

O'NEILL AND ASSOCIATES

May 23, 2018

Mr. Brian P. Golden, Director
Boston Planning & Development Agency
One City Hall Plaza, 9th Floor
Boston, MA 02201

RE: Willet St Extension, West Roxbury

Dear Director Golden,

On behalf of my client, CAD Builders LLC (the "Proponent"), I am pleased to submit this Supplemental Information Report to the Project Notification Form (PNF) filed on February 26, 2018; continuing Large Project Review under Article 80B of the Boston Zoning Code for the development of the property on the Willet St Extension in Boston's West Roxbury neighborhood. The Supplemental Information Report is in the response to the Request for Supplemental Information, issued by BPDA staff on April 23, 2018. That Memo included public comments written by City and BPDA staffers, IAG members and the public; as you will see in the attached filing, the development team has taken these comments under consideration, investigated the issues and responded in kind.

The development includes approximately 29 single family homes, complete with a new street and associated infrastructure on a 7.75 acre lot of land (the "Proposed Project"). The total Proposed Project is approximately 75,400 gross square feet. The Proposed Project presents a unique opportunity to create new housing and homeownership opportunities on a large, unoccupied parcel of land in West Roxbury.

If you have any questions in regards to this matter, please do not hesitate to contact me.

Best,



Christopher Tracy

Senior Director, O'Neill and Associates

Cc: Jonathan Greeley, Director of Development Review, BPDA

Cc: Aisling Kerr, Project Assistant, BPDA

Cc: Anthony Di Letizia, CAD Builders LLC

Supplemental Information Report

WILLET STREET EXTENSION

CAD Builders LLC (the “Proponent”)

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Section A - Executive Summary

CAD Builders LLC (the "Proponent") submitted a Project Notification Form ("PNF") for the Willet Street Extension Development Project in the West Roxbury neighborhood of Boston, in accordance with the Article 80 requirements of the Boston Zoning Code (the "Code") on February 26, 2018. The development will include approximately 29 single family homes, complete with a new street and associated infrastructure on a 7.75 acre lot of land owned by the Proponent (the "Proposed Project"). The total Proposed Project is approximately 75,400 gross square feet. Each of the 29 homes will be family sized units with multiple bedrooms and off street parking. The average size of the home is approximately 2,600 square feet and the Proponent will use their urban design expertise to make each home unique, avoiding complete uniformity of design.

The Proposed Project is located on a large, unoccupied parcel of land in West Roxbury totaling approximately 7.75 acres of land (approximately 337,590 square feet). The land is currently occupied by brush and small trees on the unbuilt paper street portion of Willet Street and an unoccupied parcel extending to the west of Willett Street ("Project Site").

Because the proposed project exceeds 50,000 gross square feet of development, it is subject to the requirements of Large Project Review by the Boston Planning and Development Agency ("BPDA") pursuant of Article 80B of the Code.

A Letter of Intent ("LOI") to file a Project Notification Form was filed with the BPDA for the proposed development project on November 6, 2017.

Project Site

The site is bounded to the west by the West Roxbury Crushed Stone Quarry and The Roxbury Latin School owned parcels; to the south by Washington Street; to the east by Heron Street and to the north by Willet and Thrush Streets. The nearby neighborhood is mostly comprised of residential uses or undeveloped land owned by the West Roxbury Crushed Stone Quarry and The Roxbury Latin School. The residential uses nearby are a mix of single and two family homes as well as larger condominium and apartment buildings.

The approximate 337,590 square foot lot area is comprised of 11 individual and abutting parcels; City of Boston Parcel ID's are 2003312010, 2002968000, 2003313000, 2003312001, 2003314000, 2002937000, 2002938000, 2002939000, 2002940000, 2002940001, and 2002941000.

The proposed project site is located 1.4 miles from Centre St in West Roxbury, 2.1 miles from Roslindale Village, and 1.2 miles from the town of Dedham.

The site is within close proximity to MBTA Bus routes # 34, 34E and 40 to Forest Hills with service to Downtown Boston via the Orange Line.

The site is also a 1.4 mile walk to the Highland Station, a 1.4 mile walk to West Roxbury Station and a 1.9 mile walk to the Roslindale Village Station of the MBTA Commuter Rail.

The site is also easily accessible via vehicular transportation to Interstates 93, 95/Rt. 128 and Downtown Boston.

Area Context

The Proposal fits the need in both the City of Boston, as well as the West Roxbury neighborhood; for the type of high quality housing stock that both existing and future residents desire. The introduction of a new swath of single family housing will help alleviate the burden on the existing housing stock in this community and throughout the City. The high quality and thoroughness of design and construction methods will concurrently fit the character of the existing neighborhood while enhancing the aesthetics of the neighborhood as a whole.

A portion of the site was previously used as construction/storage yard for the Todesca Company; the community frequently bemoaned the existence of a construction yard that abutted a residential neighborhood. Additionally, the abutting West Roxbury Crushed Stone Quarry has created some neighborhood concerns of blasting rock and associated work that can at times be loud and disruptive to residential neighbors.

The Proponent submits that housing is the best use for the site as it does not bring the associated burdens of construction yards and quarry's. The Proponent further submits that single family housing, as opposed to a large multiple family housing complex, is the best fit for the Project Site. The Proponent maintains that the single family home layout with the associated road, as opposed to a large scale multi-unit housing complex, is a more appropriate scale and scope proposal and will behoove the existing community and the City of Boston

Section B- Background to Supplemental Information Report

On Monday, February 26, 2018, the PNF was formally received by the BPDA. This triggered a 30 day comment period lasting through Thursday March 29, 2018. The comment period was subsequently extended until Thursday, April 12, 2018. During this Article 80 review period, a Scoping Session with City and BPDA staff was conducted on Monday, March 19th at Boston City Hall. On Tuesday, March 20, 2018 an IAG and publicly advertised Public Meeting was held at the Roche Family Community Center at 1716 Centre St in West Roxbury. In addition to this process and pre-file meetings with BPDA staff, the proponent had conducted a robust community process with the West Roxbury community starting in the fall of 2017 before filing the project.

Throughout this public process, the proponent has taken feedback from the public, IAG and BPDA/City staff under very serious consideration. This Supplemental Filing Report reflects the changes made to the proposed project and the increased breadth that the project has expanded to. This Supplemental Filing Report also reflects answers to the questions, comments and concerns raised by BPDA staff, IAG members and community members. The proponent took all feedback into consideration and incorporated changes wherever possible and feasible. The proponent feels strongly that the project has improved as they have taken feedback into consideration and incorporated recommend changes whenever possible.

The proponent looks forward to continuing to engage and work with BPDA staff, the IAG and community as we move towards approval.

Section C- Response to BPDA feedback

1. Public Realm

As stated in the PNF, the proposed project contains approximately 66,764 square feet of deed restricted natural open space. The design is intended to blend the new homes into the existing neighborhood and create a tranquil, peaceful neighborhood that respects the current community layout. In addition to that deed restricted open space, each of the 29 homes is accompanied by front, rear and side yards; a feature very rarely seen in a BPDA large project. The proposed project is considered so unique because it allows new residents to enjoy open space via their own personal yards and the deed restricted open space. This unique offering of both public and private open space can be programmed in a multitude of ways and is considered the most appropriate use for the proposed project.

BPDA staff have recommended better access to both the open space and to public transit as a means of promoting healthy lifestyles; this feedback has been taken under consideration and incorporated into the revised plans. As can be seen in the attached plans, two pedestrian paths have been created to accommodate those requests. Each of these paths promote healthier living by encouraging exercise and the use of public transit.

On the south boundary of the project site, a path is being created to allow pedestrian access towards Washington St. The design of the pathway encourages pedestrians to traverse south of the site to Washington St. This will provide direct access to three major bus routes on Washington St to Forest Hills. This path can be seen in the revised plans, adjacent to Lot W; it will be a sidewalk extended towards the approved project at 4945 Washington St.

On the north boundary of the project site, a pedestrian path is being created to allow pedestrian access to the over 44,000 square feet of deed restricted open space there. This path can be seen in the revised plans, between Lots # 13 and 14. This will be a publicly open space allowing neighborhood dog walkers, pedestrians and hikers to traverse through. The path will be a 4 foot wide greenspace access easement that will also be mulched.

With regard to Complete Streets requirements, the proponent has and will continue to work with the PIC, BFD and BPDA staff as they progress. The proponent is pleased to say that all agencies have expressed a level of comfort with the current plan. The proposed sidewalks on Roads A & B will now be 6 feet wide (including curb) with sloped transition curbing at the driveway curb cuts. The travel way is 28 feet wide at the request of BFD. The layout is 40 feet wide. The proponent has preliminary approval from PIC and will submit road A & B Acceptance Plans (Line and Grade Plan for private ways) to Public Works.

The proposal originally called for 7 foot sidewalks with tree pits in the sidewalk; after consulting BPDA and PIC staff it was recommended that the trees be placed in the front yard of the homes. The plans now reflect front yard tree pits and associated trees with 6 foot sidewalks. At the proponent's last review with PIC a request was made that the proponent revise the curb cuts, removing the 'D-stones" and replacing them with sloped transition curbing. This allows for a complete 6 foot wide sidewalk with ramps on each side of the driveway; therefore the sloped transition curb at each driveway is being implemented. Based on BFD feedback for truck turning radius, parking will be restricted on one side of the street via "NO PARKING" signs.

2. Urban Design

The project team has taken BPDA staff under consideration with regard to altering garage door placements. The proponent has encountered some challenges around this request that are described below. The proponent will continue to explore the issue and work with BDPA staff on the matter as our ongoing design review progresses.

-The use of side loaded garages is not appropriate in this instance as the structures are generally only 20 feet apart. A minimum distance of 30-35 feet is generally needed for a car to back out of the garage with enough room to easily and safely not back into the opposing structure.

-The use of a common driveway would increase the amount of impervious area due to the expanse of pavement needed between the structures as opposed to front loaded garages that would not require the additional paved area between structures.

-Homeowners are reluctant to have shared driveways in the project teams' experience.

3. Transportation, Circulation and Traffic

See attached report from Howard Stein Hudson.

In response to BPDA and community feedback, the proponent has further engaged one of the most reputable transportation and engineering firms in Greater Boston, who specialize in Article 80 Large Project reviews such as this.

The Proponent asked Howard Stein Hudson to investigate the existing conditions of traffic in the neighborhood, the impacts this proposed project would have and how these impacts can be mitigated and minimized whenever possible.

As demonstrated in the attached report, Howard Stein Hudson concluded that the existing traffic data proves that:

There is minimal vehicular traffic traveling on the roadways adjacent to the site during the peak hours. Maplewood Street carries most traffic in the area, as it is used for motorists to travel between Washington Street and Centre Street. However, even Maplewood Street only has less than 2 vehicles per minute.

As demonstrated in the attached report, Howard Stein Hudson concluded that the proposed project impact analysis proves that:

The Project will have minimal impact on the surrounding transportation infrastructure. The Project is expected to generate the equivalent of one additional vehicle every three minutes. The surround transportation infrastructure has the capacity to accommodate the minimal amount of additional vehicle trips expected to be generated by the Project without the need for any additional improvements, however, pedestrian improvements could be implemented at some of the nearby intersections.

4. Environmental

Storm water treatment and runoff is something that the proponent takes extremely seriously. As we've learned through talking to neighbors and investigating the site, there are existing storm and runoff water problems in the neighborhood. As has been previously stated, the project will need the approval of the Boston Water & Sewer Commission and the Conservation Commission; the proponent looks forward to continuing to engage with staff at each of these agencies as they move towards approval from them. As part of these approvals, the proposed project will have to contain and treat all of its water onsite. This will therefore behoove the abutting neighborhood, including Carol Circle, which currently experience problems from runoff water originating at the project site.

As the design of the proposed project has progressed, new challenges with regard to water treatment and retention have surfaced. In response to this, a second drainage easement was added to the hammerhead section of the site. This second underground filtration site will further contain and treat the water from the proposed project.

Adding a second underground filtration site required a revision of the lot lines and home locations. As can be seen in the attached revised site plan; lots on Road B had to be swapped and interchanged to accommodate the drainage easement. There is no net gain or loss of units due to this revision; just a location change of units. The proponent is still able to achieve major goal of the design through this revisions; that is achieving at least 6,000 SF for each lot, which is the standard that most West Roxbury zoning calls for.

Please see below for additional notes on water treatment:

- The project employs Best Management Practices (BMPS) identified in the Massachusetts Stormwater Regulations which are designed to retain and infiltrate runoff on the site.
- The infiltration/detention systems in this project have been designed to store and infiltrate more than the 1" of runoff over the impervious areas (streets, sidewalks, driveways and roofs) entering the system required by the City of Boston.
- All runoff from roof surfaces is collected and discharged directly to subsurface infiltration/detention basins to avoid the acquisition of pollutants by overland flow through lawn and paved surfaces.

- All runoff from other impervious surfaces is also routed through subsurface infiltration/detention basins.
- The rate of runoff leaving the site has been reduced for all storm events.
- A treatment train is provided that consists of deep sump hooded catch basins directed through proprietary storm water treatment units to achieve a 44% reduction in Total Suspended Solids (TSS) prior to discharge to the subsurface infiltration/detention basins is provided. This treatment train results in a total TSS removal rate of between 95 and 100%
- Phosphorus reduction is achieved through the project design consistent with the TMDL for the Lower Charles River Basin.
- System has preliminary approval from BWSC. Concurrent filing will be made with the Conservation Commission and BWSC for final approval.

With regard to Wind, Air Quality and Noise; no adverse impacts to the neighborhood are anticipated. As stated in the PNF, the height of the proposed homes will be approximately 35 feet. There is anticipated to be no noticeable change in existing wind, air quality and noise conditions once construction is completed.

With regards to Article 37 requirements, the proponent has engaged Price Sustainability Associates who has filed the attached report. Please see Section F of this document.

Section D- Response to IAG and Public Feedback

1. Vehicular Access

As previously stated, the design of this proposal was completed after meticulous planning and due diligence. The proposal was always intended to be an extension of the "Bird Streets". The Bird Streets are commonly known as the neighborhood that includes Eagle St, Thrush St, Willet St and Heron St. It was never intended to be a Washington St proposal. However, after reading the comment letters and considering the feedback heard at the Public Meeting held on March 20; the development team decided to investigate the matter of opening up vehicular access to Washington St. The request heard from certain community members was to allow vehicular access to the site at Washington St; a means of ingress and egress that connected the project site to Washington St.

The development team investigated the matter by consulting City records and staff. City staff from the BPDA and the PIC confirmed that although a paper street exists on City records for Willet St to connect to Washington St, the development team has no control over that portion of Willet Street. The paper street/unimproved segment of Willet St that exists only on old plans is actually a Private Way; therefore, the abutting property owners own the land that runs half way to the middle of the street and therefore control the use of it. Therefore, it was determined that since the proponent has no control over this, the proposed project cannot have vehicular access to Washington St via this route. The proponent also investigated vehicular exits to the West of the project site but found no access point to a public street from the project site.

Although the proponent has no control over a street extension to Washington St, they understand that the neighborhood has concerns over vehicular transportation problems occurring. Street congestion as well as speeding cars account for a majority of the vehicular access concerns stated by concerned members of the neighborhood. As such, the development team retained a traffic engineer from Howard Stein and Hudson to conduct traffic counts and create a report on the current issues. The team will then take the report into account to strategize on solutions to any current and possible future traffic and speed issues. Collaborations on traffic solutions will include working with the BPDA and the Boston Transportation Department to create sustainable solutions.

2. Drainage/Sewage

Several public comments stated concerns that pertain to the drainage and sewage of the new extension during and after construction of the proposed project. As explained in Section C, 4 of this document, the site has been designed to contain any runoff on site rather than affect the neighboring houses. All necessary means will be enacted to minimize any runoff that occurs during the construction duration as well. The project will connect to the Boston Water and Sewer System. Much of the existing water issues in the neighborhood are caused by the previous land owner who dumped material and didn't properly treat their water. There will be

no adverse effects on abutting properties after completion of the project; in fact, the proponent is confident that the new drainage and infiltration system will behoove the abutting properties by helping their current water problems.

3. Noise, Dust and Construction Impacts

Some of the public comments received pertain to the noise and dust pollution expected once construction begins. Again, this is something the proponent takes very seriously and has a proven track record of mitigating construction impacts through their experience in building many homes in this immediate neighborhood. In an effort to alleviate this concern of noise and dust pollution, the proponent plans to store and stage construction equipment on site to minimize the amount of trucks that need to travel through the neighborhood. The staging of equipment on site will greatly reduce the amount of dust filtered into the air. Along with reducing dust pollution that occurs in the area, it will also minimize traffic congestion. As stated in the Public Meeting, the proponent has committed to hiring a street sweeper to clean the dust from the streets. A goal of the construction team is to keep the area as clean as possible and minimize and mitigate these construction impact whenever possible.

4. Rodent Mitigation

The project team received a concern regarding the possibility of a rodent problem once construction begins. The proponent takes this issue very seriously and has a proven track record of treating any rodent issues that may occur during construction. The development team will exercise any needed remedies (baiting, trapping, etc) to control any problem with wildlife in the construction area and the surrounding neighborhood. Any problem pertaining to rodents will be taken care of by conforming to City standards and the proponent will continue to have an open dialogue with abutters if any issue de arise during construction.

5. Zoning Compliance

This project is currently in the midst of the Article 80 process, and as was previously stated, conducted a robust public process before Article 80 commenced. Again, the project is anticipated to seek zoning relief through the Boston Zoning Board of Appeals (ZBA). The proponent will engage in any public process required by the City in association with that zoning relief sought.

6. Affordable Housing

As previously stated in the PNF, the proposed project is subject to the Mayor's Executive Order on Affordable Housing; otherwise known as IDP (Inclusionary Development Policy). The proponent is pleased to announce that the project will conform with the IDP policy, and looks forward to continuing to engage with BPDA staff on the specifics of that IDP conformation.

7. Senior Housing

One public comment requests the proposal be strictly senior housing. The project does not have age restrictions on prospective residents. It is market rate single family homes with an IDP requirement.

8. Density

A few public comments sighted that the project had too many units. The Proponent maintains that the single family home layout with the associated road, as opposed to a large scale multi-unit housing complex, is a more appropriate scale and scope proposal and will behoove the existing community and the City of Boston. When considering the large scale of the project site (7.75 acres) and that multifamily housing is an allowed use on the majority of the site; a much denser proposal could be envisioned but instead the proponent has chosen a project design that fits with the character of the existing neighborhood.

Furthermore, by using the 6,000 SF lot requirement as a standard, which the majority of West Roxbury zoning calls for, the project site could have been further subdivided to create lots of this size. However the proponent chose not to because the current design and layout is the appropriate size and scope for the proposal.

Section E - Transportation Report



TO:	Anthony Di Letizia Chris Tracy	DATE:	May 8, 2018
FROM:	Brian Beisel, PTOE Michael Littman, P.E.	HSR PROJECT NO.:	2017107.01
SUBJECT:	Willet Street Development		

Howard Stein Hudson (HSH) has conducted an evaluation of the transportation impacts of the proposed development to be located along Willet Street (the “Project” and/or “Site”), in Boston’s West Roxbury neighborhood. The study includes an evaluation of existing conditions and future impacts of the proposed Project.

Project Description

The Site is bounded by the West Roxbury Crushed Stone Quarry to the south, Roxbury Latin School Woods Park to the west, Washington Street to the east, and Willet Street to the north. The Site is currently undeveloped and will include the construction of approximately 29 single family lots. Each of the single family homes will include dedicated off-street parking. Vehicular access/egress to the Site will be provided via Willet Street.

Existing Transportation Conditions

Existing Roadway Conditions

Sidewalks in the Project area are typically provided on both sides of the roadway and are in good condition. Several sidewalks include a green buffer between the sidewalk and the roadway. ADA ramps are provided at most approaches to the study area intersections. However, there is not any on-street bicycle infrastructure provided along the study area roadways.

Existing Traffic Data

Traffic movement data was collected at three intersections in the area of the Site on Thursday April 26, 2018. The study area includes the following intersections:

- Maplewood Street/Searle Street (unsignalized);
- Maplewood Street/Eagle Road (unsignalized);
- Maplewood Street/Saint Theresa Avenue/Sparrow Street (unsignalized); and
- Grouse Street/Thrush Street/Herton Street (unsignalized).

Turning Movement Counts (TMCs) were conducted during the weekday a.m. and p.m. peak periods (7:00-9:00 a.m. and 4:00-6:00 p.m., respectively) for the study area intersections. The TMCs include car, truck, pedestrian, and bicycle counts. Based on the TMCs, the peak hours of vehicular traffic throughout the study area are approximately 7:45-8:45 a.m. and 5:00-6:00 p.m. The Existing (2018) Condition traffic volumes for the weekday a.m. and p.m. peak hours are presented in **Figure 1**.

As shown in **Figure 1**, there is very minimal vehicular traffic traveling on the roadways adjacent to the site during the peak hours. Maplewood Street carries the most traffic in the area, as it is used to for motorists to travel between Washington Street and Centre Street. However, even Maplewood Street only has less than 2 vehicles per minute.

Existing Public Transportation

The Project site is situated to take advantage of several public transportation options. The MBTA operates three bus lines (routes 34, 34E, and 40) that travel along Washington Street with access to Dedham, Roslindale Village, and Forest Hills Station in Jamaica Plain. The closest inbound bus stop is located at Washington Street opposite Heron Street and the closest outbound bus stop is located at Washington Street at Heron Street.

Project Impact

Site Access and Circulation

As previously mentioned, vehicular access/egress to the Site will be provided via a Willet Street. The Project is proposing to construct an extension of Willet Street as well as two new roadways extending to the south to accommodate the new homes. Each home will have a driveway to accommodate parking on-site.

Trip Generation

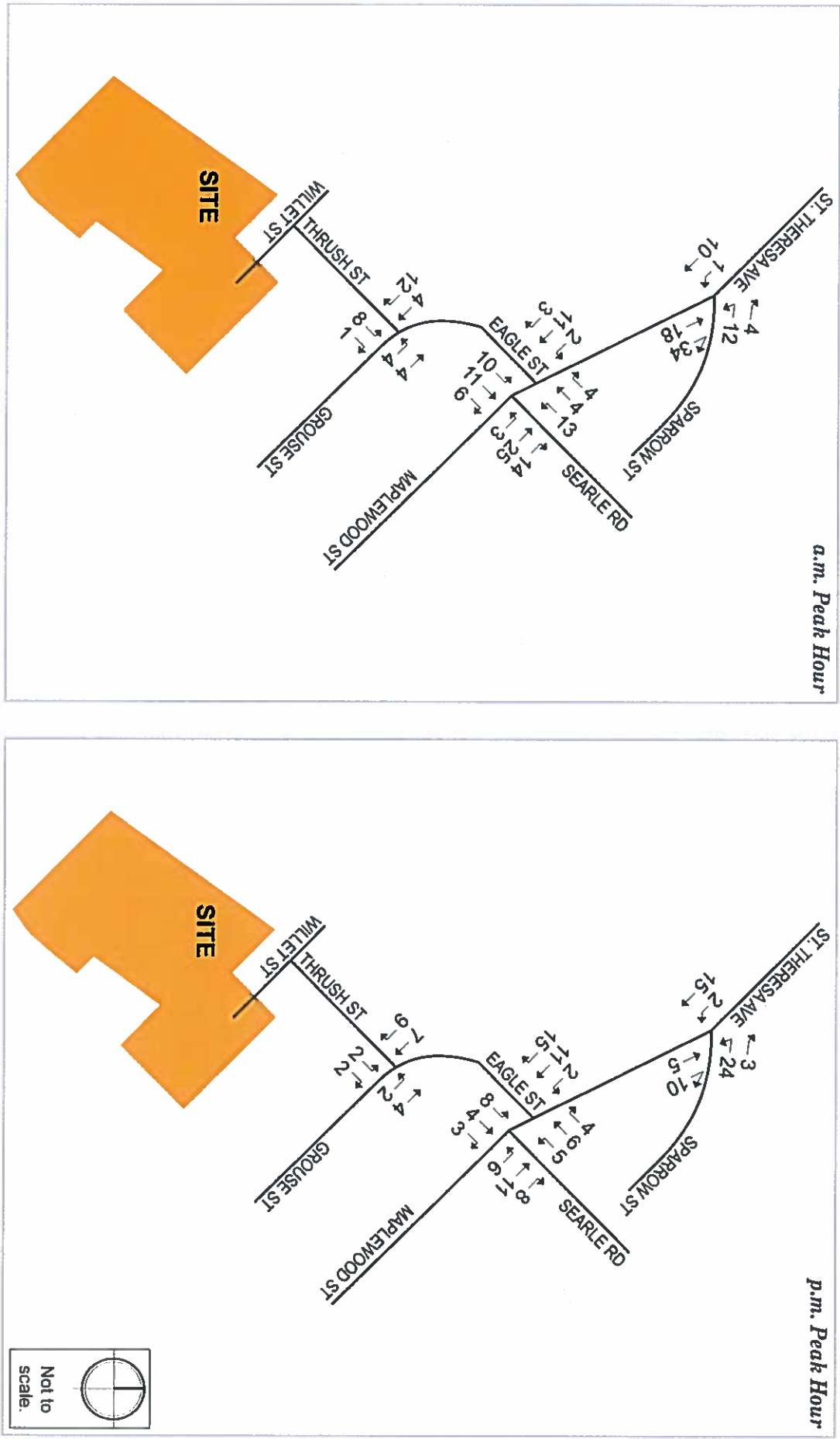
Trip generation is a complex, multi-step process that produces an estimate of vehicle trips, transit trips, walk trips, and bicycle trips associated with a proposed project and a specific land use program. A project's location and proximity to different modes determines how people will travel to and from that project site.

To estimate the number of trips expected to be generated by the Project, data published by the Institute of Transportation Engineers (ITE) in the Trip Generation Manual¹ was used. ITE provides

¹*Trip Generation Manual*, 10th Edition; Institute of Transportation Engineers, Washington, D.C.; 2017.



Figure 1. Existing Condition Traffic Volumes, Weekday a.m. and p.m. Peak Hours



data to estimate the total number of unadjusted vehicular trips associated with the Project. Trip generation estimates for the Project were derived using the Land Use Code (LUC) 210 – Single Family Detached Housing. In an urban setting served by transit, adjustments are necessary to account for other travel mode shares such as walking, bicycling, and transit.

MODE SHARE

The mode share was developed using the 2011-2015 American Community Survey (ACS). The ACS is the Census Bureau's Population Estimates Program that produces population, demographic and housing unit estimates. The Project site is located in Census Tract 1304.04, Suffolk County, Massachusetts. Table S08301: *Means of Transportation* was used to estimate the Mode Share for proposed Project. The travel mode share used is shown in Table 1.

Table 1. Mode Share

Travel Mode	Mode Share ¹
Auto	80%
Transit	17%
Walk/Bike	3%

¹ 2011-2015 American Community Survey (ACS), Census Tract 1304.04.

PROJECT TRIP GENERATION

The trip generation process described above yields the trips associated with the Project adjusted by mode split. The Project-generated trips by mode are summarized in Table 2, with detailed trip generation information provided as an Attachment.

Table 2. Project Trip Generation

Time Period	Direction	Vehicular Trips	Transit Trips	Walk/Bicycle Trips
a.m. Peak Hour	In	4	1	0
	Out	12	3	1
	Total	16	4	1
p.m. Peak Hour	In	14	3	1
	Out	9	2	0
	Total	23	5	1

¹ LUC 210 (Single Family Detached Housing), 29 Houses, Average Rate.

As shown in Table 2, the Project is expected to generate approximately 5 new transit trips and 1 new walk/bicycle trips during the peak hours. The Project is also expected to generate

approximately 16 vehicle trips (4 entering and 12 exiting) during the weekday a.m. peak hour and 23 vehicle trips (14 entering and 9 exiting) during the weekday p.m. peak hour. This corresponds to an increase of approximately one new vehicle every 4 minutes during the weekday a.m. peak hour and one new vehicle every 3 minutes during the weekday p.m. peak hour. The peak hour traffic volumes associated with the Project are shown in **Figure 2**.

Build Traffic Volumes

The existing traffic volumes shown in **Figure 1** were added with the project related traffic volumes shown in **Figure 2** to determine the Build traffic volumes. The Build traffic volumes are shown in **Figure 3**.

Mitigation

Since the proposed Project is expected to create a very minor increase in vehicle traffic onto roadways with low existing traffic volumes, Howard Stein Hudson inventoried the existing pedestrian facilities within the area to determine if there were any improvements that could be made to increase pedestrian safety. Sidewalks exist along both sides of the roadways in the area. The sidewalks at the majority of the intersections include recently constructed ADA ramps with tactile warning strips. However, crosswalks are not present connecting the ADA ramps. Crosswalks could be installed on the north side of Maplewood Street across Searle Road, the south side of Maplewood Street across Eagle Street, the north side of Maplewood Street across Sparrow Street, and the south side of Heron Street across Thrush Street.

Conclusion

Based on the evaluation presented in this memorandum, the Project will have minimal impact on the surrounding transportation infrastructure. The Project is expected to generate the equivalent of one additional vehicle every three minutes. The surrounding transportation infrastructure has the capacity to accommodate the minimal amount of additional vehicle trips expected to be generated by the Project without the need for any additional improvements, however, pedestrian improvements could be implemented at some of the nearby intersections.



Figure 2. Project-generated (2025) Vehicle Trips, Weekday a.m. and p.m. Peak Hours

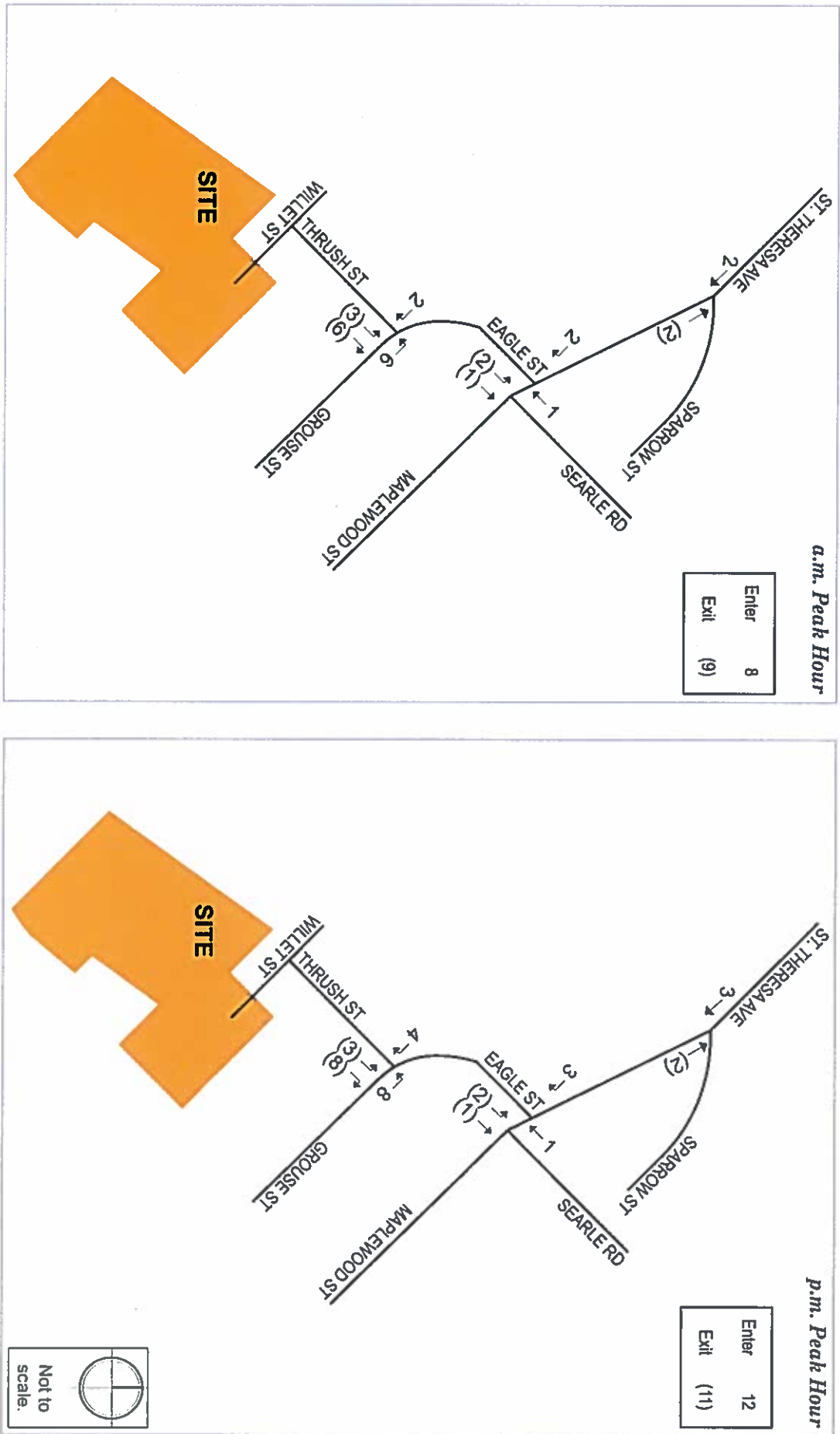
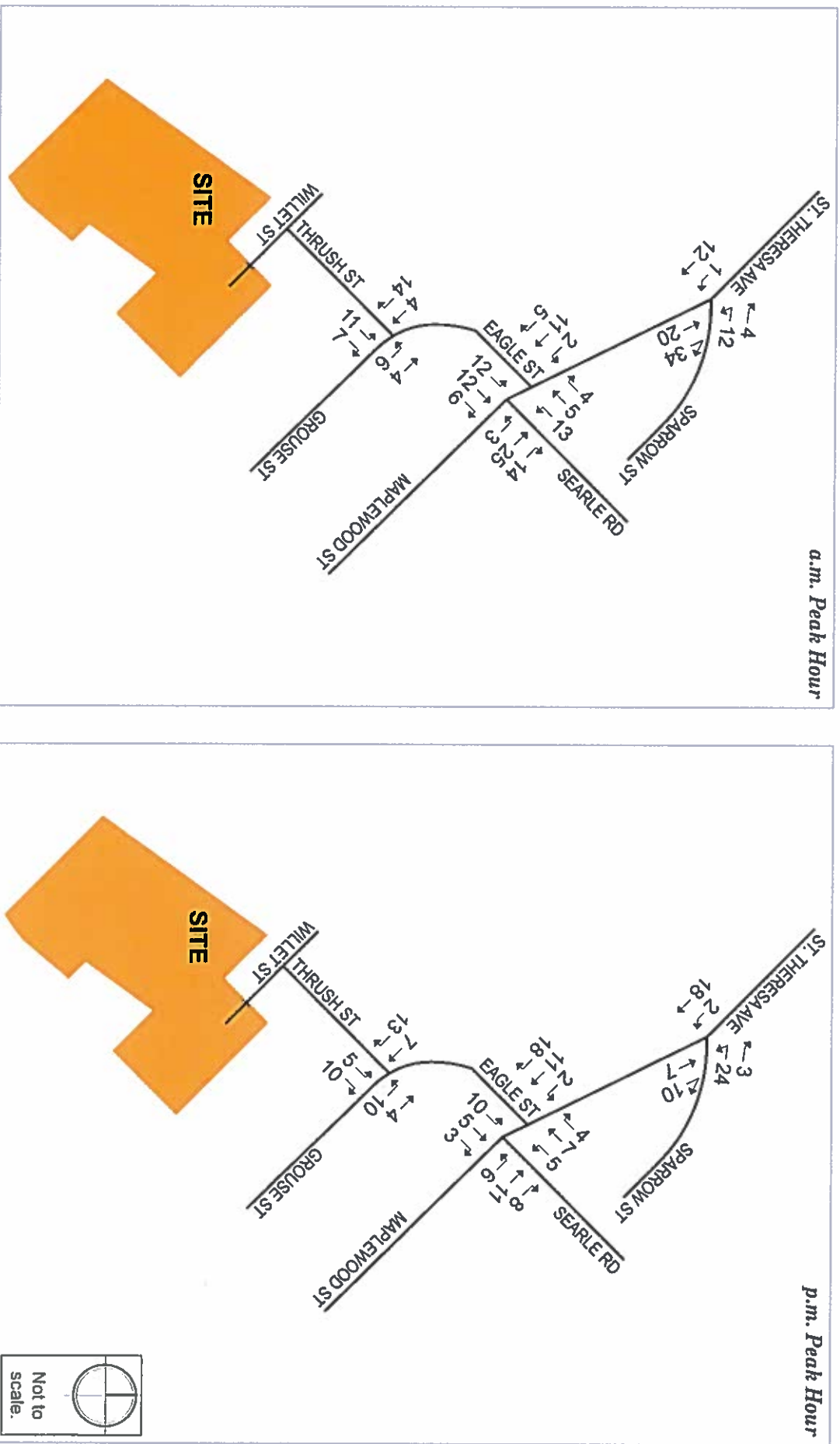




Figure 3. Build Condition Traffic Volumes, Weekday a.m. and p.m. Peak Hours



Section F - Article 37 Report



LEED v4 for Building Design and Construction: Homes and Multifamily Lowrise

Project Checklist

Project Name: Willow St Extension
Date: 5/22/2018

1 2 N
Credit Integrative Process

2

9	0	0	0	Location and Transportation	15
Y				Floodplain Avoidance	Required
			X	LEED for Neighborhood Development Location	15

PERFORMANCE PATH					
				Site Selection	8
			X	Compact Development	3
			X	Community Resources	2
			X	Access to Transit	2

Sustainable Sites					
				Construction Activity Pollution Prevention	7
				No Invasive Plants	Required
			X	Heat Island Reduction	Required
			X	Rainwater Management	2
			X	Non-Toxic Pest Control	2

Water Efficiency					
				Water Metering	12
				Total Water Use	12
				Indoor Water Use	6
				Outdoor Water Use	4

Energy and Atmosphere					
				Minimum Energy Performance	38
				Energy Metering	Required
				Education of the Homeowner, Tenant or Building Manager	Required

PERFORMANCE PATH					
				Annual Energy Use	29

BOTH PATHS					
				Efficient Hot Water Distribution System	5
			X	Advanced Utility Tracking	2
			X	Active Solar Ready Design	1
			X	HVAC Start-Up Credentialing	1

PRESCRIPTIVE PATH					
				Home Size	Required
				Building Orientation for Passive Solar	3
				Air Infiltration	2
				Envelope Insulation	2
				Windows	3
				Space Heating & Cooling Equipment	4

EA PRESCRIPTIVE PATH (continued)					
				Heating & Cooling Distribution Systems	3
				Efficient Domestic Hot Water Equipment	3
				Lighting	2
				High Efficiency Appliances	2
				Renewable Energy	4

Materials and Resources					
				Certified Tropical Wood	Required
				Durability Management	Required
				Durability Management Verification	1
			X	Environmentally Preferable Products	4
			X	Construction Waste Management	3
			X	Material Efficient Framing	2

Indoor Environmental Quality					
				Ventilation	16
				Combustion Venting	Required
				Garage Pollutant Protection	Required
				Radon-Resistant Construction	Required
				Air Filtration	Required
				Environmental Tobacco Smoke	Required
				Compartmentalization	Required
				Enhanced Ventilation	3
				Contaminant Control	2
				Balancing of Heating and Cooling Distribution Systems	3
				Enhanced Compartmentalization	1
				Enhanced Combustion Venting	2
				Enhanced Garage Pollutant Protection	2
				Low Emitting Products	3

Innovation					
				Preliminary Rating	6
				Innovation	Required
				LEED AP Homes	5

Regional Priority					
				Regional Priority: Specific Credit	4
				Regional Priority: Specific Credit	1
				Regional Priority: Specific Credit	1
				Regional Priority: Specific Credit	1

TOTALS					
				50	3

				110	0
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Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

Possible Points: 110

Price Sustainability a s s o c i a t e s

To: Kathleen Pedersen, BPDA
John Dalzell, BPDA

From: Mark Price, PSA

CC: Anthony DiLetizia, CAD Builders
Gary Martell, Christopher Tracy

Date: 5/22/2018

Re: Article 37, Willet Street Extension LEED BD+C: Homes Compliance

Introduction

Willet Street Housing will be designed and built using construction industry best-practices for sustainability described within, and measure by, the LEED BD+C: Homes rating system. An Integrated Project Team including CAD Builders and their construction team has been assembled to leverage the professional expertise of each specialty trade and seek every opportunity to employ Green Building techniques and practices. The projects' Preliminary Rating demonstrates certifiability under the LEED system. Certification for this project is being discussed and pursuing full certification is viable.

LEED BD+C: Homes Checklist Items

IP - Integrative Process

Preliminary Rating

The project team met on May 10, 2018 to conduct the Preliminary Rating with the Green Rater (PSA) and Integrated Project Team in attendance. The Preliminary Checklist was completed with the target of 'LEED Certified' level achieved.

Option 1: Trades Training, 1 point

A in-field training for the Subcontractor Supervisors for the Framing, Insulation & Air-sealing, HVAC, and Plumbing trades will take place, on site, during the earliest stages of construction, and, as appropriate, thereafter.

LT - Location and Transportation

LT Prerequisite Floodplain Avoidance

LEED floodplain criteria are met, this project is not located in a flood hazard area.

LT Credit Site Selection, 6 points

Option 2. Infill Development, 2 points

The site is 75% bordered by previously developed land within ½ mile.



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Option 3. Open Space, 1 point

The project will be built within ½ mile of Roxbury Latin School Woods Park, Bellevue Hill Park, and Turtle Pond.

Option 4. Street Network, 1 point

There are greater than 90 qualifying intersections in the surrounding area within ½ mile.

Option 6. Existing Infrastructure, 1 point

The center of the lot is within ½ mile of existing water and sewer infrastructure.

Option 7. Sidewalks, 1 point

Sidewalks, parallel to the roads, will be installed across the entire lot.

LT Credit Community Resources, 1 point

The location is somewhat dense with at least 4 qualifying amenities within a ½ mile.

LT Credit Access to Transit, 1-2 points

Public Transportation via bus lines 34, 34E, 40, & 50 is readily available along Washington St.

SS - Credit Sustainable Sites

SS Prerequisite Construction Activity Pollution Protection

All measures will be met and the project team has created a conforming Erosion and Sedimentation Control Plan.

SS Prerequisite No Invasive Plants

No invasive plant species will be introduced through designed landscaping.

SS Credit Nontoxic Pest Control, 2 points

Several pest control strategies will be employed including: landscape spaced 1.5 ft. from the buildings, non-cellulosic material for structural elements, and building gaps will be sealed with appropriate caulking and insect resistant screens, and landscape features will be spaced 6 inches away from cellulosic structures for inspection.

WE - Water Efficiency

WE Prerequisite Water Metering

Water meters will be installed for each home.

WE Credit Indoor Water Use, 5 points

All water fixtures (showers, lav faucets, and toilets) will be WaterSense labeled, and high-limit thresholds will be met. Clothes Washers, where provided, will be ENERGY STAR labeled.

WE Credit Outdoor Water Use, 1-2 points

Native and adaptive plantings will primarily be used in landscaping.

EA - Energy and Atmosphere

EA Prerequisite Minimum Energy Performance

All homes will achieve a HERS 55, or lower. ENERGY STAR v3.1 checklists will be followed, qualified appliances will be installed, and duct runs will be fully ducted.

EA Prerequisite Energy Metering

Both electric and gas meters will be included for each home.

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EA Prerequisite Education of Homeowner

An Operations & Maintenance Binder will be provided to each Homeowner and a one hour educational walk-through will be provided.

EA Credit Annual Energy Use, 23 points

Preliminary modeling shows HERS Indices between 51 and 55 for example plans which equates to 23 points in the rating system.

MR - Material and Resources

MR Prerequisite Durability Management

All LEED requirements will be met for Building Durability Measures including the ENERGY STAR for Homes, v3, Water Management System Builder Checklist and interior moisture control measures.

MR Credit Durability Management Verification, 1 point

Each measure will be 3rd party verified by the verification team (PSA). Building overhangs will be part of design, and cold water lines will not run through unconditioned spaces.

MR Credit Material-Efficient Framing, 1 point

The team will employ LEED & ENERGY STAR measures to reduce framing waste and improve thermal performance.

EQ - Indoor Environmental Quality

EQ Prerequisite Ventilation

- Bath ventilation fan and range hood systems will meet the provisions of ASHRAE 62.2-2010, sections 5 and 7
- Bath exhaust systems exhaust directly to outdoors and be ENERGY STAR labeled

EQ Prerequisite Combustion Venting

No unvented combustion appliances will be installed and CO monitors will be installed per LEED and MA code.

EQ Prerequisite Garage Pollutant Protection

No unit HVAC equipment will be installed in the garage, shared garage surfaces and penetrations are to be sealed, doors weather-stripped, and CO detectors in adjacent rooms.

EQ Prerequisite Air Filtering

MERV 8 filters will be used.

EQ Prerequisite Compartmentalization

Careful air-sealing measures will be implemented and homes tested to comply with low LEED infiltration standards.

EQ Credit Enhanced Ventilation, 1 point

Whole-house ventilation will be provided via Panasonic bath fans operated by electronic controllers which will comply with ASHRAE 62.2 (no more than 10% over)

EQ Credit Contaminant Control, .5 point

A Preoccupancy Flush will be conducted prior to turnover by opening windows and running ventilation fans for 48 hours.

EQ Credit Balancing of Heating and Cooling Distribution Systems, 1 point

Homes will have at least 2 zones with independent thermostatic control.

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Section G - Revised Site and Landscape Plans

