Total Units
Studio (Studio, 1 BR-JR)	24	11,203 SF	32%	137	32%	161
1 Bedroom (1 BR, 1 BR+D)	27	19,885 SF	36%	200	47%	227
2 Bedroom (2 BR, 2 BR+L)	16	15,874 SF	21%	86	20%	102
3 Bedroom (3 BR)	8	9,036 SF	11%	0	0%	8
Total	75	55,998 SF		423		498

The affordable housing proffer will introduce a mixed-income community on a site where no housing currently exists in proximity to transit and desirable outdoor and service amenities.

(k) Environmental and sustainable benefits

The project has been upgraded to LEED Platinum. OP considers this a public benefit for residents in a high opportunity area, particularly for future lower-income residents. The LEED Rating Scoresheet for LEED v4 for Homes: Multifamily Mid-Rise is provided ([Exhibit 38A5 Sheet 85](#)) and includes credits for use of environmentally preferable products, construction waste management and indoor environmental quality.

The site is in a Resilience Focus Area, which is an area in need of special attention to ensure resilience to flooding for new development and infrastructure projects. OP encouraged the Applicant to review and implement relevant recommended strategies under the [Climate Ready DC Resilient Design Guidelines](#), or as may be prescribed by District Department of Energy and the Environment (DOEE) recommendations. The Applicant indicated the strategies proposed to be incorporated throughout the building and site design where appropriate to enhance the Project’s climate readiness. DOEE’s comments to OP are attached to this report.

(o) Transportation infrastructure beyond that needed to mitigate any potential adverse impacts

The site is surrounded by a robust network of transit, bicycle, and pedestrian facilities for safe and effective non-vehicular transportation.

The Project would provide 120 long-term bicycle parking spaces, and the support facilities would exceed zoning requirements, including eight (8) lockers and two (2) showers, where the Regulations require no showers and two (2) lockers. A minimum of 32 short-term bicycle parking spaces along the property’s frontage would also be included. Up to 10% of long-term spaces would have access to electrical outlets for charging. A new bicycle lane would be installed along 9th Street to Maine Avenue to improve bicycle access along the 9th Street right-of-way.

Long-term bicycle parking will be accommodated in the bike room on the first level of the development, adjacent to the parking garage. The Applicant is coordinating with DDOT to select locations for these racks in public space.

Two hundred and thirty-four (234) below-grade parking spaces would be provided with 16 electric vehicle (EV) charging spaces. In addition, a short-term pick-up and drop-off (PUDO) space would be provided on the 9th Street frontage as requested by the community as a mitigation measure for additional traffic that may arise to and from the site by residents who may not drive.

The proposed loading area will be accessed via Maine Avenue to a north/south private alley and would include one (1), 30-foot loading berth, one (1), 20-foot service/delivery space, and one (1) short-term 20-foot service/delivery space, satisfying the residential and retail loading requirements. All loading maneuvers would take place on the site and not in public space. The proposed curb cuts along Maine Avenue and G Street received DC Public Space Committee concept approval in May 2022, with final approval to the design upon permitting ([Exhibit 38E](#)). Use of the proposed private alley for vehicular access is optimal given the layout, shape and location constraints of the site, while maximizing the design of the building's frontages on G Street, 9th Street and Maine Avenue.

The Applicant's CTR study indicates there would be improvements to the existing public right-of way infrastructure for 9th Street and Maine to mitigate the current traffic impacts that occur without the redevelopment of the Site. (Exhibit 25A, Page 30; Exhibit 38C Sheet 33). Briefly, these include:

- Bicycle lanes along 9th Street SW;
- Reduction of one northbound and on southbound lane on 9th Street;
- Widening of the sidewalk along the 9th Street frontage;
- Improved crosswalks at 9th and G Street for bike and pedestrian safety;
- Proposal to consider a 9th Street Redesign with a signalized and unsignalized 9th Street SW and G Street SW intersection.

TDM measures that will be implemented to promote nonvehicular modes of travel for residents and visitors are also included in the Applicant's Comprehensive Transportation Review (CTR) submitted to DDOT (Exhibit 25A). A Loading Management Plan (LMP – CTR, Page 36) is included to ensure efficiency of the on-site loading facilities.

The proposed infrastructure improvements are considered valuable to the neighborhood which is currently impacted by traffic issues without the proposed development. The proposed development is not anticipated to contribute undue traffic to the neighborhood as future residents would be within walking distance of many amenities. OP believes that the PUD would provide transportation infrastructure benefits, including *a reconstruction of 9th Street adjacent to the property that incorporates safety and multimodal benefits.*

(q) Uses of special value to the neighborhood or the District of Columbia as a whole; and

- Consistency with the SW Neighborhood Plan (Exhibit 38G). OP considers this consistency while required is of special value due to the location of the building at a prominent corner, as entrance to Maine Avenue and the Wharf.
- Grocery Store use as desired by the community. The Applicant has committed up to 6,000 sf for a small store.

- Bank: A bank use was requested by the community and the Applicant has committed to leasing a portion of retail space to a retail financial use.

In summary, OP finds that the benefits, amenities and proffers would **appear to be** commensurate with the related map amendment and other requested flexibility through the PUD.

IX. AGENCY COMMENTS

Interagency meeting:

OP held an interagency meeting, inviting representatives of all notified agencies to participate on May 16, 2022, including discussions with DOEE, DDOT, DCWATER and DPR. In addition, the Applicant also met separately with DDOT to discuss the relevant aspects of this application.

DDOT: It is anticipated that the Department of Transportation will provide comments in a separate report prior to the hearing.

DOEE: DOEE's comments were submitted to OP and are included as an attachment to this report.

No agency filed a report to the Office of Zoning record as of the date OP completed this report.

The Applicant submitted its responses to the concerns - expressed at the interagency meeting, and with the community- to the record in its Supplemental Statement at [Exhibit 38](#), Pages 11-14.

X. COMMUNITY COMMENTS

At the date of this report, there are several letters in opposition to the record, including

Requests for Party Status in Opposition. Exhibits 22, 33,39, 39A

Letters in Opposition: Exhibits 23, 26-28, 30-32, 34, 36, 40-43

Letters in Support: 24, 35

Primary opposition to date by the community are stated generally as follows:

- Increased traffic: a comprehensive traffic study considering major traffic during Wharf and the Anthem events.
- Programmable public spaces: Thoughtful space design on the corner of 9th and G streets SW, such as more green space, and/or bench seating would create a nice community area.
- Construction impact: the lengthy demolition and construction would add considerable noise to the neighborhood, especially for residents and the school.
- Affordable housing: Less than 20% of total square footage is planned to be devoted to affordable units, contrary to the percent required in the Southwest Small Area Plan for PUD developments.
- Building heights and increased shadows: The proposed buildings on 807 Maine Ave and 899 Maine Ave are expected to have maximum heights of 110ft and 130ft, respectively

XI. ATTACHMENT

The District Department of the Environment (DOEE) Comments

DOEE Development Review Comments ZC 22-06: 899 Maine Ave SW

DOEE applauds the applicant for committing to achieve LEED Platinum certification. DOEE further commends the applicant for using the LEED for Homes: Multifamily Midrise rating system, which is best suited for this project and includes features that will specifically benefit residential tenants. The project site is located in a Resilience Focus Area, according to the [Comprehensive Plan Generalized Policy Map](#), and DOEE urges the applicant to accommodate for that. The following recommendations are intended to assist the applicant with incorporating sustainable and resilient design and construction strategies that will further enhance the project's performance, improve occupant comfort, and minimize the project's impact on the environment.

Many of these strategies can be financed with no upfront cost through [DC PACE](#). The [DC Green Bank](#) and the [DC Sustainable Energy Utility](#) (DCSEU) also offer innovative financial products and technical assistance to help projects gain access to capital. To learn about project-specific financing options, contact Crystal McDonald at cmcdonald1@dcseu.com or complete DCSEU's [Custom Rebate Form](#).

Energy Performance and Electrification

DOEE applauds the applicant's current energy efficiency and renewable energy strategies and encourages the applicant to continue exploring options to reduce the project's energy consumption and increase its energy generation. Maximizing energy efficiency at the time of construction will more cost effectively assist in meeting [Building Energy Performance Standards](#) (BEPS) in the future. The BEPS program was established in Title III of the Clean Energy DC Omnibus Act of 2018. The Act states that starting in 2021, owners of buildings over 50,000 square feet that are below a specific energy performance threshold will be required to improve their energy efficiency over the next 5 years. Projects below the performance threshold will be able to choose between a performance pathway, which requires that they document a 20% reduction in energy usage over the 5-year compliance period, or a prescriptive list of required energy efficiency measures. The next BEPS will be established in 2027 and again every six years, and the compliance threshold will increase each cycle. New projects are encouraged to maximize energy efficiency during the initial design and construction in order to meet BEPS upon completion.

In line with the District's goal of carbon neutrality and the objectives of the [Sustainable DC 2.0](#) and [Clean Energy DC](#) plans to reduce greenhouse gas emissions, DOEE recommends that the applicant design the project to be fully electric (i.e., no on-site combustion of fossil fuels) for the residential portion of the project, at a minimum. DOEE and DCRA are evaluating options to include building electrification requirements in future code updates. Building electrification involves powering all building appliances and systems (e.g., domestic hot water, heating equipment, cooking equipment) with electricity rather than fossil fuels (e.g., natural gas or fuel oil). Efficient electric systems reduce indoor air pollution caused by combustion equipment and can save on operating costs, especially when coupled with solar energy. All-electric buildings can also save on construction costs by avoiding the need to install gas piping. It's easier and more cost-effective for new construction to be designed with electric systems than it is to retrofit buildings later, so DOEE strongly encourages projects to evaluate electric options as part of their initial energy modeling exercises. For more information about building electrification in the District, visit [this resource page](#) created by the Building Innovation Hub.

DOEE notes that this applicant should design the project to comply with the [electric vehicle make-ready parking requirements of the Green Building Act](#), which requires the project to include electric vehicle make-ready infrastructure to accommodate the future installation of an electric vehicle charging site at least 20% of the parking spaces. DOEE encourages the applicant to go beyond this requirement and install EV charging stations for a portion of the parking spaces. Given the current rate of EV adoption, DOEE encourages the applicant to consider and account for a greater prevalence of electric vehicles at time of occupancy. One [study](#) found that the cost to install EV capable infrastructure during new construction is four to six times less expensive than during a standalone retrofit. The [2017 DC Green Construction Code](#) provides some suggested thresholds for the provision of supply equipment and make-ready infrastructure. EV resources and information about available incentives are available at <https://doee.dc.gov/service/electric-vehicles-resources>.

Net-Zero Energy

Clean Energy DC, the District's detailed plan to reduce greenhouse gas emissions, calls for net-zero energy (NZE) building codes by 2026. DOEE encourages the project to explore net-zero energy construction/certification ahead of this planned code requirement. An NZE building is a highly energy-efficient building that generates enough on-site, or procures acceptable offsite, renewable energy to meet or exceed the annual energy consumption of its operations. NZE buildings can benefit both owners and tenants through significantly lower operating costs, improved occupant comfort and improved indoor air quality. Under the [2017 District of Columbia Energy Conservation Code](#), projects can use Appendix Z as an alternative compliance pathway, which provides a working definition and guidance for NZE.

DOEE has published a *Net-Zero Energy Project Guide*, a *Multifamily Guide*, and an *Integrated Design Charrette Toolkit* to assist project teams with planning, designing, constructing and operating NZE buildings. These and other resources can be found at doee.dc.gov/service/greenbuilding.

For the past few years, DOEE has offered grants to projects exploring NZE design and other innovative green building approaches. Case studies and final reports from some of these projects are available at [here](#).

If the applicant is interested in NZE construction, either on this project or future projects, DOEE can be of assistance. Please reach out to Connor Rattey at connor.rattey@dc.gov for more information.

Solar

DOEE applauds the applicant's efforts to generate solar energy on the project's rooftop. DOEE has issued guidance on how to successfully incorporate solar into green roofs on pages 41 & 42 of the [2020 Stormwater Management Guidebook](#). Maximizing solar energy production contributes to achieving the District's goals to rely on 100% renewable electricity by 2032 and increase local solar generation to 10% of total electricity by 2041.

Climate Resilience

The proposed project sits in a Resilience Focus Area, as defined on the Comprehensive Plan Generalized Policy Map, at the edge of FEMA's 500-year floodplain (updated 2016) and in close proximity to the tidally-influenced Washington Channel, a subsidiary of the Potomac River. Although this is beyond the regulatory jurisdiction of the District's floodplain (Title 20 DCMR Chapter 31), DOEE encourages the applicant to incorporate resilience elements to protect life, property, and its own investment through the duration of the project's design life. DOEE recommends that the applicant pay special attention to the

ground floor retail and placemaking spaces along Maine Avenue, as that façade is especially at risk. DOEE recommends that the applicant follow the District's [Resilient Design Guidelines](#), which were developed in line with the objectives of the [Climate Ready DC](#) plan.

As DC's flood risk is projected to increase due to climate change, the applicant should consider design strategies that better prepare the project and its inhabitants for future conditions through the design life of the proposed project. Evidenced by recent flood events in 2010, 2016, 2019, and 2020, the District is already experiencing floods that interrupt local economies, damage homes and businesses, and disrupt livelihoods beyond the current 100-year and 500-year floodplains. By the end of the century, DC is predicted to experience over 6 feet of sea level rise. The risk imposed by sea level rise is also compounded by projected increases in the frequency and intensity of rainstorm events during the same period. The project site is likely to experience the impacts of sea level rise, flash flooding, and riverine overflows stemming from the Potomac River.

To mitigate risks to the physical building and its future residential and retail tenants, the applicant should consider building practices to withstand future flood conditions. This may include floodproofing the perimeter of lower floors, using building materials capable of withstanding floodwaters, and elevating mechanical equipment 6 feet above the 500-year floodplain (Resilient Design strategies 3, 5, and 9, respectively).

Additionally, the Resilient Design Guidelines recommend site and landscape strategies to manage excess water on site, rather than pushing waters onto neighboring properties or infrastructure. This may start with a hydrologic assessment of current and potential water retention features of the site. DOEE encourages the applicant to incorporate design features that retain at least 2 inches of a 24-hour storm event (Resilient Design strategy 27). To enhance water storage and reduce flood risks, the applicant may consider porous pavers, bioswales, rain gardens, and other natural features as a part of green roof and landscape features (Resilient Design strategy 28 and 29). Recommended sea level rise-adjusted flood elevations can be calculated with Section 2 of the [Resilient Design Guidelines](#).

In addition to flood risk, extreme heat poses serious health risks to individuals and is the leading cause of climate-related deaths. Extreme heat also damages buildings by overburdening cooling and electrical systems, deteriorating surfaces and increasing risk from termites and other insects. The impacts of heat are exacerbated by the Urban Heat Island (UHI) effect.

The UHI effect occurs in areas where sunlight is absorbed and retained by paved surfaces and roofs. This absorbed heat is combined with heat released by technologies such as air conditioners and automobiles to create an "island" that is significantly warmer than surrounding rural areas. The presence of trees and vegetation can help keep temperatures cool by deflecting radiation from the sun, providing shade, and releasing moisture into the atmosphere. Neighborhoods with fewer trees and greater concentrations of impervious surfaces (or water-resistant surfaces such as pavement, buildings, and roads) absorb and retain more heat.

The applicant should consider designing this project based on future climate projections instead of historical climate data. DOEE's Climate Projections & Scenario Development showed that summer temperatures are projected to increase by up to 10 degrees over the next 60 years. The number of heat emergency days each year (i.e., days with heat index above 95°F) is expected to more than triple by 2050. By 2080, the District could see as many as 75 heat emergency days.

To mitigate the risks of extreme heat, applicant should incorporate strategies that reduce urban heat island effects and prepare the project for higher temperatures. DOEE's [Resilient Design Guidelines](#) include best practices and additional resources about numerous strategies, including:

- Vegetated roofs and facades
- Cool roofs and cool or reflective pavement
- Planting of climate-adapted tree species (see [WashingtonDC_TreeSpeciesVulnerability.pdf \(forestadaptation.org\)](#)) and annual tree maintenance plan
- Termite-proof barrier materials in foundation and connections between foundation and above-ground structure to protect against migrating wood-boring insects as the climate warms
- A continuous air barrier in the building envelope

Additional DOEE Climate Adaptation and Preparedness resources are available at doee.dc.gov/climateready.

Green Area Ratio and Stormwater Management

DOEE encourages the applicant to exceed the minimum GAR and stormwater requirements. This project is located in an area of the District that has a municipal separated storm sewer system (MS4), which means that stormwater runoff is discharged, untreated, into local water bodies; the Potomac River, in the case of this project. Stormwater management strategies used by projects located in the MS4 are more environmentally beneficial than those used by projects in the combined sewer system (CSS). Additional on-site stormwater retention can earn the project Stormwater Retention Credits (SRCs) that can be sold through DOEE's Credit Trading Program. SRCs can be sold directly to DOEE through the SRC Price Lock Program (for projects located in the [MS4 Sewer System](#) only) or sold on the open market. For more information, please visit doee.dc.gov/src or email Matt Johnson at src.trading@dc.gov.

DOEE is prepared to meet with the project team to discuss GAR and stormwater opportunities on the project site. To set up a review meeting with the stormwater team at DOEE, please contact Ayende Thomas at ayende.thomas@dc.gov.

Deconstruction, Reuse, and Embodied Carbon Reduction

Wherever possible, DOEE encourages the reuse of existing buildings and materials because the demolition of these buildings and construction of entirely new buildings is very carbon intensive. Given that this project involves razing the existing structure on-site, DOEE encourages the applicant to explore options for deconstruction and reuse or salvage of materials from the existing structure. In 2018, construction and demolition (C&D) activities in the US generated 600 million tons of waste. The reuse and rehabilitation of existing buildings can reduce waste and embodied carbon. When reuse is not possible, deconstruction or pre-demolition salvage can divert waste from landfill and incineration and allow for reuse of building materials. Destruction is the process of carefully and intentionally dismantling a building rather than demolishing it. While this process is more time consuming than demolition, reusing salvaged materials can reduce construction costs, and the sale of salvaged or recyclable materials can generate additional revenue. Organizations like [Community Forklift](#) collect donations of unwanted and salvaged building materials throughout the DC region. DOEE is also working to develop a Donation and Reuse program and may have additional resources and information available at the time of project construction. The applicant is encouraged to reach out to Connor Rattey at connor.rattey@dc.gov encouraged if they are interested in sustainable deconstruction of existing structures or donation and reuse of building materials.

DOEE encourages the applicant to conduct a simple life-cycle analysis (LCA) to measure and reduce the impact of the proposed project's structural and envelope design. An LCA is an effective tool to measure the embodied carbon, or global warming potential (GWP), of a building and its materials. An LCA can inform decisions about the selection and quantity of materials used, and can assist with dematerialization (i.e., reducing the amount of a given material). Dematerialization reduces environmental harm and saves money.

Embodied carbon is the sum of all greenhouse gas emissions resulting from the construction of buildings, including materials and construction activities. It is estimated that 23% of the world's GHG emissions result from construction. Most of these embodied emissions are associated with the production and use of concrete and steel, common structural elements. The energy savings of a high-performance building can take decades to offset the impacts of the building's construction. DOEE recently funded two grant projects focused on reducing embodied carbon through LCAs. The lessons learned by these grantees may help the applicant identify simple ways to reduce the project's embodied carbon and understand how to conduct a basic LCA. The reports from these projects are available here: [LCA for St. Elizabeth's Building 2 Commercial Office by Hickok Cole](#) and [Embodied Carbon Life Cycle Assessment Assistance for Southeast Neighborhood Library by Quinn Evans](#).

The US General Services Administration (GSA) recently [announced](#) new standards for the concrete and asphalt used in their projects. The GSA has published sample contract language that can easily be incorporated into an agreement with a general contractor to define procurement requirements for [low embodied carbon concrete](#) and [environmentally preferable asphalt](#). Additional guidance is available [here](#). DOEE encourages the applicant to adopt the GSA standards, which can drastically reduce the project's embodied carbon emissions with little to no financial impact.