

EDUCATION CENTER REUSE

David M. Brown Planetarium
AEC 1426 North Quincy Street

ARLINGTON PUBLIC SCHOOLS

1426 N QUINCY ST

BLPC / PFRC JOINT MEETING 3

BUILDING LEVEL PLANNING COMMITTEE
PUBLIC FACILITIES REVIEW COMMITTEE

NOVEMBER 28, 2018

- 1) Welcome
- 2) Project Parameters
- 3) Revised Meeting Schedule
- 4) Transportation Schematic Recommendations
- 5) Committee Comment on Transportation Recommendations
- 6) Space Program / Educational Specifications Update
- 7) Draft Schematic Design
- 8) Committee Comment on Draft Schematic Design
- 9) Public Comment
- 10) Next Steps and Adjourn

A woman with long, wavy blonde hair is smiling warmly at a group of people seated at a table. She is wearing a white lace-trimmed top and a lanyard. On the table in front of her are a can of 100% Orange Juice, a container of TruMoo Chocolate Cold Cream, and some food. The background shows other people at tables, suggesting a large meeting or conference. The entire image has a warm, orange-toned overlay.

1 Welcome



2 Project Parameters

Project Parameters

- Project included in the FY2019-28 Capital Improvement Plan (CIP)
- Renovate the Education Center to both increase the capacity of Washington-
Lee initially, and later to adapt to possible future instructional and grade level
changes
- Support APS Strategic Plan Goals, specifically for Healthy, Safe, and
Supported Students
- Address capacity by providing 500-600 high school seats
- Open by start of school 2021
- Spend a maximum project cost of \$37 million, using every effort to spend less

Building Level Planning Committee - BLPC

1. Based on Policy Implementation Procedure F-5.7 PIP-2
2. School Board approved BLPC Charge found at: <https://www.apsva.us/wp-content/uploads/2018/09/C-4-Education-Center-BLPC-Charge-083018-SB-approved.pdf>
3. Primary role is to serve as the principal communication liaison with community stakeholders
4. Solicit comments from constituency groups and share with the BLPC for consideration
5. Assist APS Staff during schematic design phase by reviewing:
 - a. Site amenities
 - b. Adjacencies between interior spaces and site amenities
 - c. Community use of the building and site
 - d. Impact of project on surrounding community

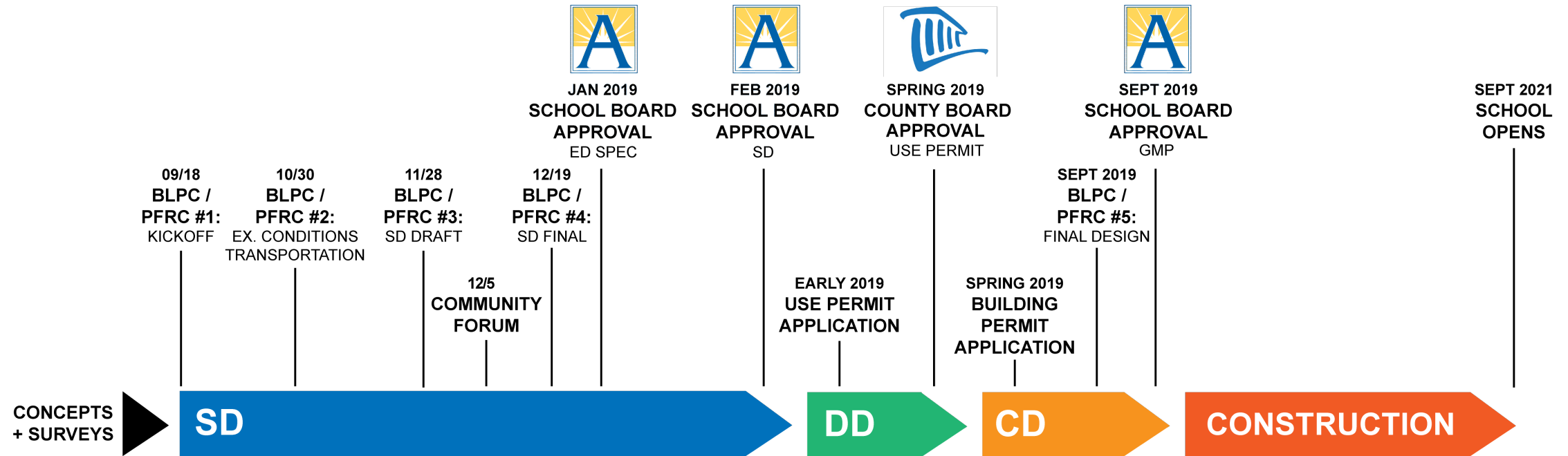
Public Facilities Review Committee - PFRC

1. PFRC Charge (June 18, 2014) found at: https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/5/2014/06/PFRC_Charge_June2014.pdf
2. Mission: to ensure that the highest quality of land use planning, design, transportation planning, and other important community aspects are incorporated into civic projects as assigned to the Committee by the Arlington County Board.
3. Key responsibilities:
 - a. Provide a forum for advisory commission and committee input
 - b. Ensure highest quality of land use planning and design
 - c. Promote compliance with County Comprehensive Plan and other County planning policies
 - d. Provide means for broad-based public participation
 - e. Provide advice to County Board and County Manager



3 Revised Meeting Schedule

Project Timeline



REVISED MEETING SCHEDULE



4 Transportation Schematic Recommendations

Topics

Parking

School buses

Parent drop-off/pick-up

Traffic operations

Recommendations



TRANSPORTATION

What we heard last meeting

Need to maintain visitor parking for the pool

Speeding concerns on N Quincy Street

Cut-through traffic on 13th and 14th to N Quincy St

Pedestrian crossing challenges
N Quincy St at 13th and 14th

Southbound left turns from N Quincy Street
onto Washington Blvd

Parking management in the garage (policies,
pricing)



TRANSPORTATION

Visitor Parking

Existing Demand
33

Projected Demand
41

Supply
50 in Pool/Visitor & Front
Door Lots

Recommendation
No change to amount.
Explore signing more
school visitor parking near
W-L front door.



TRANSPORTATION

Staff/Student Parking

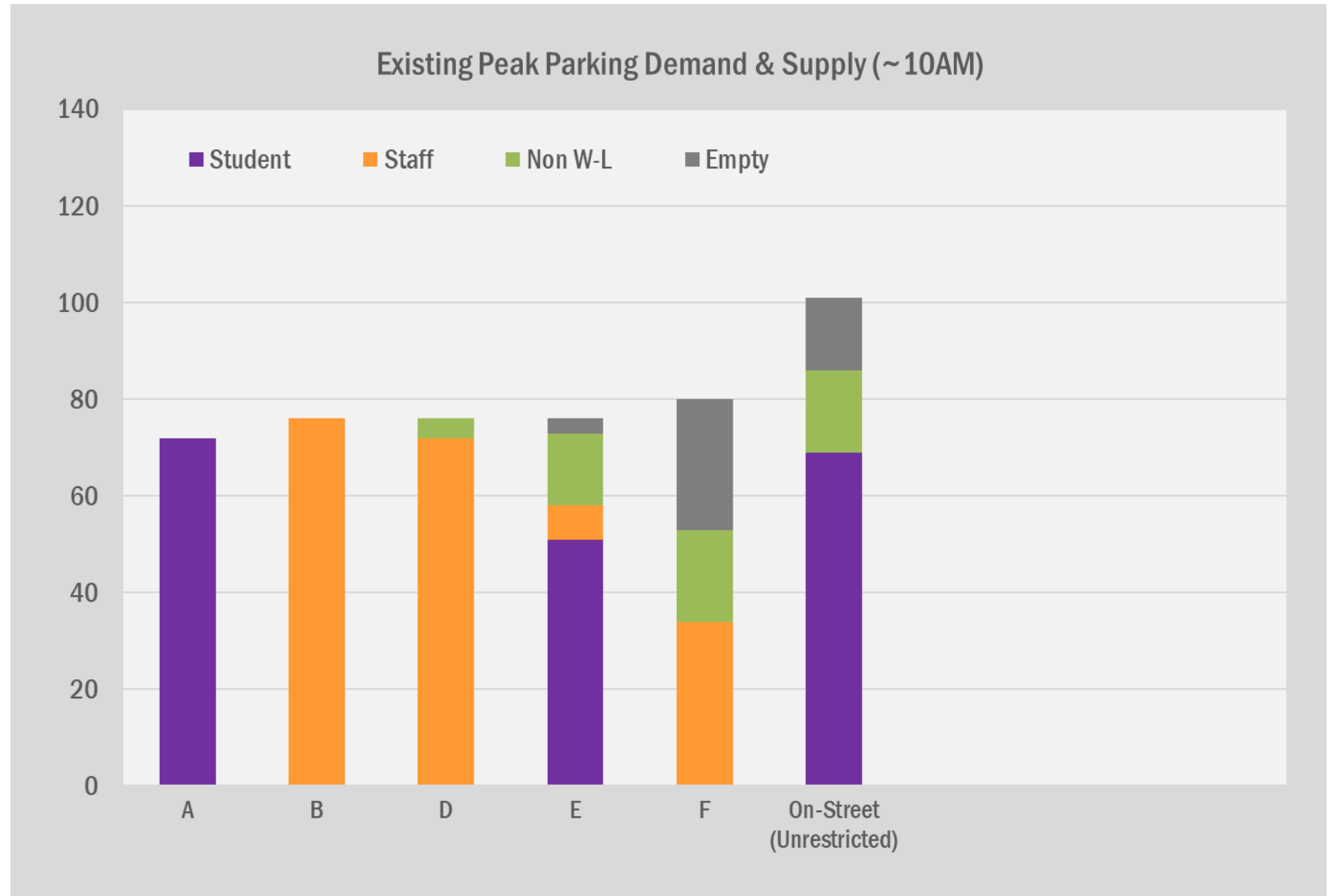
Existing Demand

189 Staff

192 Student

381 Total spaces

Chart shows estimations of who is parking where between the 5 areas within the garage and the unrestricted on-street parking nearby



TRANSPORTATION

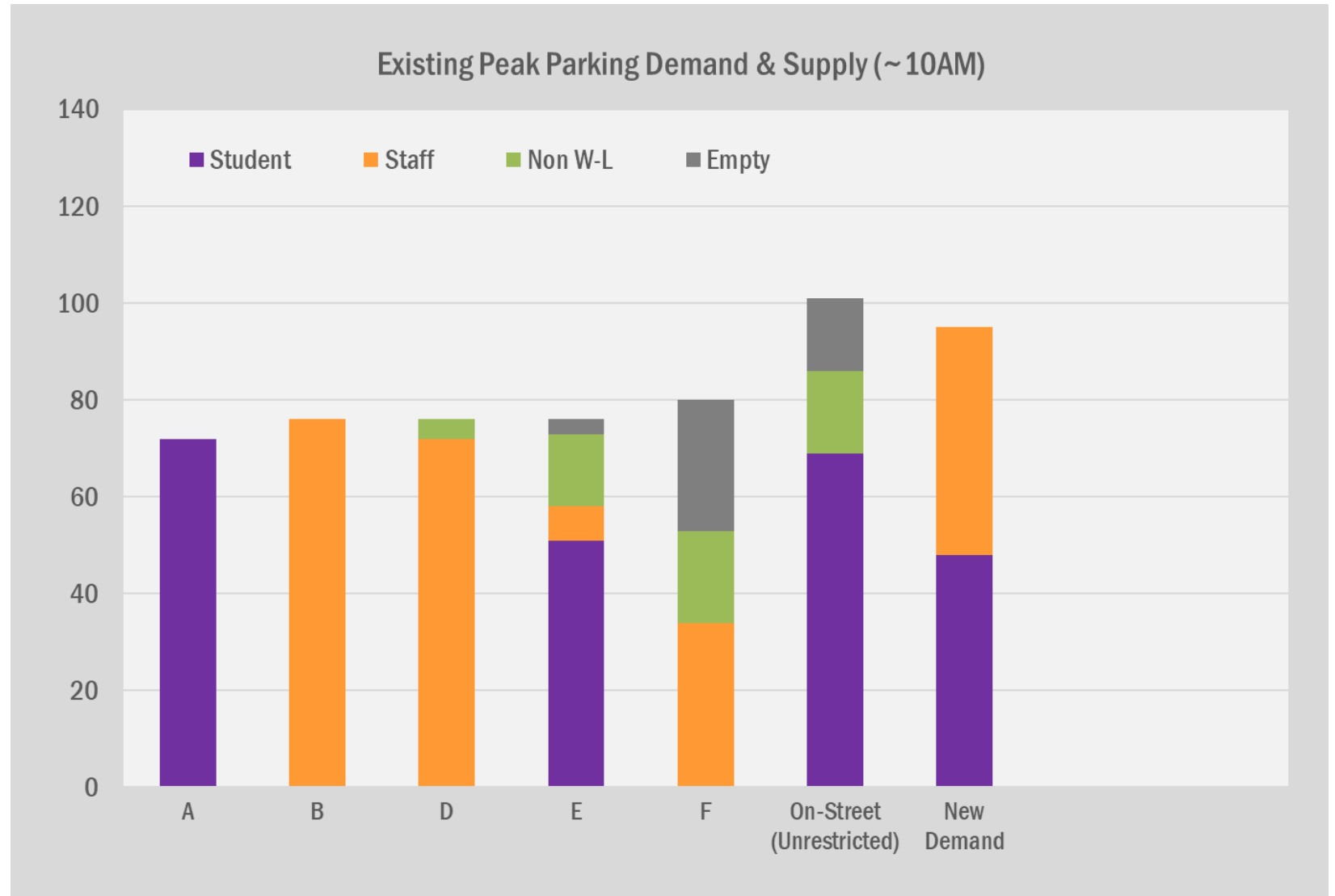
Staff/Student Parking

Projected Demand

236 Staff

240 Student

Net increase of 95 spaces



TRANSPORTATION

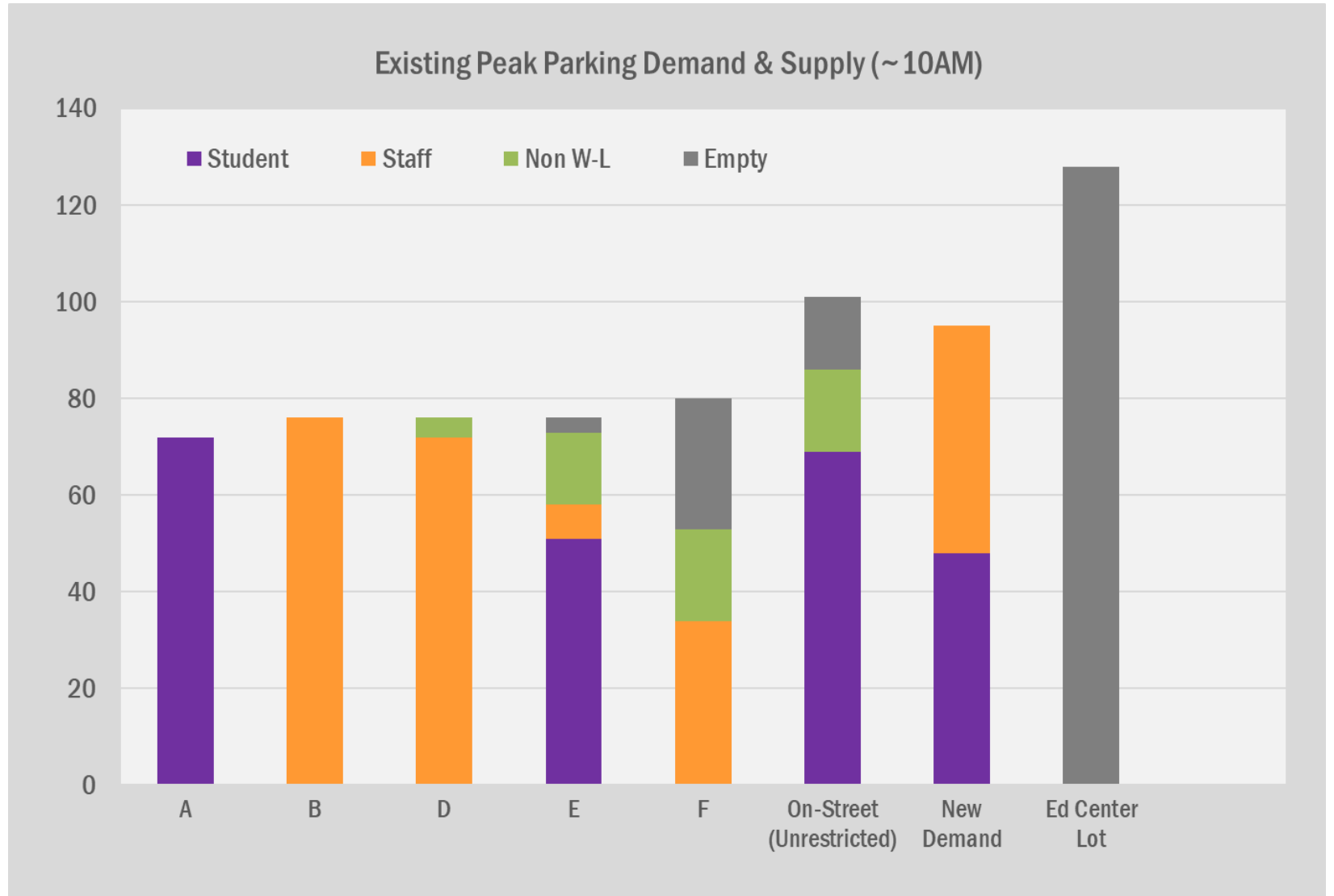
Staff/Student Parking

Potential Supply

30 spaces in garage

15 spaces on-street

128 spaces in Ed Center lot



TRANSPORTATION

Staff/Student Parking

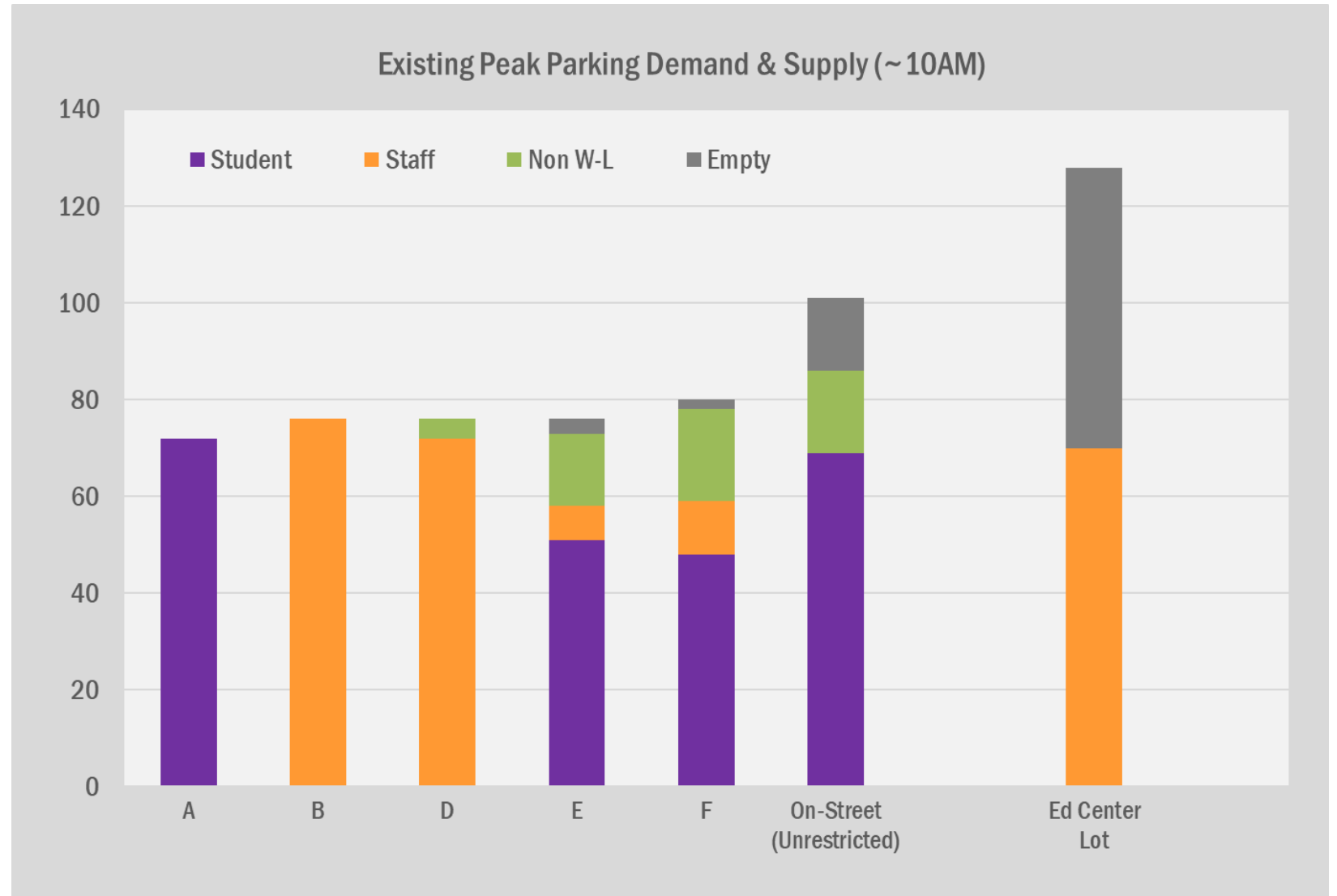
If demand stays same:

Convert area F to public (similar to E)

Open up Ed Center lot to staff

Around 58 empty spaces in Ed Center lot

Only some of the spaces in the Ed Center lot are needed

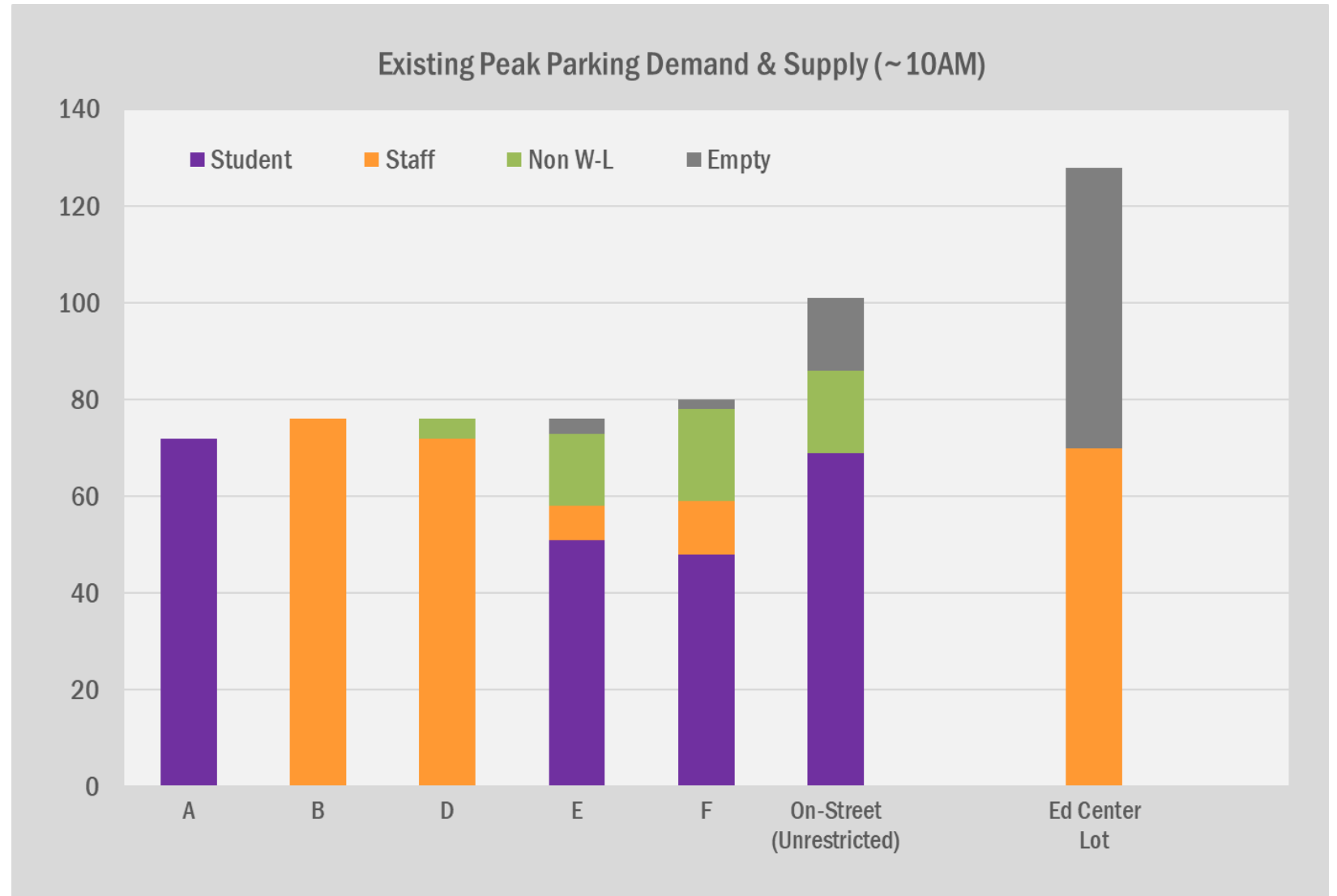


TRANSPORTATION

Parking Recommendations

Open 70 spaces in the Ed Center lot

Explore ways to decrease parking on site even further through demand management

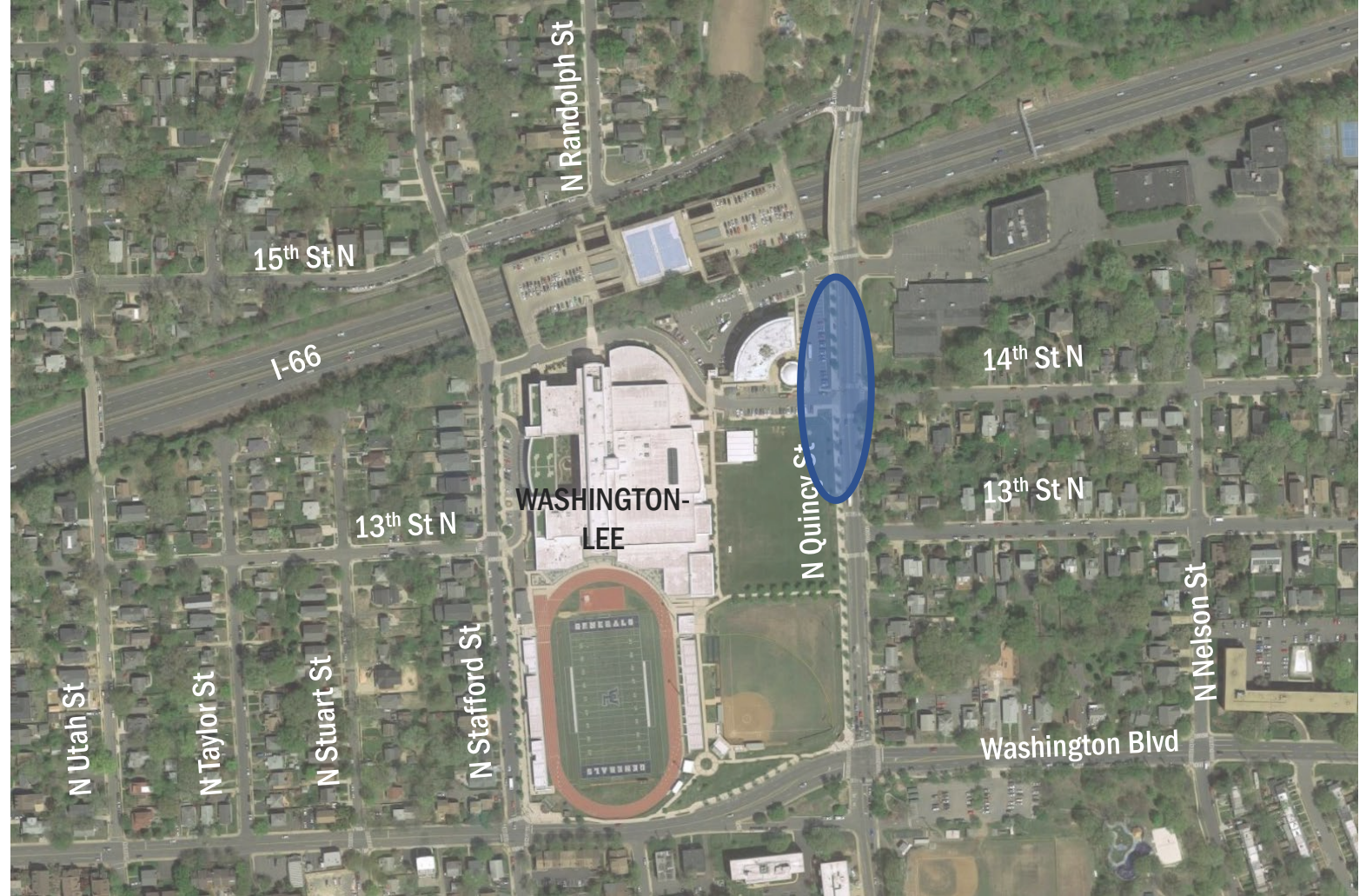


TRANSPORTATION

Arrival/Dismissal

Establish additional:
Bus loading/unloading
Student Drop-off/Pick-up

Adds flexibility:
Can be used to supplement
W-L facilities, or act as
independent facilities



School Buses

Existing Demand

W-L served by 24 buses

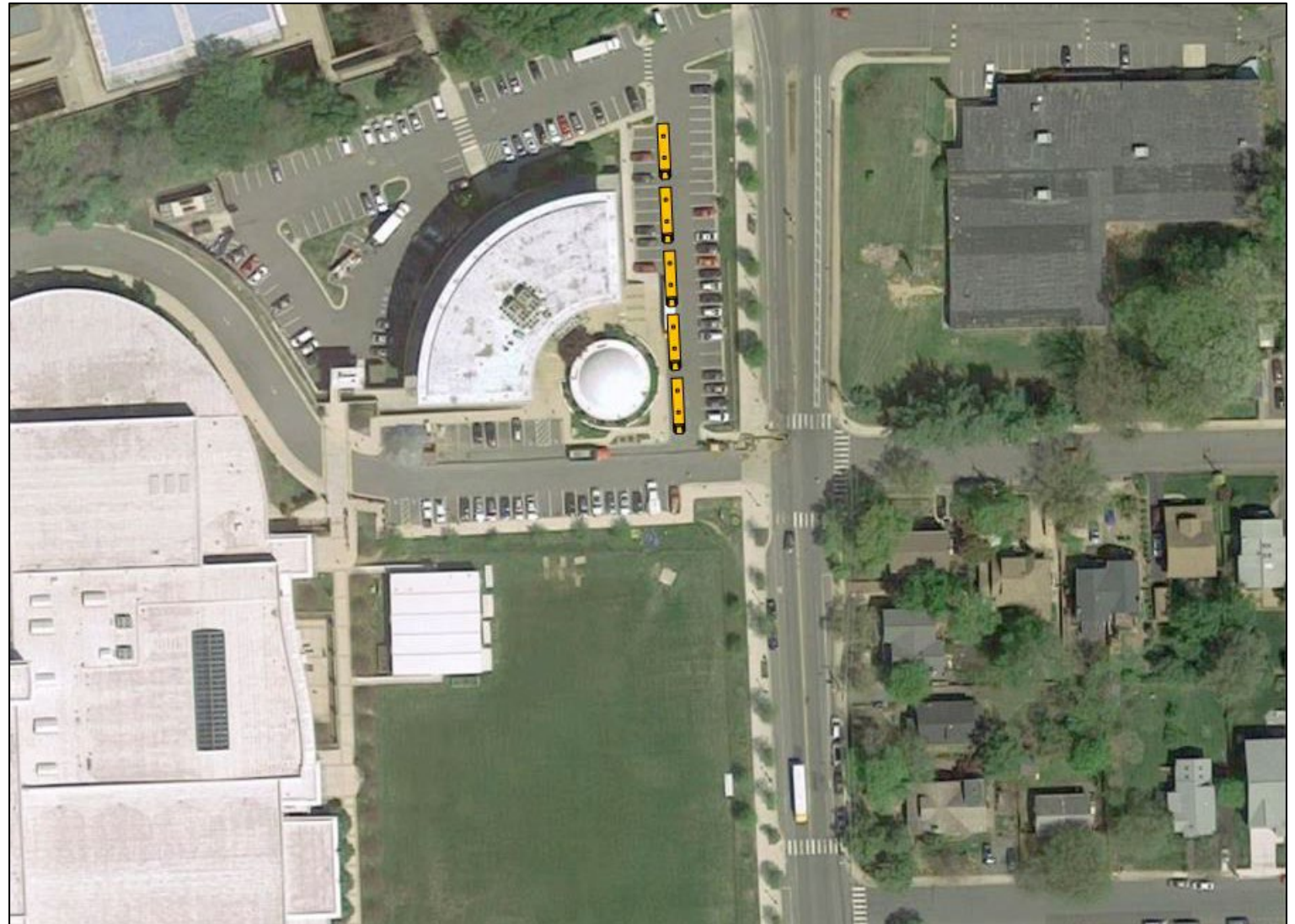
Potential Demand

Likely will have a similar amount of buses, with a small chance more will be needed.

Recommendations

Create additional bus loading/unloading area on the N Quincy St side

Five buses can fit within the drive aisle in the Ed Center lot



TRANSPORTATION

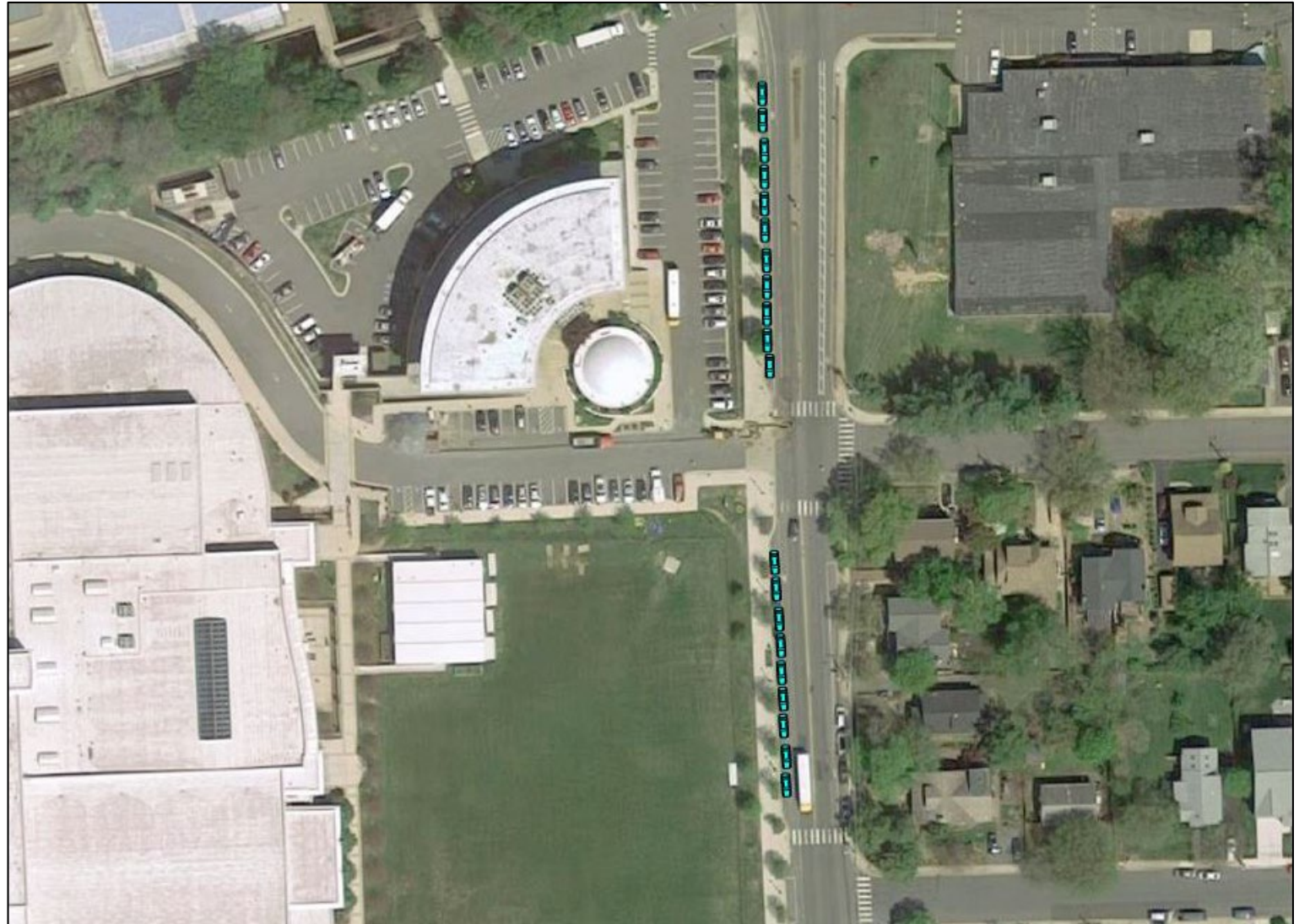
Drop-off/Pick-up

Recommendations

Create additional parent drop-off/pick-up area on the N Quincy St side

Alter time restricted parking on N Quincy Street to reserve on-street parking for arrival/dismissal

Room for 20 vehicles to load/unload at the same time



TRANSPORTATION

Bike Parking

Projected Demand

23 Staff

135 Student

Recommendations

Add third parking location on N Quincy St side (or expand location on General's Way), preferably with covered/secure spaces

Explore improvements to staff parking options & amenities



TRANSPORTATION

Traffic Operations

Traffic models with the new school population added aren't that much different than existing conditions ones.

The delays for drivers trying to turn onto N Quincy St get longer (lack of gaps for people to turn onto Quincy St)

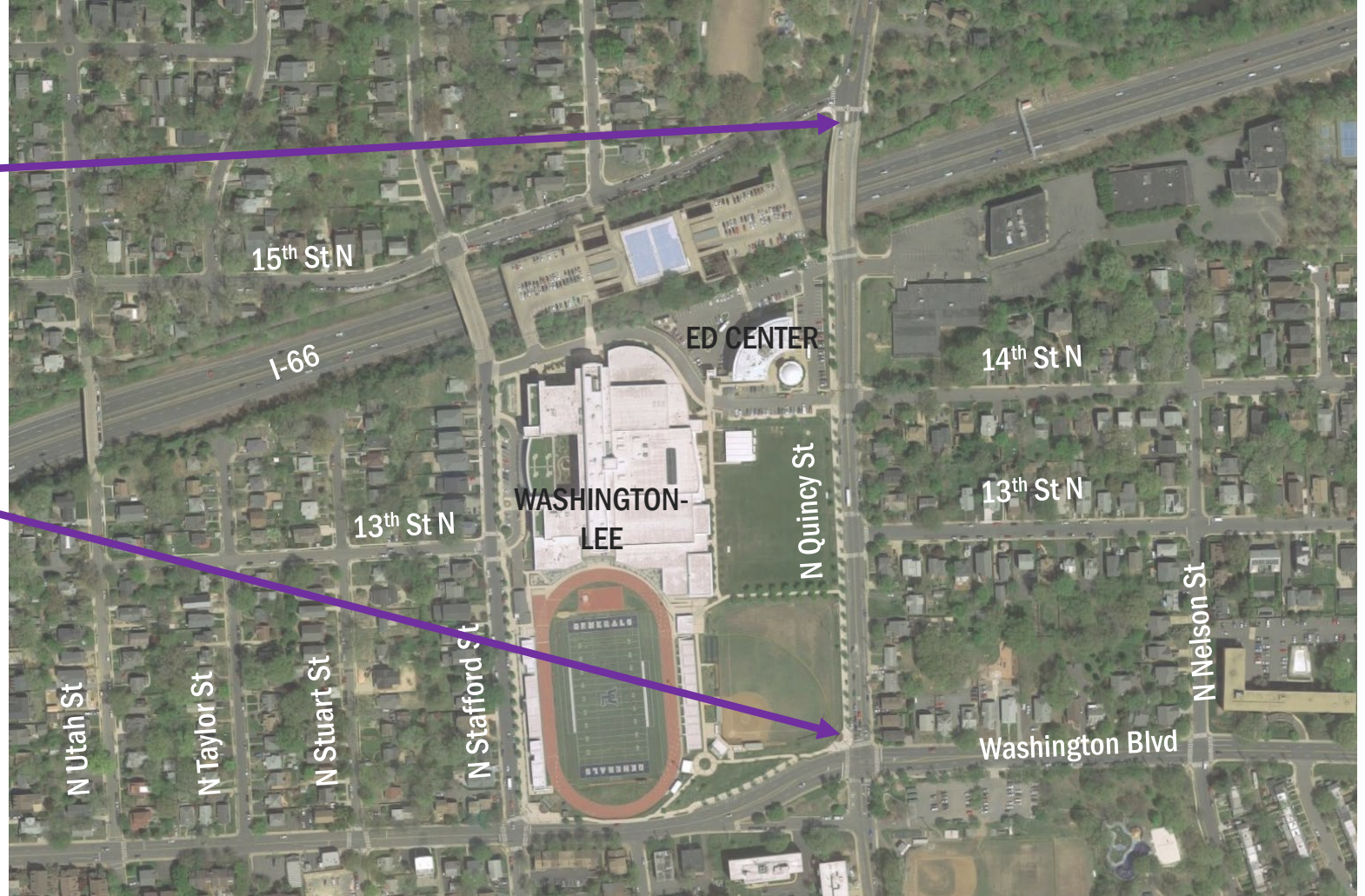
Addition of Buck site traffic shows similar results



Traffic Operations

A right turn lane could help where 15th St turns onto N Quincy St, but wouldn't be appropriate given the trail connection.

A southbound left turn arrow for N Quincy Street helps that turn, but overall makes things worse for the intersection (esp. in the PM)



TRANSPORTATION

Pedestrian Crossings

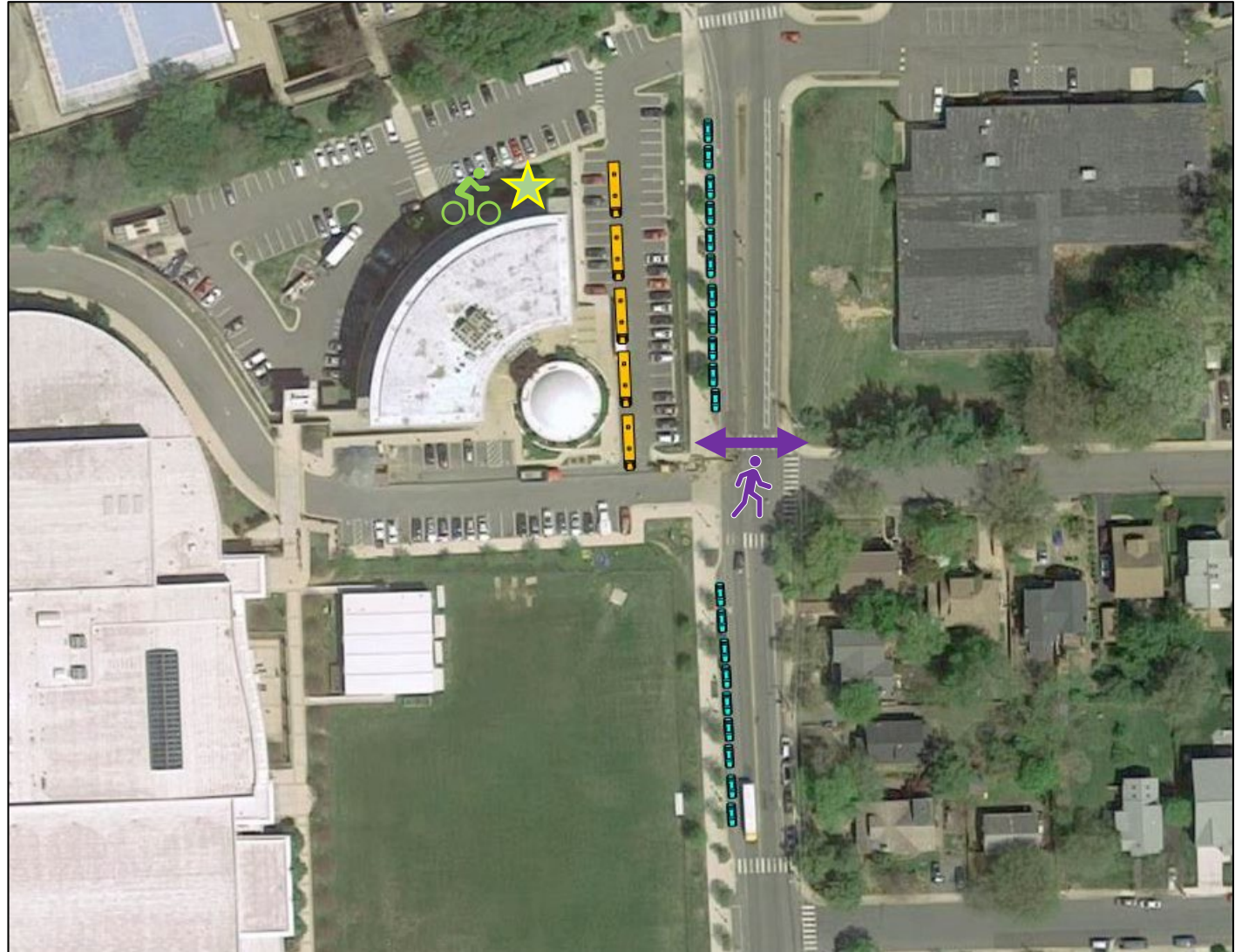
Data shows (and video confirms) that there are few gaps in traffic along N Quincy St (esp. in the morning).

Based on standards for school crossings the crosswalk at 14th/Quincy already meets standards for upgraded treatment



Summary of Concerns

- (1) General level of activity on N Quincy Street & conflicts between modes
- (2) Pedestrian crossings of N Quincy St
- (3) Long delays for side street traffic



TRANSPORTATION

Potential Solutions from the Toolbox

Traffic control devices

- Traffic signal
- HAWK signal

Enhanced crosswalks

- Rapid flash beacon

Operations/management

- Police officer/crossing-guard
- APS staff



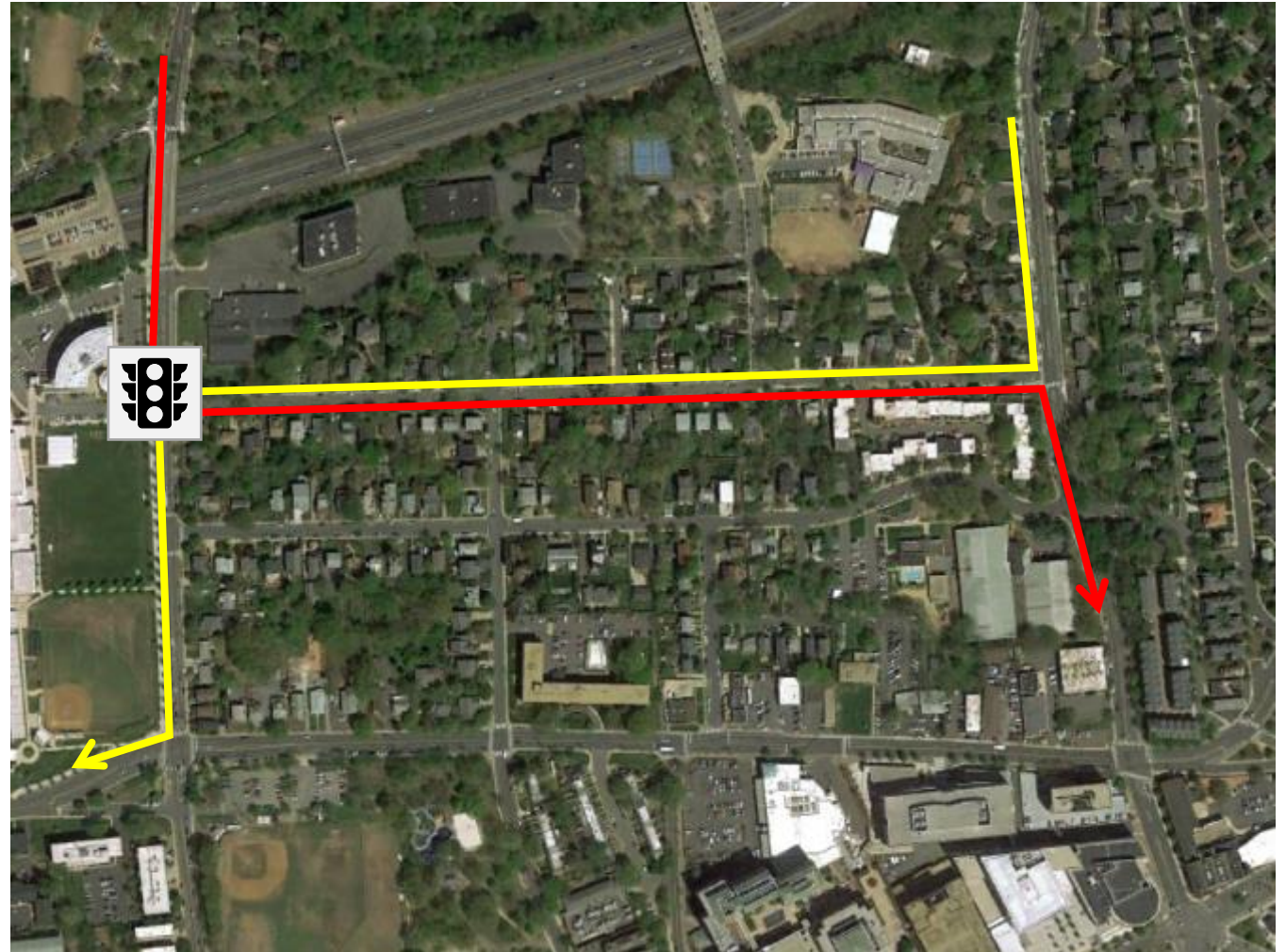
Traffic Signal

Doesn't meet analytical thresholds

None of the unsignalized intersections along N Quincy meet standard thresholds for a traffic signal. The volume of cars is too low – even after adding Ed Center and Buck site traffic.

Could lead to negative impacts

- (1) Increase in crashes
- (2) Increase in cut-through traffic



HAWK Signal

On the edge of meeting standards

Would be clear cut if N Quincy Street was more than one lane in either direction

Good justification

Given the crosswalk is a school crossing and entirety of data there is a good case for HAWK

Concerns

Potential increase in crash rate



Rapid Flash Beacon

Meets standards for installation

There is one installed at 5th & N Quincy Street

Concerns

Driver compliance rate varies greatly between locations



Operations/Management

Police officer/crossing guard

Not controlled by APS, thus difficult to make a condition

Doesn't help outside arrival/dismissal times

Arrival/Dismissal procedures

Incorporated into student/parent school handbook

APS staff

Staff on sidewalk could help organize bus, pedestrian, and student drop-off/pick-up from the sidewalk/school property, and enforce arrival/dismissal procedures



Summary of Recommendations

Visitor Parking

- Keep mostly the same, but explore adding more near W-L front door.

Staff/Student Parking

- Reopen 70 of the existing 128 parking spaces in the Ed Center lot
- Explore ways to further reduce parking demand

Bicycle Parking

- Add bicycle parking on N Quincy St side of campus
- Explore sheltered bike parking
- Explore improvements to staff bike parking and amenities

Student drop-off/pick-up

- Add second designated area on N Quincy Street side, where metered parking is today
- Make drop-off/pick-up area available for visitors outside of arrival/dismissal times (e.g. 2-hour parking outside of arrival/dismissal times)

Bus loading/unloading

- Add 5 more spaces for bus activity in Ed Center lot

Traffic Operations

- Select a recommended pedestrian crossing treatment
- Use arrival/dismissal procedures with APS staff on sidewalk to enforce procedures

Transportation Next Steps

Our to-do list:

- Review feedback from today
- Document all of this in the Multi-Modal Transportation Review (MMTA)
- Receive comments on draft MMTA
 - APS
 - County staff
 - BLPC/PFRC
- Finalize MMTA



TRANSPORTATION



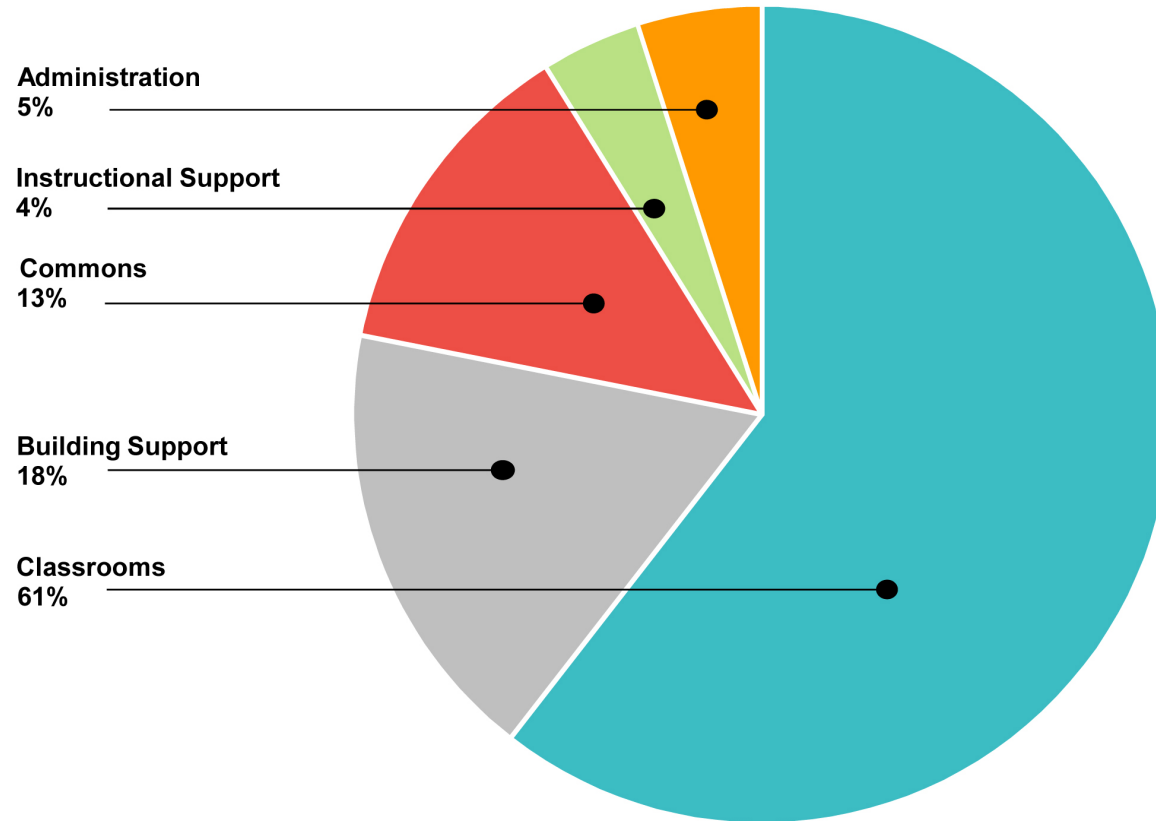
5 Committee Comment on Transportation Recommendations



6 Space Program / Educational Specifications Update

Educational Specifications + Space Program

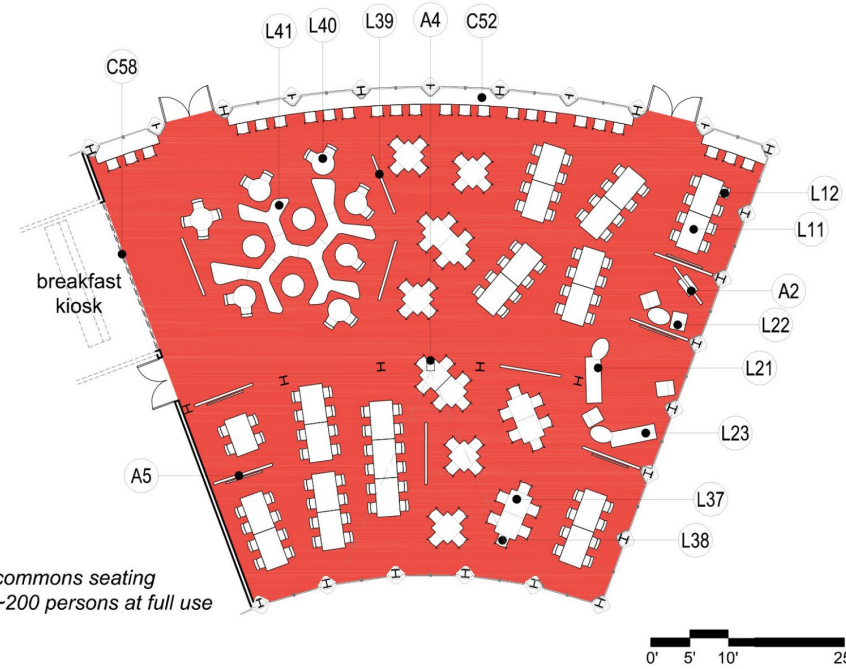
Educational Specifications + Space Program by APS Staff



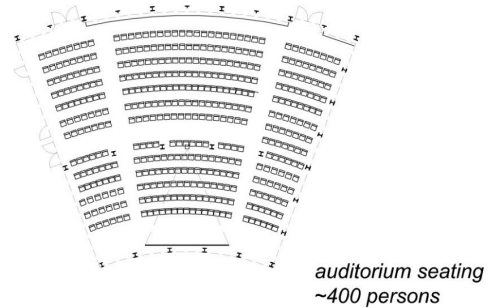
Educational Specifications Example

LEGEND

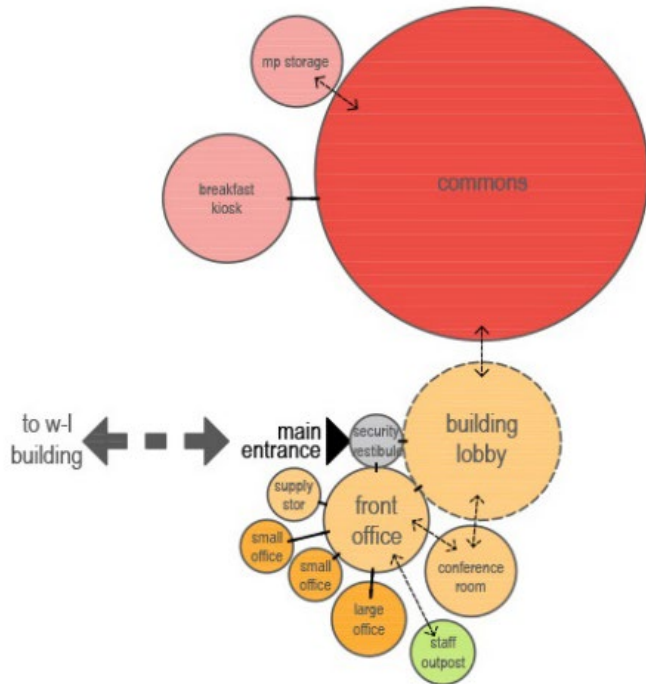
- LEARNING SPACES
- LEARNING SUPPORT
- COMMON SPACES
- ADMINISTRATIVE SPACES
- BUILDING SUPPORT



commons seating
~200 persons at full use



auditorium seating
~400 persons



COMMONS

Description

A flexible and adaptable space to accommodate meals, individual and group work, large group gatherings and small assemblies.

Size

4,000 SF

Capacity

400 learners, staff

Related spaces / floor level

Direct access to breakfast kiosk
Near commons storage

Loose furnishings

- L11 folding table for four (22)
- L12 high-density stacking chairs (400)
- L21 mobile, small worksurface (3)
- L22 lounge chair (4)
- L23 lounge couch (2)
- L37 bar-height table for four (13)
- L38 bar-height stool (73)
- L39 mobile partition (5)
- L40 café table for 4 (10)
- L41 coated foam modular bench (8)

Casework, display boards + equipment

- C52 café bar (3, length varies)
- C58 lockable roll-up gate

Audio Visual

- A4 projected display with automated screen (1)
- A5 mobile partition with mounted tv display (5)

Information Technology

Wireless access points and charging stations

Environmental Considerations

- E1 access to daylight, ventilation + views from one or more exterior walls



7 Draft Schematic Design

ARLINGTON EDUCATION CENTER
1426 N. QUINCY STREET

Arlington County Principles of Civic Design

- Intended to inform the design of civic facilities
- Ensure facilities meet community goals and are attractive, durable, & functional
- Supplement existing County planning documents & policies
- Each project reviewed individually- certain principles may be stressed over others

Civic Values

- Context
- Bold Architecture
- Sustainable Design
- Universal Design
- Adaptive Reuse
- Open Space
- Mixed Use

Siting & Orientation

- Building Entrances
- Emphasize Pedestrians, Bicycles, Mass Transit
- Circulation
- Outdoor Spaces

Building Form

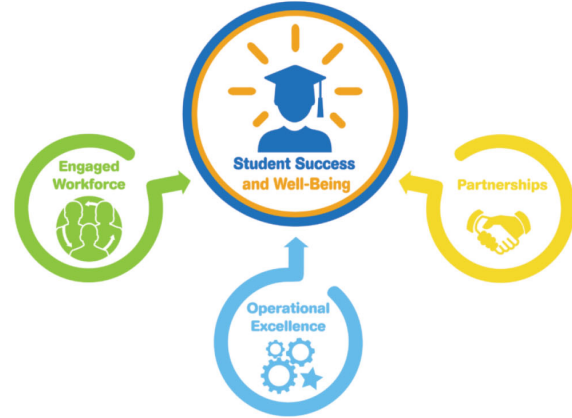
- Massing
- Scale
- Hierarchy

Building Details & Materials

- Pedestrian Scale
- Public art & Architecture
- Durable Materials
- Consistency
- Sense of Place

DRAFT SCHEMATIC DESIGN

APS Strategic Plan - Design Principles



APS STRATEGIC PLAN 2018-2024 GOALS

Student Success: Multiple Pathways To Student Success

Student Well-Being: Healthy, Safe, And Supported Students

Engaged Workforce

Operational Excellence

Partnerships: Strong And Mutually Supportive Partnerships

DESIGN PRINCIPLES

Safety + Security

Maintain safe, secure spaces while creating environments which enrich learning and emphasize transparency and community

Short-Term Agility + Long-Term Adaptability

Create spaces which are agile in their day to day use, while being adaptable to future changes in program and learning methods

High-Performance Learning Environments

Spaces are to perform at the highest levels for the following:

- Thermal comfort
- Indoor air quality
- Acoustics
- Daylight + views
- Transparency
- Technology
- Community use
- Active schools

Universal Design

Spaces should be designed and composed so they are accessible, understood and useful for all

Adherence To Budget

Building elements should be assessed for meeting the required design function through economical means

Sustainability

To the greatest extent possible the final design should minimize the impact on the environment through thoughtful site design, carefully managed water use, innovative energy and exterior envelope solutions, selective material use and a holistic approach to the interior design.

DRAFT SCHEMATIC DESIGN

BLPC / PFRC Committee Discussion Points for Schematic Design

General

- Adherence to Arlington County principles of civic design

Site Layout

- General character and location of amenities
- Pedestrian circulation
- Quantity and location of vehicle and bicycle parking
- Bus pick-up and drop-off area
- Vehicular pick-up and drop-off area
- Traffic operations improvements

Building Appearance

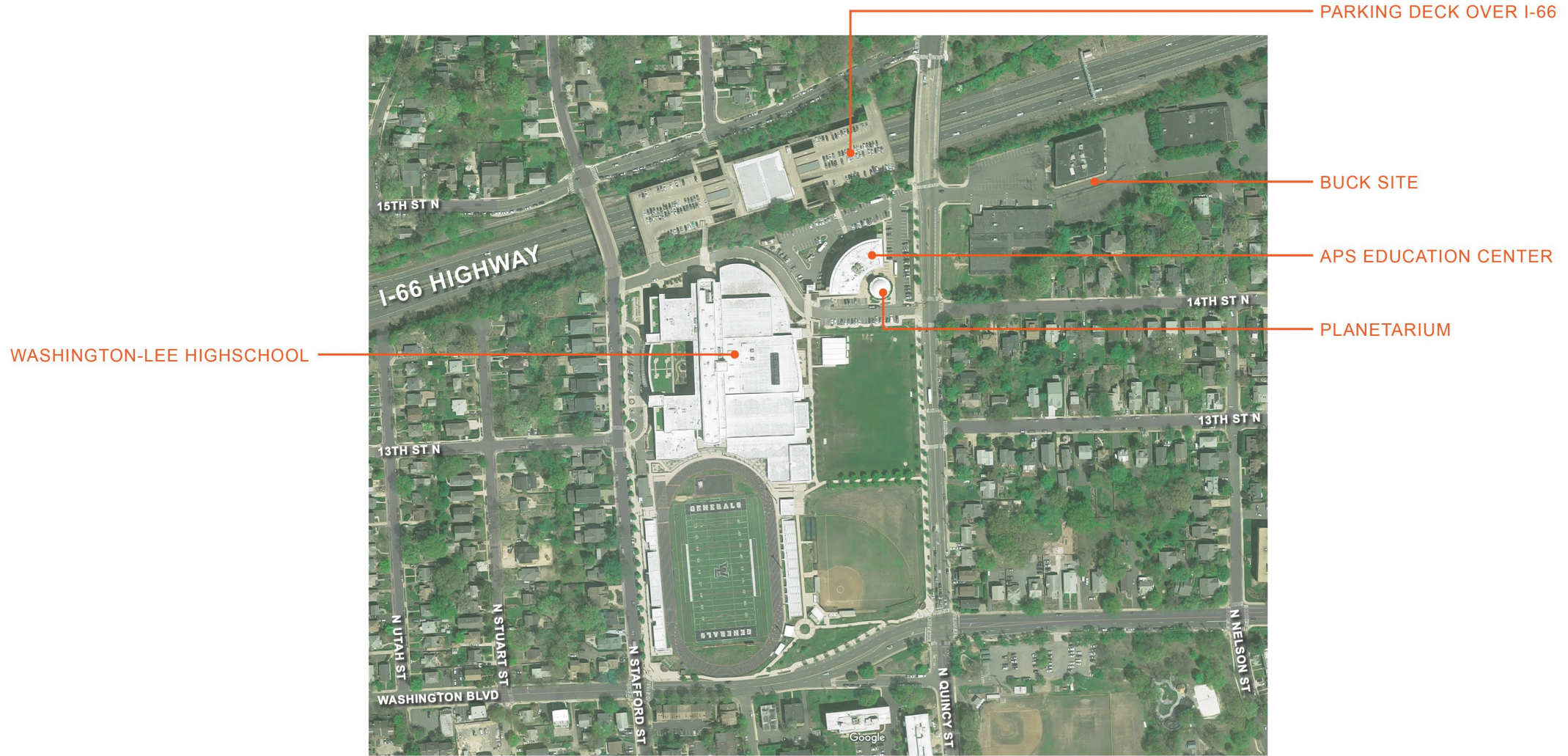
- Character and strategy for glazing replacement

Building Layout

- Location of entrance(s)
- Location of major public space(s)

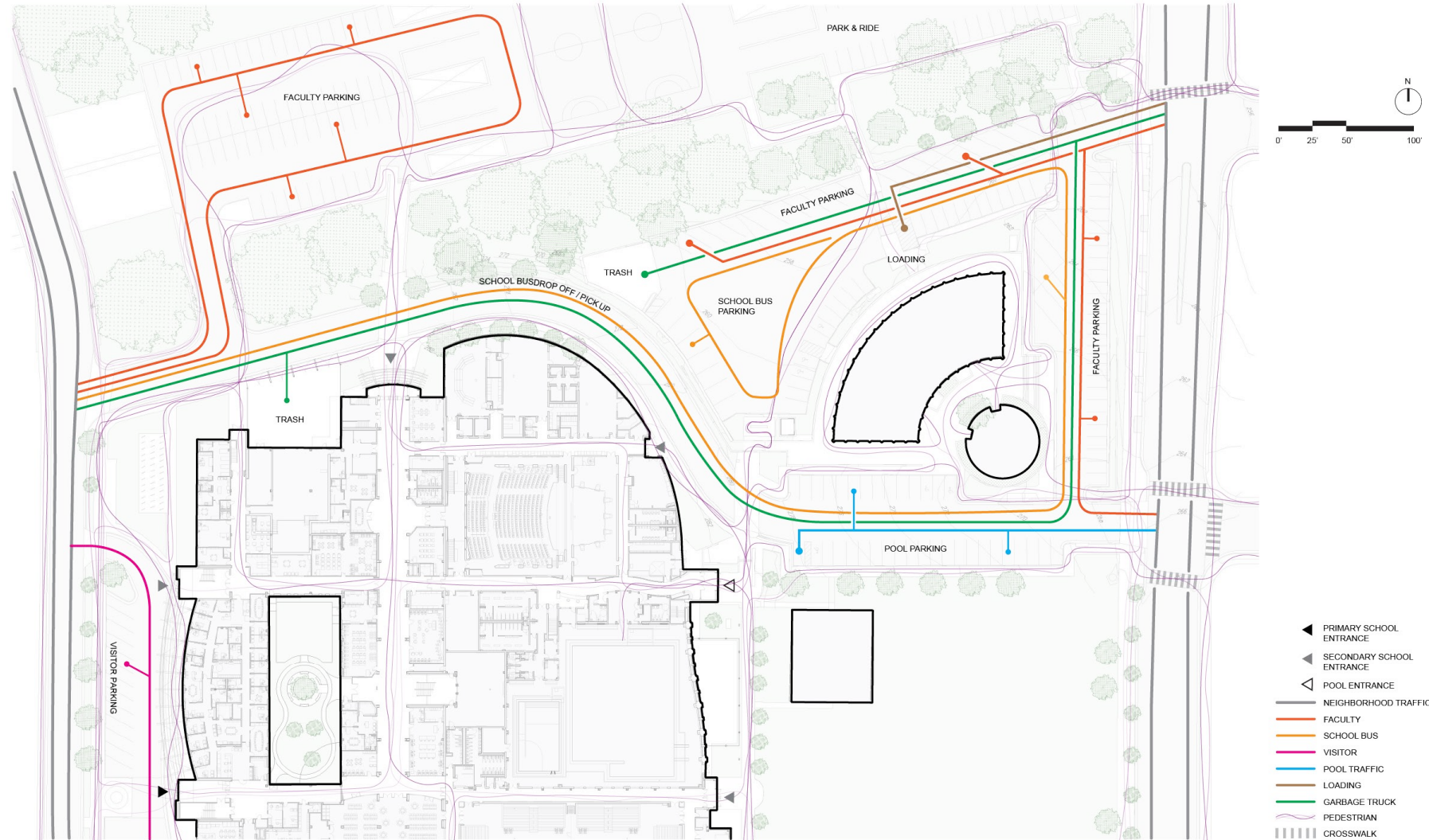
7 Draft Schematic Design Site Design

Existing Campus



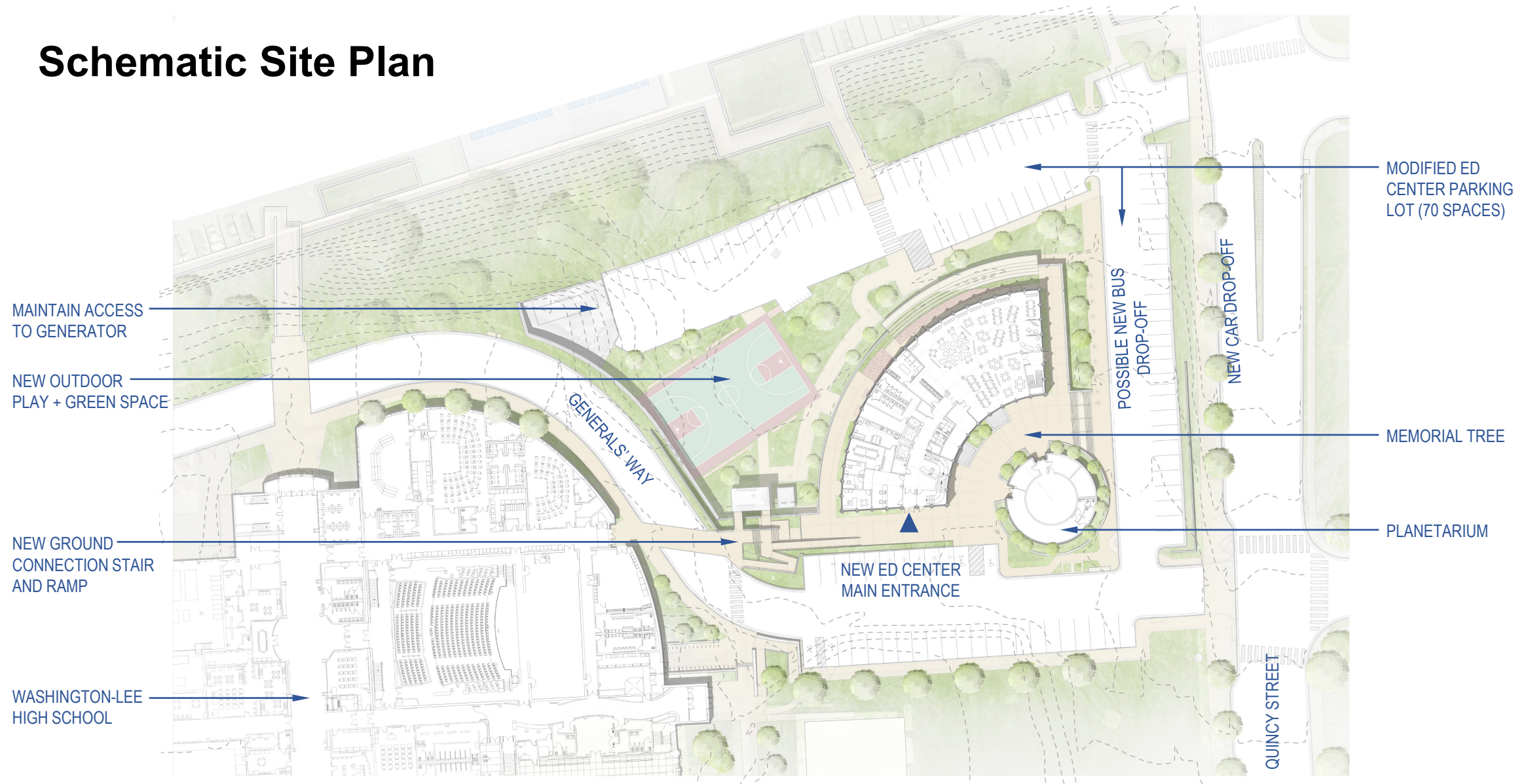
DRAFT SCHEMATIC DESIGN

Existing Site Circulation



DRAFT SCHEMATIC DESIGN

Schematic Site Plan



DRAFT SCHEMATIC DESIGN

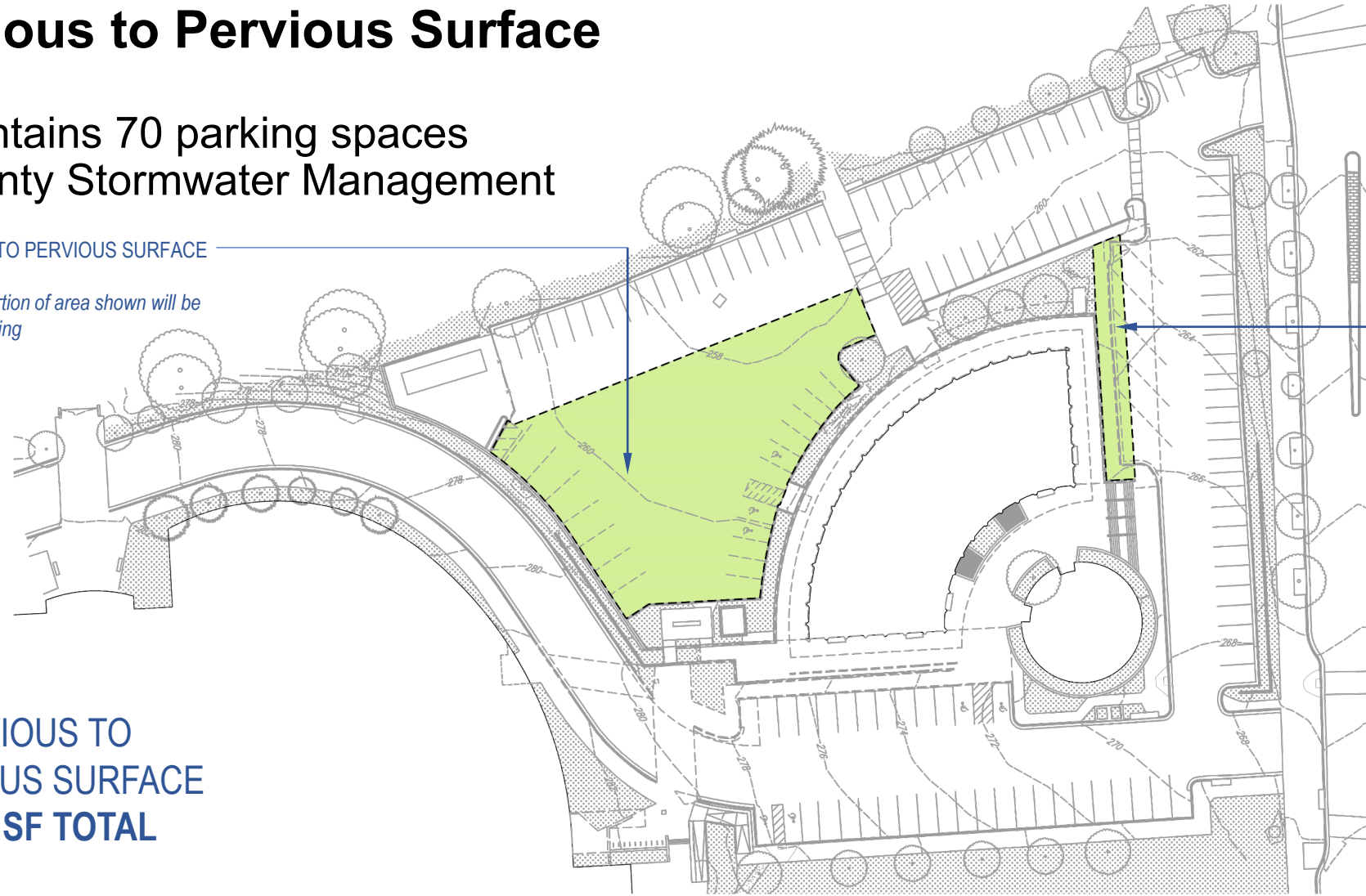
Impervious to Pervious Surface

- Maintains 70 parking spaces
- County Stormwater Management

IMPERVIOUS TO PERVIOUS SURFACE
~10,000 SF
*Anticipate a portion of area shown will be
impervious paving*

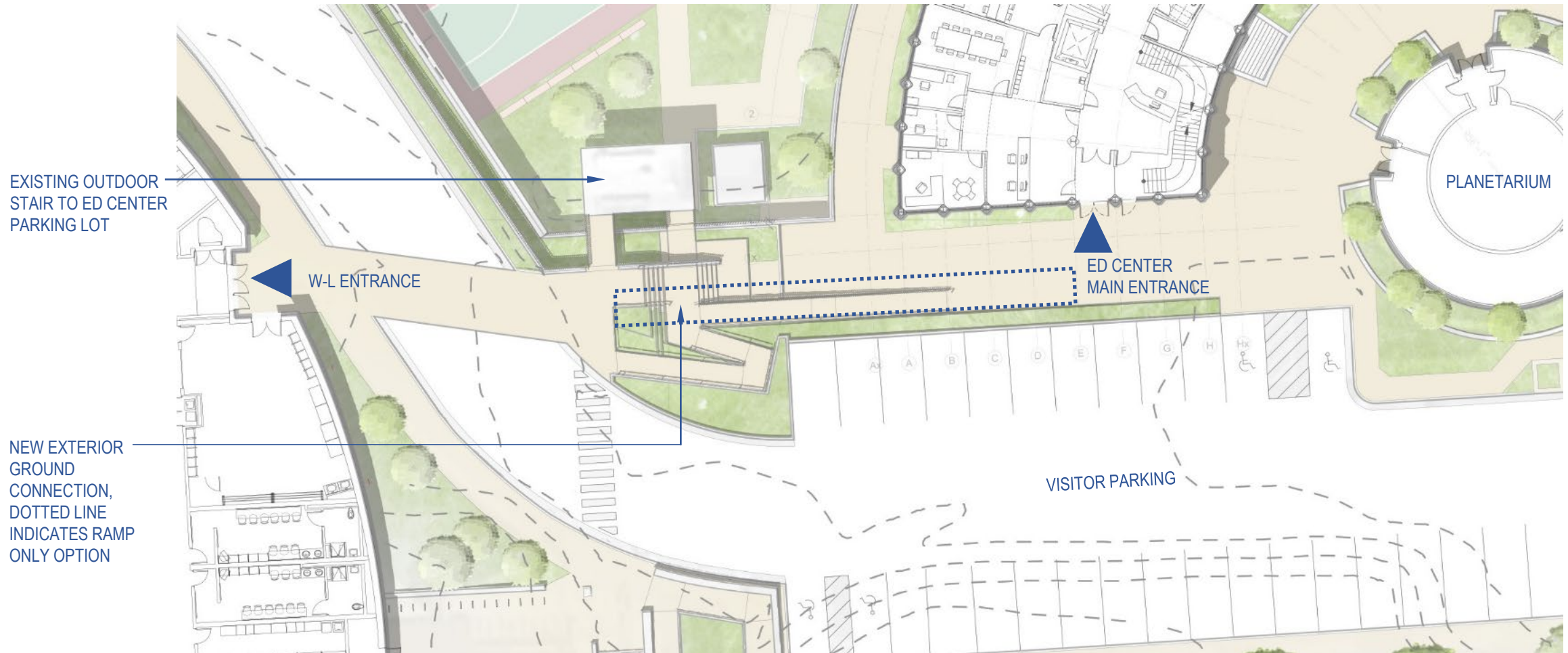
IMPERVIOUS TO
PERVIOUS SURFACE
~1,000 SF

IMPERVIOUS TO
PERVIOUS SURFACE
~11,000 SF TOTAL



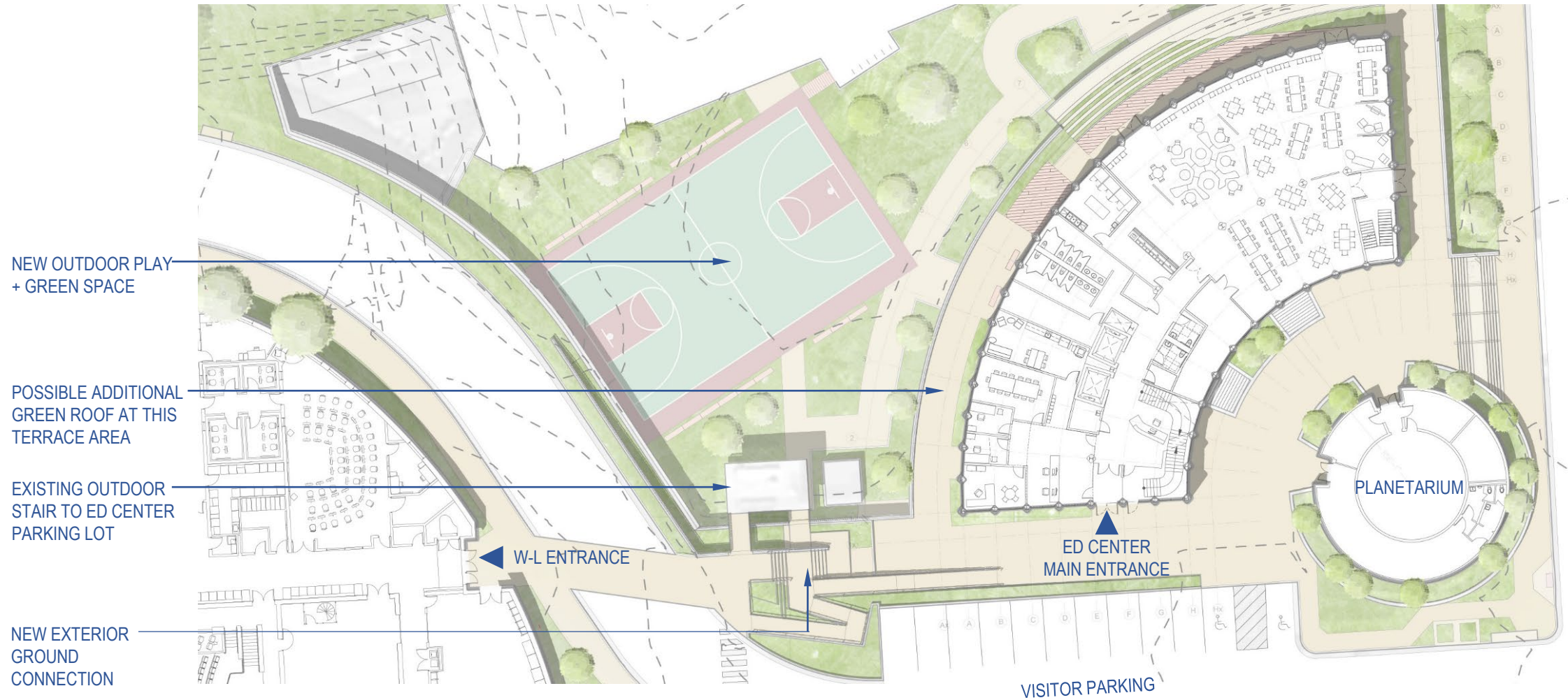
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Site Connection with W-L



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New Outdoor Play Area












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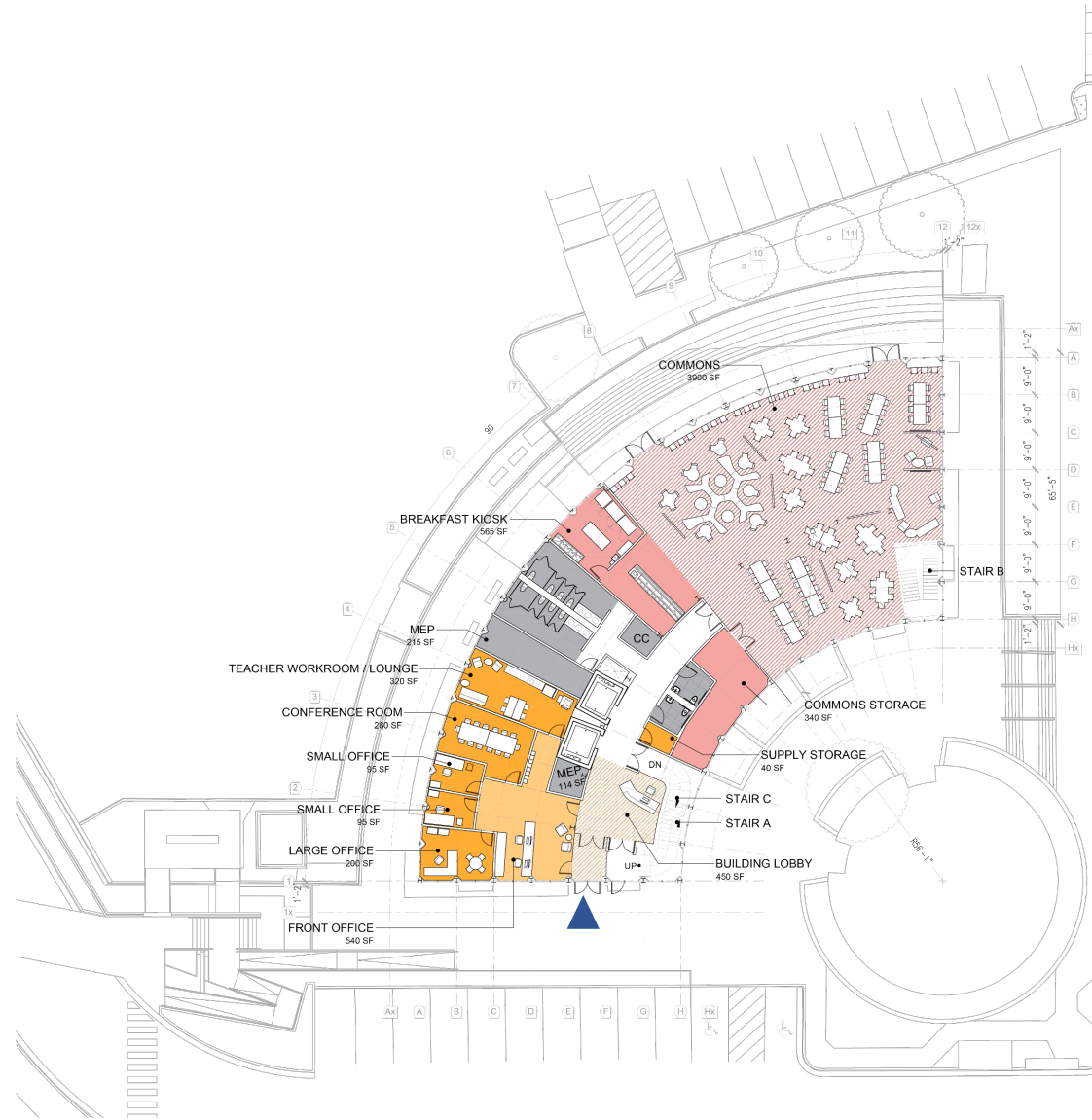
Terrace Extension + Bike Canopy



First Floor Plan

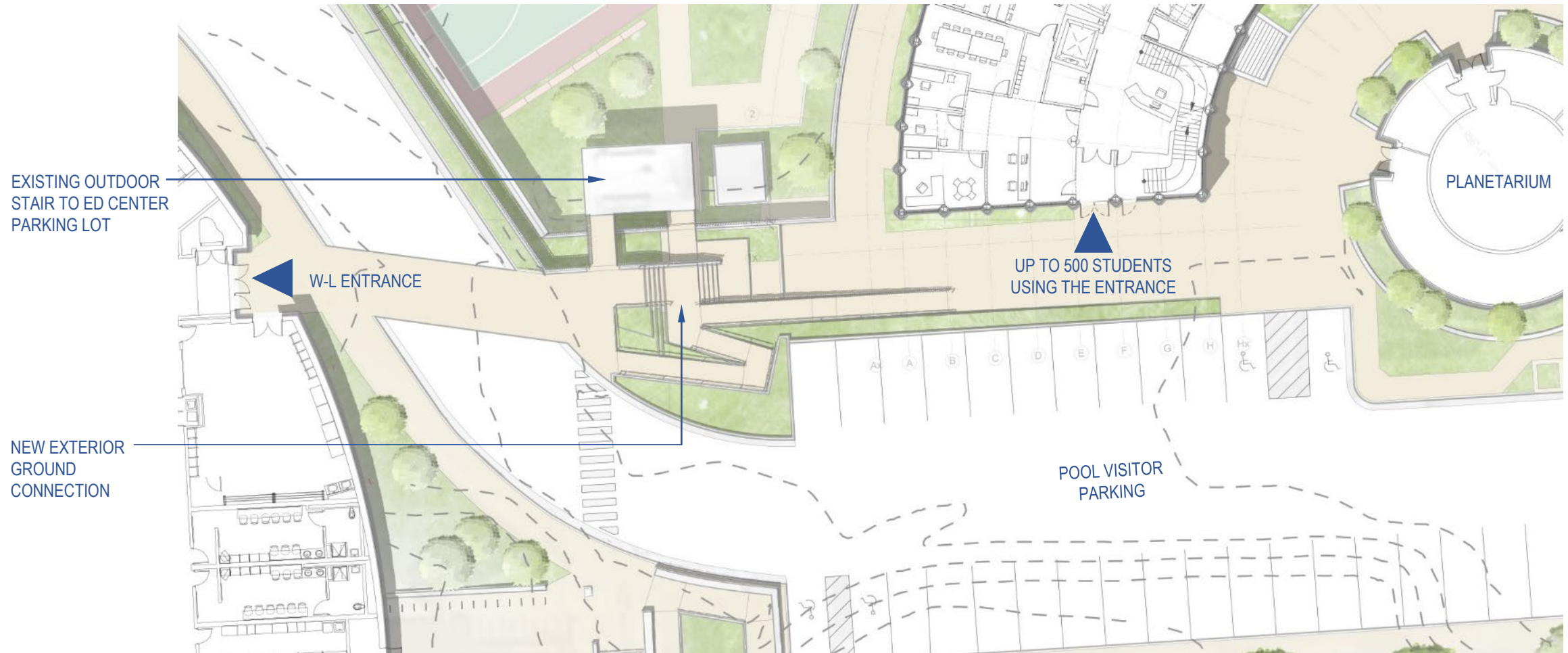
LEGEND

-  MAIN ENTRANCE
-  SECONDARY ENTRANCE
-  LEARNING SPACES
-  LEARNING SUPPORT SPACES
-  COMMON SPACES
-  ADMINISTRATIVE SPACES
-  BUILDING SUPPORT
-  ENCLOSED SPACES
-  SEMI-ENCLOSED SPACES



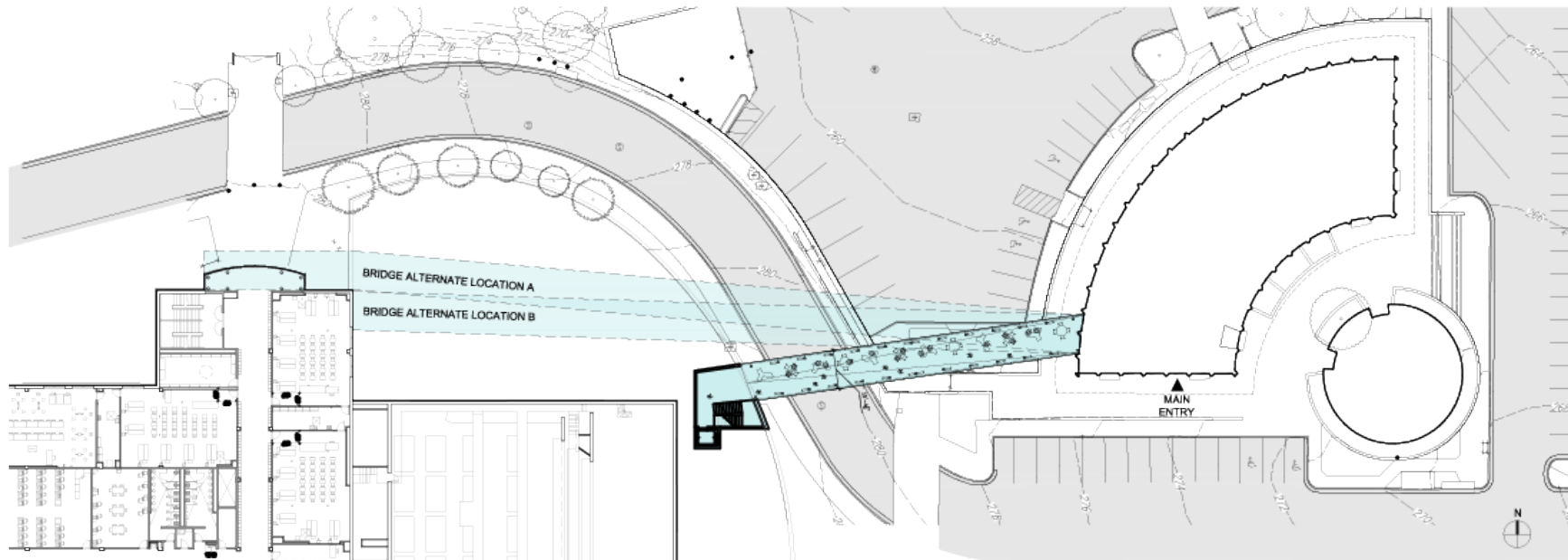
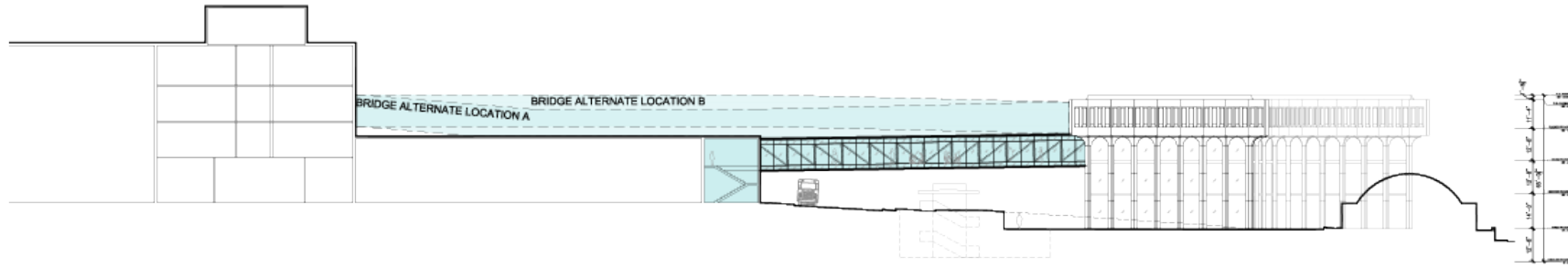
DRAFT SCHEMATIC DESIGN

Bridge Design: Logistics + Security at the Ground Plane



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Bridge Design: Concepts



DRAFT SCHEMATIC DESIGN

7 Draft Schematic Design Building Design

Change of Use

The minimum required fire resistance rating of the structure increases



Existing Façade Elements

Precast Concrete Panels :

At Fourth Floor

Plaster Exterior Soffit:

At Fourth Floor

Precast Arched Column Cap:

At First, Second and Fourth Floors

Precast Column Panels:

At First, Second and Fourth Floors

Three-story Curtainwall:

At First, Second and Fourth Floors

Terrace:

At First Floor

Terrace Guardrail:

Metal guardrail on Precast Cap

Painted CIP Concrete Plinth:

Ground Floor

Small Punched Windows:

Vision Glass



Narrow Punched Windows:

Vision Glass with Operable Vent

Curtainwall Spandrel Glazing:

Black Back-painted Glass between Floors

Curtainwall Vision Glazing:

Single-paned Vision Glass

Black Back-painted Glass at Curtainwall:

Located at MEP Rooms, Storage, RR's, + Stairwells



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Envelope Improvements

Existing Façade Concept Reuse

- Concept of glass between white concrete forms

Curtainwall Replacement

- Response to internal program – daylight, views and glare mitigation
- Response to external environment – energy efficiency
- Operable Vents
 - Minimum of two operable vents per classroom
 - Minimal visual impact on exterior

Ground Floor Openings Enlargement

- Response to program change from service spaces to classroom spaces

Fourth Floor Openings Enlargement

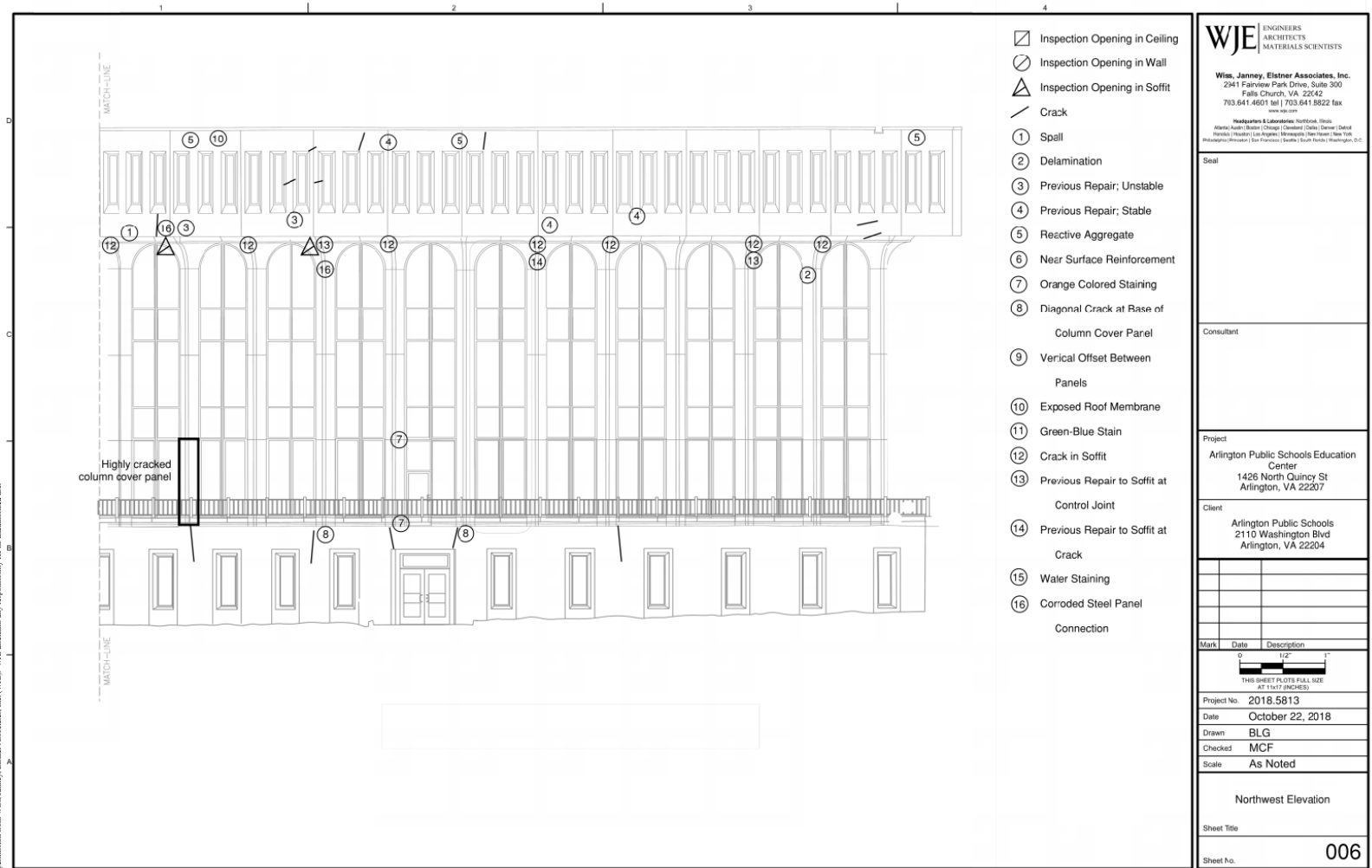
- Response to program and environment

Existing Envelope Materials

- Stable Cladding Panels
- Cleaning + Repairs



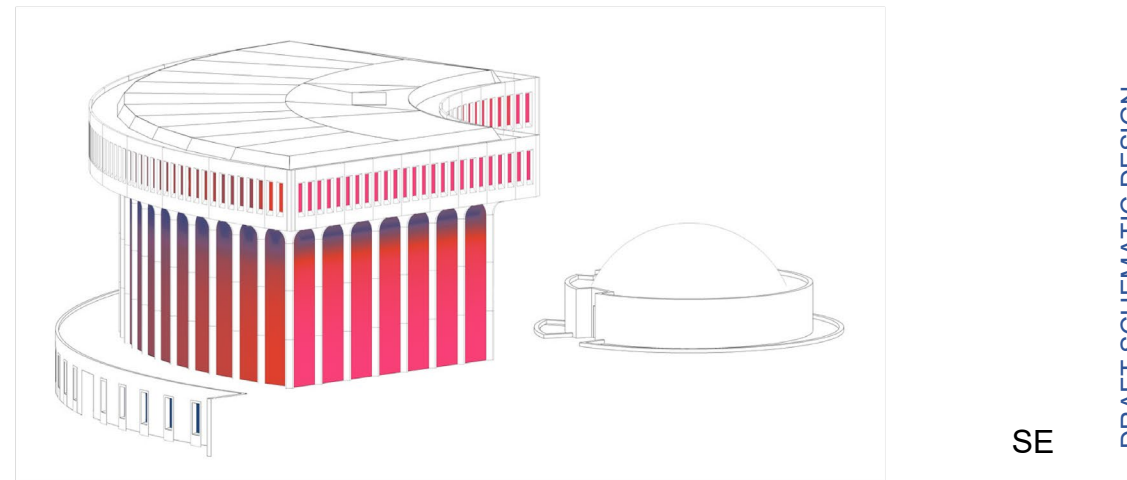
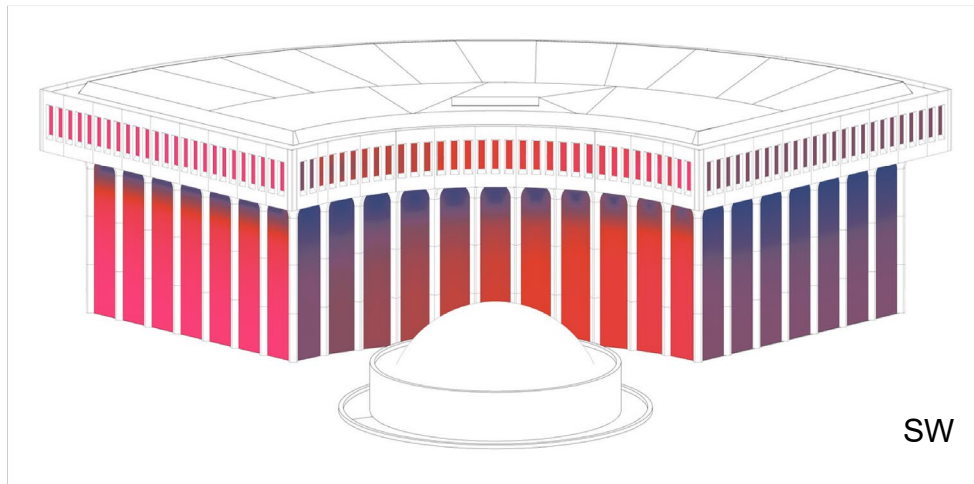
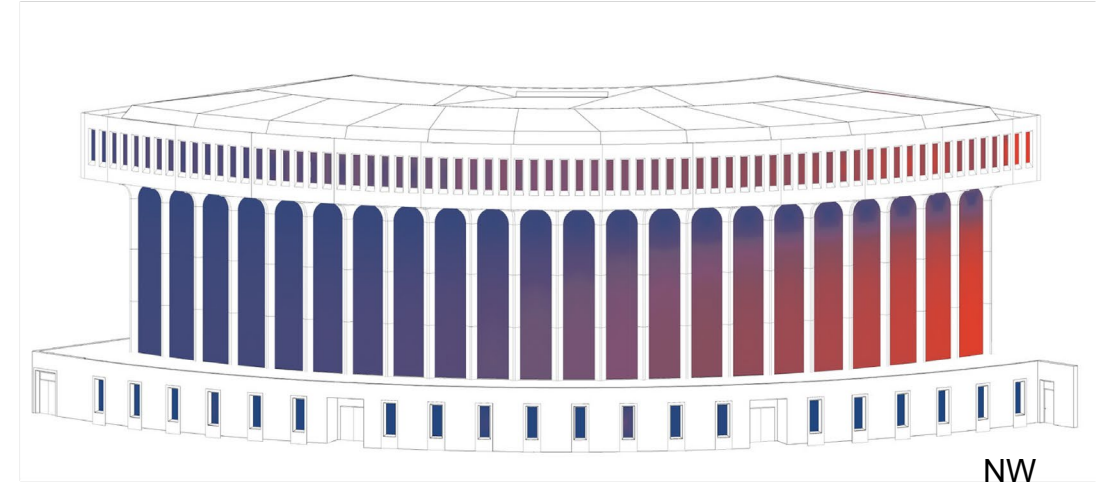
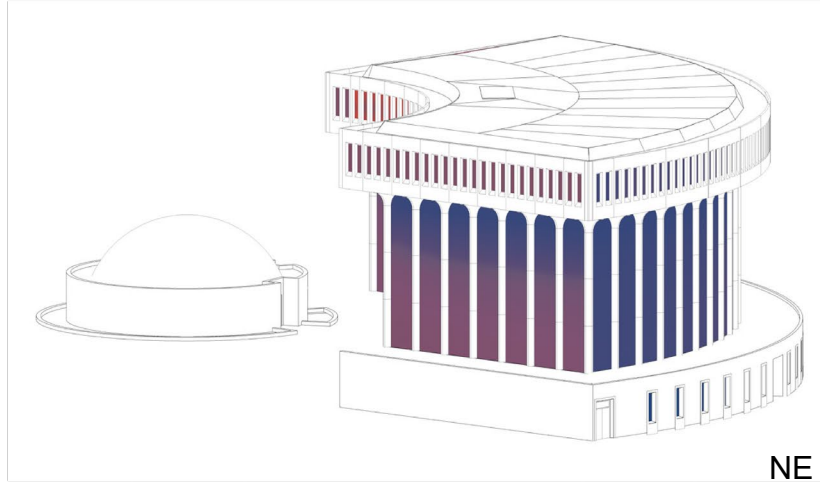
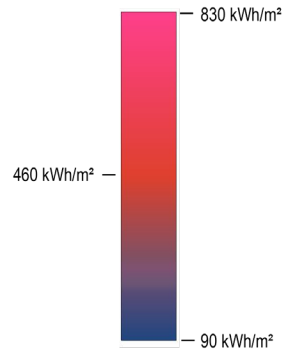
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Solar Insolation

Annual Cumulative Gains

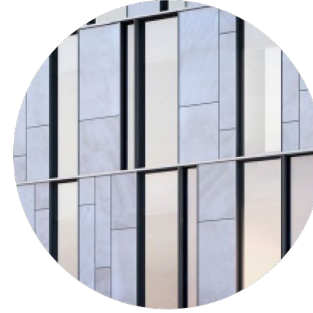


DRAFT SCHEMATIC DESIGN

Sun Control Options for Curtainwall

Other than Opaque Glass

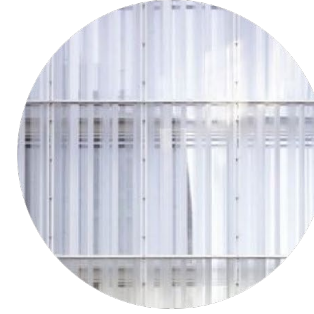
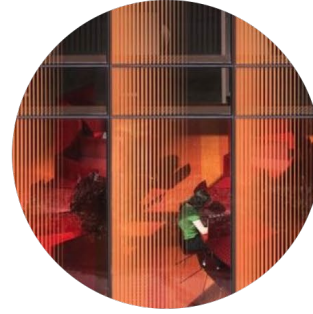
Solid Panel Infill



Sun Control Fins

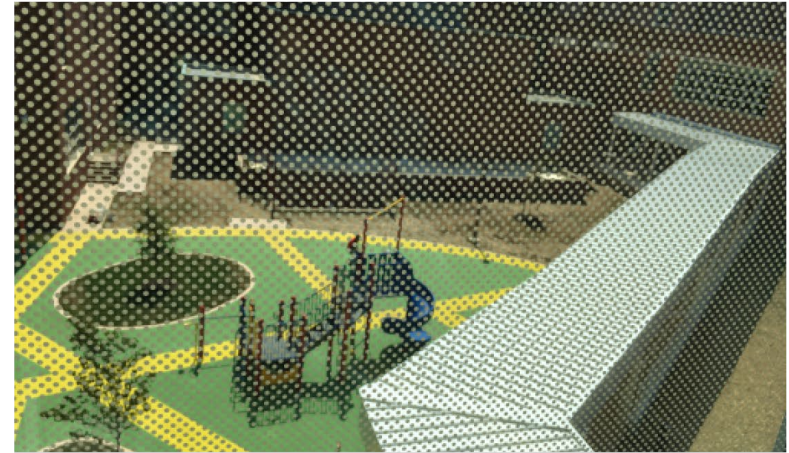
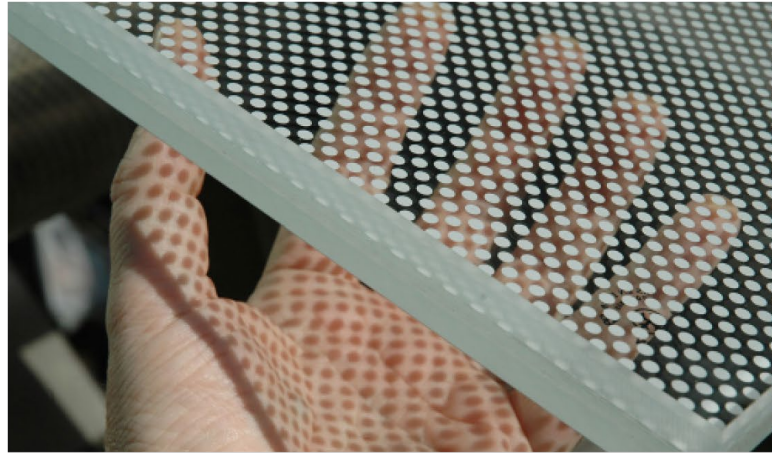
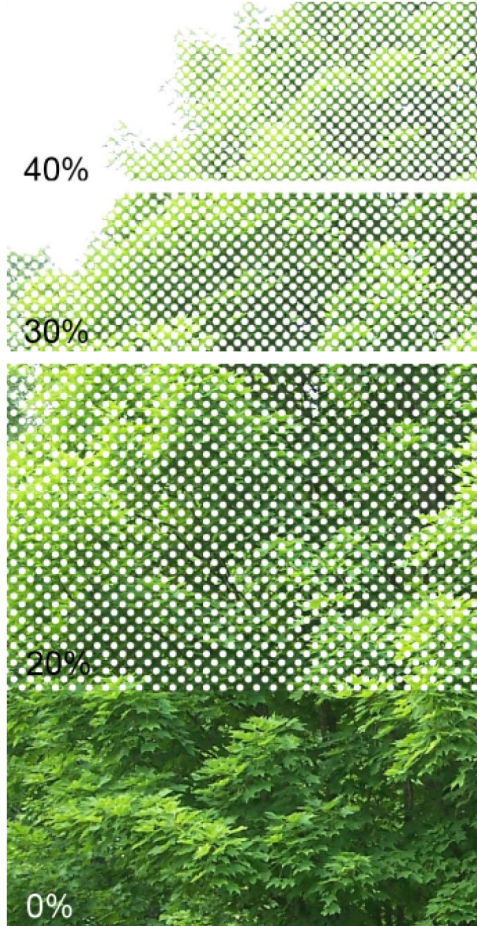


Fritted Glass



Fritted Glass

Examples



Operable Vents (Window Units for Ventilation)



Standard Vents with Standard Mullions \$

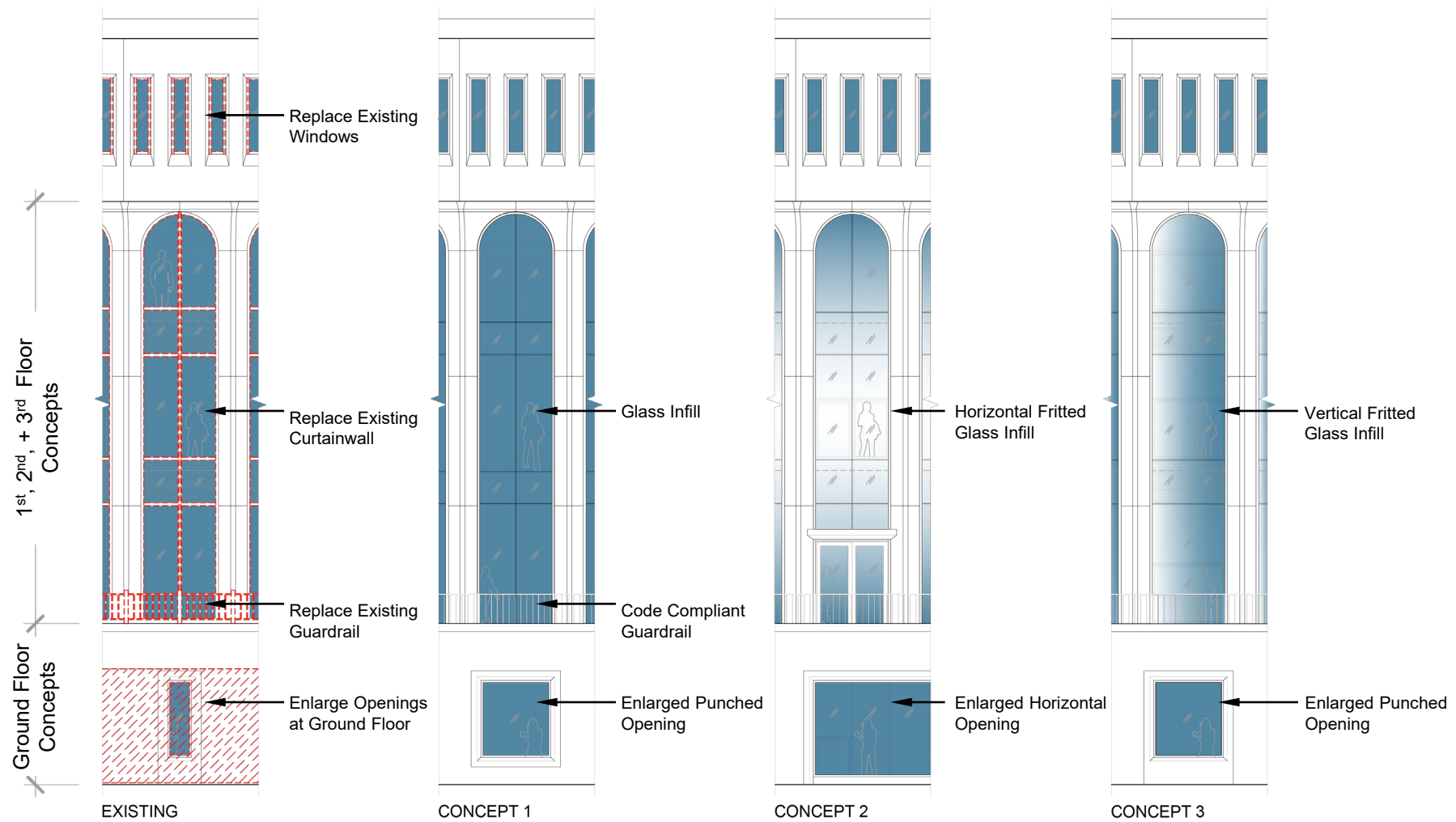


Frameless Vents with Standard Mullions \$\$



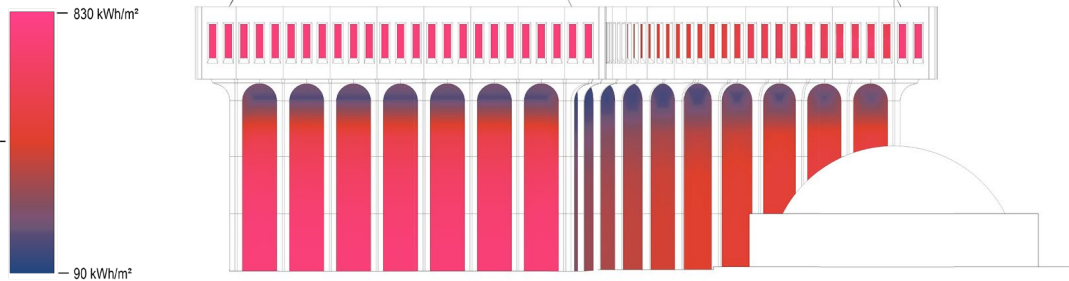
Frameless Vents with Frameless Mullions \$\$\$

Glazing Replacement Study

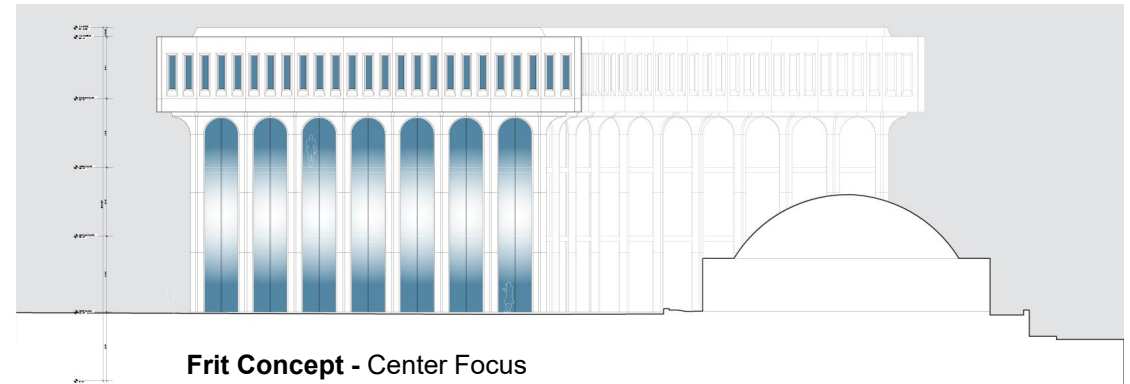


DRAFT SCHEMATIC DESIGN

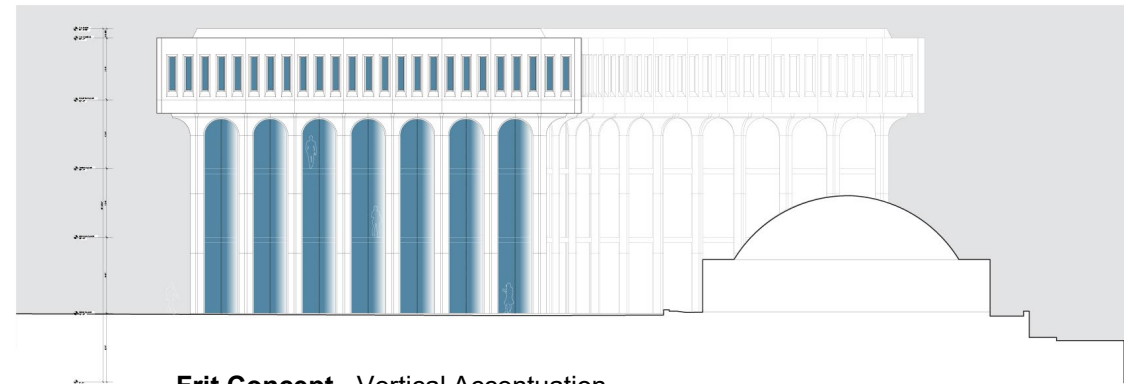
Frit Pattern Study



ANNUAL CUMULATIVE INSOLATION - North Elevation



Frit Concept - Center Focus

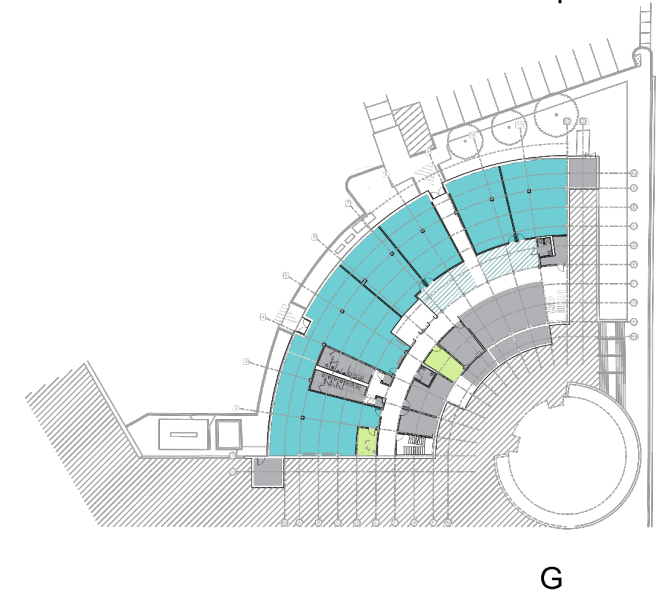
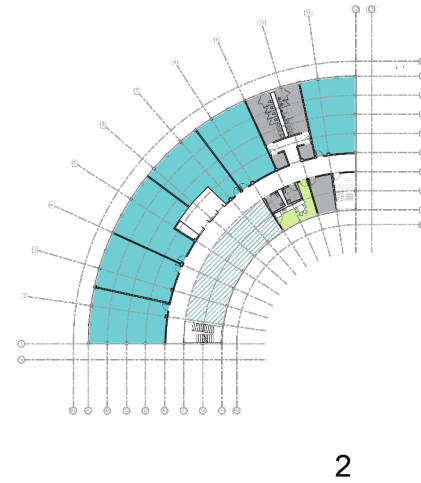
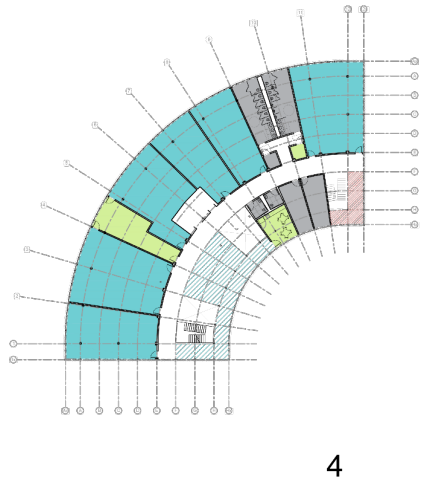
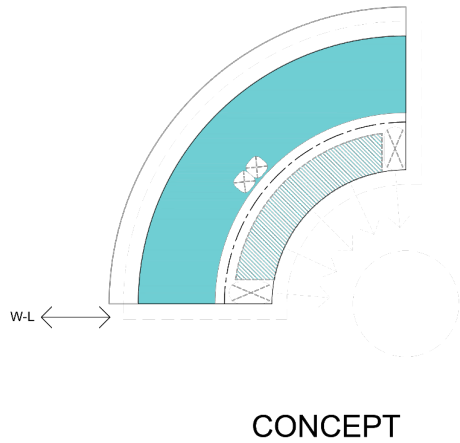
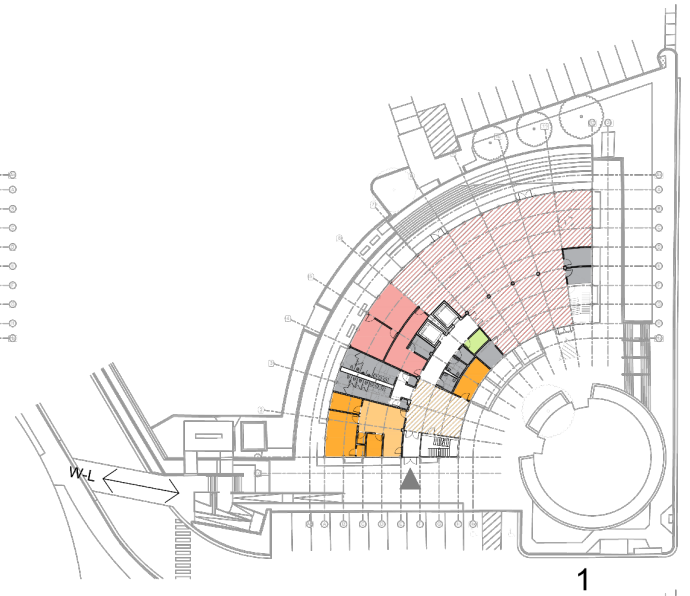
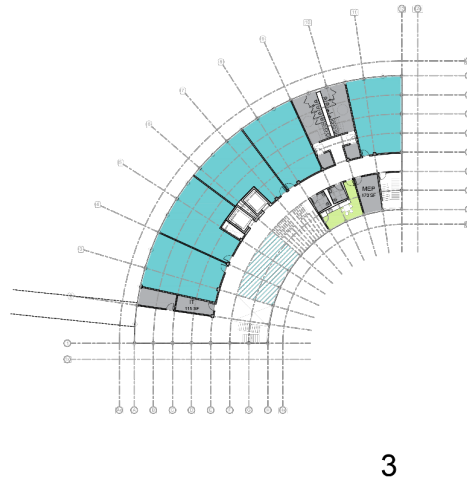
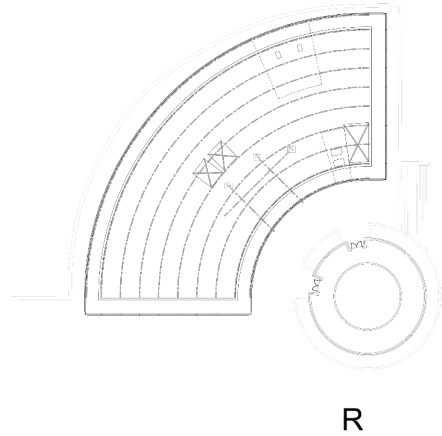


Frit Concept - Vertical Accentuation

DRAFT SCHEMATIC DESIGN

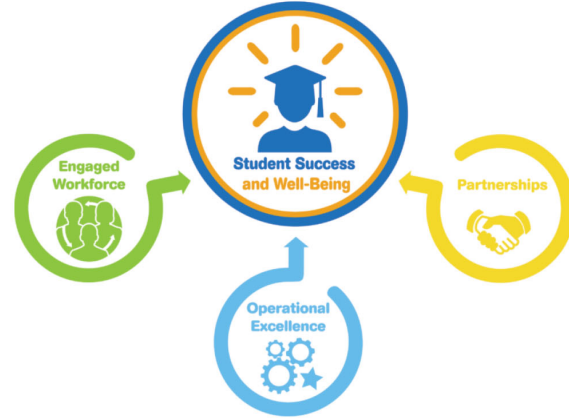
Blocking + Stacking

- LEGEND**
- ▲ MAIN ENTRANCE
 - ▨ SECONDARY ENTRANCE
 - LEARNING SPACES
 - LEARNING SUPPORT SPACES
 - COMMON SPACES
 - ADMINISTRATIVE SPACES
 - BUILDING SUPPORT
 - ENCLOSED SPACES
 - ▨ SEMI-ENCLOSED SPACES
 - ← PRIMARY VIEWS FROM MAIN CORRIDOR
 - W-L ← → GROUND CONNECTION TO WASHINGTON LEE
 - ⊗ ELEVATORS OR STAIRS



DRAFT SCHEMATIC DESIGN

APS Strategic Plan - Design Principles



APS STRATEGIC PLAN 2018-2024 GOALS

Student Success: Multiple Pathways To Student Success

Student Well-Being: Healthy, Safe, And Supported Students

Engaged Workforce

Operational Excellence

Partnerships: Strong And Mutually Supportive Partnerships

DESIGN PRINCIPLES

Safety + Security

Maintain safe, secure spaces while creating environments which enrich learning and emphasize transparency and community

Short-Term Agility + Long-Term Adaptability

Create spaces which are agile in their day to day use, while being adaptable to future changes in program and learning methods

High-Performance Learning Environments

- Spaces are to perform at the highest levels for the following:
- Thermal comfort
 - Indoor air quality
 - Acoustics
 - Daylight + views
 - Transparency
 - Technology
 - Community use
 - Active schools

Universal Design

Spaces should be designed and composed so they are accessible, understood and useful for all

Adherence To Budget

Building elements should be assessed for meeting the required design function through economical means

Sustainability

To the greatest extent possible the final design should minimize the impact on the environment through thoughtful site design, carefully managed water use, innovative energy and exterior envelope solutions, selective material use and a holistic approach to the interior design.

DRAFT SCHEMATIC DESIGN

BLPC / PFRC Committee Discussion Points for Schematic Design

General

- Adherence to Arlington County principles of civic design

Site Layout

- General character and location of amenities
- Pedestrian circulation
- Quantity and location of vehicle and bicycle parking
- Bus pick-up and drop-off area
- Vehicular pick-up and drop-off area
- Traffic operations improvements

Building Appearance

- Character and strategy for glazing replacement

Building Layout

- Location of entrance(s)
- Location of major public space(s)

A large group of diverse students, including boys and girls of various ethnicities, are posing in a school hallway. They are arranged in several rows, some sitting on the floor and others standing. Many are smiling and making peace signs. In the background, a wall is covered with numerous "Honor Award" certificates. The entire image has a warm, orange-red color overlay.

8 Committee Comment on Draft Schematic Design

A photograph of two children sitting at a table with laptops in a classroom. The child on the left is a girl with glasses, and the child on the right is a boy. They are both looking at their laptops. The background shows a chalkboard with the words "Parents Advoc" written on it. The entire image has a blue tint.

9 Public Comments

10 Next Steps + Adjourn

David M. Brown Planetarium
AEC
1426 North Quincy Street

Adjourn

1. As a reminder the APS Project Manager is:
Steve Stricker
(703) 228-7749
steven.stricker@apsva.us
2. Public meeting dates and past presentations are posted on the APS project website:
<https://www.apsva.us/education-center-reuse/>
3. To provide feedback and/or comments to APS use: engage@apsva.us

