



The Heights Building Phase 2 County Board Use Permit – July 16, 2022

(Submitted July 15, 2022)

INCLUSION * EXCELLENCE * INNOVATION

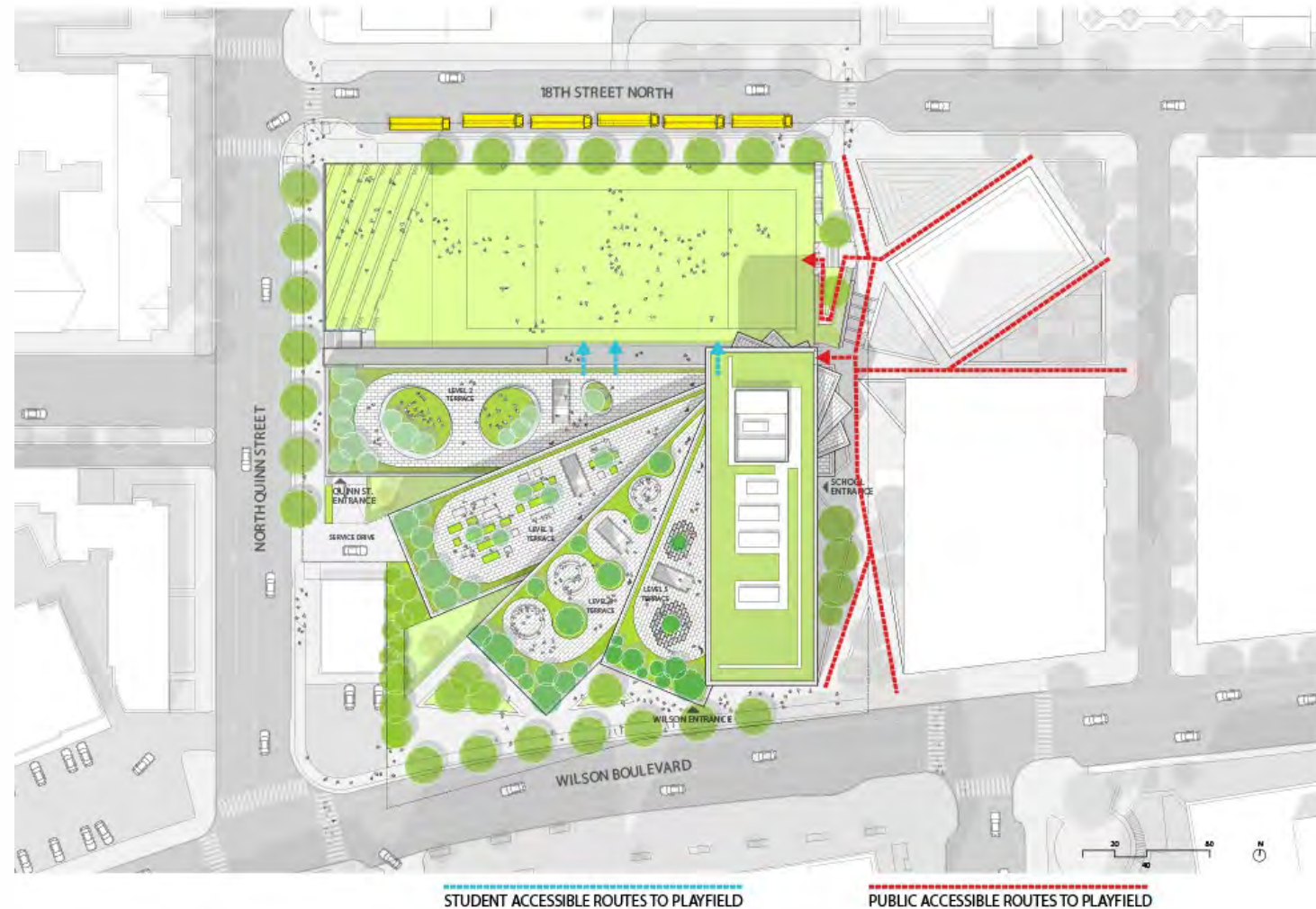
- Completes the site which opened in 2019; was delayed to accommodate the temporary fire station
- Provides improvements in accessibility, educational use, and overall school operations
- Principle features of the project include:
 - An **inviting and universally accessible path** to a main entrance adjacent to the Shriver Program administrative area;
 - **Covered, off-street area** for student pick-up and drop-off for those with differing abilities;
 - Convenient **handicap parking for staff and visitors**, immediately adjacent to a building entrance; and
 - The **largest possible lighted synthetic turf field** for school and community use.

2017 Proposal

- Identified the field elevation at **175'** and required indirect access from the building to the field by ramps and stairs.
- Provided **one** accessible route from Rosslyn Highlands Park to the field at the middle of the field.
- Solution does not align with current APS goals of inclusion, universal design, and security.

2022 Proposal

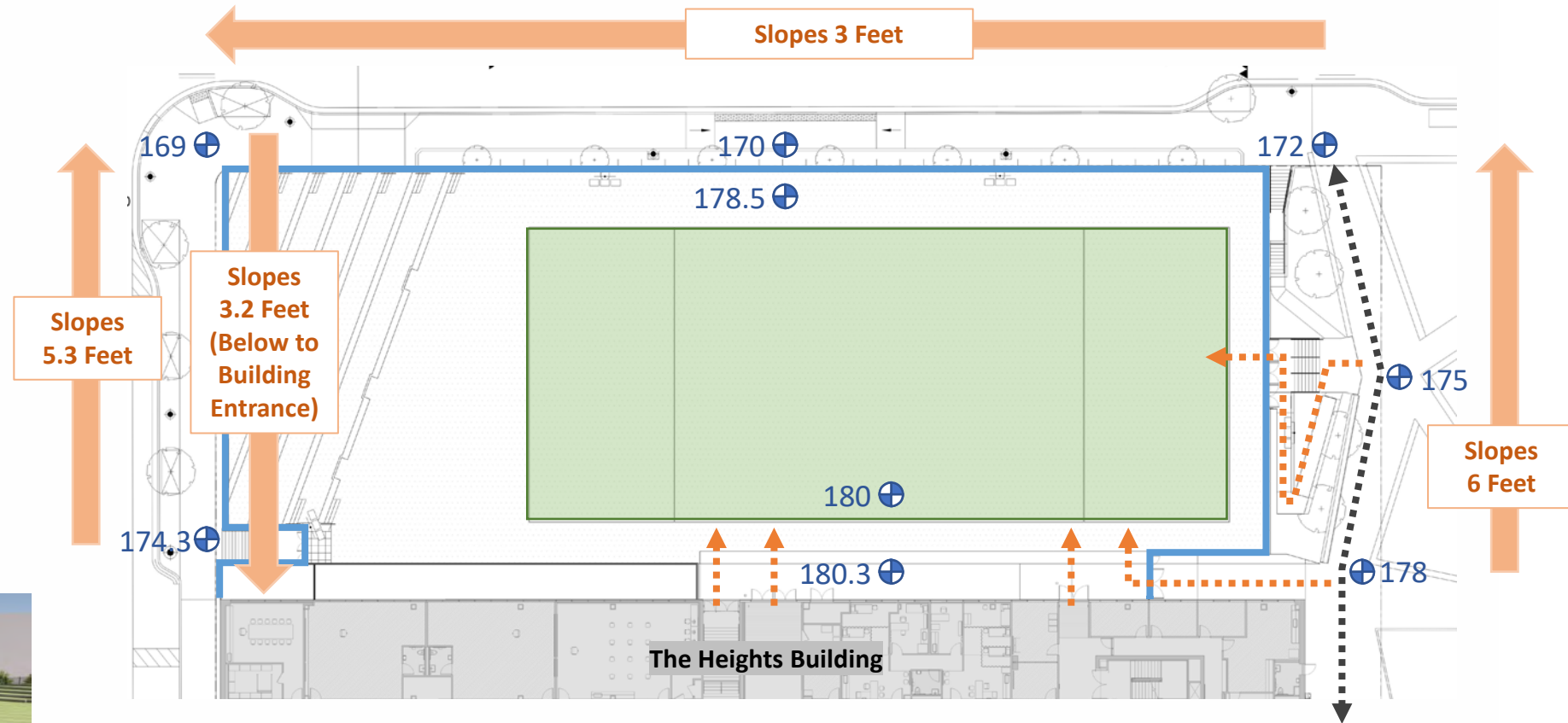
- Identifies the field elevation at **180'** permitting direct access from the building Level 1 to the field, better supporting the intended use.
- Maximizes usable field size since area for ramps and stairs is not required.
- Provides **two** accessible routes from Rosslyn Highlands Park to the field, at the middle and corner of the field.



Proposed Design – Student and Public Accessible Routes

Zero Barrier Access from Building to Field

- Natural sloping topography of the site presents several challenges for field access, visibility, and required egress
- Prioritizes field access for primary users
- Inclusive access: no elevation change between building and field along an extensive amount of frontage
- Maintains access within a perimeter that can be secured



Zero Barrier Field Access from Major Building Entrances/Exits

- Legend**
- ◄-----► Wilson Blvd & 18th St Connection through Rosslyn Highlands Park
 - > Accessible Route to the Field
 - Field Fence
 - ▭ Striped Area of Field
 - ⊕ Approximate Elevation (Above Sea Level)
 - ← Direction of Slope (High to Low)



Appendix

(for Reference)

Project Background

- **June 2014**
 - Project included in [FY 2015-24 CIP](#) as part of 1,300 secondary seats
 - County-led [Western Rosslyn Area Planning Study \(WRAPS\)](#) begins
- **September 2014** – School Board action on architecture/engineering contracts for secondary seat studies at Heights, Hamm, and Reed sites
- **December 2014** – [School Board direction](#) to divide 1,300 secondary seats into two projects: (1) The Heights Building and (2) Hamm Middle School
- **April 2015** – Concept Design begins with [first BLPC meeting](#)
- **July 2015** – County Board adopts the [WRAPS Area Plan](#)
- **December 2015** – School Board approves [Concept Design](#)

- **July 2016**

- School Board [motion](#) approves [Schematic Design](#) that includes a garage
- County and School Boards approve a [license agreement](#) permitting a temporary fire station on APS property and delaying construction of a field/garage

- **September 2016** – County Board approves [Rosslyn Highlands Park + Coordinated Open Spaces Plan](#)

- **February 2017**

- County Board approves WRAPS developments, including Heights Use Permit and Penzance and Queens Court site plans. **County Board deferred consideration of the proposed 93 space parking garage until removal of the temporary fire station.**
- School Board approves demolition contract and construction begins

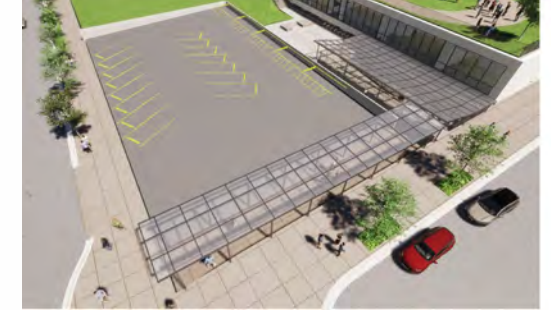
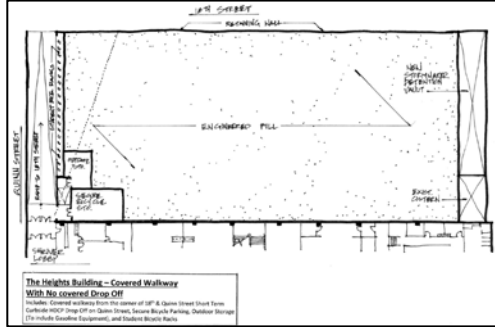
- **January 2018** – School Board approves [Final Design](#) and Construction Contract

- **September 2019** – Heights Building opens

Project Background (continued)

- **August 2020** – School Board Work Session, The Heights Building Accessibility and Capital Project Planning [presentation](#) (includes details associated with the interim condition, including its challenges, and several options for Phase 2)
- **May 2021** – School Board Work Session #1, Superintendent’s Proposed FY 2022-24 CIP [presentation](#) (includes the Phase 2 options considered)
- **June 2021**
 - Heights Phase 2 "Option A" discussed at the [Joint CIP Work Session with the County Board](#)
 - Heights Phase 2 "Option A" approved in the [School Board Adopted FY 2022-24 Capital Improvement Plan](#)
- **November 2021** – Temporary fire station removed from APS site
- **December 2021** – completed data collection for the Multimodal Transportation Assessment (MMTA)
- **January 2022** – Rosslyn Highlands Park completed
- **February 2022** – APS submits application for a Use Permit Amendment

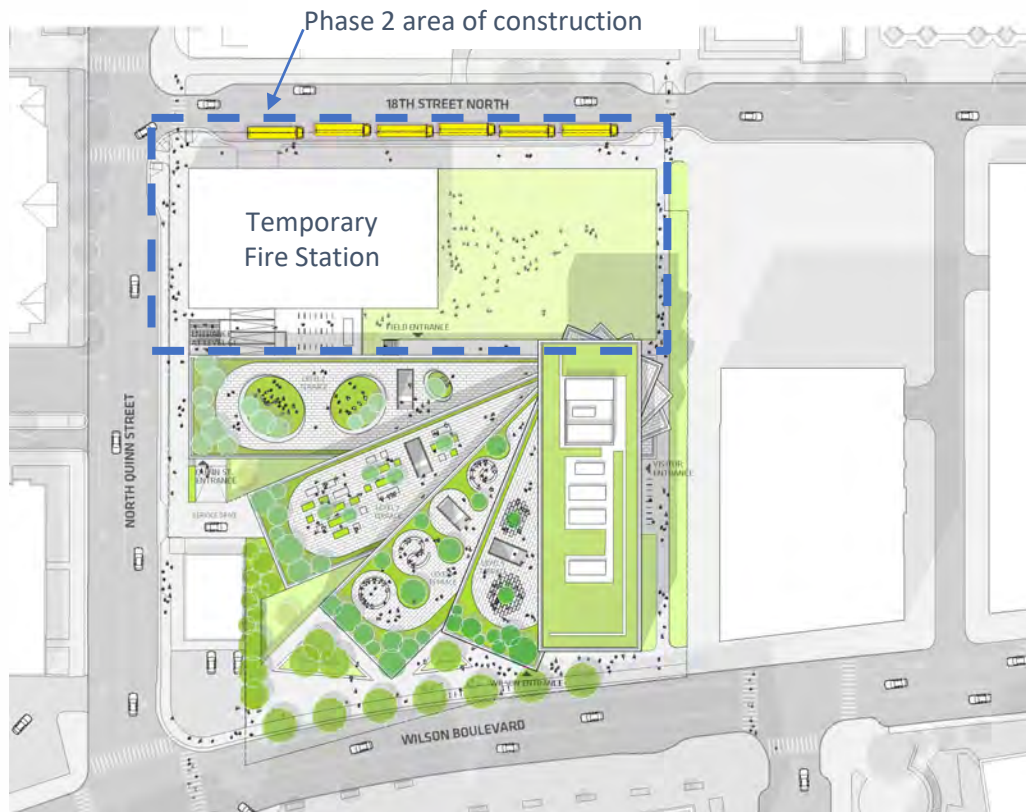
Alternatives Considered But Dismissed



Option B	Option C	Option D1	Option D1
<p>Turf field over covered entrance to Heights G1 level.</p>	<p>Turf field over partial below-grade structure about half the width of the field.</p>	<p>Natural grass field with covered entrance to Heights G1 level.</p>	<p>Combination natural grass field and surface parking with covered entrance to Heights G1 level.</p>
<ul style="list-style-type: none"> • Required significant capital investment. • Does not address the most pressing on-site transportation needs. 	<ul style="list-style-type: none"> • Provided less value being a similar capital investment with significantly less features. Approx. \$2.7M cost savings from proposed design. • Egress out of the structure would likely result in compromises to the field size/function. 	<ul style="list-style-type: none"> • Required significant capital investment. • Field areas would be disjointed and sloped. • No lighted artificial turf field. • Does not address the most pressing on-site transportation needs. 	<ul style="list-style-type: none"> • Required significant capital investment. • Inadequate and sloped field area. • No lighted artificial turf field.

Sources: [August 18, 2020 Heights Phase 2 Work Session](#), [May 11, 2021 CIP Work Session](#)

Summary of Development Phases



Phase 1 – Interim

- From September 2019 school opening to current
- Temporary fire station was removed November 2021 and area converted to a natural grass field
- Includes temporary field and entrances access



Phase 2 – Final

- Completion expected late 2023
- Includes permanent synthetic turf field, covered entrance access, on-site transportation facilities, and storm water facility
- No field on site during construction

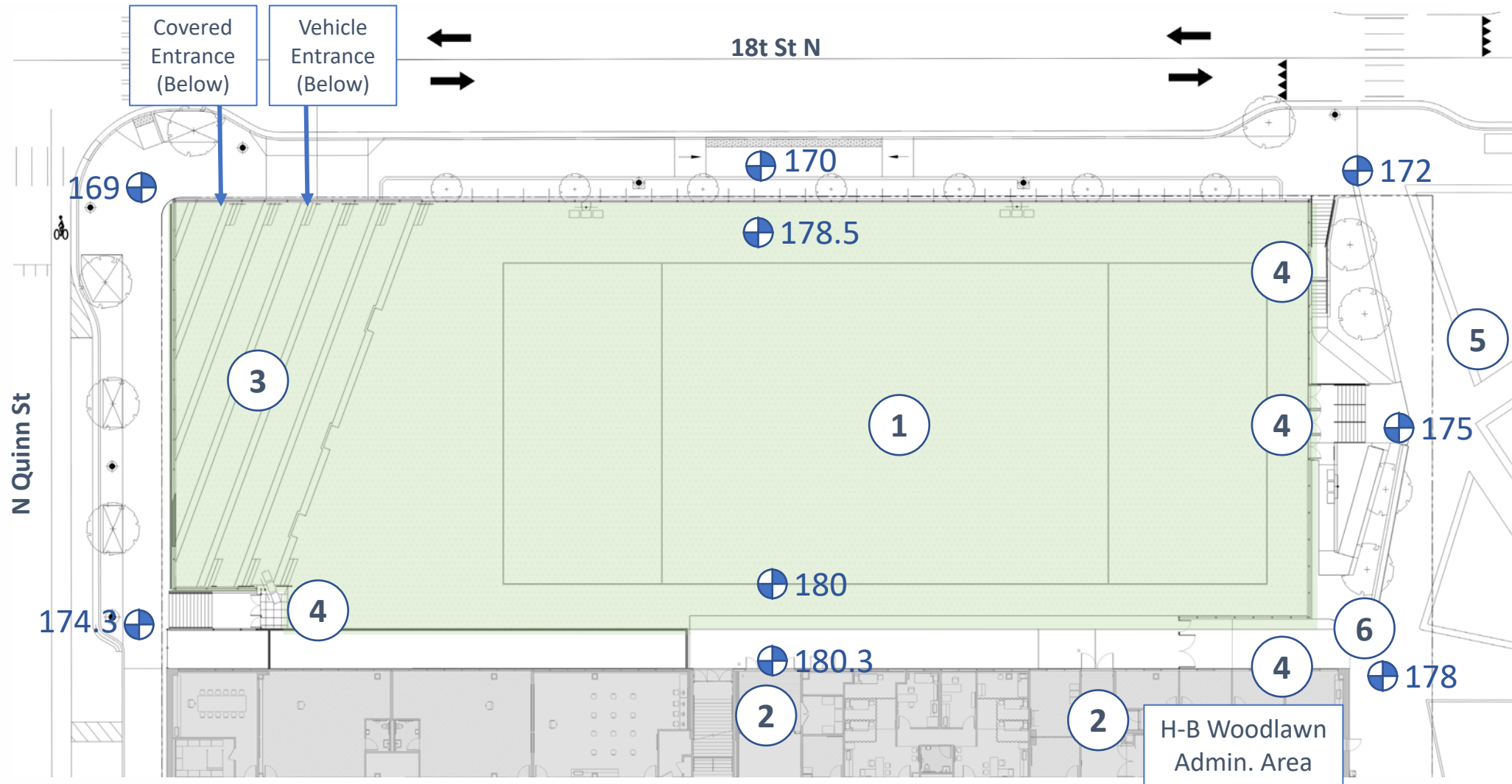
Proposed Design

Plan View: Field (Heights Level 1)

Features:

- 1 Artificial Lighted Turf Field
(Striped at 195' x 82' non-standard size, with 10' runoff minimum)
- 2 Door to Heights Building Level 1
- 3 Seating/Passive recreation
- 4 Required means of field egress
(4 total required, minimum 2 accessible)
- 5 Rosslyn Highlands Park
- 6 Access for field maintenance

 Approx. Elevation

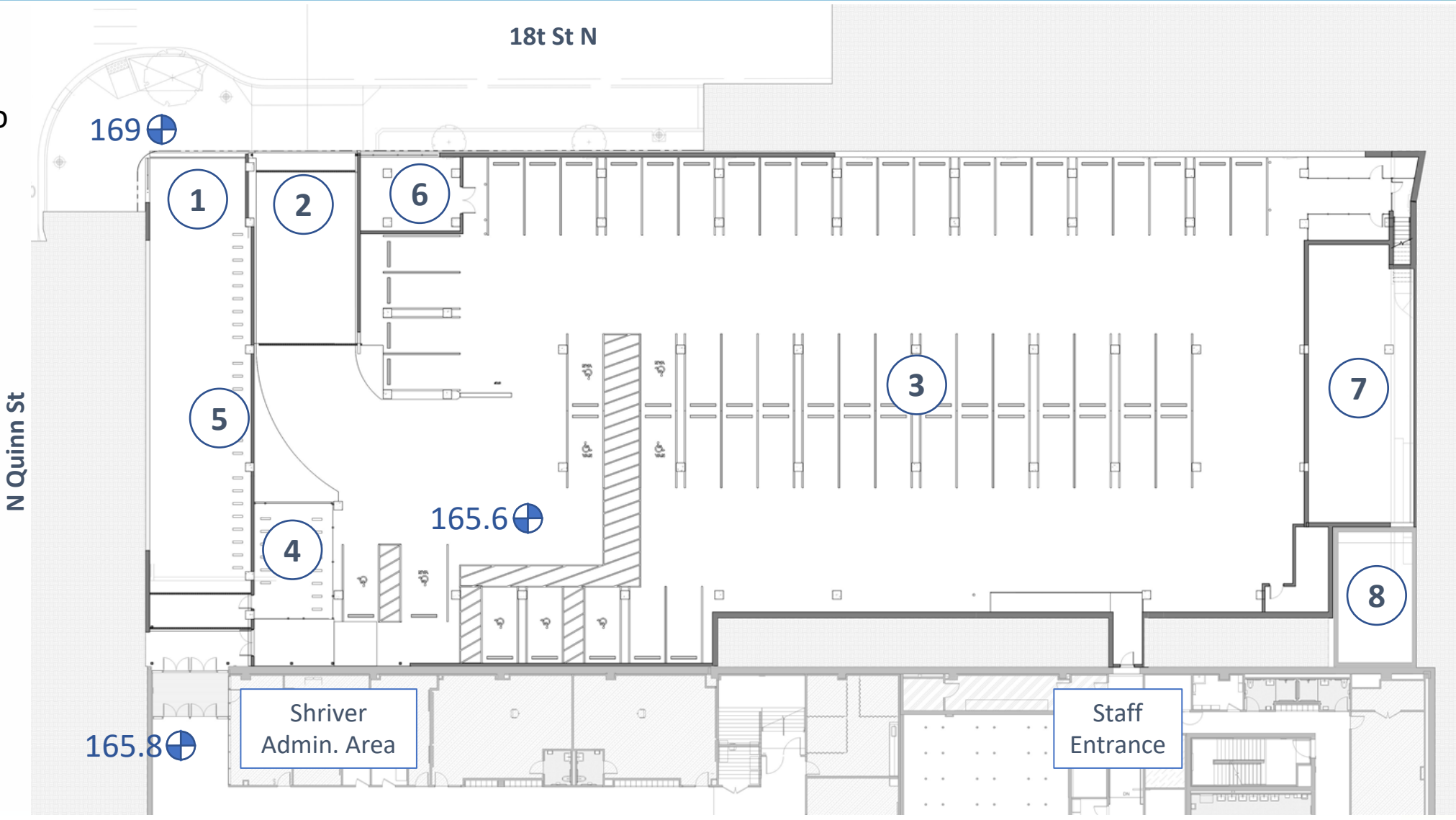


Plan View: Entrance & Parking (Heights Level G1)

Features:

- ① Covered walkway to Heights Level G1
- ② Vehicle entrance from 18th St N
- ③ 61 spaces (9 ADA spaces)
- ④ 28-Class I bicycle spaces (staff)
- ⑤ 50-Class II bicycle spaces (visitors & students)
- ⑥ Equipment storage
- ⑦ Stormwater vault
- ⑧ Existing cistern

⊕ Approx. Elevation



Aerial View from N Quinn St/18th St N



Street View from N Quinn St/18th St N



Aerial View from Rosslyn Highlands Park/18th St N



Street View from Rosslyn Highland Park/18th St N



View from Rosslyn Highland Park



Aerial View from N Quinn St



Aerial View of Artificial Lighted Turf Field



Impacts of a Lower Field

Major impacts with lowering the field

- 1 Access from Level 1 to the field is significantly diminished. A 120' sloped walkway is required to accommodate the level change, increasing travel distance from the building to the field.
- 2 Public accessible route to the field from the northeast corner of the building is increased by approximately 120'.
- 3 Addition of the sloped walkway reduces the field by approximately 10' (from 82' to 72'). The 2018 Memorandum of Agreement identifies 195' x 82' as the minimum field size required.
- 4 Fourth means of egress from field at N Quinn St is no longer feasible due to the clear height required for the building entry. It would likely be relocated to discharge on 18th St N. Final solution could further reduce field width and length.

Impacts not shown: additional excavation to lower the garage floor slab, decrease in vehicle clearance would exclude most APS maintenance vehicles, additional ramps needed within the garage to reach building level, potential conflicts with existing building footings, and mechanical instead of natural garage ventilation.



Field Elevation at 175' – Student and Public Accessible Routes

Covered Entrance to Building Level G1

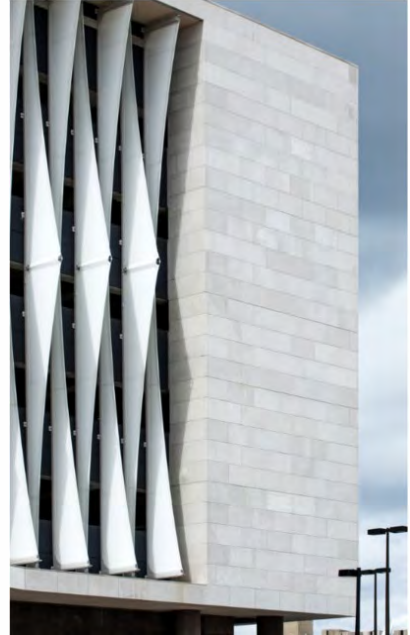
Material Precedent



Precedent: KEIM coating applied at the recently completed APS Education Center Reuse project.



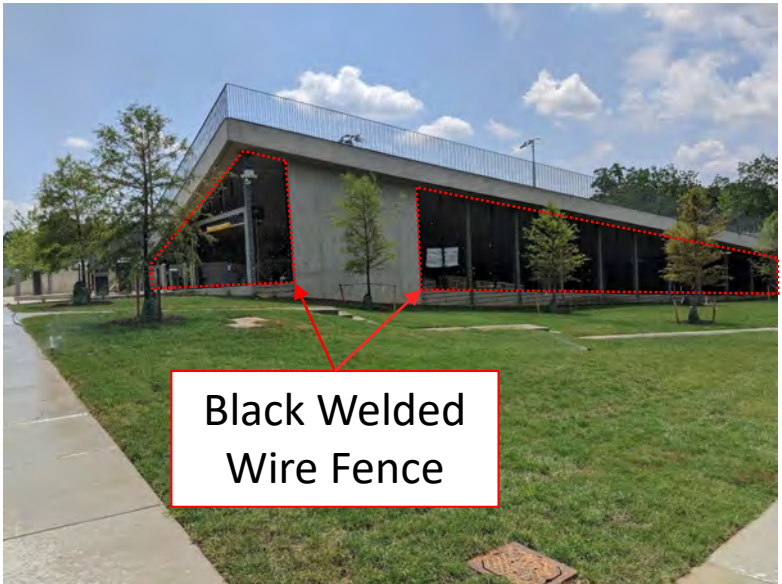
Proposal: a high-quality white mineral coating applied to the concrete wall and soffit at covered entrance.



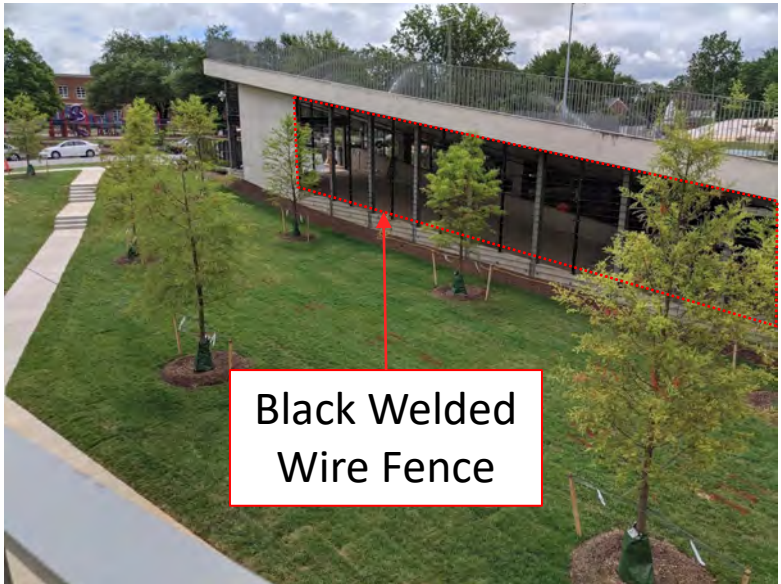
Proposal: vertical banners installed between street trees, possibly designed with assistance from APS students

Precedent Images

Material Precedent – Welded Wire Fence at Lubber Run Community Center



Black Welded
Wire Fence











Black Welded
Wire Fence



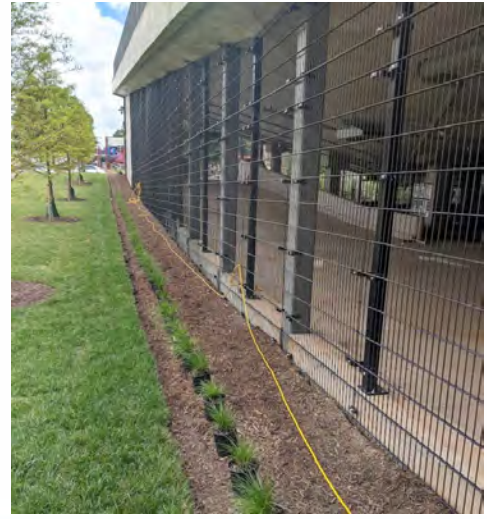
Color Options

Proposed Color

			
Green 6005	Black 9004	Brown 7006	White 9010
			
Blue 5003	Yellow 1028	Red 3002	Grey 7037



Example White Welded Wire Fence



- APS intended to use the 2020 APSGo! survey results to monitor transportation demand management (TDM) and inform the project.
- Unfortunately, the survey was launched in March 2020 shortly before the pandemic began. Preliminary response rates were very low and the survey was ultimately canceled due to the pandemic.
- On March 20, 2021, the County Board approved amendments to 33 school Use Permits, including Heights, to standardize TDM requirements and align data collection and reporting with the APSGo! Survey.
- The next division-wide APSGo! survey is not yet scheduled.
- APS completed a detailed [Multimodal Transportation Assessment \(MMTA\)](#) which concluded that the project will not have a detrimental impact on the surrounding multimodal transportation network and will significantly improve observed existing transportation challenges.

Improvements Provided with the Below-grade Structure

See Existing Conditions for Additional Detail

Component	Existing Condition	Proposed in Below-grade Structure
Shriver Pick-up Drop-off (PU/DO)	Functions poorly, relies on 3 signed on-street spaces which are often occupied by other vehicles. Number of spaces insufficient for demand.	9 ADA spaces provided (2 van sized) which should accommodate all demand. Provides covered area for PU/DO directly adjacent to a main entrance.
ADA parking	Relies on 4 ADA spaces (1 van sized) in Aubrey garage and 2 signed ADA spaces on Wilson/Quinn. Spaces not always available and are a considerable distance from the Shriver areas.	9 ADA spaces provided (2 van sized) which should accommodate all demand. Provides covered area directly adjacent to a main entrance.
Long-term staff parking	Accommodated through 90 spaces in Aubrey garage, plus an additional 30 leased at 1776 Wilson	30 spaces provided eliminates the need for APS to lease and manage off-site parking (except at Aubrey garage)
Staff parking loading/unloading	Short-term staff parking relies on on-street parking and often conflicts with other uses	2 spaces provided, eliminates conflicts
Visitor parking	10 spaces provided in Aubrey garage, validated by APS	14 spaces provided, the need for validation is removed. The 10 in the Aubrey garage become available for staff parking.
Maintenance and parcel parking	None designated, often conflicts with other uses	6 spaces provided, eliminates conflicts
Event parking	Relies on nearby on-street parking and garages	Spaces provided reduces the need for validation with parking needs for small/moderate events fully accommodated

Proposed Conditions – Below-Grade Structure

- Seven (7) ADA loading spaces increase Shriver PUDO capacity.
- A covered entrance to Shriver is provided.
- Six (6) maintenance van/parcel delivery spaces alleviate curbside conflicts.



Proposed Conditions – Below-Grade Structure

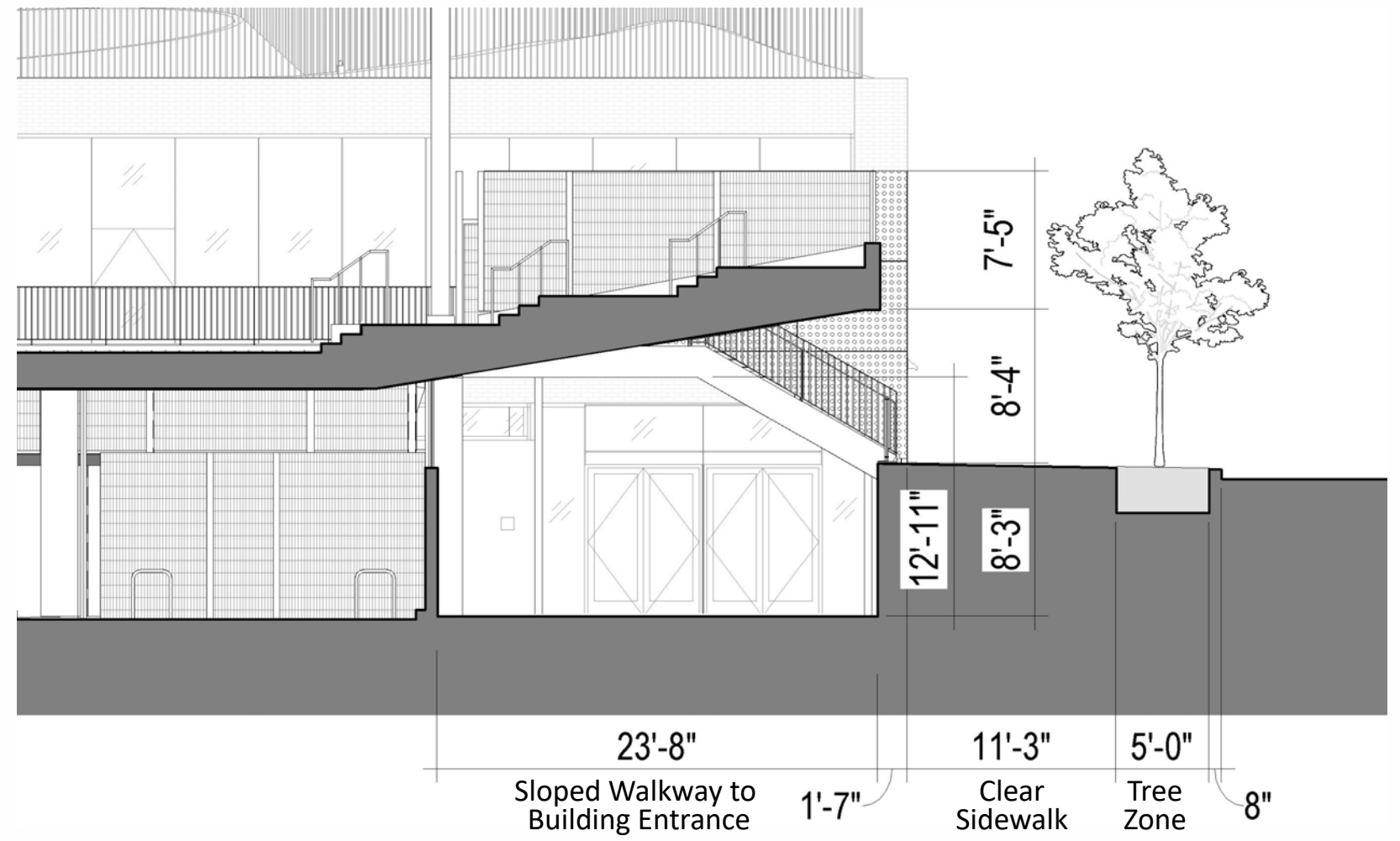
- 30 staff spaces will allow APS to stop leasing spaces at 1776 Wilson Blvd.
- Two (2) short-term staff parking spaces will make it easier for staff to load/unload supplies.
- 14 visitor spaces reduce demand for curbside spaces.
- Covered walkway provides protected bike racks for students.
- Bicycle storage provides secure, protected bike racks for staff.



Site Section at N Quinn Near Building Entrance



Key Plan



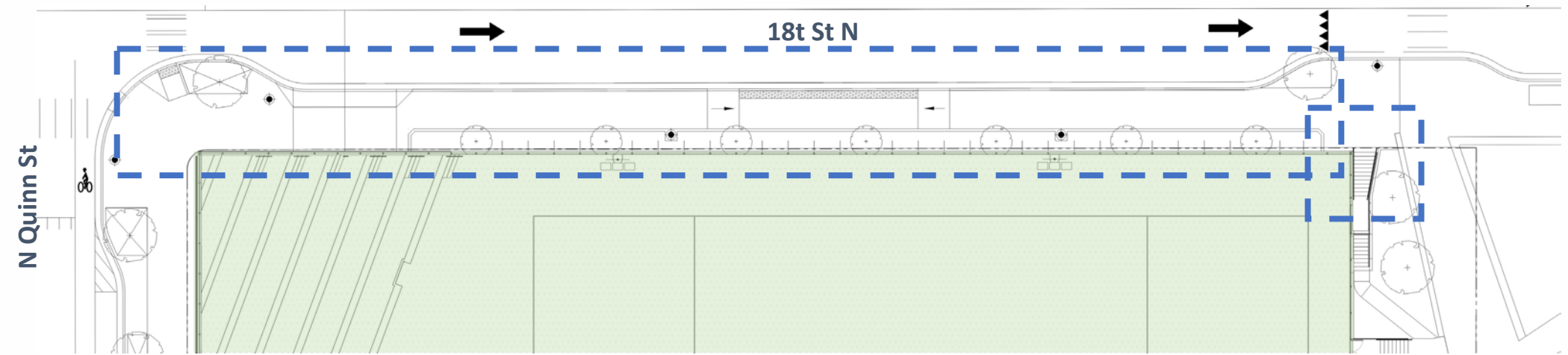
Design Revisions

Comparing Initial (May 2022) and Revised (July 2022) Designs

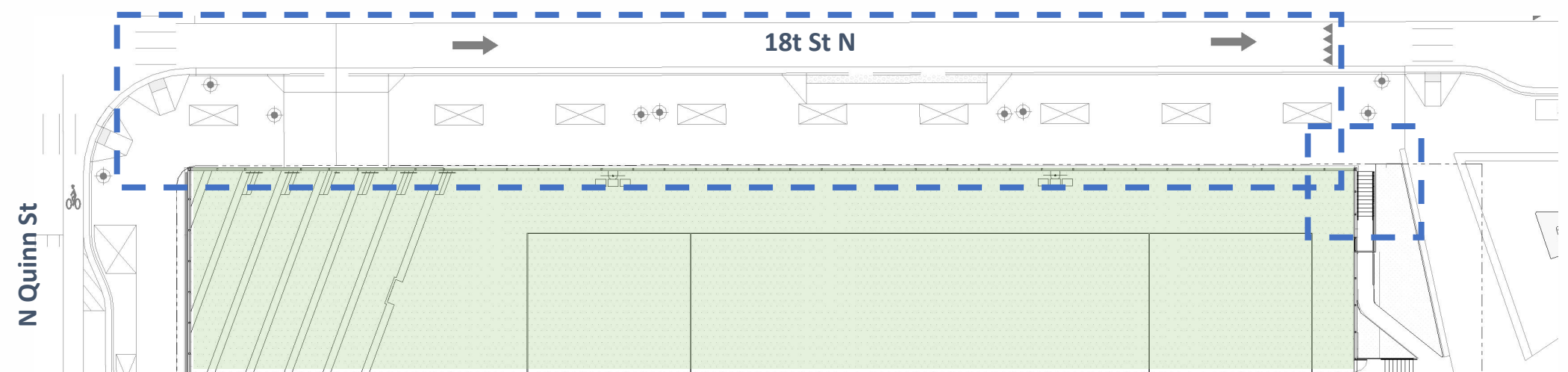
- Revised 18th St N streetscape
 - Maintains existing street width and parking lane adjacent to APS frontage
 - Adds continuous elevated planting strip with trees and other plantings
 - Reduces sidewalk clear width to 10'-0"
- Geometry change at stair from 18th St N to field
- Additional detail on finishes at covered entrance to building Level G1
- Façade treatments along 18th St N
- Added planting strip at N Quinn St adjacent to railing

Plan View: Field (Heights Level 1)

Comparing Initial and Revised Design



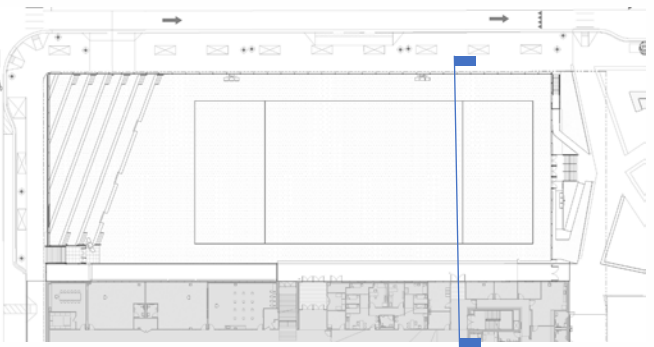
Revised Design



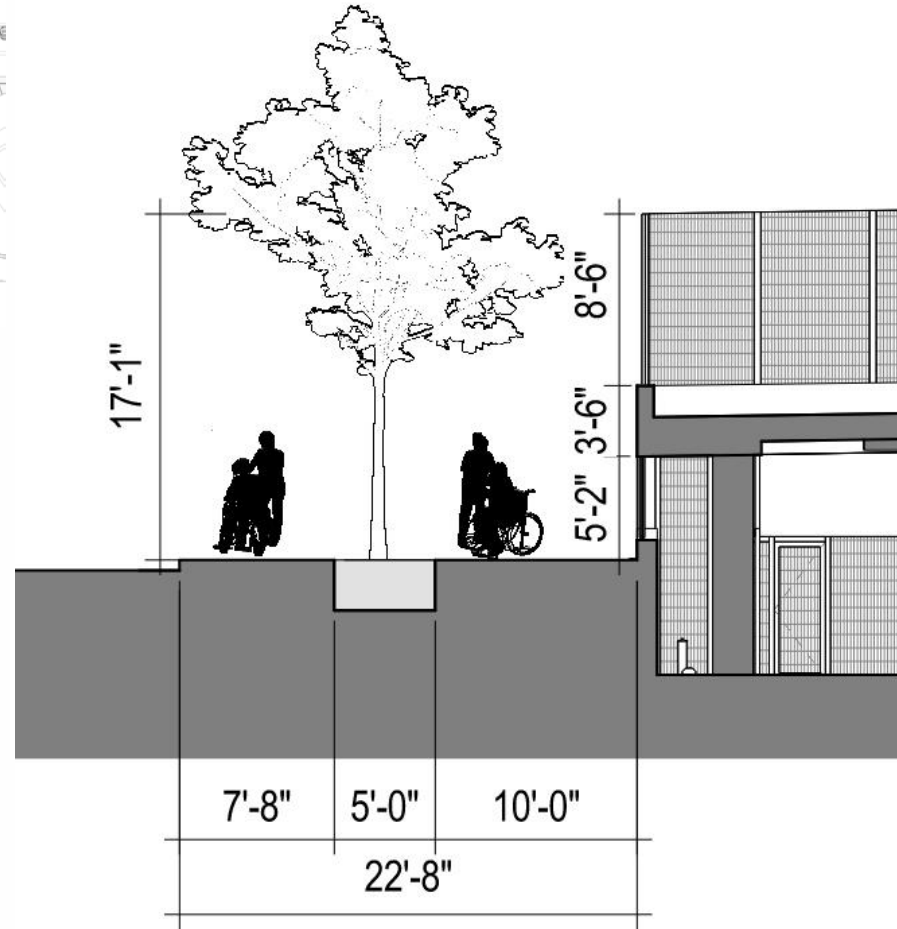
Initial Design

Enlarged Site Section at 18th St. Near Park

Comparing Initial and Revised Design

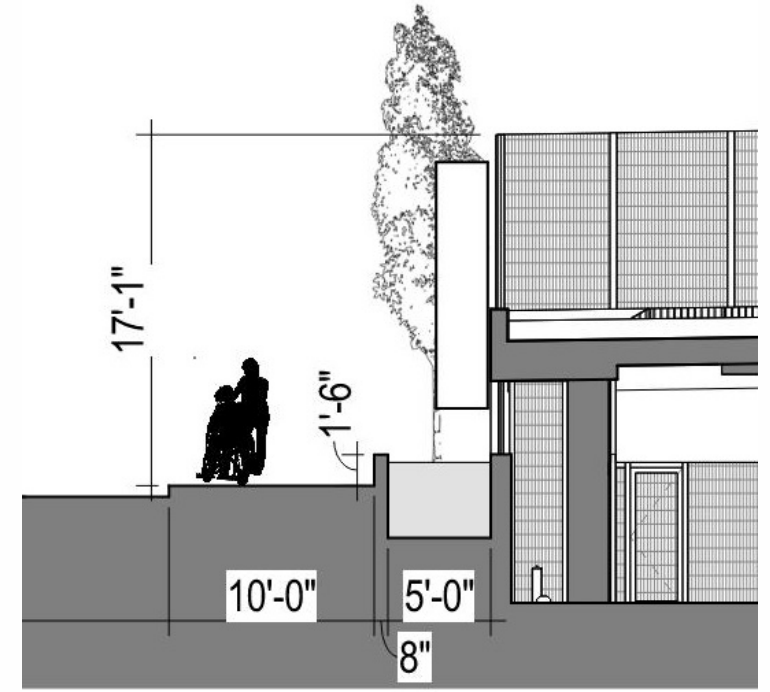


Key Plan



Initial Design

Reduces existing roadway width, removing parking lane along APS frontage



Revised Design

Maintains existing roadway width and parking lane along APS frontage

Aerial View from N Quinn St/18th St N

Comparing Initial and Revised Design



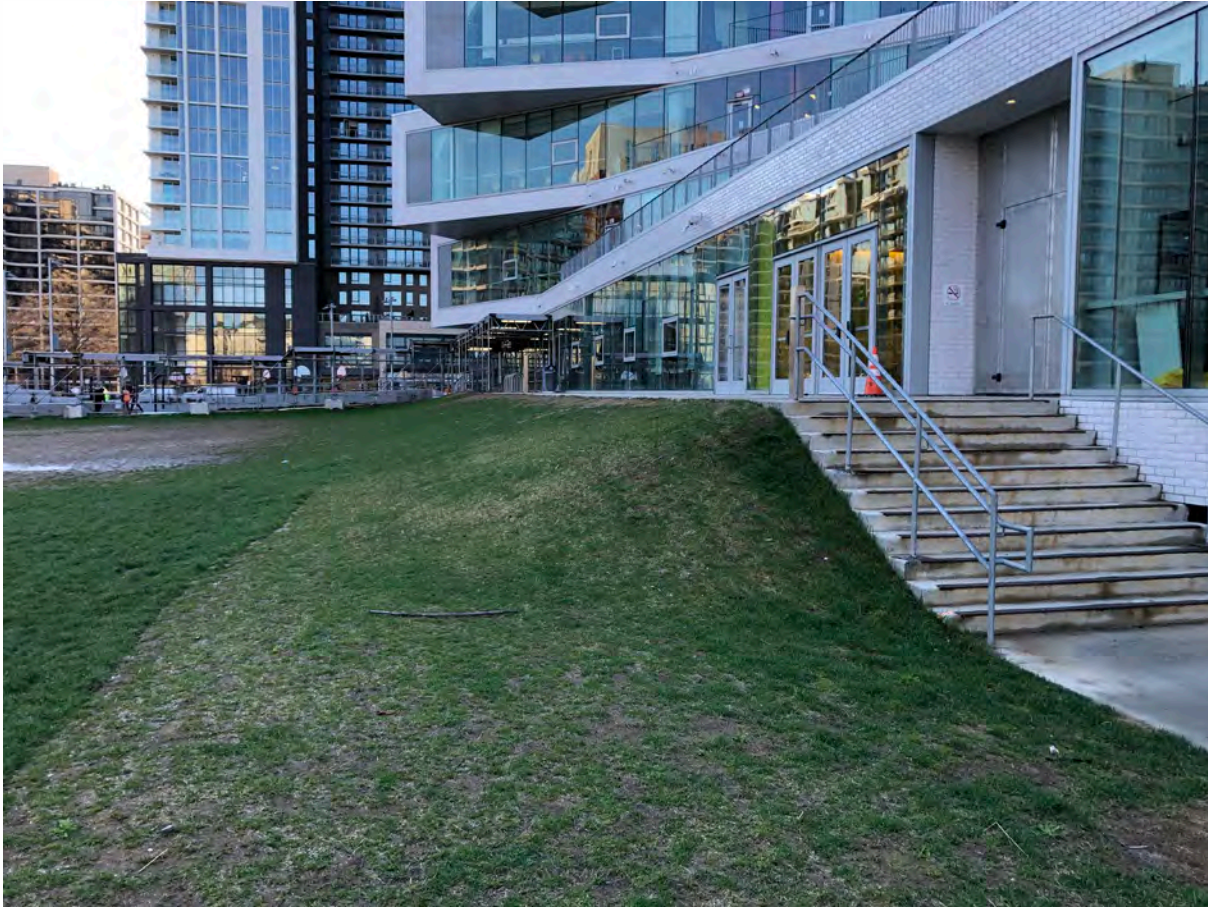
Initial Design



Revised Design

Existing Conditions

Existing Condition Photos (April 2022)



**Stair Access from Heights Building Level 1 to Temporary Field
(Accessible Route via Rosslyn Highlands Park or 18th St S)**

Existing Condition Photos (April 2022)



**Temporary Stair and Ramp to Heights Building G1 Level
(Shriver Administrative Area)**



View of Temporary Field Looking Toward Rosslyn Highlands Park

Existing Condition Photos (April 2022)



18th St N at Rosslyn Highland Park Looking West Toward N Quinn St

Existing Conditions – 18th Street N

- Both schools currently use 18th Street (curb-to-curb) between Quinn Street and the mid-block crosswalk for boarding and alighting during arrival and dismissal.



Existing Conditions – 18th Street N

- There is not sufficient space for students waiting on the sidewalk for loading and unloading buses.

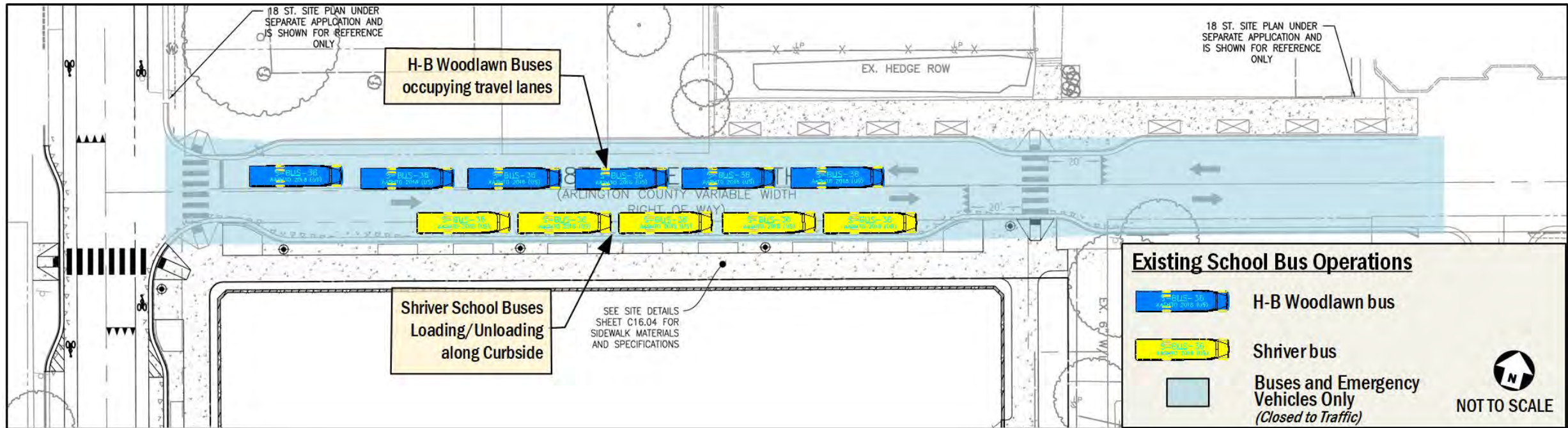


Existing Conditions – 18th Street N

- Vehicles enter 18th Street during arrival and dismissal hours despite “Do Not Enter” signs, conflicting with buses.



Existing Conditions – 18th Street N



Existing Conditions – ADA Pick-Up/Drop-Off

- Spaces are limited for ADA PUDO on Quinn St.



- There is no covered entrance for Shriver students.



Existing Conditions – ADA Pick-Up/Drop-Off

- Maintenance vehicles frequently occupy ADA loading spaces on Quinn St.

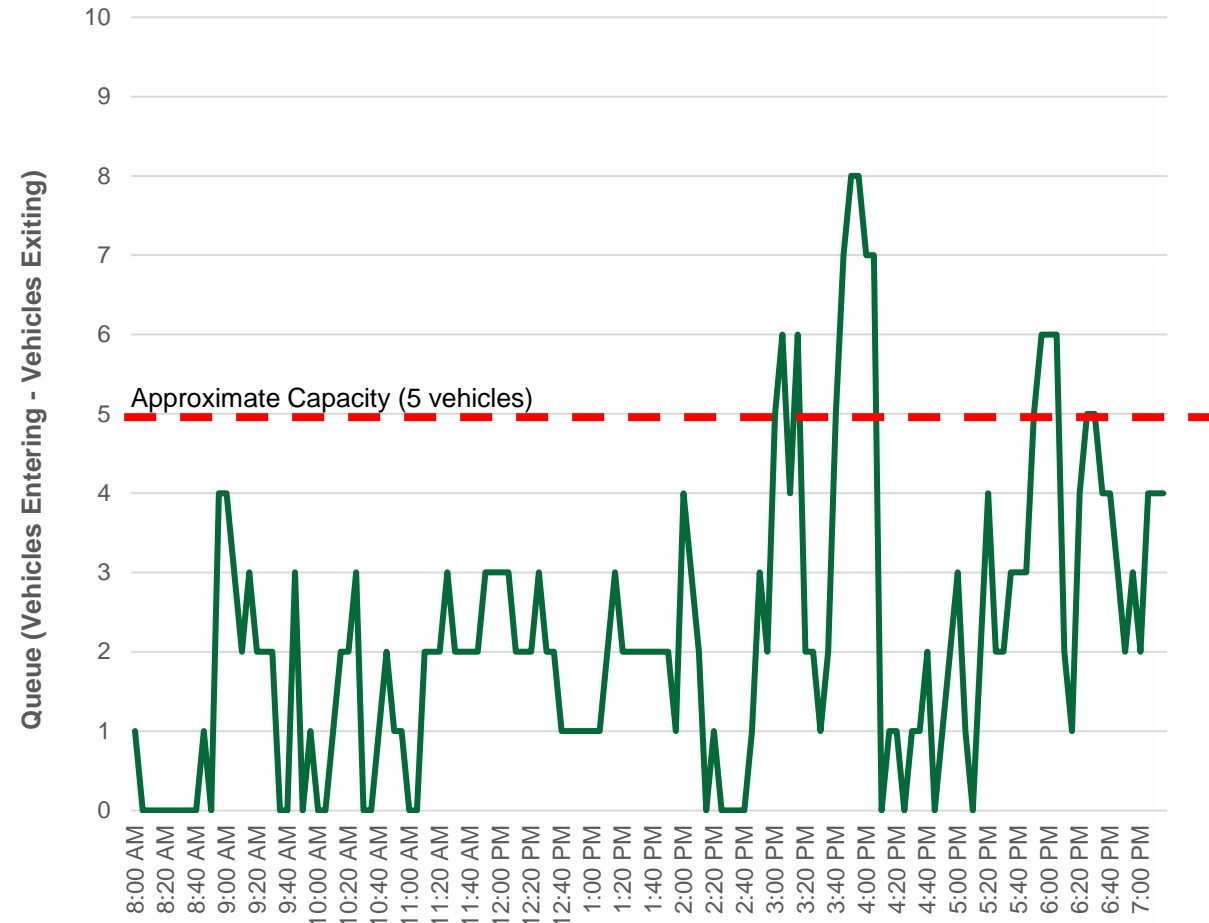


Existing Conditions – Short-Term Parking

- Vehicles queue in the travel lane on Wilson Blvd.



Wilson Boulevard Short-Term Parking Queuing



Existing Conditions – Short-Term Parking

- Maintenance vehicles and delivery vans occupy parking spaces and conflict with PUDO.



Existing Conditions – Loading Conflicts

- Vehicles park in the loading area on Quinn St and conflict with large deliveries and trash removal.



Existing Conditions – Staff Parking

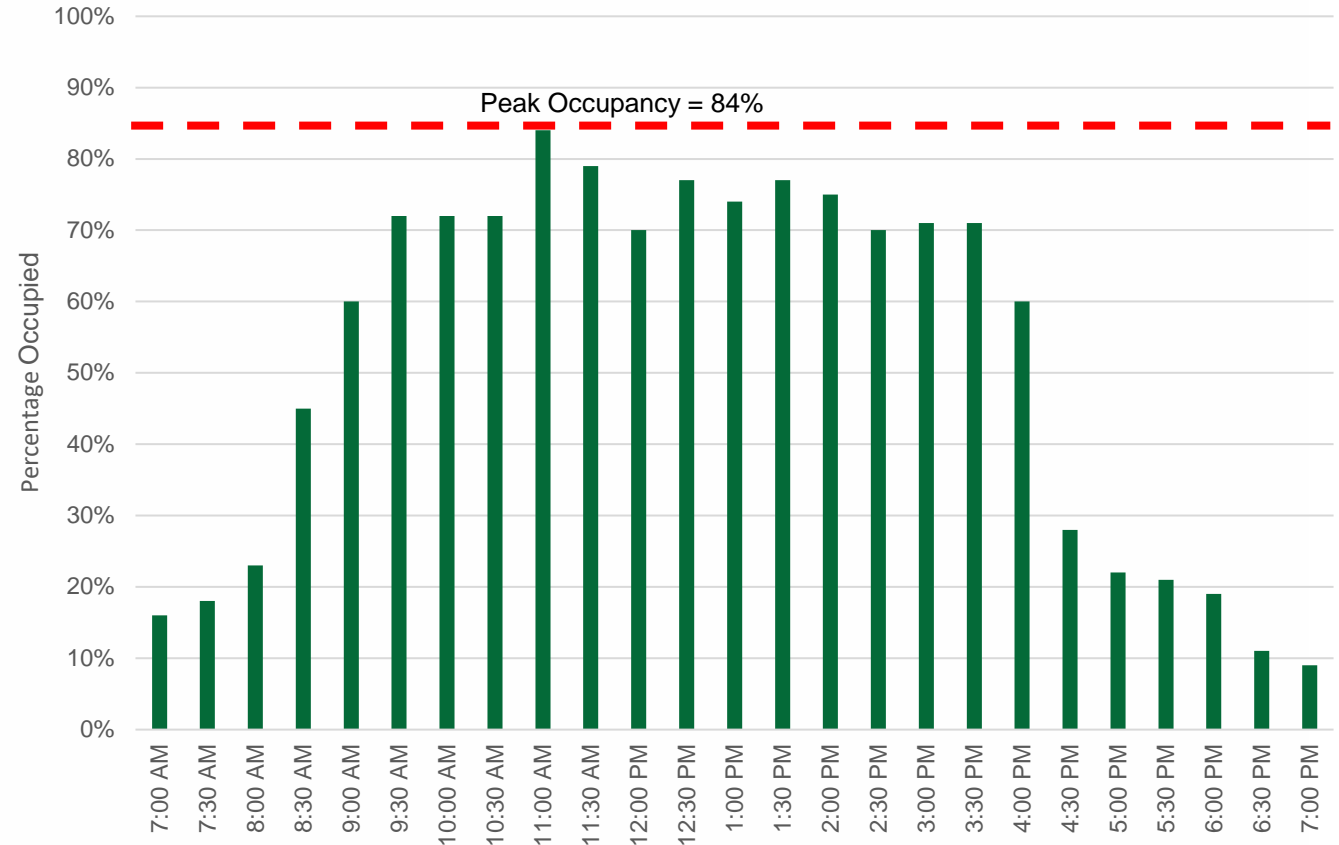
- 100 parking spaces reserved for APS, for permanent/temporary staff, and long-term visitors in The Aubrey with 30 additional spaces leased in the 1776 Wilson garage



Existing Conditions – Staff Parking

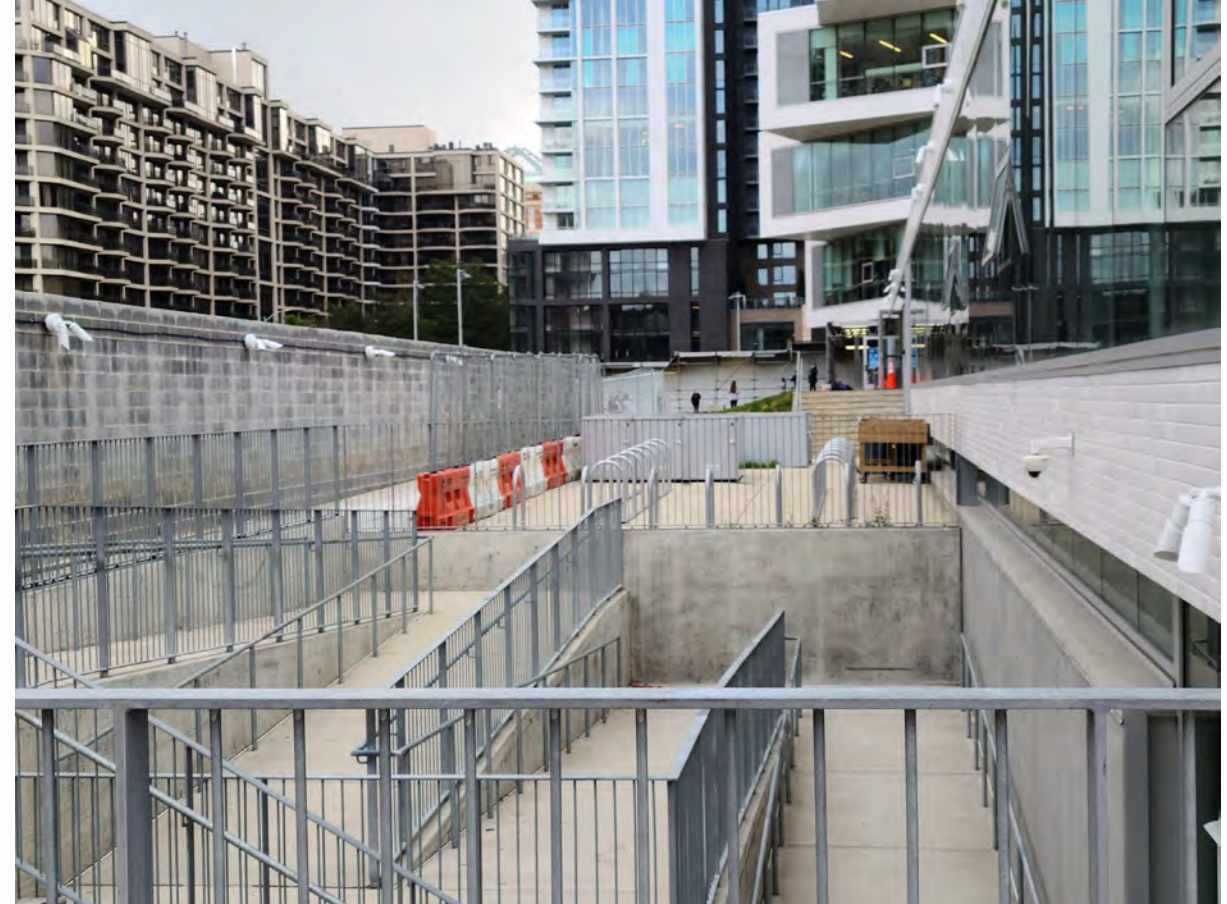
- Based on December 2021 data, highest occupancy occurred during school hours (8:30 AM to 4:00 PM) with a daily peak at 11:00 AM (84 spaces).
 - Traditionally, an 85% occupancy rate is considered an ideal level of parking utilization to be considered “full” while having space to accommodate demand from incoming vehicles.
- The reserved parking spaces in Aubrey have limited capacity to accommodate additional demand.
 - Additional parking is required for events.
 - No short-term parking spaces are available for staff to load and unload supplies.
 - Occupancy is too high during school hours to consolidate 1776 Wilson Blvd spaces into the Aubrey.

Aubrey School Parking Occupancy



Existing Conditions – Bicycle Parking

- Racks are taped off along Wilson due to frequent theft.
- Other racks and bike boxes by Shriver underutilized due to lack of cover and inaccessibility.



Existing Conditions – Bicycle Parking

- As a result of issues with the other racks and bike boxes, the racks by the main H-B Woodlawn entrance are overcapacity.

