ECKINGTON YARDS

1611-1625 ECKINGTON PLACE + 1500 HARRY THOMAS WAY, NE WASHINGTON DC 20002 PUD | CONSOLIDATED SUBMISSION

July 5, 2016



"ECKINGTON YARDS WEST" 1611-1625 ECKINGTON PLACE, NE SQUARE: 3576 LOT: 0805 (2001-2008)

"ECKINGTON YARDS EAST" 1500 HARRY THOMAS WAY, NE SQUARE: 3576 LOTS: 0814

OWNER/APPLICANT:

JBG/Boundary 1500 Harry Thomas Way, LLC JBG/Boundary Eckington Place, LLC Joint Ventures between

The Boundary Companies The JBG Companies

LAND USE COUNSEL: Goulston & Storrs PC

ARCHITECT:

Eric Colbert & Associates

LANDSCAPE ARCHITECT: LandDesign

CIVIL ENGINEER: Bowman Consulting

TRAFFIC CONSULTANT: Gorove/Slade Associates

LEED CONSULTANT: Sustainable Design Consulting

ZONING COMMISSION

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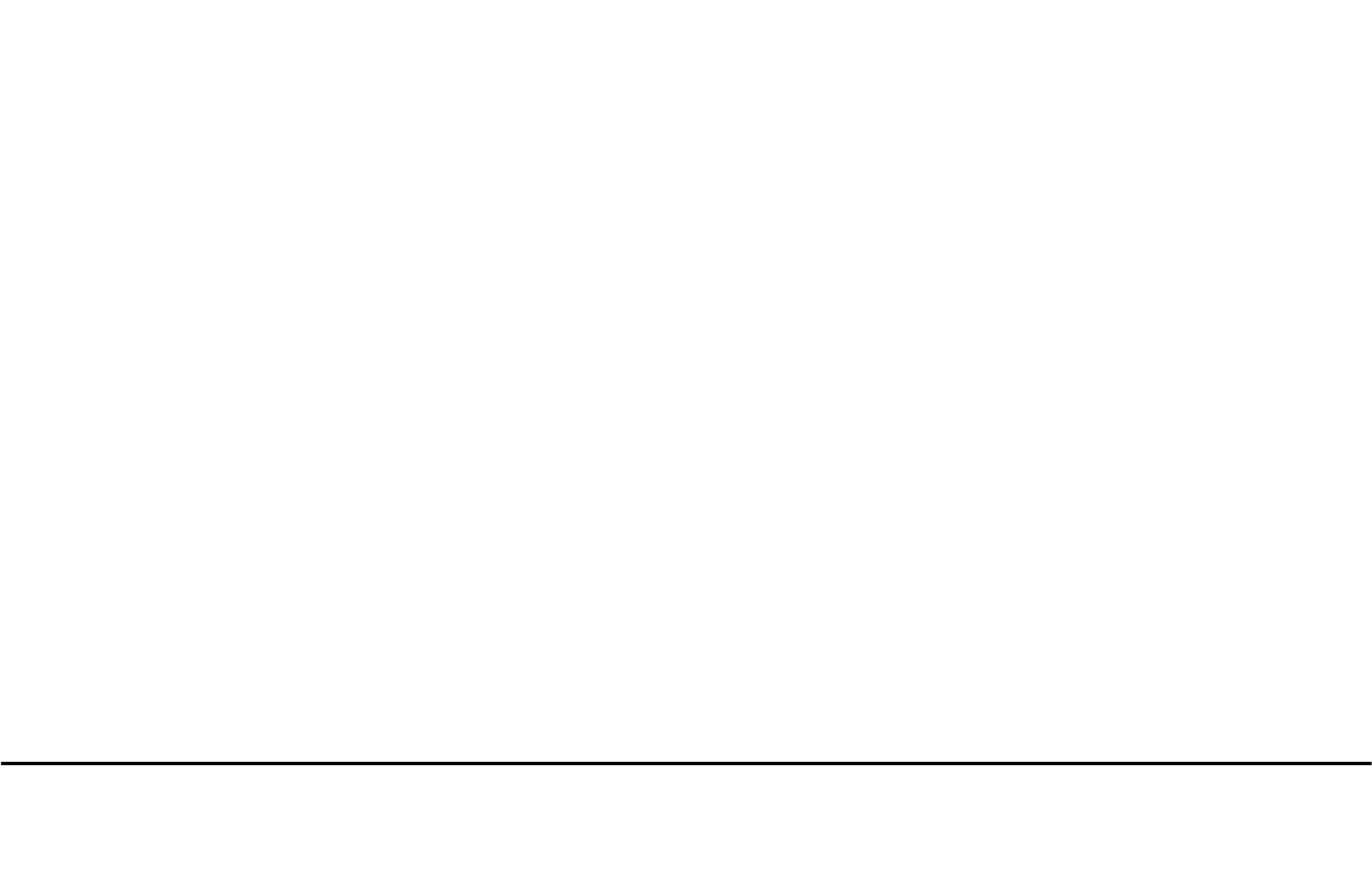
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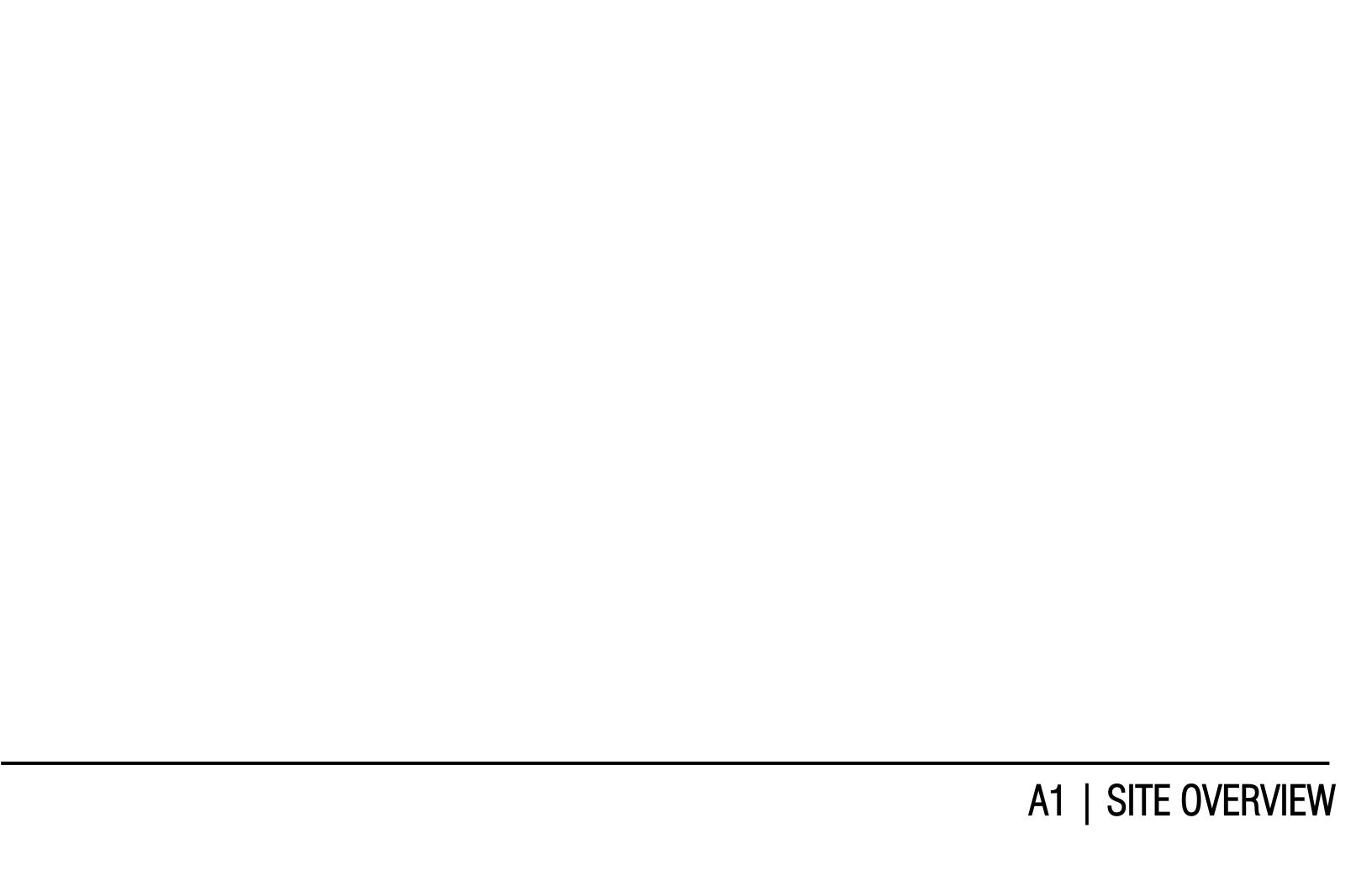
Consolidated PUD Checklist (2406.11-2406.12)

SQUARE: 3576	LOTS: 0805 (2001-2008), 0814	
SECTION	ITEM	SHEET NUMBER
2406.11a	COMPLETED APPLICATION FORM	IN WRITTEN APPLICATION
2406.11b	ZONING PLAN: A map showing the location of the proposed project, the existing zoning for the subject site, the zoning of adjacent properties, and any proposed change of zoning.	A1.02
2406.11 c	STATEMENT OF PURPOSE: A statement of the purposes and objectives of the project, including the proposed form of development and a detailed statement elucidating how the application meets the PUD evaluation standards in section 2403.	IN WRITTEN APPLICATION
2406.11D	SITE PLAN: A general site, landscape, and development plan indicating the proposed use, location, dimensions, number of stories, and height of each building, and the exact area of the total site.	L1.01 / C1.05-06 / A4.01-02, A4.20
2406.11e	DEVELOPMENT DATA: (1) The area and dimensions of each lot proposed for each building and the exact area of the total site;	C1.01-02 / A1.02
	(2) The percentage of lot occupancy of each building on each lot and the total percentage of lot occupancy for all buildings on the entire site;	A1.02
	(3) The gross floor area and floor area ratio for each building on each lot, including a break-down for each use, and the total gross floor area and floor area ratio for all buildings on the entire site, including a breakdown for each use;	A1.02
	(4) A circulation plan, including the location of all vehicular and pedestrian access ways and the location and number of all off-street parking spaces and loading berths, including an indication of which spaces are designated for which use;	A1.07-08
	(5) The existing topography of the development area; the location of all major natural features, including trees of six-inch (6 in.) caliper or greater; and the location and elevations of public or private streets, alley, or easements bounding or traversing the site, including an indication of which of the rights-of-way or easements are to be continued, relocated, or abandoned;	C1.01-02, C1.05-06
	(6) Estimated quantities of potable water required by the project, and of sanitary sewage and storm water to be generated including the methods of calculating those quantities;	C1.09-10
	(7) Any other information needed to understand the unique character and problems of developing the PUD.	A1.03-A1.04

2406.12a	COMPLETED APPLICATION FORM	IN WRITTEN APPLICATION
2406.12b	A detailed statement as to the uses to be located in the project, including the location, number, size, and types of stores, offices, residential, institutional, industrial, and other uses;	IN WRITTEN APPLICATION
2406.12c	SITE PLAN: A detailed site plan, showing the location and external dimensions of all buildings and structures, utilities and other easements, walkways, driveways, plazas, arcades, and any other open spaces;	C1.05-06 / A4.01-02, A4.20
2406.12d	LANDSCAPE & GRADING PLAN: A detailed landscaping and grading plan, showing all existing contour lines, including graphic illustration of grades exceeding fifteen percent (15%) in five percent (5%) increments, landscaping to be retained, grades, planting, and landscaping. The plan shall also show the proposed drainage for the site, including the location of buildings, roads, sidewalks, water and sewer lines, inlets, and basins, and connections to public water and sewer lines. Proposed erosion control measures shall also be shown;	L1.01-02 / C1.07-08
2406.12e	FLOOR PLANS: Typical floor plans and architectural elevations for each building, sections for each building and the project as a whole, and sections and elevations of the entire square within which the project is located;	A3 & A4
2406.12f	CIRCULATION PLAN: A final detailed circulation plan showing all driveways and walkways, including widths, grades, and curb cuts, as well as detailed parking and loading plans;	A1.07-08
2406.12g	OTHER INFORMATION: Any other information needed to understand the final design of the proposal, or information specifically requested by the Commission;	LEED A1.13-14
2406.12h	A statement showing how the second-stage plans are in accordance with the intent and purposes of this title, the PUD process, and the first-stage approval.	IN WRITTEN APPLICATION; FIRST STAGE ACCORDANCE NOT RELEVANT AS THIS IS A CONSOLIDATED PUD APPLICATION

CONSOLIDATED PUD CHECKLIST





ZONING RELIEF REQUIRED

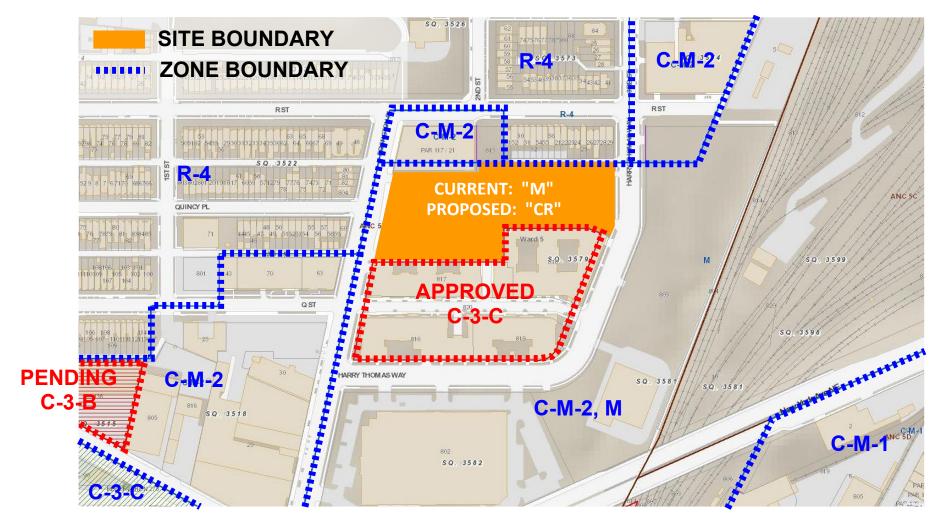
	Zoning Restriction	Proposed
Penthouse, Number of DCMR 11, 411.3	One permitted per structure and per each elevator override or stairwell	Multiple penthouses proposed on NE Bldg.
Penthouse Heights DCMR 11, 411.5	Three heights permitted (for habitable space, enclosed mechanical space, and screen wall for unenclosed equipment)	Proposed Penthouse heights are as follows: 20'-0" for habitable space, 17'-6" for elevator penthouses, 12'-0" for habitable space enclosures, and 8'-0" for screens/fences.
Manufacturing and Processing Special Exception DCMR 11, 610	Special exception required for use in CR.	Use proposed for building.
Minimum Closed Court DCMR 11, 638.2(a)	Minimum width = 4" per foot of height and 15' minimum. 75' high court requires 25'-0" width. Minimum area = Twice the square of the required width. 2*(25' x 25') = 2*625 s.f. = 1,250 s.f minimum area	Proposed closed courts are as follows: (2) @ SW Bldg/B-1 = 6'-0" by 24'-6" (147 s.f.) (3) @ SW Bldg/B-1 = 12'-10" by 64'-9" (832 s.f.) (1) @ NW Bldg/3RD FL = 6'-0" by 19'-9" (119 s.f.) (1) @ NW Bldg/3RD FL = 17'-0" by 246'-2" (4,184 s.f.)
Minimum Loading DCMR 11, Chapter 22	 Assuming a retail use of (at most) between 30,000 GSF and 77,200 GSF, one 30' loading berth, one 55' loading berth, one 20' loading space, one 100 SF loading platform, and one 200 SF loading platform. Assuming a manufacturing use of (at most) more than 25,000 GSF, one 30' loading berth, one 55' loading berth, one 100 SF loading platform, and one 200 SF loading platform. Residential = one 55' loading berth, one 20' loading space, and one 100 SF loading platform. TOTAL REQUIRED: (3) @ 55', (2) @ 30', (2) @ 20', (3) @ 100 SF, (2) @ 200 SF 	The following will be provided on Project lot: 30' loading berths: 1 20' loading spaces: 2 100 SF loading platforms: 1 200 SF loading platforms: 2 The following will be provided on The Gale lot in the shared facilties: 55' loading berths: 2 30' loading berths: 1 20' loading spaces: 1 200 SF loading platforms: 1 TOTAL PROVIDED: (2) @ 30', (3) @ 20', (1) @ 100 SF, (3) @ 200 SF Significant loading area also provided in promenade.
Parking, Compact	40% maximum compact spaces	151 compact spaces / 331 total = 45.6%

COMPLIES W/ ZONING

	Zoning Restriction	Proposed
Maximum Building Height DCMR 11, 2405.1	110'	102'
Maximum FAR DCMR 11, 2405.2	8.0	5.2
Maximum Lot Occupancy DCMR 11, 2405.4 & 634.1	75% + 5% IZ = 80%	80.0%
Bicycle parking DCMR 11, 2119.1	One bicycle space/3 dwelling units (695÷3 = 232). 5% retail vehicle parking required (5% x 99 spaces = 5 required). Total requirement = 237	237 provided, plus additional as required for LEED FTE requirements. Temporary bike spaces will be provided on the exterior of the project in public space, as approved by DDOT.
Penthouse FAR DCMR 11, 411.7	Maximum 0.4 FAR for habitable; no limit on other with 1:1 setback	Less than approx. 0.15 FAR provided
Required Public Space at Ground Level (CR) DCMR 11, 633	Required public space at ground level shall be provided that meets minimum 10% of total lot area, and is located immediately adjacent to main entrance, street and pedestrian right-of-way. It shall be open to the sky, suitably lighted, and open and availble to the general public on a continuous basis.	Public space is provided in accordance with Section 633: The proposed pedestrian alley and plaza are 21,400 s.f. which is >10% of the total site area.
Minimum Rear Yard DCMR 11, 636.5	For a through lot, there is no rear yard requirment.	Through lot
Minimum Side Yard, if Provided DCMR 11, 637.2	Not required, but if provided: Minimum width = 3" per foot of height and 8' minimum	None provided
Minimum Open Court DCMR 11, 638.1(a)	Minimum width = 3" per foot of height and 10' minimum 78.5' high court requires 19'-7" min. width	30'-0" minimum at pedestrian alley
Court Niche DCMR 11, 638.5 & 638.6	Width/depth no less than 2/1; 3' depth rule	None proposed
Minimum Parking DCMR 11, Chapter 21	For apartment house, 1 for each 3 dwelling units (695/3 = 232). For retail or service establishment in excess of 3,000s.f., 1 for each additional 750 s.f. of gross floor area: (77,184-3,000 = 74184 / 750 = 99); Total required = 232 + 99 = 331	331 spaces provided (Parking Ratio = 0.45)
Loading Platform DCMR 11, Chapter 22	For apartment house, 1 loading platform @ 200 s.f For retail and service, 1 loading platform @ 100 s.f. and 1 loading platform @ 200 s.f. For manufacturing use (for more than 25,000 SF), 1 loading platform @ 100 s.f. and 1 @ 200 s.f.	For apartments, (1) 200 s.f. platform at SW Bldg. For retail, (1) 100 s.f. platform at NE Bldg. For retail, (1) 200 s.f. platform at NE Bldg. Significant loading areas provided in promenade provide manufacturing use (greater than required). Shared loading at NW and NE neighboring apartment building (Gale).
Green Area Ratio	Minimum 0.2 GAR	Greater than 0.2 GAR provided
Penthouse, Setback Act of 1910	1:1 setback ratio required	1:1 setback provided

ZONING ANALYSIS

ZONING MAP



UNIT COUNTS

	STUDIO	1-BR JR	1BR	2BR 1-BA	2BR 2-BA	3BR 2-BA	MULTI-LVL	TOTAL
B-1 Level	0	0	0	0	0	0	15	15
1st Floor	0	0	10	1	0	0	27	38
2nd Floor	4	7	16	4	3	0	0	34
3rd Floor	8	24	41	16	10	5	15	119
4th Floor	9	25	40	19	12	4	0	109
5th Floor	9	25	41	19	11	3	15	123
6th Floor	9	31	38	20	9	1	0	108
7th Floor	9	23	27	18	10	3	0	90
8th Floor	0	1	7	4	4	2	0	18
9th Floor	0	0	8	4	4	2	0	18
10th Floor	0	0	8	4	4	2	0	18
PH/Mezzanine	0	0	0	0	2	0	3	5
TOTAL UNIT COUNT	48	136	236	109	69	22	75	695
Total Unit Area (NSF)	20870	66637	150712	97351	74063	32385	92010	534028
Avg Unit Area (NSF)	435	490	639	893	1073	1472	1227	768
% of Total	7%	20%	34%	16%	10%	3%	11%	
Afford. Units by Type	4	11	19	9	6	2	6	56
Afford. Types % of Total	7%	20%	34%	16%	10%	3%	11%	

Note: Multi-level units are counted at the lowest/entry level only. (These units have 2 or 3 bedrooms.)

Applicant requests +/- 10% flexibility in unit count due to the schematic nature of the plans.

AREA BREAKDOWN



ECKINGTON YARDS | SW 222,199 GSF RESI. **39,129 GSF RETAIL** 292 RESI. UNITS

• ECKINGTON YARDS | NW: MAX 102' TOP OF ROOF

BUILDING HEIGHTS

ECKINGTON YARDS | SE 61,780 GSF RESI. 45 RESI. UNITS

10 STORIES ABOVE GRADE 1 STORY BELOW GRADE (SHADED AREA = MAX 75' TOP OF ROOF, 7 STORIES)

- ECKINGTON YARDS | SW: MAX 75' TOP OF ROOF 7 STORIES ABOVE GRADE 1 STORY BELOW GRADE
- ECKINGTON YARDS | NE: MAX 75' TOP OF ROOF 7 STORIES ABOVE GRADE 1 STORY BELOW GRADE
- ECKINGTON YARDS | SE: MAX 75' TOP OF ROOF 7 STORIES ABOVE GRADE 1 STORY BELOW GRADE

above ground GSF not including PH

0.12

PH

15,732

5

10

17,343

18

17,343

Area Breakdown figures above include below-ground and PH habitable area. Note: 8% of the residential occupiable area of the NW Structure penthouse (approximately 640 GSF) will be provided for an IZ unit at 50% AMI.

Total FAR Area* 702,362 695 Retail Area 77,184

Total FAR Resident. Area* 625,178

ZONING & DEVELOPMENT DATA



98,147

119

98,147

98,096

109

98,096

Total Units

DEVELOPMENT DATA

Lot Area

Level

(Multi-level units are counted at the lowest/entry level only.)

Zoning FAR

Lot Occupancy

Retail Area

Gross area toward FAR

Residential units per floor

Gross residential area toward FAR

135,099 sf

B1

6,560

15

6,560

80.0%

97,895

39

51,468

46,427

77,496

33

25,716

51,780

94,135

108

94,135

17,894

18

17,894

80,066

90

80,066

17,653

18

17,653

5.2

97,077

123

97,077

AERIAL LOOKING NORTH



AERIAL LOOKING SOUTH



PROJECT DESCRIPTION

As a guiding principle we strove to design a project that fits comfortably into the immediate site and its surrounding neighborhood. Historically, train yards with supporting industrial warehouse structures were situated on this property. Existing adjacent conditions include the old Sanitary Grocery Company warehouse to the north which has windowless walls facing us. On the east side of our north property line there is a 20' public alley then yards leading to the backs of townhomes and newer condominiums that front on R Street NE. Our south property line abuts the existing Gale residential development with a combination of mostly blank walls containing a few non-essential windows. There are some north facing courts abutting this property line. To our east is Harry Thomas Way with the PEPCO property across the street which could potentially become a public park. An important bicycle trail abuts the east side of this property. There are blocks of attractive old well-maintained residential townhomes to the west.

Our design goals include the extension of Quincy Place through our site which will function in a way that allows some vehicular circulation but is essentially pedestrian oriented. We refer to the private alley as a "promenade". Prototypes for our promenade include Cady's Alley in Georgetown and Hoffman's Union Row. From a massing perspective we propose to locate our highest structure to the south of the existing warehouse. Innovative "maker" type manufacturing and retail uses are to be located on our ground floor along the west half of the promenade. Blank walls along the north and south property lines must be recognized when laying out the apartment blocks. Existing north facing courts on the north side of the Gale complex will be mirrored on our property.

Aesthetically our façades strive to capture the feeling of the industrial architecture that was present on the site and still visible along the nearby railroad tracks. Our goal has been to employ façade elements that are a modern abstracted version of the historic aesthetic. Due to the size of the project we have created a variety of facade expressions which strive to break down the scale of the building and create hierarchy. These varied façade groupings help to alleviate the horizontality of the development.

Specific design strategies include creating upper floor setbacks along Eckington Place forming a smooth transition to the row dwellings across the street. A central plaza punctuates the middle of the promenade. The south side of this promendade has several setback courts above the retail level to create openness and assure abundant sunlight along the promenade. Discouraging significant vehicular use of the promenade will be achieved through the implementation of a narrow wandering path for cars. There will be no curbs to encourage pedestrian use of the entire alley. Unlike the majority of current residential developments in DC we want to include a significant percentage of larger, two-story and three-story dwellings to encourage occupancy by families.

Our design goals include incorporating as many sustainable elements as possible. The current layout has been developed to comply with DC's "Green Area Ratio" which mandates significant roof planting areas. Storm water management is another element of design that we will implement as the plans evolve. The choice of facade and other building materials will be made with the issue of sustainability in mind.

In addition to having an aesthetically pleasing project we need to assure that the design achieves excellent functionality. Internal circulation must be provided to gain easy access to parking and loading. Vehicular and truck circulation around the site must be arranged to minimize conflict with pedestrians. Adequate light and air must be provided for all dwelling units

BOUNDARY COMPANIES / J B G

4445 WILLARD AVE SUITE 400 BETHESDA MD. 20815



LOCATION MAPS















Apartments building across Eckington PI





ECKINGTON YARDS WEST CONTEXT PHOTOGRAPHS







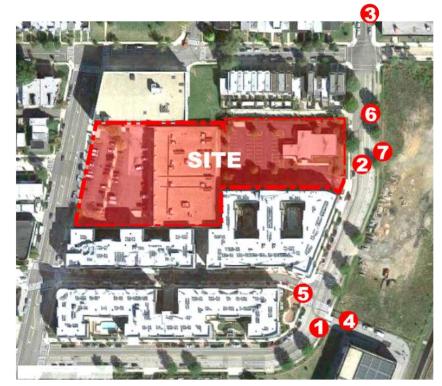






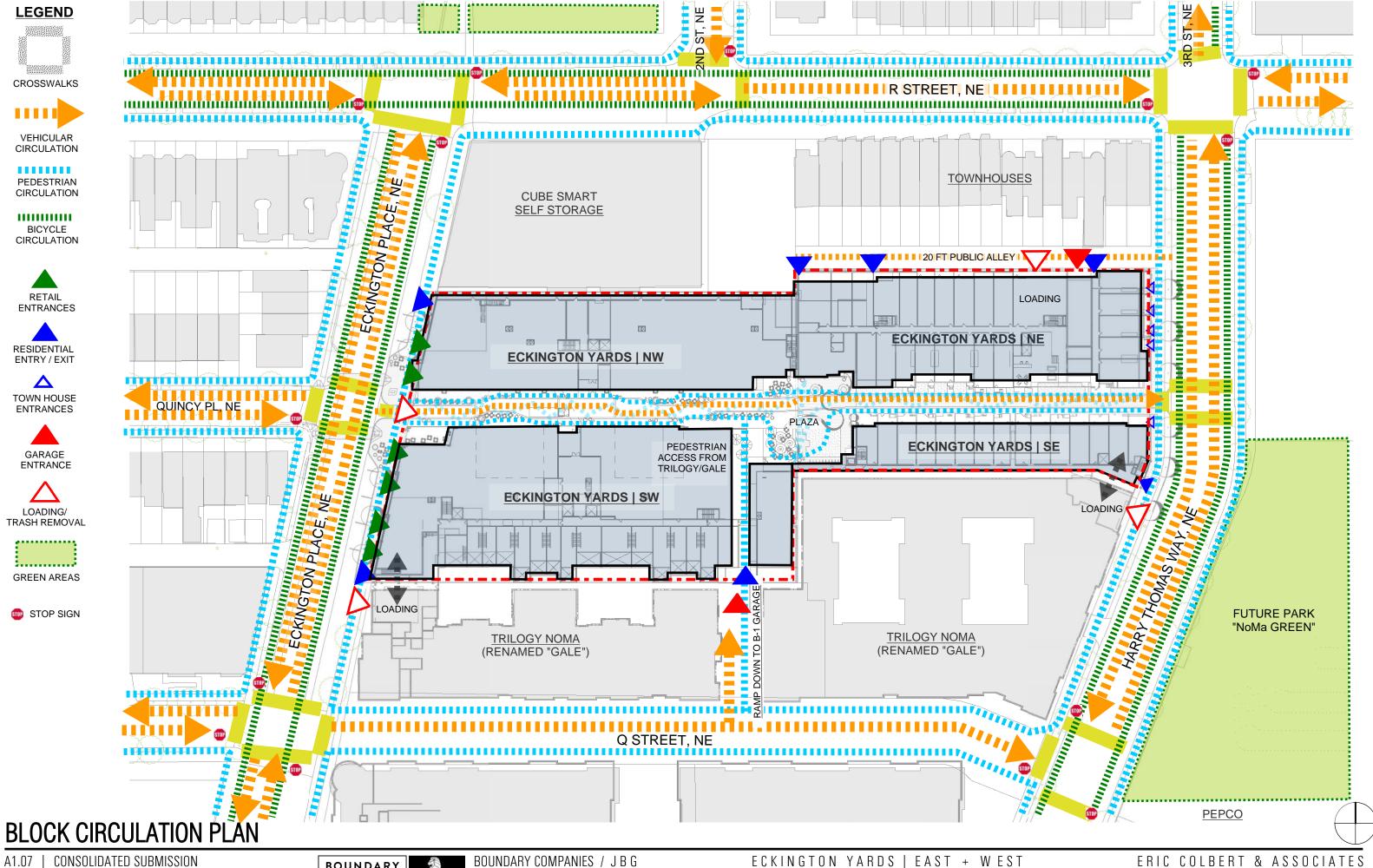


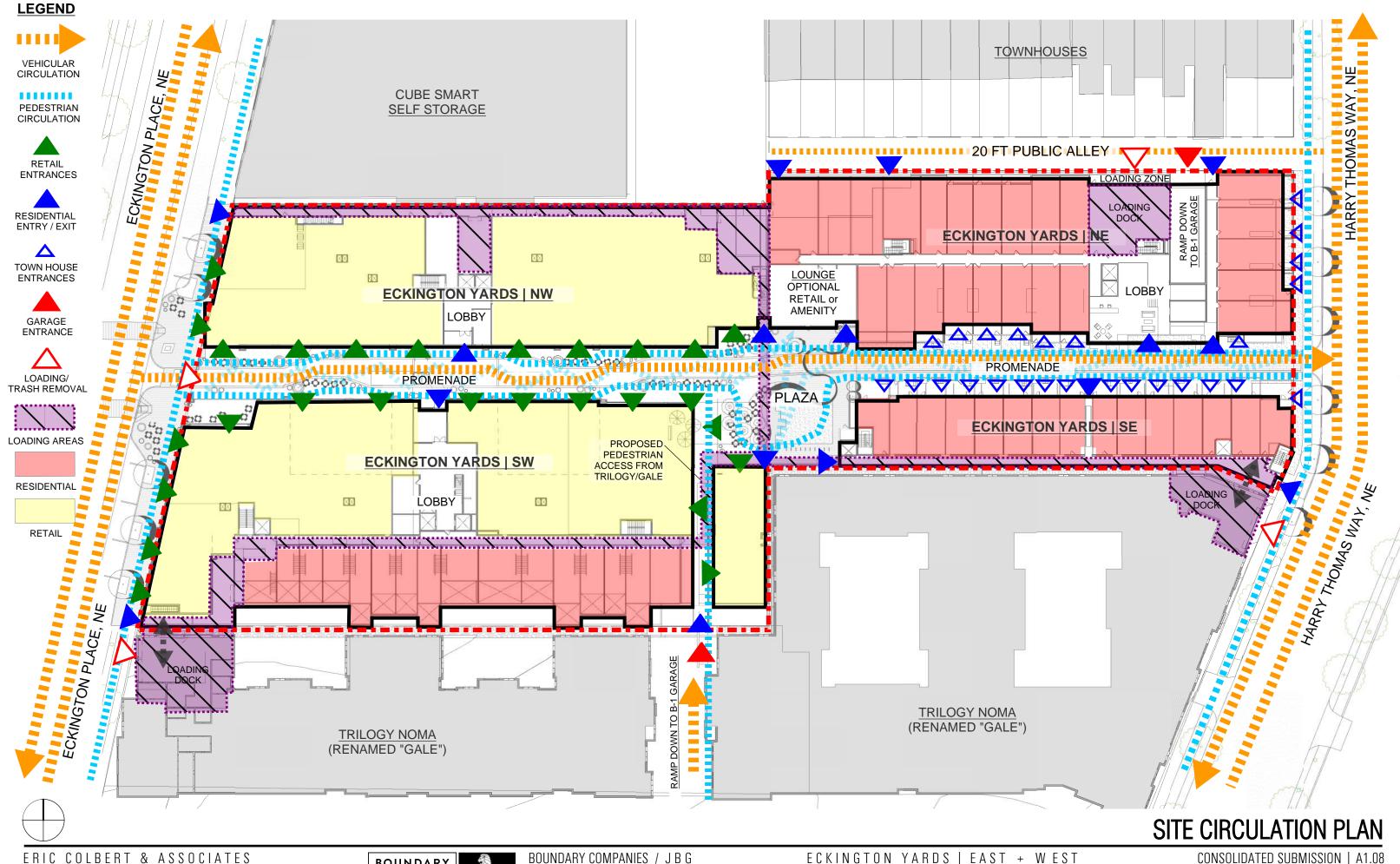




ECKINGTON YARDS EAST CONTEXT PHOTOGRAPHS

ECKINGTON YARDS | EAST + W EST 1611-1625 ECKINGTON PLACE+1500 HARRY THOMAS WAY NE WASHINGTON, DC 20002





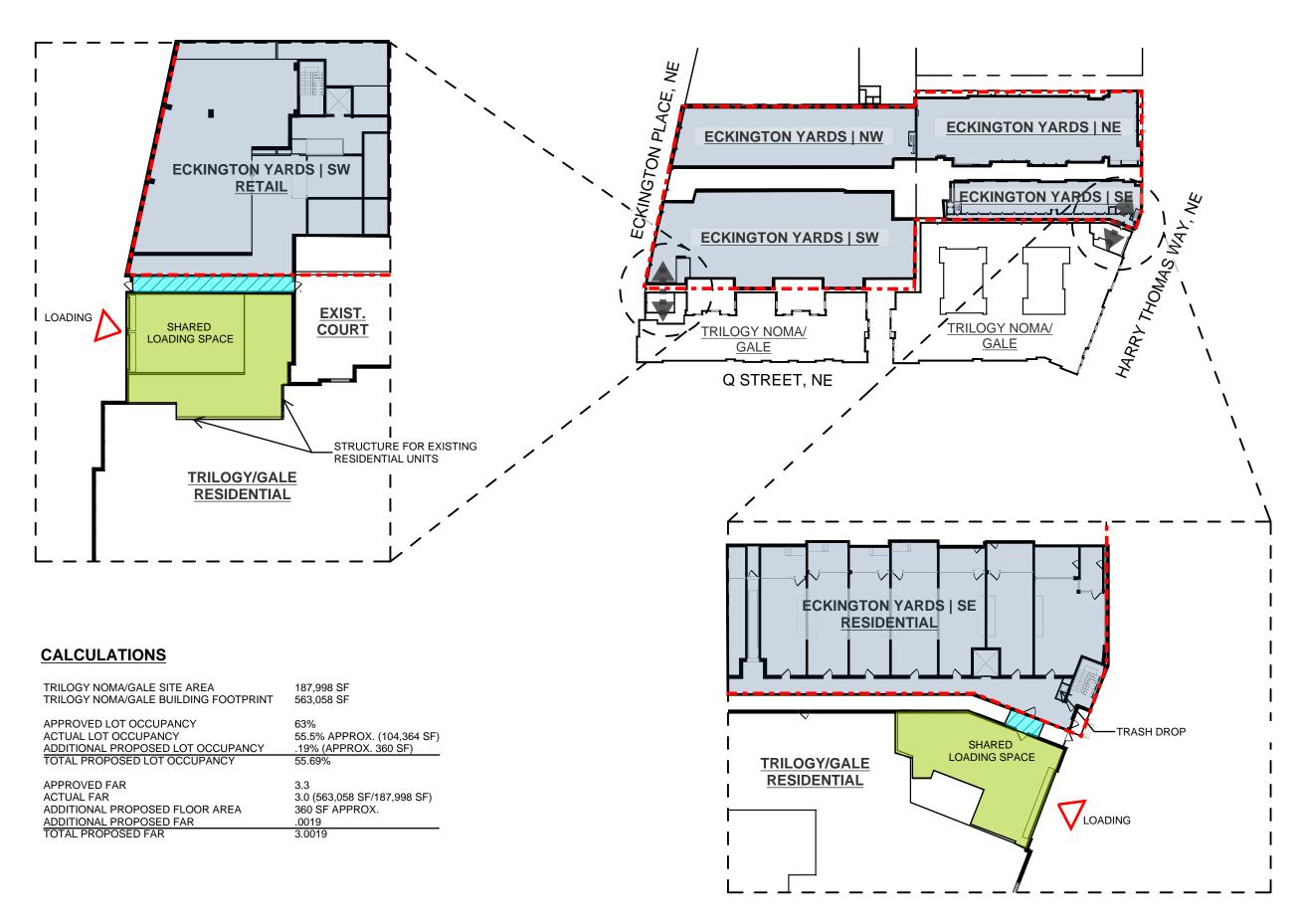
LEGEND

PROPERTY LINE

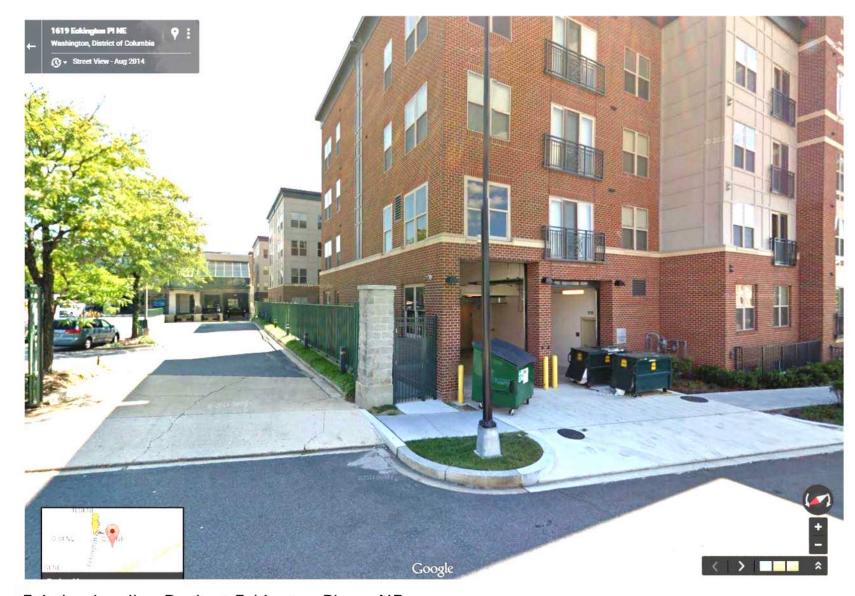




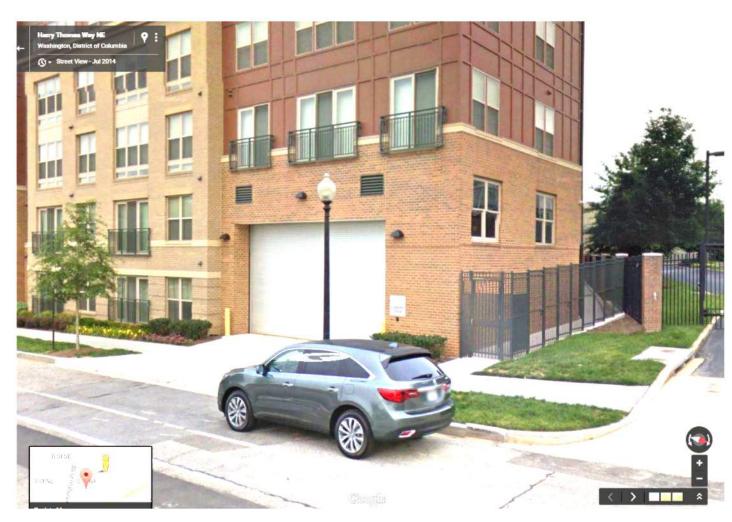
AREA OF **PROPOSED** SHARED LOADING SPACE



SHARED LOADING CONCEPT PLANS

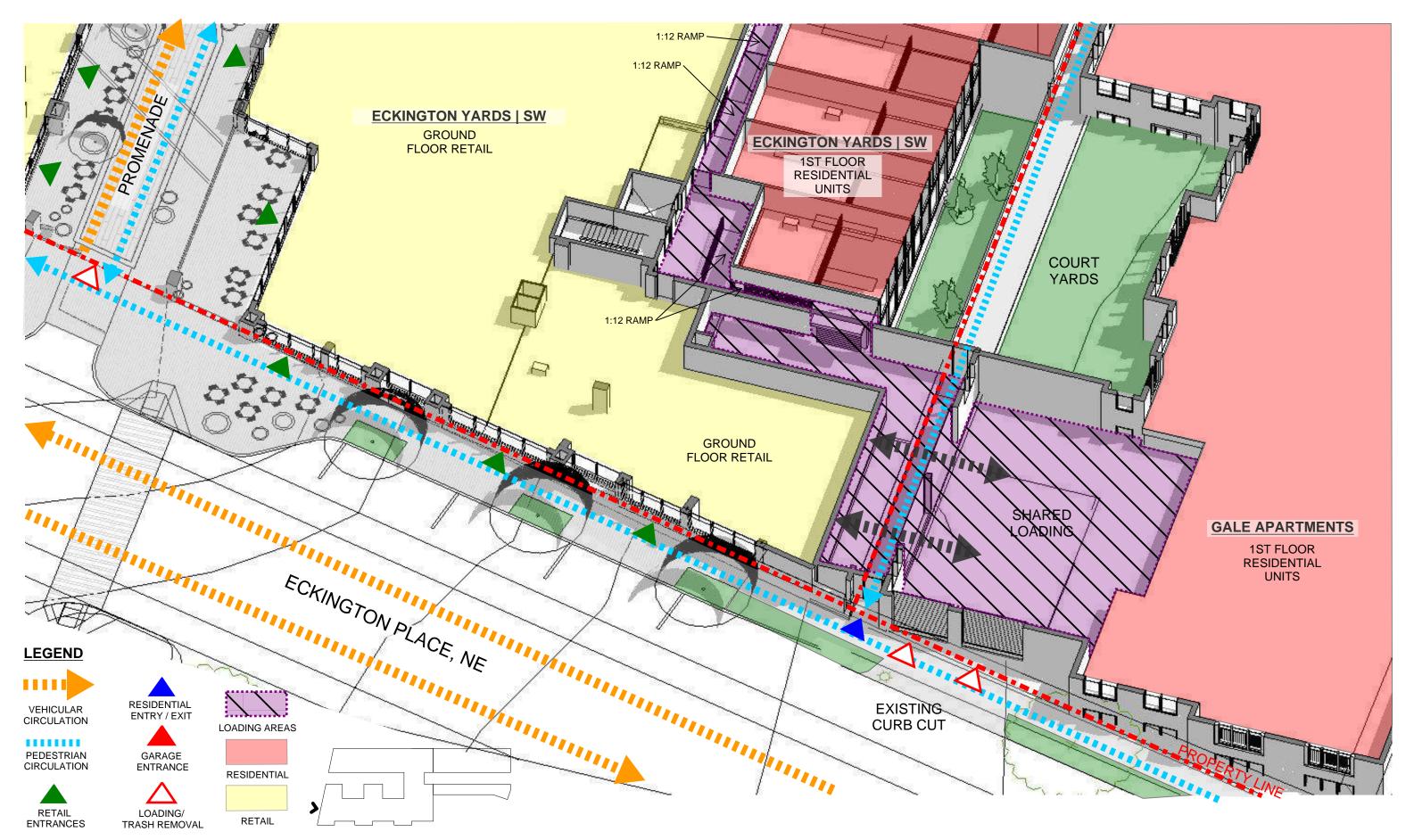


Existing Loading Dock at Eckington Place, NE



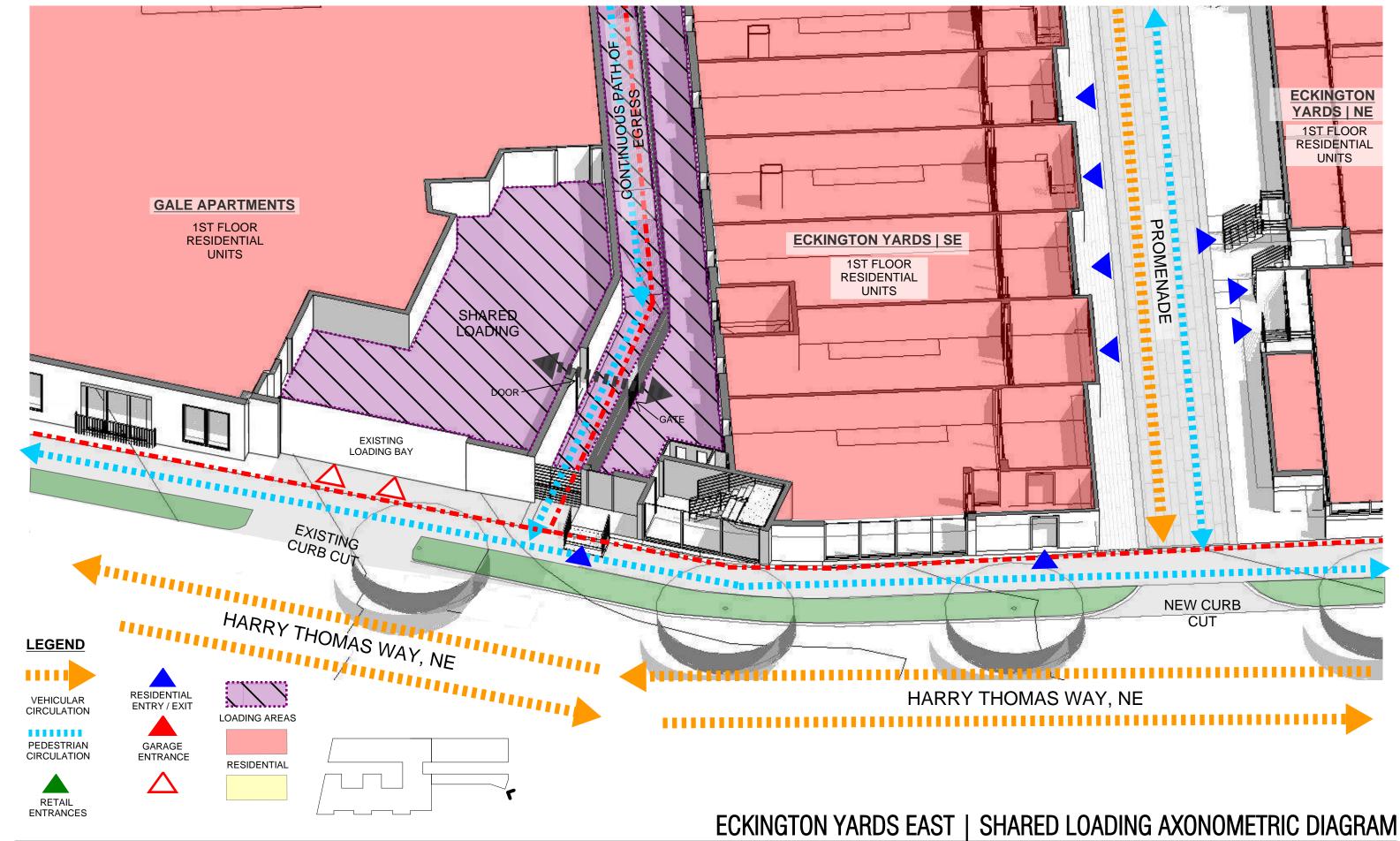
Existing Loading Dock at Harry Thomas Way, NE

PHOTOS OF EXISTING LOADING AREAS



ECKINGTON YARDS | EAST + WEST

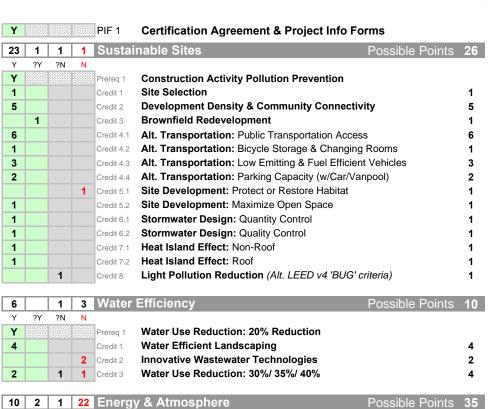
1611-1625 ECKINGTON PLACE+1500 HARRY THOMAS WAY NE WASHINGTON, DC 20002



LEED SCORECARD (WEST)

LEED® 2009 for New Construction and Major Renovation

Preliminary Project Checklist



		1	6	Credit 2	On-Site Renewable Energy: 1%-13%		7
			2	Credit 3	Enhanced Commissioning		2
2				Credit 4	Enhanced Refrigerant Management		2
1			2	Credit 5	Measurement & Verification (1 pt.: ES Portfolio	Mgr.)	3
2				Credit 6	Green Power		2
4	2		8	Materi	als & Resources	Possible Points	14
Υ	?Y	?N	N				
Υ Υ	?Y	?N	N	Prereq 1	Storage & Collection of Recyclables		
Y Y	?Y	?N	N 3	Prereq 1 Credit 1.1	Storage & Collection of Recyclables Building Reuse: Maintain Existing Walls, Floors	, and Roof	3

Construction Waste Management: 50%/ 75%

Materials Reuse: 5%/ 10%

Minimum Energy Performance

Fundamental Refrigerant Management

Optimize Energy Performance: 12%+

Fundamental Commissioning, Bldg. Energy Systems

Eckington Yards - West

Eric Colbert & Associates

6/2/16

				Materia	als & Resources, Cont.	
Υ	?Y	?N	N			
1	1			Credit 4	Recycled Content: 10%/ 20%	2
1	1			Credit 5	Regional Materials: 10%/ 20%	2
			1	Credit 6	Rapidly Renewable Materials: 2.5%	1
			1	Credit 7	Certified Wood: 50%	1
7	2	1	5	Indoor	Environmental Quality Possible Points	15
Υ	?Y	?N	N			
Υ				Prereq 1	Minimum IAQ Performance	
Υ				Prereq 2	Environmental Tobacco Smoke (ETS) Control	
	********	********	1	Credit 1	Outdoor Air Delivery Monitoring	1
			1	Credit 2	Increased Ventilation: 30%	1
1			i i	Credit 3.1	Construction IAQ Management Plan: During Construction	1
			1	Credit 3.1	Construction IAQ Management Plan: Before Occupancy	1
1			-	Credit 4.1	Low-Emit'g. Materials: Adhesives, Sealants	4
1					Low-Emit'g. Materials: Adnesives, Sealants Low-Emit'g. Materials: Paints	I 4
•				Credit 4.2	G	1
1				Credit 4.3	Low-Emit'g. Materials: Flooring Systems	1
		1		Credit 4.4	Low-Emit'g. Materials: Composite Wd./Agrifiber	1
			1	Credit 5	Indoor Chemical & Pollutant Source Control	1
1				Credit 6.1	Controllability of Systems: Lighting	1
1				Credit 6.2	Controllability of Systems: Thermal Comfort	1
4						
1				Credit 7.1	Thermal Comfort: Design	1
1			1	Credit 7.1 Credit 7.2	Thermal Comfort: Design Thermal Comfort: Verification (not avail. to Residential projects)	1
1	1		1			•
1	1		1	Credit 7.2	Thermal Comfort: Verification (not avail. to Residential projects)	1
	1		1	Credit 7.2 Credit 8.1 Credit 8.2	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces	1 1 1
5	1	2NI		Credit 7.2 Credit 8.1 Credit 8.2	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces	1
5 Y	1	?N	1 N	Credit 7.2 Credit 8.1 Credit 8.2	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Possible Points	1 1 1
5 Y	1	?N		Credit 7.2 Credit 8.1 Credit 8.2 Innova	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Exemp. Performance SSc4.1 Public Transport.	1 1 6
5 Y 1	1	?N		Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space	6
5 Y	1 1 ?Y	?N		Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Possible Points Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect	1 1 6
5 Y 1 1	1	?N		Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Possible Points Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower	6
5 Y 1 1	1 1 ?Y	?N		Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Possible Points Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings	6
5 Y 1 1	1 1 ?Y	?N		Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Possible Points Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower	6
5 Y 1 1 1	1 1 ?Y	?N	N	Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Possible Points Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings LEED Accredited Professional	1 1 1 1 1 1 1 1
5 Y 1 1 1 1	1 1 ?Y		N 3	Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Possible Points Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings	6
5 Y 1 1 1	1 1 ?Y	?N	N N	Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings LEED Accredited Professional Tall Priority Credits Possible Points	6 1 1 1 1 1 1 1 1 1 1 1
5 Y 1 1 1 1	1 1 ?Y		N 3	Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2 Region	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings LEED Accredited Professional The Priority Credits Possible Points SSc5.1, Habitat	6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5 Y 1 1 1 1	1 1 ?Y		N 3 N 1 1	Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2 Region Credit 1.1 Credit 1.1	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings LEED Accredited Professional The Priority Credits Possible Points SSc5.1, Habitat SSc6.1, SW Quantity control	6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5 Y 1 1 1 1	1 1 ?Y		N 3 N 1 1	Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2 Region Credit 1.1 Credit 1.1 Credit 1.1	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings LEED Accredited Professional The Priority Credits Possible Points SSc5.1, Habitat SSc6.1, SW Quantity control WEc2, Innovative Wastewater	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5 Y 1 1 1 1 1 1	1 1 ?Y		N 3 N 1 1	Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2 Region Credit 1.1 Credit 1.1	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings LEED Accredited Professional The Priority Credits Possible Points SSc5.1, Habitat SSc6.1, SW Quantity control	6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5 Y 1 1 1 1	1 1 ?Y		N 3 N 1 1 1 1 1	Credit 7.2 Credit 8.1 Credit 8.2 Innova Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2 Region Credit 1.1 Credit 1.1 Credit 1.1	Thermal Comfort: Verification (not avail. to Residential projects) Daylight & Views: Daylight 75% of Spaces Daylight & Views: Views for 90% of Spaces Ition & Design Process Exemp. Performance SSc4.1 Public Transport. Exemp. Performance SSc5.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect Water Reuse at Cooling Tower Low-emitting Walls & Ceilings LEED Accredited Professional The Priority Credits Possible Points SSc5.1, Habitat SSc6.1, SW Quantity control WEc2, Innovative Wastewater	6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

SUSTAINABLE APPROACHES

The Eckington Yards project has been registered as two distinct LEED®v 2009 New Construction (NC) projects with USGBC. Fifty points are required for the targeted Silver certification level; the team will pursue additional points to demonstrate a commitment to delivering a high-performance mixed-use project. Credits are identified as achievable based on design feasibility and potential environmental benefits. Sustainable strategies being implemented include:

- Significantly reducing or eliminating storm water runoff / pollution
- Providing numerous bike storage spaces
- Reducing heat island effect by employing emissive/reflective materials for hardscape and vegetated roof.
- Reducing potable water usage through irrigation design, use of water conserving fixtures, and reuse of rainwater for cooling tower make-up is proposed.
- Reducing energy consumption by adopting high efficiency HVAC systems
- · Reducing impact of transportation and extraction of virgin material by the use of regional materials and those with significant recycled content.
- Improving productivity and occupant health by access to daylight and views
- Meeting ASHRAE 55 standards to ensure thermal comfort and providing thermal controls to ensure accommodation of the individual preferences of its occupants.
- Installing low-emitting paints, adhesives, sealants and flooring systems.
- Installing permanent monitoring systems to ensure adequate ventilation.

OTHER STRATEGIES

In keeping with The Applicant's vision that the projects address environmental issues "beyond" LEED, the Design Team is exploring several aspects of sustainable strategies. The goal is to go beyond obtaining a LEED plaque; it is to create buildings and spaces that support and nurture both inhabitants and neighbors. Several strategies, including Smart Growth and Biophilic Design, are under consideration to take advantage of the locale and enhance the project environment in keeping with The Applicant's goals.

Smart Growth will be achieved through the project's location, which is in line with urban planning and transportation goals of concentrating growth in walkable, bike-friendly and transit-oriented areas. Eckington Yards will also provide a unique sense of community and place and the innovative retail will enhance cultural

The Eckington Yards project affords an opportunity to incorporate elements of Biophilic Design in an urban context by creating strong connections between nature and man-made environments.

- Numerous windows affording natural daylight to the interior of the buildings.
- · Multiple-sensory stimulation will be experienced through the project's design scheme, where a variety of materials, as well as textures and patterns, will provide a more immersive experience.
- Providing information-rich views imparting a sense of openness (the pattern of "prospect") while imparting a sense of safety and control is fulfilled by the projects' orientation and provision of roof terraces with outdoor vistas from an elevated, safe place.
- Human preference for "refuge" is addressed in the partially enclosed space between the building components, where visual access into the refuge space from the street is limited, where the space can provide a sense of shelter with the ability to view surroundings and landscaping.
- An exhilarating space arousing attention and curiosity while the user is protected (called "risk/peril" pattern) is afforded by the bridges between the buildings.

Other strategies include:

- Shared parking between developments to reduce overall parking, construction materials, and excavation.
- Shared loading to reduce space, curb cuts, inefficiency.
- Building design that respects and acknowledges daylight impacts for neighbors.

The Team is beginning analysis of compliance with mandatory requirements ("prerequisites") of the LEED® for Neighborhood Development (LEED-ND) rating system. LEED-ND measures sustainability at a community level by evaluating where to build, what to build, and how to manage environmental impacts. If compliance with LEED-ND prerequisites is confirmed, then LEED-ND certification may also be feasible.

ECKINGTON YARDS WEST | LEED



19

2

2

Prereg 1

Prereq 2

Prereq 3

LEED SCORECARD (EAST)

LEED® 2009 for New Construction and Major Renovation

Preliminary Project Checklist



Eckington Yards - East

Eric Colbert & Associates

6/2/16

Υ				PIF 1	Certification Agreement & Project Info Forms	
23	1	1	1	Susta	inable Sites Possible Points	26
Υ	?Y	?N	N	71		
Υ				Prereq 1	Construction Activity Pollution Prevention	
1				Credit 1	Site Selection	1
5	1			Credit 2	Development Density & Community Connectivity	5
_	1			Credit 3 Credit 4.1	Brownfield Redevelopment	1
6 1				Credit 4.1	Alt. Transportation: Public Transportation Access Alt. Transportation: Bicycle Storage & Changing Rooms	6 1
3				Credit 4.2	Alt. Transportation: Low Emitting & Fuel Efficient Vehicles	3
2				Credit 4.4	Alt. Transportation: Parking Capacity (w/Car/Vanpool)	2
_			1	Credit 5.1	Site Development: Protect or Restore Habitat	1
1			H.	Credit 5.1	Site Development: Maximize Open Space	1
<u>.</u>				Credit 6.1	Stormwater Design: Quantity Control	1
<u>.</u>				Credit 6.2	Stormwater Design: Quality Control	1
1				Credit 7.1	Heat Island Effect: Non-Roof	1
1				Credit 7.2	Heat Island Effect: Roof	1
•		1		Credit 8	Light Pollution Reduction (Alt.: LEED v4 BUG criteria)	1
		_			• • • • • • • • • • • • • • • • • • • •	-
7			3	Water	Efficiency Possible Points	10
Υ	?Y	?N	N			
Υ				Prereq 1	Water Use Reduction: 20% Reduction	
4				Credit 1	Water Efficient Landscaping	4
			2	Credit 2	Innovative Wastewater Technologies	2
3			1	Credit 3	Water Use Reduction: 30%/ 35%/ 40%	4
9	2	1	23	Energ	y & Atmosphere Possible Points	35
Y	?Y	?N	N N	Lileig	y & Attitiosphere Fossible Folitis	<u> ၁</u> ၁
Y				Prereg 1	Fundamental Commissioning, Bldg. Energy Systems	
Y				Prereq 2	Minimum Energy Performance	
Υ				Prereg 3	Fundamental Refrigerant Management	
4	2		13	Credit 1	Optimize Energy Performance: 12%+	19
		1	6	Credit 2	On-Site Renewable Energy: 1%-13%	7
			2	Credit 3	Enhanced Commissioning	2
2				Credit 4	Enhanced Refrigerant Management	2
1			2	Credit 5	Measurement & Verification (1 pt.: ES Portfolio Mgr.)	3
2				Credit 6	Green Power	2
4	1	1	8	Materi	ials & Resources Possible Points	14
Υ	?Y	?N	N			
Υ				Prereq 1	Storage & Collection of Recyclables	
			3	Credit 1.1	Building Reuse: Maintain Existing Walls, Floors, and Roof	3
			1	Credit 1.2	Building Reuse: Maintain 50% Interior Non-Structural	1
2				Credit 2	Construction Waste Management: 50%/ 75%	2
			2	Credit 3	Materials Reuse: 5%/ 10%	2

				Materia	als & Resources, Cont.	
Υ	?Y	?N	N			
1	1			Credit 4	Recycled Content: 10%/ 20%	2
1		1		Credit 5	Regional Materials: 10%/ 20%	2
			1	Credit 6	Rapidly Renewable Materials: 2.5%	1
			1	Credit 7	Certified Wood: 50%	1
8	1	1	5	Indoor	Environmental Quality Possible Points	15
Υ	?Y	?N	N	7		
Υ				Prereq 1	Minimum IAQ Performance	
Υ				Prereq 2	Environmental Tobacco Smoke (ETS) Control	
			1	Credit 1	Outdoor Air Delivery Monitoring	1
			1	Credit 2	Increased Ventilation: 30%	1
1				Credit 3.1	Construction IAQ Management Plan: During Construction	1
			1	Credit 3.2	Construction IAQ Management Plan: Before Occupancy	1
1				Credit 4.1	Low-Emit'g. Materials: Adhesives, Sealants	1
1				Credit 4.2	Low-Emit'g. Materials: Paints	1
1				Credit 4.3	Low-Emit'g. Materials: Flooring Systems	1
		1		Credit 4.4	Low-Emit'g. Materials: Composite Wd./Agrifiber	1
			1	Credit 5	Indoor Chemical & Pollutant Source Control	1
1				Credit 6.1	Controllability of Systems: Lighting	1
1				Credit 6.2	Controllability of Systems: Thermal Comfort	1
1				Credit 7.1	Thermal Comfort: Design	1
•	-		1	Credit 7.1	Thermal Comfort: Design Thermal Comfort: Verification (not avail. to Residential projects)	1
	1		<u>'</u>	Credit 8.1	Daylight & Views: Daylight 75% of Spaces	1
1	-				, ,	1
1				Credit 8.2	Daylight & Views: Views for 90% of Spaces	1
5		1	П	Innova	tion & Design Process Possible Points	6
Y	?Y	?N	N	IIIIIOVa	tion & Design Frocess	U
1				Credit 1.1	Exemp. Performance SSc4.1 Public Transportation	1
1				Credit 1.2	Exemp. Performance SSc5.2 Open Space	1
1	-			Credit 1.3	Exemp. Performance SSc3.2 Open Space Exemp. Performance SSc7.1 Avoid Heat Island Effect	1
1				Credit 1.3	•	-
1	-	_			Low-emitting Walls & Ceilings	1
		1		Credit 1.5	TBD: suggest Int. Pest Mgt.	1
1				Credit 2	LEED Accredited Professional	1
1			3	Pogion	al Priority Credits Possible Points	4
1 Y	?Y	?N	3	Region	Possible Points	4
Y	΄ Τ	/IN	1	0	CCoE 4 Habitat	
4			7	Credit 1.1	SSc5.1, Habitat	1
1				Credit 1.2	SSc6.1, SW Quantity control	1
			1	Credit 1.3	WEc2, Innovative Wastewater	1
			1	Credit 1.4	EAc1 (40%), EAc2, MRc1.1	1
57	5	5	42	Total	Possible Points	140
						110
Certii	ieu 4	U IU 48	a hoil	is Jiiver	50 to 59 points Gold 60 to 79 points Platinum 80 to 110 points	

DRAFT WATER COMPUTATIONS

		Sanitary		Domestic						
Type of Fixture	Quantity			Each	Each		Total	Total	Total	Total
Type of Pixture	quantity	Each	Total	CW	HW	Total	CW	HW	Combined	Combine
		DFU	DFU	SFU	SFU	SFU	SFU	SFU	SFU	GPM
Group (Tank) (1.6 gpf)	886	5	4430	2.7	1.5	3.6	2392.2	1329	3189.6	231
WC Tank (Private)		3		2.2		2.2				
WC Tank (Public)		4		5		5				
Group (Greater than 1.6 gpf)		6		6	3	8				
WC FV (Private)		4		6		6				
WC FV (Public)	7	6	42	10		10	70		70	35
Public UR (FV) (1 gpf or less)		2		5		5				
Public Lavatory	7	1	7	1.5	1.5	2	10.5	10.5	14	17
Public Lavatory/Bidet		1		0.5	0.5	0.7				
Public Bathtub		2		3	3	4				
Private Bathtub		2		1	1	1.4				
Public Shower	2	2		3	3	4				
Private Shower	187	2		1	1	1.4				
Mop Basin	6	5	30	2.25	2.25	3	13.5	13.5	18	6.5
Service Sink		5		2.25	2.25	3				
Public kitchen Sink	4	2	8	3	3	4	12	12	16	12.8
Private Kitchen Sin W/ DW	699	2	1398	1	1	2.8	699	699	1957.2	179
Drinking Fountain	8	0.5		0.25		0.25				
Washing Machine (Public)		3		3	3	4				
Washing Machine (Private)	699	2	1398	1	1	1.4	699	699	978.6	106
3" Floor Drain	12	5	60							
4" Floor Drain	8	6	48							
3"/4" FD (emerg)										
Bar Sink		2		1.5	1.5	2				
	Sub-Tot	tal (DFU):	7421		Sub-Tot	als (SFU):	3896.2	2763	6243.4	390
Additional Sanitary			Enter	Additional Domestic Water Demands:		estic	CW	HW		Enter
Drainage Demands:			Total			GPM	GPM		Total	
			DFU			269	219	1	GMP	
HVAC				Hose Bibbs						15
Kitchen				HVAC						24
Laundry				Kitchen Laundry						
Pool / Fountain										
	_			Pool / Fountain Irrigation						
										20
	To	al (DFU):	7421	Total (SFU):			5599.2	4416	9227.2	449

ECKINGTON YARDS | EAST + WEST 1611-1625 ECKINGTON PLACE+1500 HARRY THOMAS WAY NE WASHINGTON, DC 20002

- Notes:

 1. Supply fixture unit (SFU) value based on the 2012 International Plumbing Code table E101B

 2. Drainage fixture unit (DFU) value based on the 2012 International Plumbing Code table 709.1

 3. Additional demands for HVAC make-up, pool, fountain, laundry, food service, etc.

 4. Add 5 GPM for each hose bibb up to a maximum of 15 GPM

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