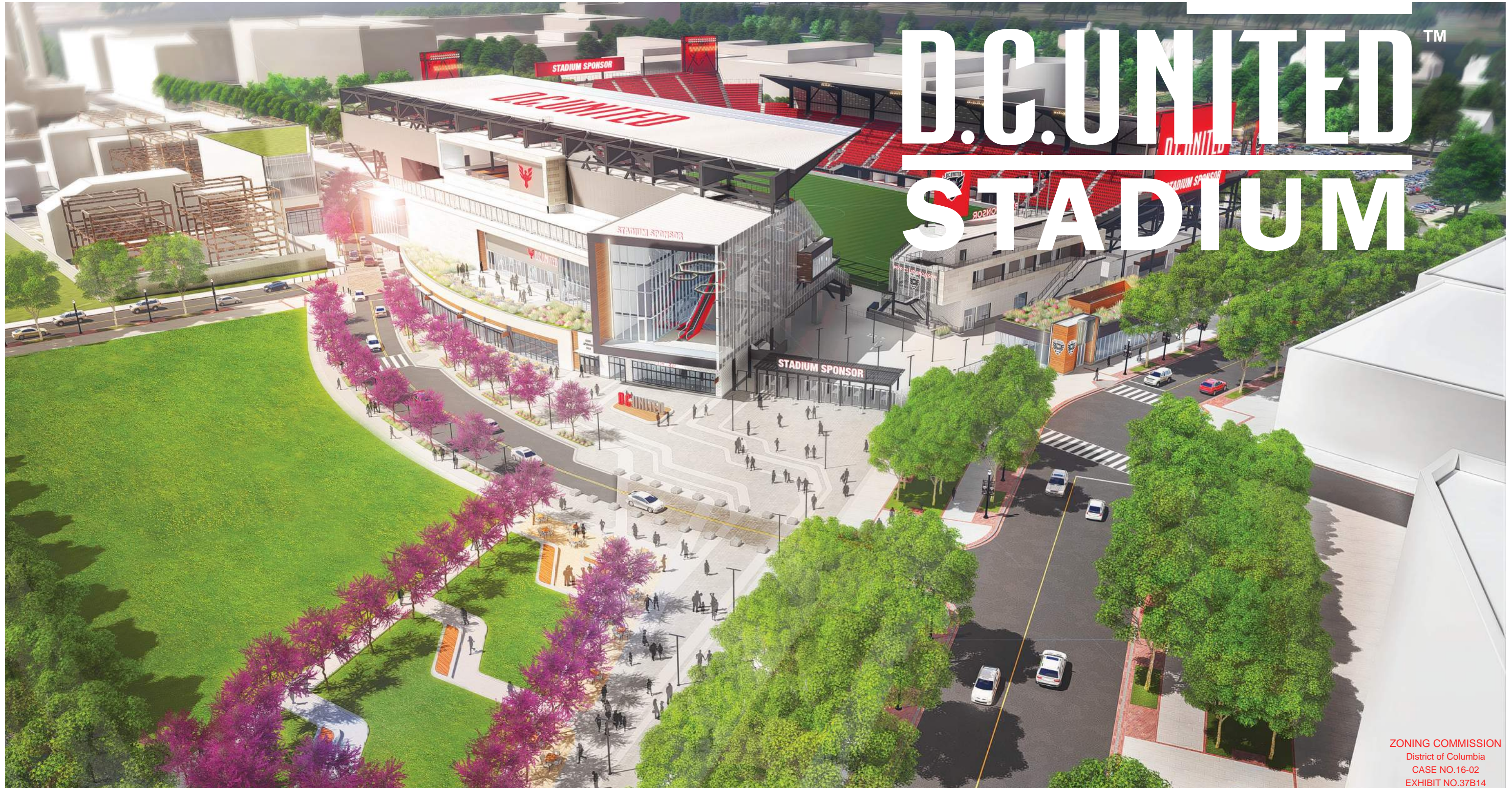


D.C. UNITEDTM STADIUM



SECTION

06

PUD OVERVIEW:

PUD DATA

ZONING
DOCUMENTS

GAR CALCULATIONS

SUSTAINABILITY
BENEFITS

LEED

- 6.01 PUD OVERVIEW
- 6.02 PUD OVERVIEW
- 6.03 GAR CALCULATION SPREADSHEET
- 6.04 GAR CALCULATION PLAN

- 6.05 EXISTING ZONING MAP
- 6.06 CONTEXT MAP
- 6.07 EXISTING SITE SURVEY & SITE PLAN
- 6.08 PUD SUBMISSION BOUNDARY
- 6.09 LOT OCCUPANCY PLAN
- 6.10 ZONING BUILDING HEIGHT

- 6.11 ENVIRONMENTAL BENEFITS NARRATIVE
- 6.12 LEED GOLD SCORECARD
- 6.13 GREEN ROOF & PV PANELS RENDERING
- 6.14 SUSTAINABLE MATERIALS RENDERING


ZONING DATA SUMMARY - 100 POTOMAC AVENUE, SW WASHINGTON, DC 20024

CONSOLIDATED LOT – Z LOT A SQUARES 603S, 605, 607, 661, 661N, PART OF SQUARE 665 AND PARTS OF POTOMAC AVENUE S.W., R STREET S.W. AND S STREET S.W.	Allowed / Required	PROPOSED
SITE AREA (LOT A)	CG/C-R	429,084 SF
GROSS FLOOR AREA (FAR) - COMMERCIAL	429,084 SF	429,084 SF
FAR	NONE REQUIRED	403,130 SF
BUILDING HEIGHT	3.0 (MOR) - 4.0 (PUD)	.94 FAR
LOT OCCUPANCY - COMMERCIAL	90 FEET (MOR) - 110 FEET (PUD)	110 FEET
OPEN SPACE	100%	50.05 %
COURTS	AT LEAST 10% OF THE LOT AREA SHALL BE RESERVED AS PUBLIC OPEN SPACE	22%
REAR YARD	NONE REQUIRED; THEN ITS WIDTH MUST MEASURE 2.5" PER FOOT OF COURT HEIGHT AND NOT LESS THAN 6' (OPEN) OR 12' (CLOSED)	NONE REQUIRED
SIDE YARD	NONE REQUIRED	NONE REQUIRED
PARKING	NONE REQUIRED; IF PROVIDED, THEN MUST MEASURE 3" PER FOOT OF HEIGHT BUT NOT LESS THAN 8'	NONE REQUIRED
BICYCLE PARKING	1 FOR EACH 10 SEATS FOR THE FIRST 10,000 SEATS PLUS 1 PER 20 SEATS ABOVE THAT	PROVIDED OFF-SITE
BICYCLE VALET PARKING	83 BICYCLES (PER LEED REQUIREMENTS)	83 BICYCLES
LOADING RETAIL OR SERVICE	150 BICYCLES (PER LEED REQUIREMENTS)	190 BICYCLES
<ul style="list-style-type: none"> • LOADING BERTHS (12' x 30') • LOADING BERTHS (12' x 55') • LOADING PLATFORM (100 SF) • LOADING PLATFORM (200 SF) • SERVICE / DELIVERY (IN EASEMENT) 	<ul style="list-style-type: none"> 1 REQUIRED 1 REQUIRED 1 REQUIRED 1 REQUIRED 1 REQUIRED 	<ul style="list-style-type: none"> 0 PROVIDED 0 PROVIDED 0 PROVIDED 0 PROVIDED 2 PROVIDED
GREEN AREA RATIO (GAR)	0.2	0.268



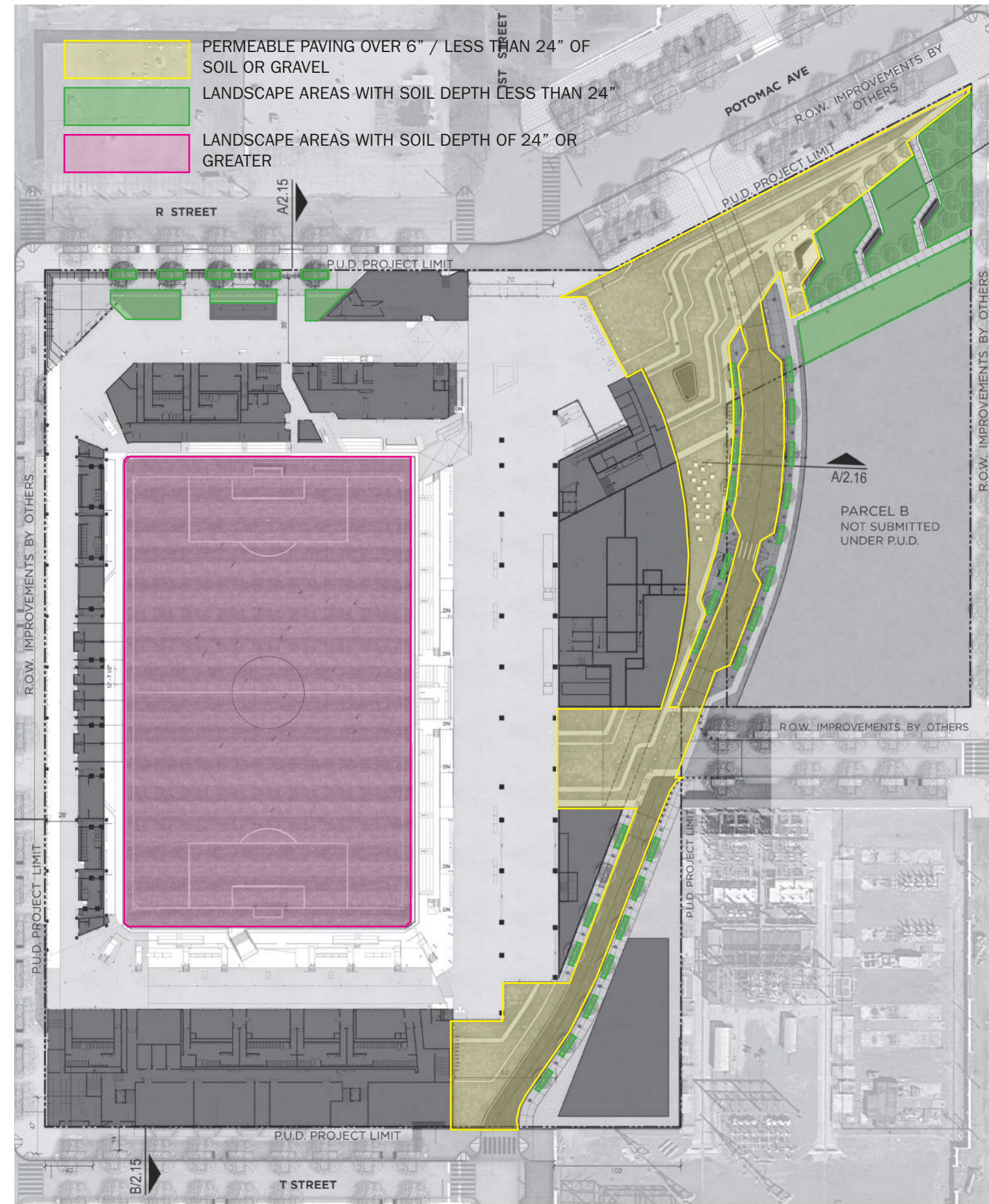
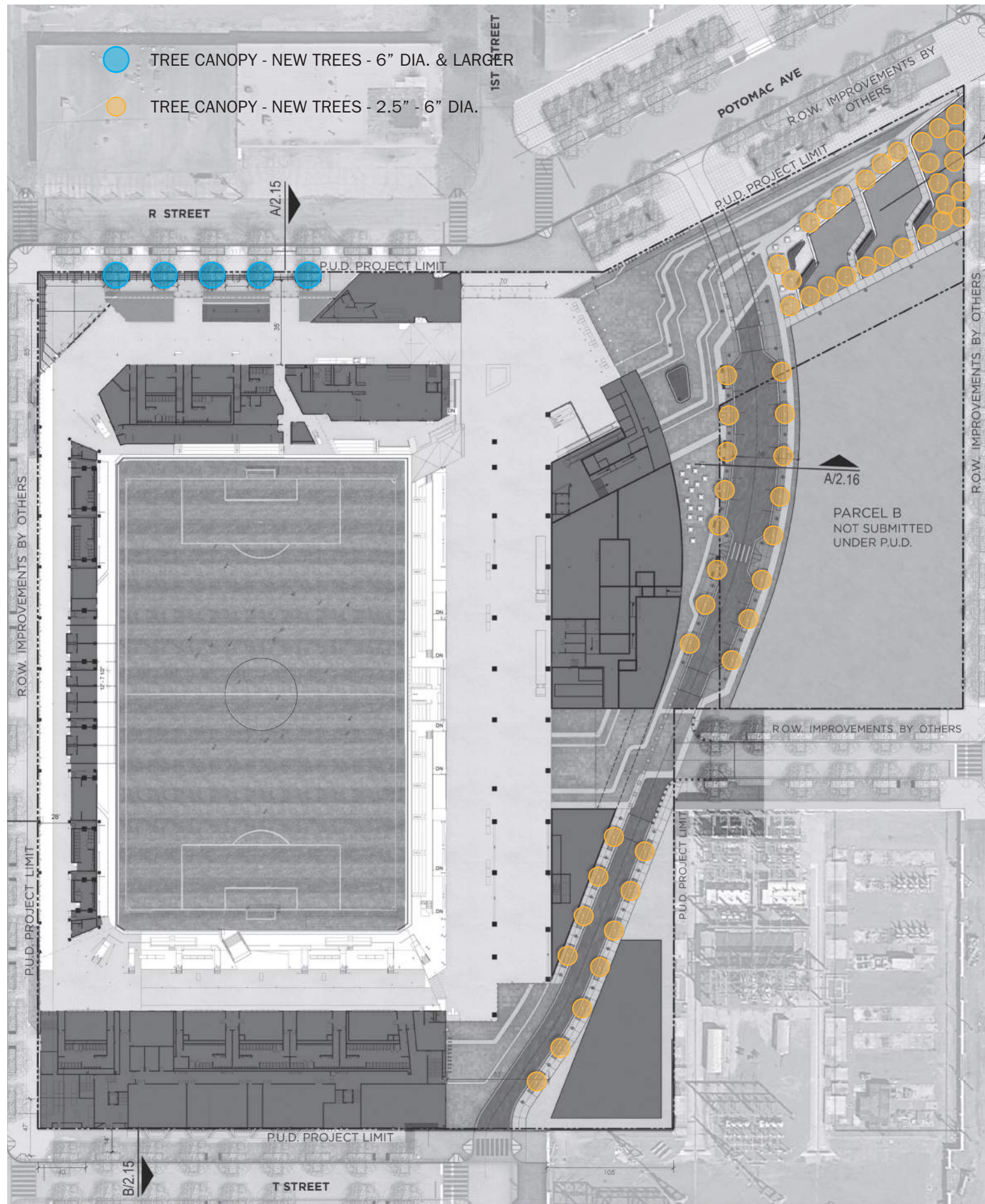
GROSS FLOOR AREA TABULATION

LEVEL	STADIUM	OFFICE / LEASABLE SPACE	TOTAL
SOUTH BASEMENT LEVEL	34,808 SF	-	34,808 SF
CONCOURSE (FIELD) LEVEL	122,458 SF	RETAIL 28,316 SF	150,775 SF
SOUTH OFFICE LEVEL	6,323 SF	TEAM OFFICE 18,605 SF	24,928 SF
EAST CLUB & NORTH SUITE LEVEL & SE CORNER 2ND LEVEL	42,612 SF	LEASABLE 9,343 SF	51,955 SF
SE CORNER 3RD LEVEL		LEASABLE 9,343 SF	9,343 SF
SUITE & PRESS LEVEL	25,100 SF	-	25,100 SF
NORTH MVP ROOF DECK	5,763 SF	-	5,763 SF
UPPER EAST CONCOURSE	25,432 SF	-	25,432 SF
STADIUM SEATING BOWL	109,835 SF	-	108,902 SF
NET	372,331 SF	65,607 SF	437,938 SF

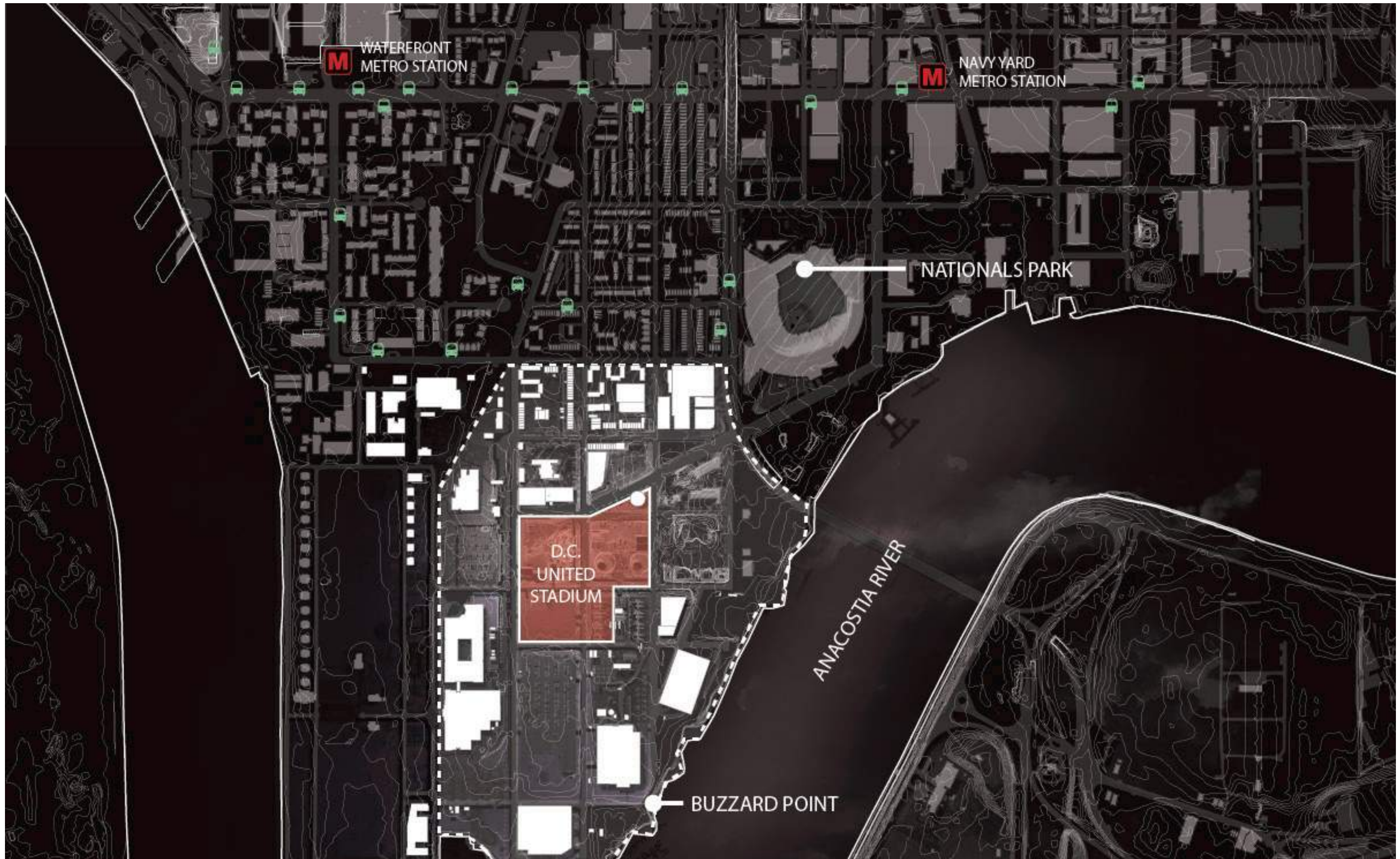

Green Area Ratio Scoresheet
 Address:
 Ward: Lot: Square:
 Other / BZA Order:
 enter sq ft of lot: multipl:
 Lot size (enter this value first) * SCORE:

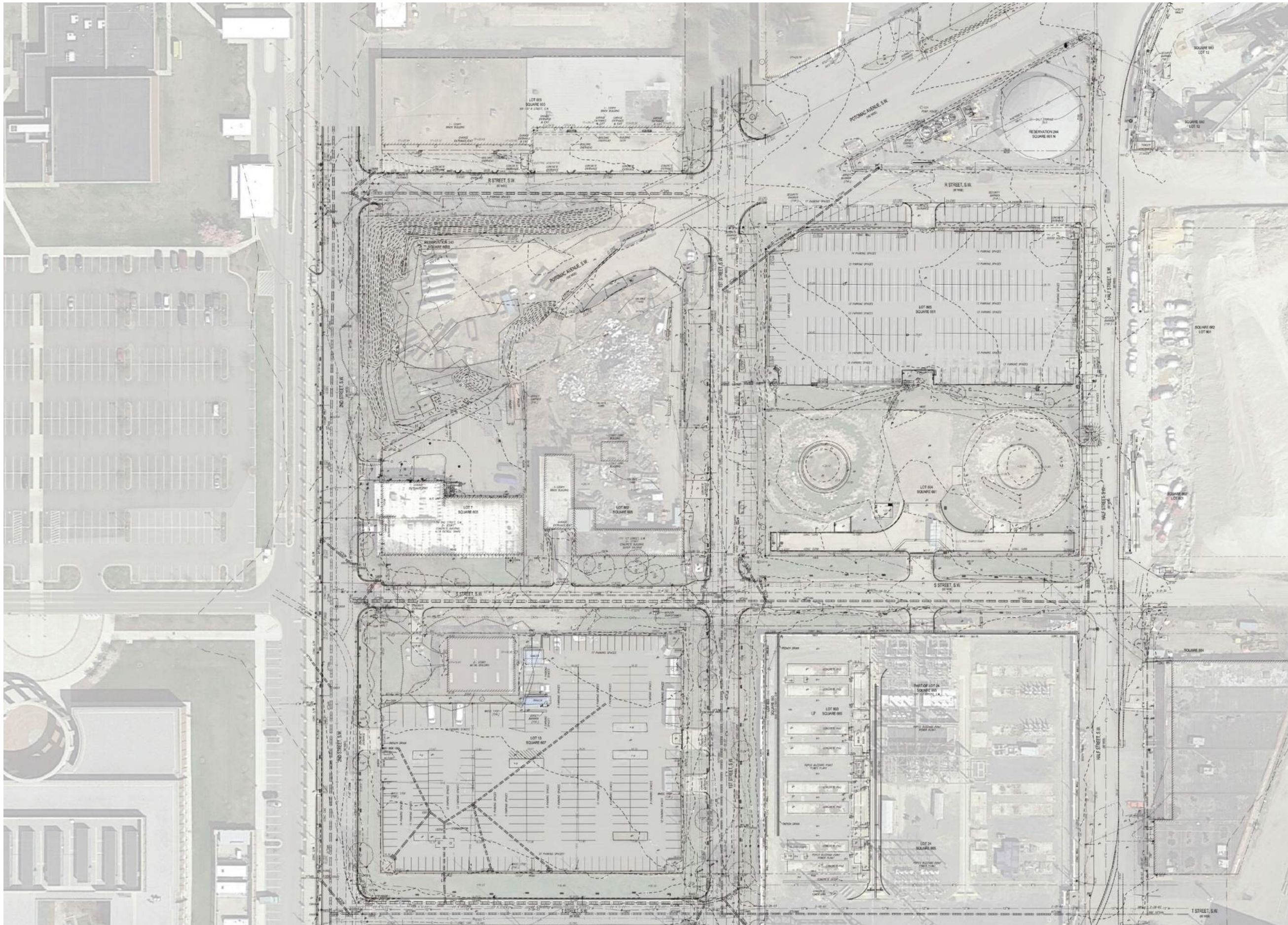
Landscape Elements		Square Ft.	Factor	Total
A Landscaped areas (select one of the following for each area)				
1	Landscaped areas with a soil depth of less than 24"	<input type="text" value="15,822"/>	0.3	4,746.6
2	Landscaped areas with a soil depth of 24" or greater	<input type="text" value="92,590"/>	0.6	55,554.0
3	Bioretention facilities	<input type="text" value="0"/>	0.4	-
B Plantings (credit for plants in landscaped areas from Section A)				
1	Groundcovers, or other plants less than 2' tall at maturity	<input type="text" value="106,414"/>	0.2	21,282.8
2	Plants, not including grasses, 2' or taller at maturity - calculated at 9 sq ft per plant (typically planted no closer than 18" on center)	<input type="text" value="600"/>	5400 0.3	1,620.0
3	Tree canopy for all new trees 2.5" to 6" diameter or equivalent - calculated at 50 sq ft per tree	<input type="text" value="54"/>	2700 0.5	1,350.0
4	Tree canopy for new trees 6" diameter or larger or equivalent - calculated at 250 sq ft per tree	<input type="text" value="5"/>	1250 0.6	750.0
5	Tree canopy for preservation of existing tree 6" to 12" diameter or larger or equivalent - calculated at 250 sq ft per tree	<input type="text" value="0"/>	0 0.7	-
6	Tree canopy for preservation of existing tree 12" to 18" diameter or larger or equivalent - calculated at 600 sq ft per tree	<input type="text" value="0"/>	0 0.7	-
7	Tree canopy for preservation of all existing trees 18" to 24" dia. or equivalent - calculated at 1300 sq ft per tree	<input type="text" value="0"/>	0 0.7	-
8	Tree canopy for preservation of all existing trees 24" diameter or larger or equivalent - calculated at 2000 sq ft per tree	<input type="text" value="0"/>	0 0.8	-

9	Vegetated wall, plantings on a vertical surface	<input type="text" value="0"/>	0.6	-
C Vegetated or "green" roofs				
1	Over at least 2" and less than 8" of growth medium	<input type="text" value="0"/>	0.6	-
2	Over at least 8" of growth medium	<input type="text" value="5,917"/>	0.8	4,733.6
D Permeable Paving***				
1	Permeable paving over at least 6" and less than 24" of soil or gravel	<input type="text" value="57,775"/>	0.4	23,110.0
2	Permeable paving over at least 24" of soil or gravel	<input type="text" value="0"/>	0.5	-
E Other				
1	Enhanced tree growth systems***	<input type="text" value="0"/>	0.4	-
2	Renewable energy generation	<input type="text" value="2,900"/>	0.5	1,450.0
3	Approved water features	<input type="text" value="0"/>	0.2	-
		sub-total of sq ft = 290,768		
H Bonuses				
1	Native plant species	<input type="text" value="5,860"/>	0.1	586.0
2	Landscaping in food cultivation	<input type="text" value="0"/>	0.1	-
3	Harvested stormwater irrigation	<input type="text" value="0"/>	0.1	-
		Green Area Ratio numerator = 115,183		
Permeable paving and structural soil together may not qualify for more than one third of the Green Area Ratio score.				
Total square footage of all permeable paving and enhanced tree growth				23,110









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PART A - EXTENT OF STADIUM PUD SUBMISSION



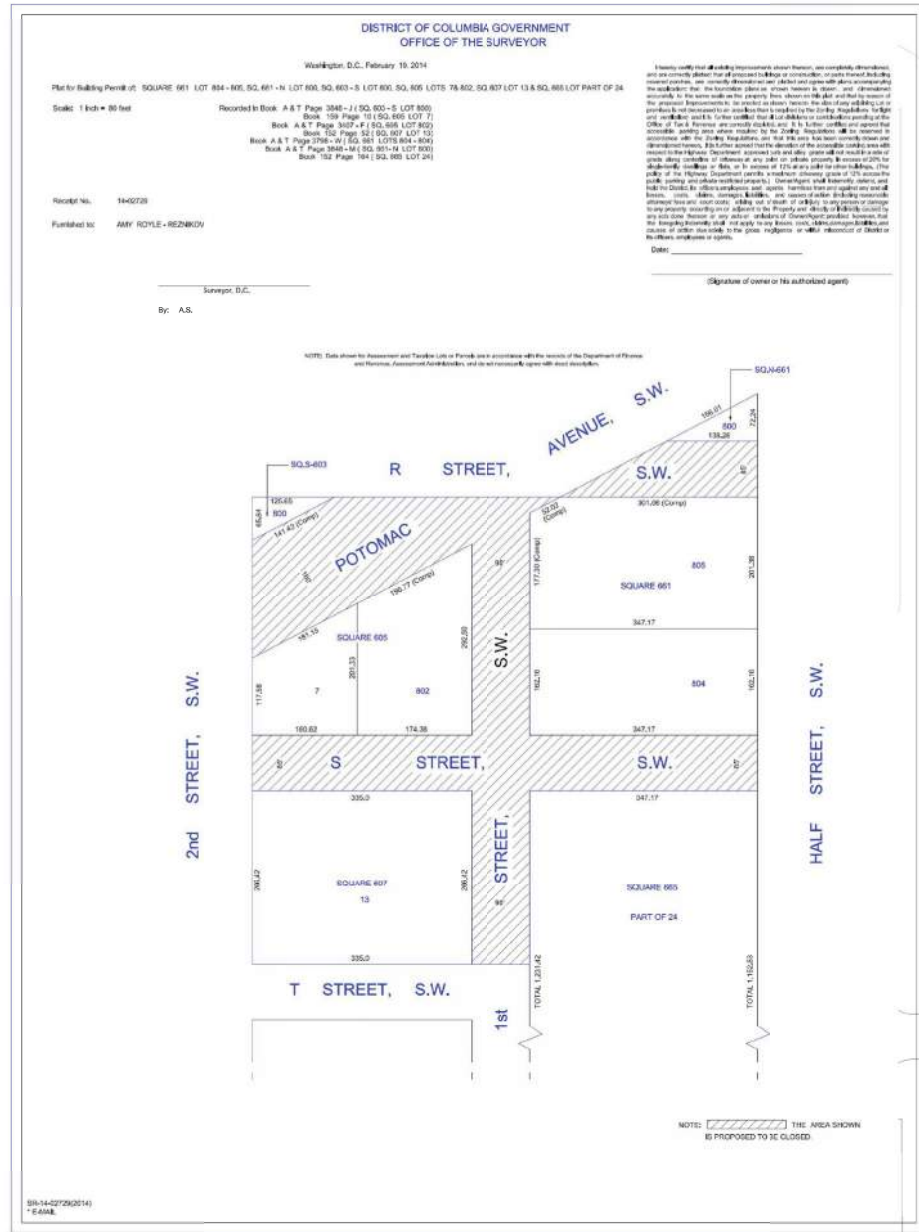
**PART B - NOT PART OF STADIUM PUD SUBMISSION
DESIGN INTENT SHOWN FOR REFERENCE ONLY**



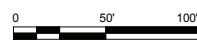
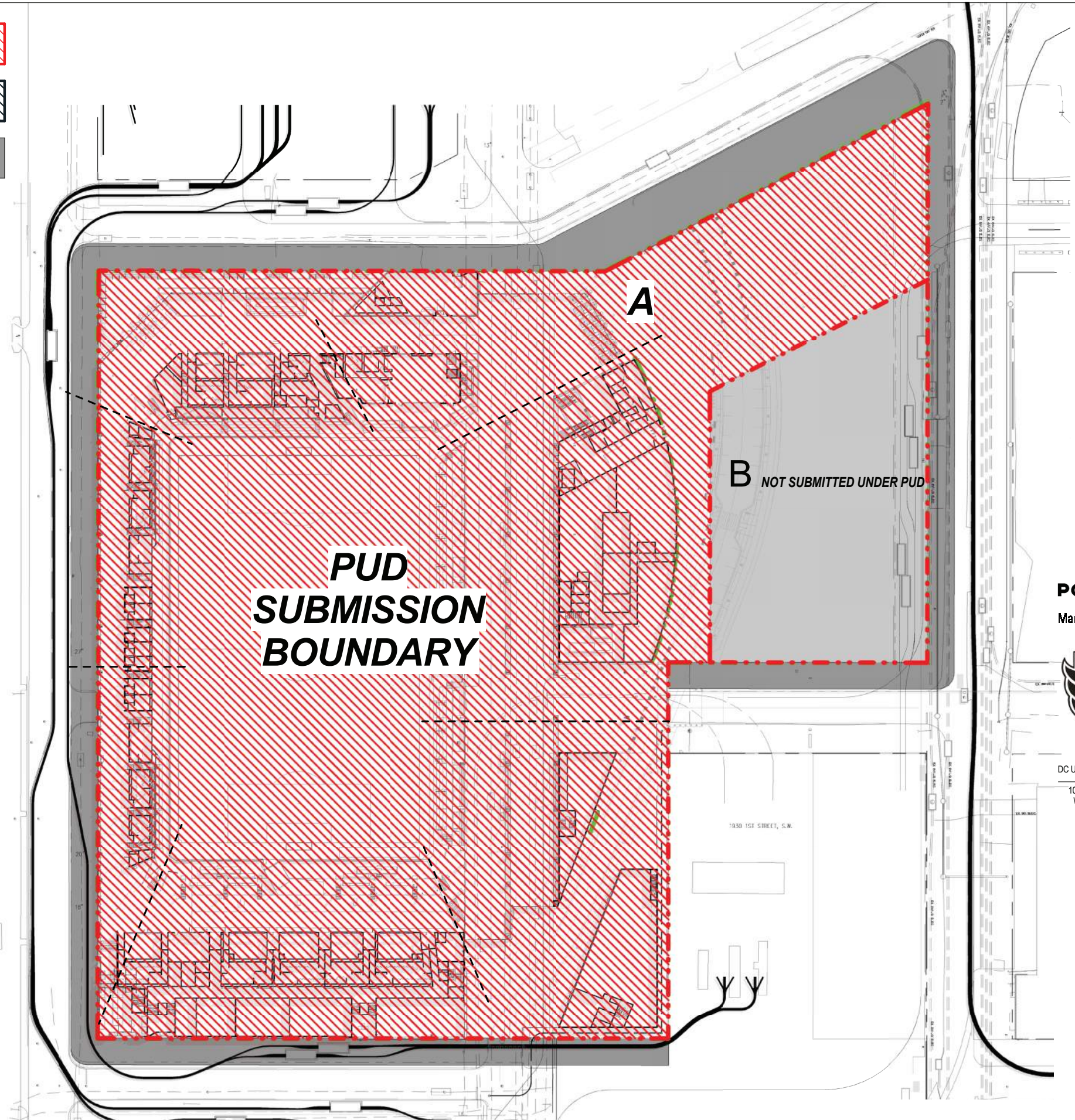
**PUBLIC REALM - NOT PART OF PUD SUBMISSION,
DESIGN INTENT SHOWN FOR REFERENCE ONLY**



**DISTRICT OF COLUMBIA RESPONSIBLE FOR DESIGN OF
PUBLIC REALM**



CONSOLIDATE PROPERTY SURVEY



1 PUD SUBMISSION BOUNDARY
1" = 50'-0"

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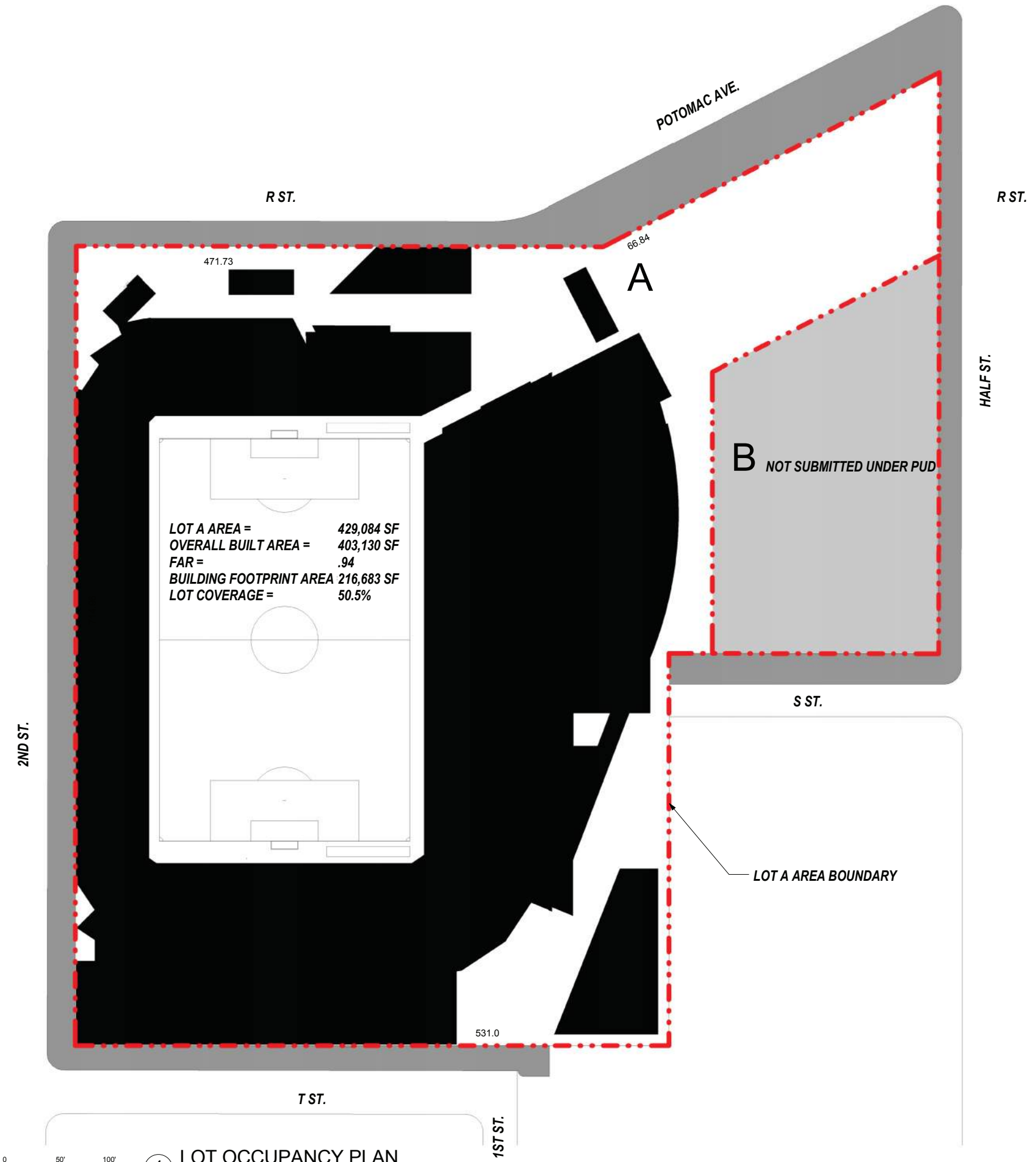
DC UNITED SOCCER STADIUM
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Washington, DC 20024

PUD SUBMISSION BOUNDARY

**PART B - NOT PART OF STADIUM
PUD SUBMISSION, DESIGN INTENT
SHOWN FOR REFERENCE ONLY**

**PUBLIC REALM - NOT PART OF PUD
SUBMISSION, DESIGN INTENT SHOWN
FOR REFERENCE ONLY**

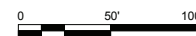
**DISTRICT OF COLUMBIA RESPONSIBLE
FOR DESIGN OF PUBLIC REALM**

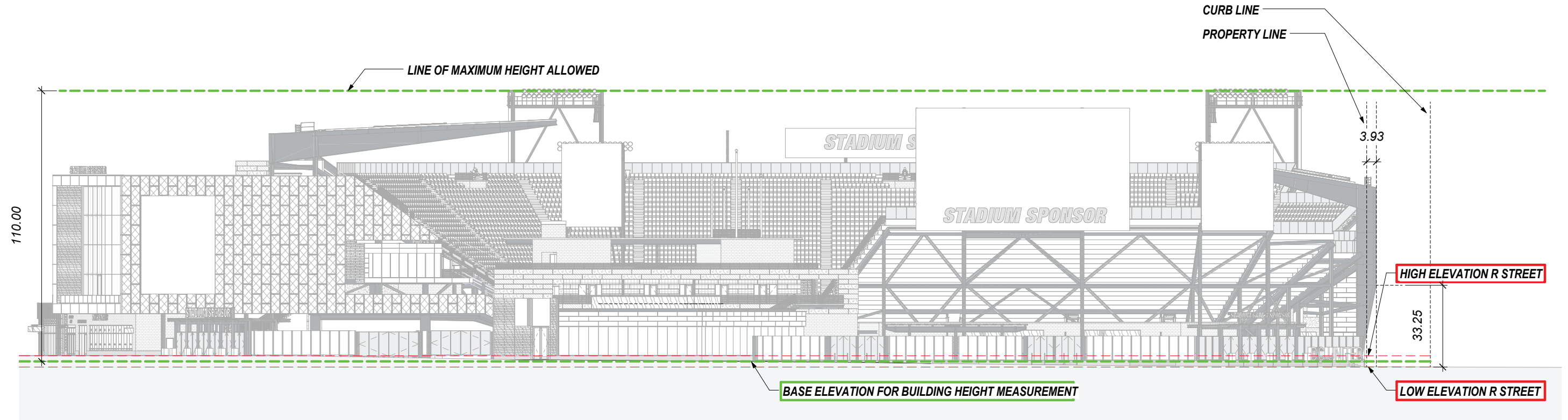


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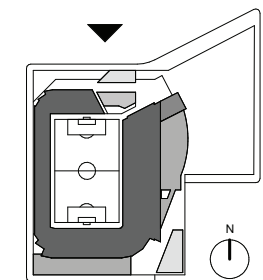




0 10' 20' 40' **1** ZONING BUILDING HEIGHT
1" = 20'-0"

POTOMAC AND R STREET IS USED AS THE PRIMARY STREETS TO ESTABLISH THE BASE ELEVATION TO MEASURE THE OVERALL BUILDING HEIGHT

THE NORTH ELEVATION OF THE STADIUM FRONTS POTOMAC AND R STREET



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100 Potomac Avenue, SW
Washington, DC 20024

ENVIRONMENTAL BENEFITS

The D.C. United Stadium is pursuing Leadership in Energy and Environmental Design (LEED) Gold Certification. The project team will implement an integrated design approach in order to maximize LEED credit achievement. Key project stakeholders and design and construction team members will be involved in the LEED process beginning in project planning and schematic design phases and will remain engaged through the certification process. The integrated team will address elements of the building's design from multiple angles including aesthetic, architectural, functional, high-performing systems, cost, operations, and sustainability. The project team will hold LEED specific integrated design coordination meetings throughout design and construction.

The project team will prioritize through design and specifications the following sustainability targets:

- Reduce development impact through site measures.
 - Address how the project site, which is infill, will be affected by a number of simultaneous developments and existing infrastructure, community services and public transportation options.
 - Implement site stormwater management through use of infiltration basin.
 - Reduce heat island effect through specification of highly reflective roofing material and areas of extensive to semi-intensive (by depth) green roof.
 - Reduce heat island effect through specification of highly reflective site paving materials.
 - Demonstrate reduction in potable water use for landscape irrigation. Project goal (50% reduction over baseline) will be pursued through native and adaptive plant species selection. The project team

will consider strategies to eliminate potable water use for landscape irrigation (to achieve 100% reduction).

- Demonstrate indoor water use reduction over baseline. Project goal (40%) will be pursued through low-flow plumbing fixtures and waterless urinals.
- Demonstrate savings on energy cost improvements against baseline via ASHRAE 90.1-2007 energy simulation. Project goal (20%) will be pursued through:
 - Optimized building envelope and associated assemblies
 - Energy efficient HVAC systems: high efficiency split system units (VRF), high efficiency boilers
 - Energy efficient lighting systems: LED building lighting, LED sports lighting, lighting control system
 - On-site renewable energy: PV panels (project goal of 3500 sf) at entrance canopies
- Specify building materials that demonstrate responsible practices. These materials may:
 - Contain recycled content (project goal 20% by cost)
 - Be regionally manufactured and extracted (project goal 20% by cost)
 - Be certified by the Forest Stewardship Council (project goal 50% or 95% of new wood products by cost)

- Provide enhanced indoor environmental quality to building users and visitors through:
 - Specification of building materials that are low- or no-emitting
 - Exceeding ASHRAE 62.1-2004 ventilation requirements (project goal greater than 30%)
 - Providing optimal thermal comfort by designing HVAC system to meet requirements of ASHRAE 55-2004
- Incorporating innovative solutions to promote the concepts of sustainability and wellness in the built environment to building visitors and users through green education, active use of the building, and sustainable operations and maintenance strategies.

LEED credits deemed appropriate for the project that may carry additional cost will be evaluated by the project team. The design team and the construction manager/general contractor will coordinate to generate a rough order of magnitude estimate. Where applicable, a return on investment estimate may also be provided to the Owner for consideration to determine the payback period of a particular strategy.

LEED is a process that is most successful when each team member is dedicated not only to the resulting LEED Certification but to the larger goal of developing an energy efficient, high-performing building that benefits its owners and occupants throughout its lifetime.



LEED 2009 for New Construction and Major Renovations

Project Checklist

17 8 1 Sustainable Sites Possible Points: 26

Y	?	N			
Y			Prereq 1	Construction Activity Pollution Prevention	
1			Credit 1	Site Selection	1
5			Credit 2	Development Density and Community Connectivity	5
1			Credit 3	Brownfield Redevelopment	1
	6		Credit 4.1	Alternative Transportation—Public Transportation Access	6
1			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
3			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
2			Credit 4.4	Alternative Transportation—Parking Capacity	2
		1	Credit 5.1	Site Development—Protect or Restore Habitat	1
		1	Credit 5.2	Site Development—Maximize Open Space	1
1			Credit 6.1	Stormwater Design—Quantity Control	1
1			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	1

8 2 Water Efficiency Possible Points: 10

Y	?	N			
Y			Prereq 1	Water Use Reduction—20% Reduction	
4			Credit 1	Water Efficient Landscaping	2 to 4
	2		Credit 2	Innovative Wastewater Technologies	2
4			Credit 3	Water Use Reduction	2 to 4

11 15 9 Energy and Atmosphere Possible Points: 35

Y	?	N			
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
6	4	9	Credit 1	Optimize Energy Performance	1 to 19
	7		Credit 2	On-Site Renewable Energy	1 to 7
2			Credit 3	Enhanced Commissioning	2
	2		Credit 4	Enhanced Refrigerant Management	2
1	2		Credit 5	Measurement and Verification	3
2			Credit 6	Green Power	2

7 7 Materials and Resources Possible Points: 14

Y	?	N			
Y			Prereq 1	Storage and Collection of Recyclables	
		3	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
		1	Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2
		2	Credit 3	Materials Reuse	1 to 2

Materials and Resources, Continued

Y	?	N			
2			Credit 4	Recycled Content	1 to 2
2			Credit 5	Regional Materials	1 to 2
		1	Credit 6	Rapidly Renewable Materials	1
1			Credit 7	Certified Wood	1

10 4 1 Indoor Environmental Quality Possible Points: 15

Y	?	N			
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
		1	Credit 1	Outdoor Air Delivery Monitoring	1
1			Credit 2	Increased Ventilation	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-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
1			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
	1		Credit 5	Indoor Chemical and 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 7.2	Thermal Comfort—Verification	1
	1		Credit 8.1	Daylight and Views—Daylight	1
	1		Credit 8.2	Daylight and Views—Views	1

6 Innovation and Design Process Possible Points: 6

Y	?	N			
1			Credit 1.1	Innovation in Design: Green Education, Active Occupants	1
1			Credit 1.2	Innovation in Design: Green Cleaning Policy and IPM Plan	1
1			Credit 1.3	Innovation in Design: EP Green Power	1
1			Credit 1.4	Innovation in Design: EP	1
1			Credit 1.5	Innovation in Design: EP	1
1			Credit 2	LEED Accredited Professional	1

1 2 1 Regional Priority Credits Possible Points: 4

Y	?	N			
1			Credit 1.1	Regional Priority: SSC6.1 Stormwater - quantity control	1
		1	Credit 1.2	Regional Priority: EAc2 On-Site Renewable Energy	1
		1	Credit 1.3	Regional Priority: WEc2 Innovative Wastewater Technology	1
		1	Credit 1.4	Regional Priority: EAc1 Optimize Energy Performance 40%	1

60 31 19 Total Possible Points: 110

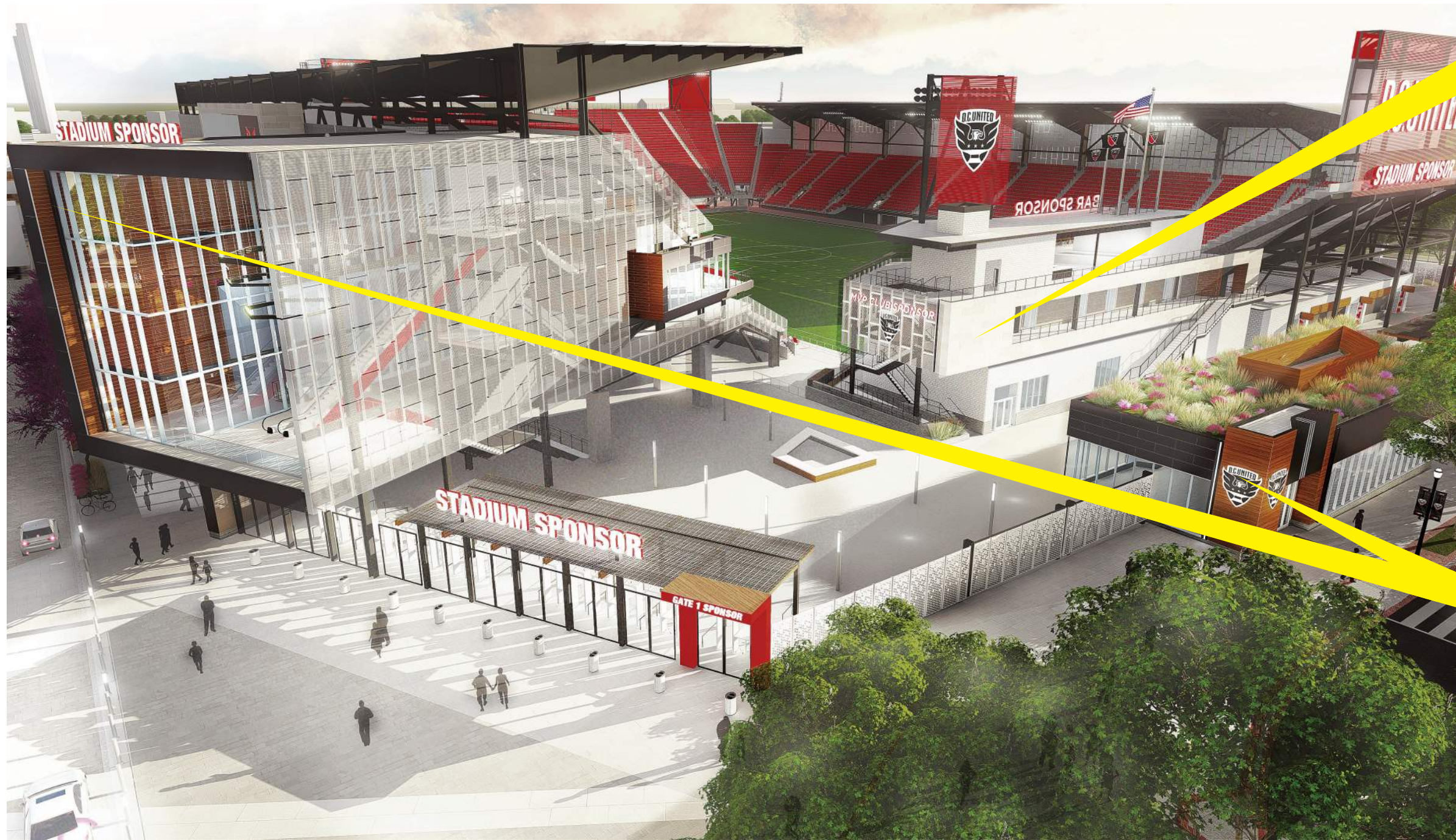
Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

GREEN ROOF & PV PANELS

- GREEN ROOF
- PV PANELS



SUSTAINABLE MATERIALS



TAKTL CONCRETE PANEL

PRODEMA