



ART Operations and Maintenance Facility

Public Facilities Review
Committee (PFRC)
Meeting #4

September 29, 2021



Agenda

1. Welcome, Introductions
2. The Project
3. Updated Design Development
4. PFRC and Public Comments
5. Next Steps / Adjourn

Team Introductions

Project Team



Arlington County Transit Division

- **Pierre Holloman** – Assistant Transit Bureau Chief
- **William Jones** – Transit Services Manager

Arlington County Facilities and Engineering Division

- **John Mir** – Facilities Design and Construction Manager



Design Consultants

- **Greg Shipley**, AIA, LEED AP BD+C – Stantec Architecture, Inc. – Project Manager
- **Pete Cloutier**, P.E. – Timmons Group – Civil Engineer

Project Page

CHECK IT OUT!

<https://projects.arlingtonva.us/projects/art-operations-maintenance-facility/>

The Latest

Where?

What?

The screenshot shows the Arlington VA website's 'Projects & Planning' page. The header includes the Arlington VA logo and navigation links for County Home, Jobs, Payments, Services A-Z, and Translate. A search bar is located in the top right. Below the header is a navigation menu with links for Home, Neighborhoods, Planning, Projects, Plans & Studies, Programs, Building, and Data & Research. The main content area features the project title 'ART Operations and Maintenance Facility' and sections for Location, Status, About the Project, and Public Process. The 'Status' section is currently expanded, showing the project is 'In Design'. The 'About the Project' section describes the need for a new facility to support the growing ART bus fleet. The 'Public Process' section includes a 'Project Timeline' table with a legend for 'In Progress' and 'Construction Management at Risk (CMAR)'. On the right side, there is an 'Image Gallery' with a satellite view of the site, a 'Contacts' section listing project managers (John Mir, Pierre Holloman, Eric Balliet) and media inquiries, a 'Sign up for Four Arlington Transportation Updates' email subscription form, and an 'Events' section showing 'No events'.

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ART Operations and Maintenance Facility

Location

Facility to be located at 2631 and 2635 Shirlington Road, accessible via the access road, in the Green Valley neighborhood

Status

In Design

In July 2018 the County Board approved the purchase of three parcels on Shirlington Road for the operations and maintenance facility.

The project was approved in the County's FY 2019-2028 Capital Improvement Plan for \$81.2 million, which included the cost of the land purchase, concept planning, design and construction.

On Sept. 15, 2020, the County Board approved a \$3.9 million contract with Stantec Architecture, Inc. for planning, design and construction administration services for the facility.

About the Project

This project will address the need for parking, operations and maintenance of the County's growing Arlington Transit (ART) bus fleet. ART has significantly increased its number of routes and hours of service during the past 10 years and plans to continue growing during the next 20 years, supported by a fleet of more than 100 buses.

The County acquired three parcels of land in Green Valley to construct the facilities needed to consolidate ART service functions and support its current and future needs. The facility will perform regular preventive bus maintenance, repairs and other unscheduled maintenance work. It also will include administration and operations functions and parking for buses and staff. The facility is essential for ART's long-term sustainability.

The project will include:

1. A maintenance, operations, and administration building and surface parking for the buses (to be located on Parcel A)
2. A three-story parking structure for employee vehicles (to be located on Parcel B)

The County will require a minimum of LEED Building Design + Construction (BD+C) Silver Certification for the project, which will be designed to include sustainable materials and systems.

About Arlington Transit

Arlington Transit (ART) is Arlington County's local transit system that supplements Metrobus service with cross-County routes as well as neighborhood connections to Metrorail and Virginia Railway Express.

Public Process

Project Timeline

In Progress
Construction Management at Risk (CMAR)

Image Gallery

Contacts

Facilities Project Manager

John Mir ✉
703-228-7887 📞

Transit Project Manager

Pierre Holloman ✉
703-228-3790 📞

Media Inquiries

Eric Balliet ✉
703-228-3770 📞

Sign up for Four Arlington Transportation Updates

Email

Submit

Events

No events

Who?

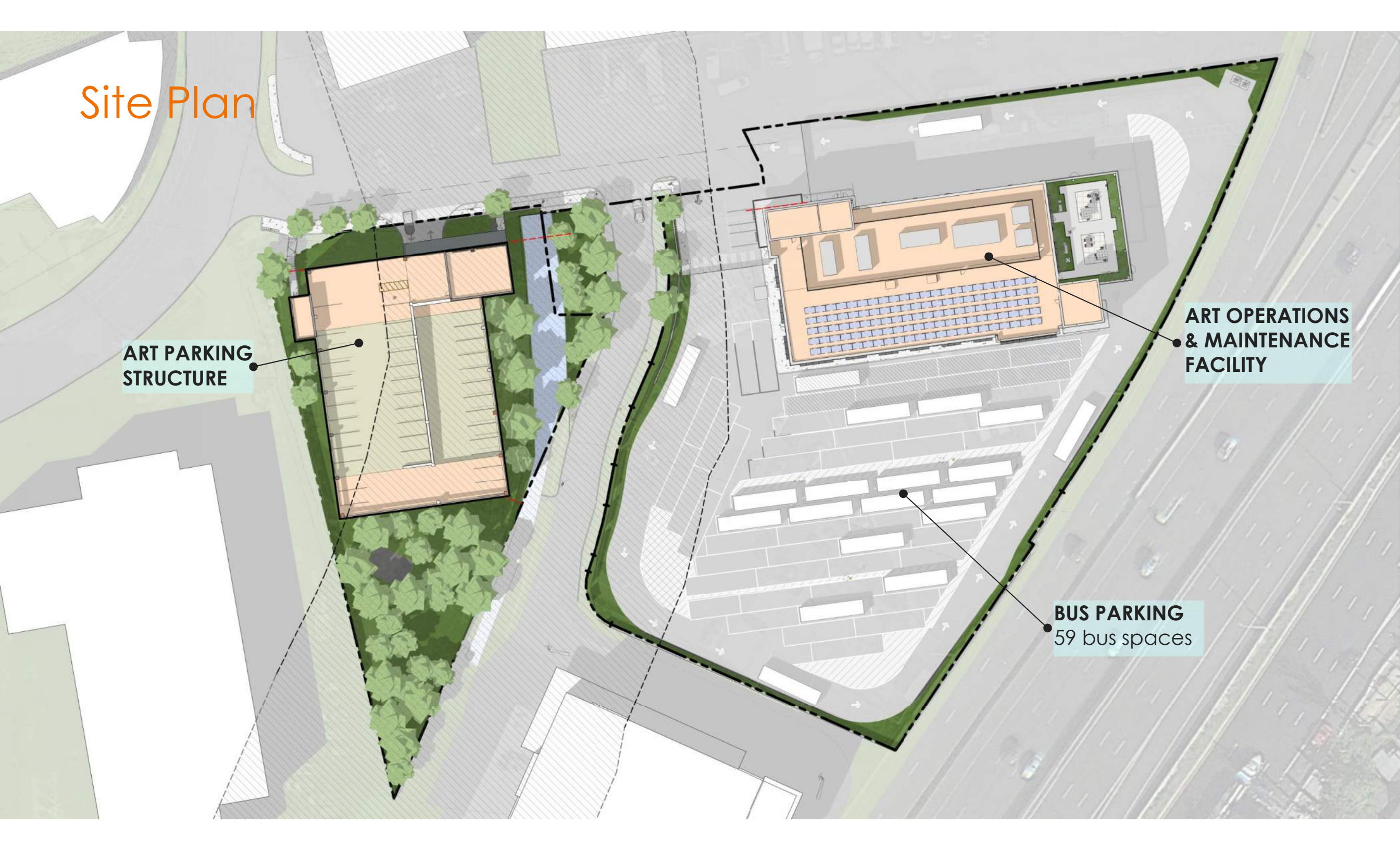
Updated Exterior Aesthetics

Site Plan

**ART PARKING
STRUCTURE**

**ART OPERATIONS
& MAINTENANCE
FACILITY**

BUS PARKING
59 bus spaces



Current Block Massing

OPERATIONS & MAINTENANCE FACILITY

45' +/- (w/4' parapet)

**OPERATIONS & MAINTENANCE FACILITY
STAIR/ELV/EQUIPT**

57' +/- (w/4' parapet)

DC Rental

25'
1-story

BUS LAYOUT

59 bus spaces

HIGHWAY 395

CubeSmart

59.4' (w/ 4' parapets)
5-stories

PARKING GARAGE

36' +/- (w/4' parapet)
110+ spaces

**ART PARKING
GARAGE STAIR/ELV**

48' +/- (w/4' parapet)

CubeSmart

70'
6-stories

SHIRLINGTON RD

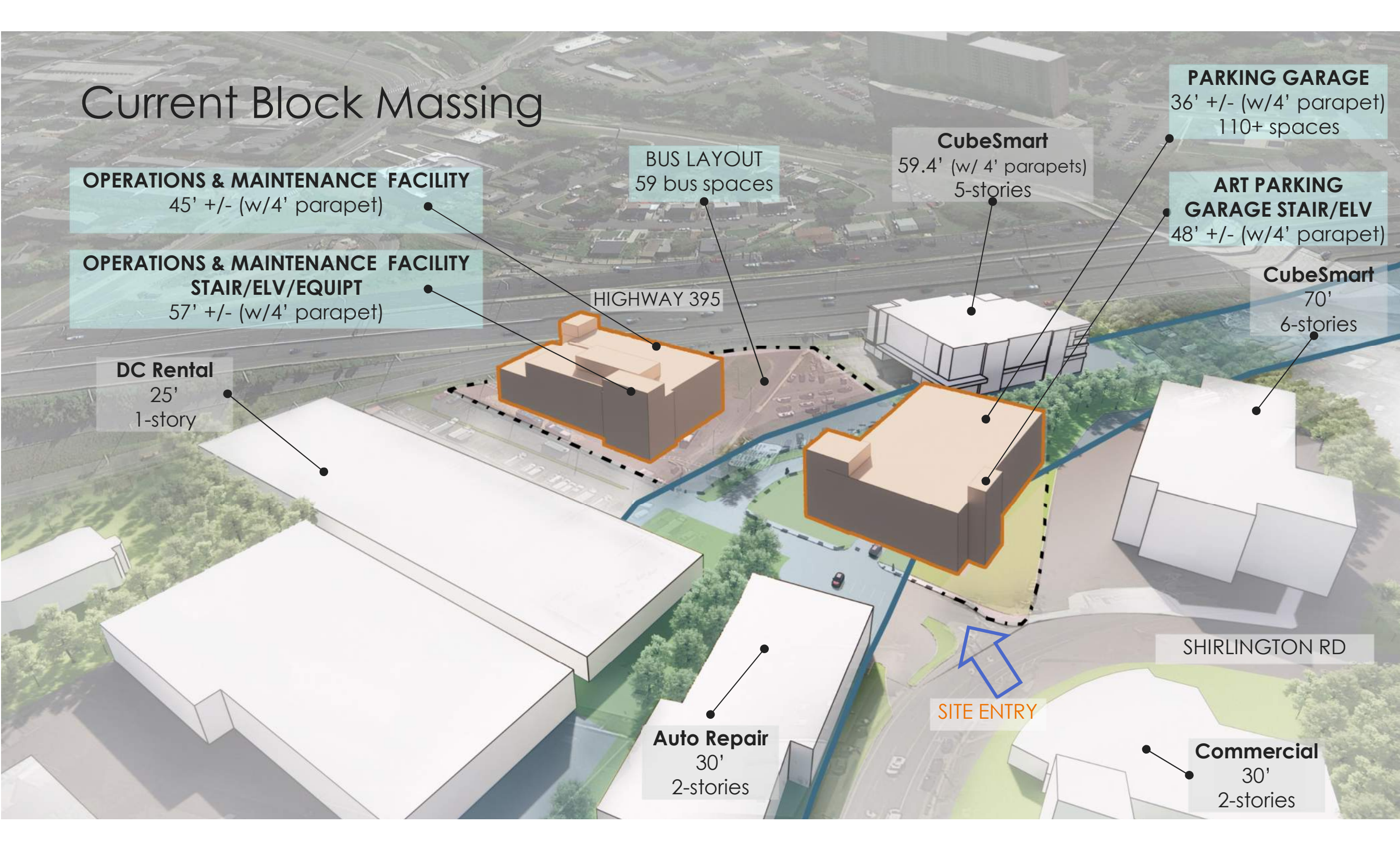
Auto Repair

30'
2-stories

SITE ENTRY

Commercial

30'
2-stories



Aerial View – Approach View



Shirlington Approach View



Pedestrian View – Shirlington Road



Pedestrian View – AOMF Entrance



View From 395



Pedestrian View – Maintenance



PFRC & Public Comments

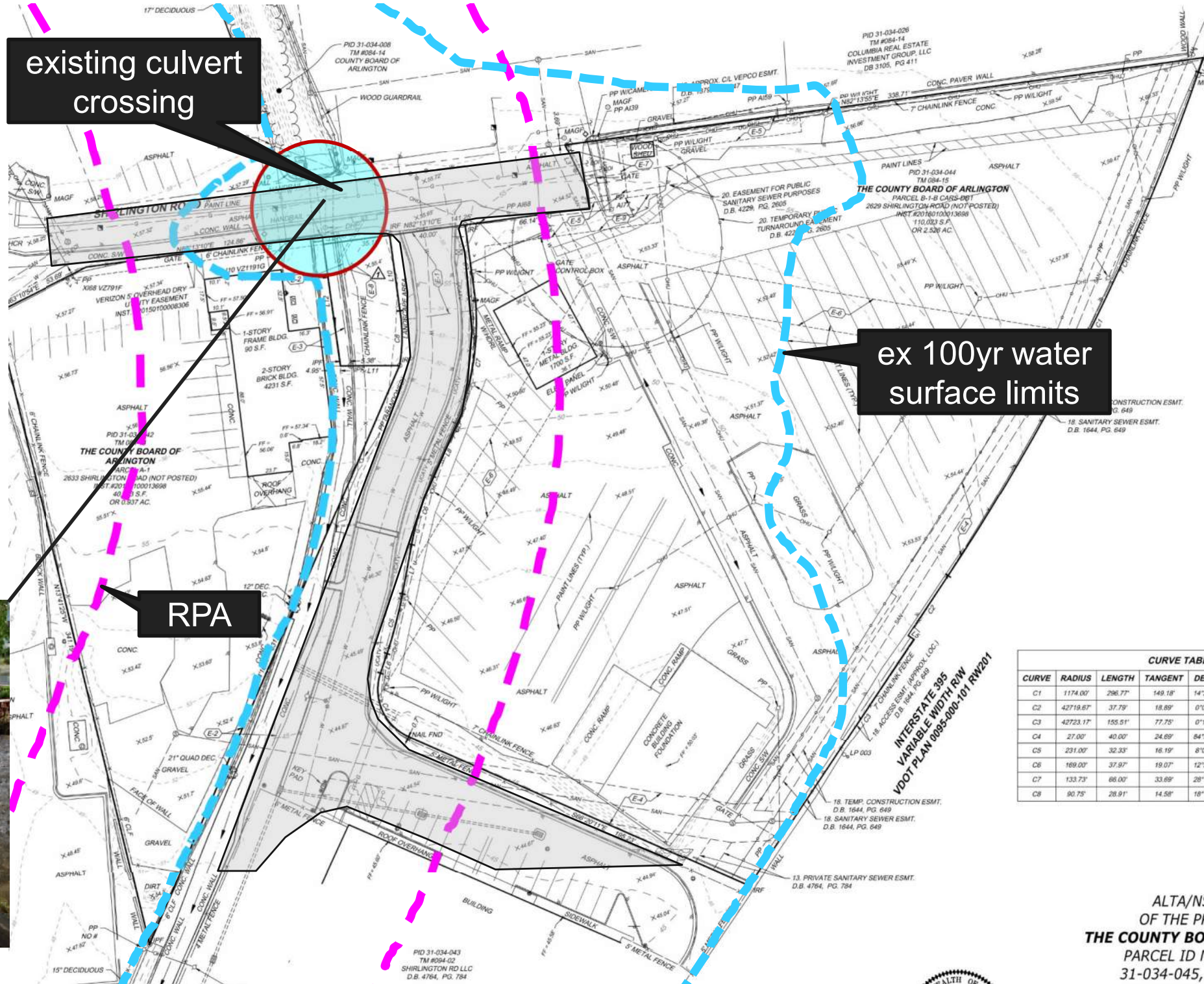
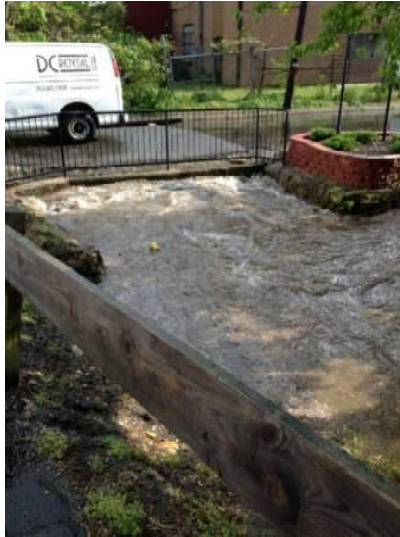
Site Considerations

- 3.523 acres (3 parcels)
- Zoned M-1 Light Industrial
- Bisected site
 - CubeSmart access road
 - manmade open stream channel w/ RPA
- **Flooding issues at access road**
- Multiple existing utility crossings
- Four Mile Run Valley Area Plan



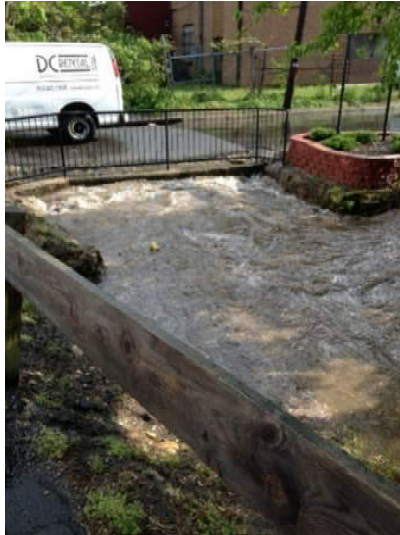
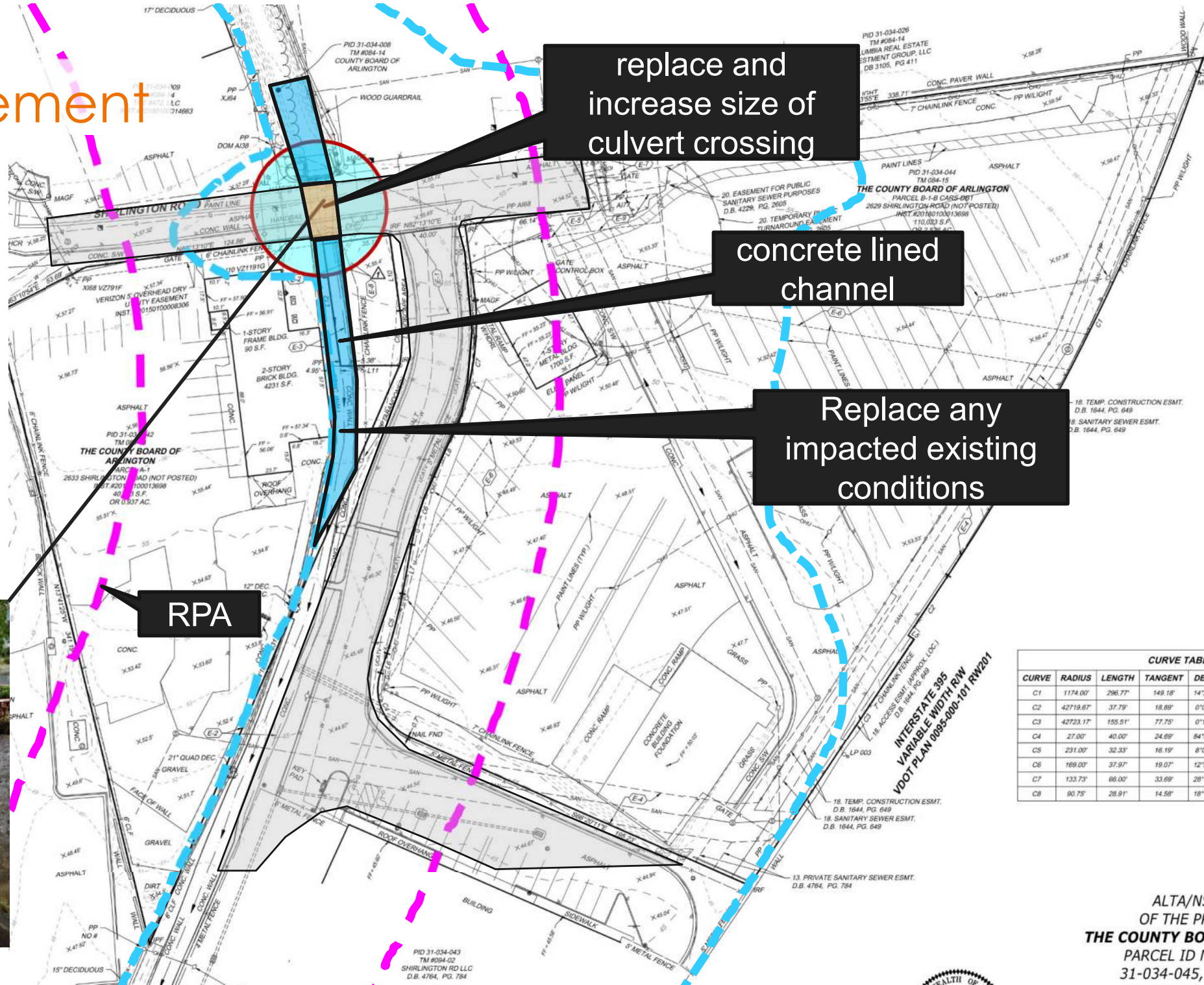
Stormwater

- Manage the 10yr & 100yr WSE
- Channel improvements and increasing culvert crossing
- Retaining / flood wall
- Long term stormwater issues
- Ensure best design solution



Channel Improvement

- Reduce Flooding
- Channel improvements and increasing culvert crossing



Stormwater Management



bioretention facility

underground SWM facility

Stormwater Management

VA DCR STORMWATER DESIGN SPECIFICATION NO. 9

BIORETENTION

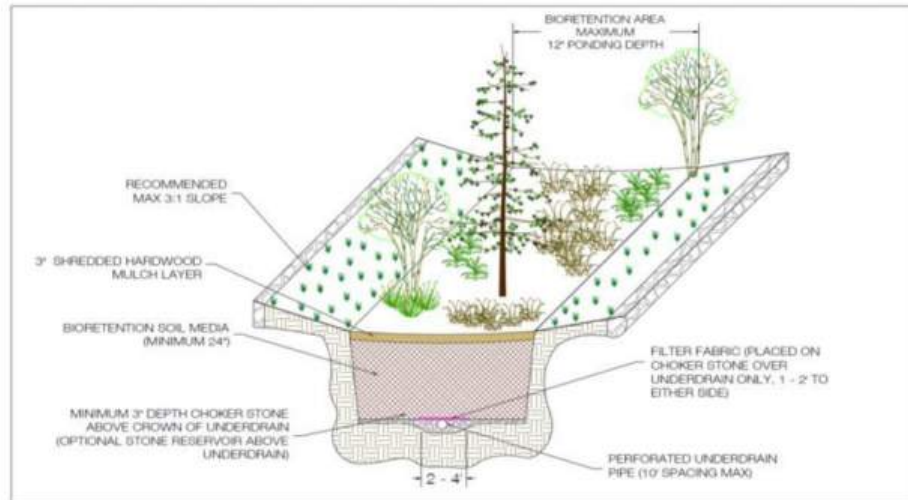


Figure 9.4a: Typical Bioretention Basin Level 1



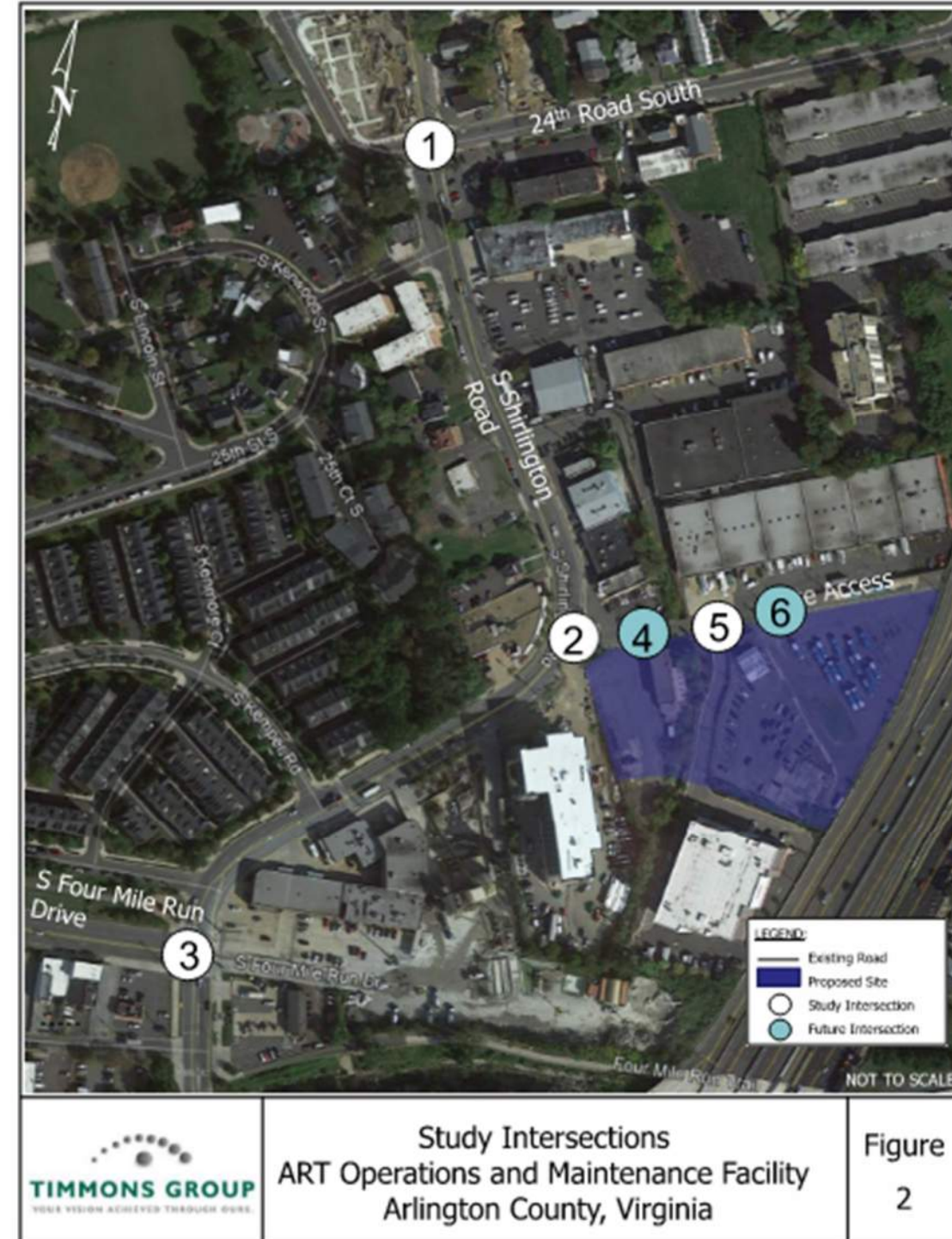
Traffic Assessment

Overview

- Completed in June 2021
- Scope of traffic assessment agreed upon with Arlington Transportation prior to beginning study
- Examined 6 intersections in the area.
- Analyzed the following:
 - Existing (2021) conditions
 - 2023 background conditions (without developing the site)
 - 2023 future conditions (with developing the site).

Posted on Project Page

<https://projects.arlingtonva.us/projects/art-operations-maintenance-facility/>



Traffic Assessment

Process

- Collected existing traffic counts
 - Due to the ongoing pandemic, all existing traffic counts were adjusted upward to reflect typical traffic conditions
- Applied a 2% annual growth rate to develop 2023 background conditions (without development of the site)
- Determined the new trips that will be generated by the site
- Summed existing, background, and site trips to develop 2023 future conditions

**Table 1:
Site-Generated Traffic for ART Facility**

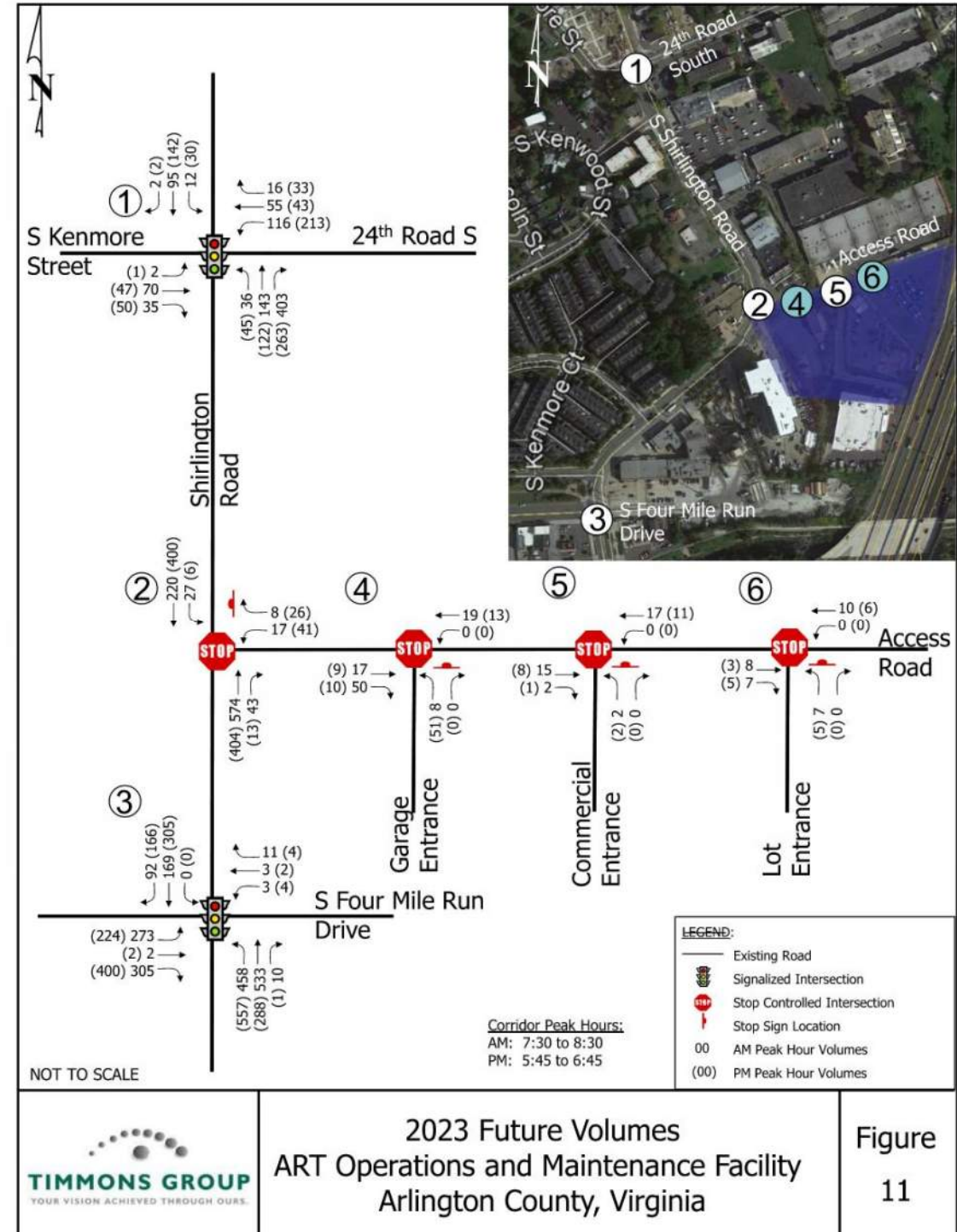
Buildout Land Use	Size	Units	Land Use Code	Weekday						Average Daily Trips
				AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Proposed Uses⁽¹⁾										
Administrative Office Building	11,000	S.F.	710	11	2	13	2	12	14	125
Operations and Maintenance Facility ⁽²⁾	39,000	S.F.	710	39	6	45	8	39	47	426
Bus Parking ⁽³⁾	61	Spaces		<u>7</u>	<u>7</u>	<u>14</u>	<u>5</u>	<u>5</u>	<u>10</u>	<u>456</u>
Total Site Trips				57	15	72	15	56	71	1,007

Notes: (1) Based on the Institute of Transportation Engineers Trip Generation, 10th Edition. Assumes General Urban/Suburban land use category.
 (2) This facility will contain office and maintenance space. Trips shown are for all office as this is more conservative (worst case). The trip generation may be refined as the space is more clearly defined.
 (3) Based on the bus schedule provided by the user, 7 buses will depart in the AM and 5 in the PM. No buses return in either peak. The trips shown account for bus drivers entering in personal vehicles and departing in a bus in the same peak hour. Daily trips calculated based on total bus routes (114) * 4 trips per day (driver in, bus out, bus in, driver out).

Traffic Assessment

Study Findings:

- Development of the site will have minimal to no impact on surrounding roadway network
- Development of the site will have minimal to no impact on bicycle and pedestrian network
- No improvements are required at the study intersections to accommodate the traffic generated by the site



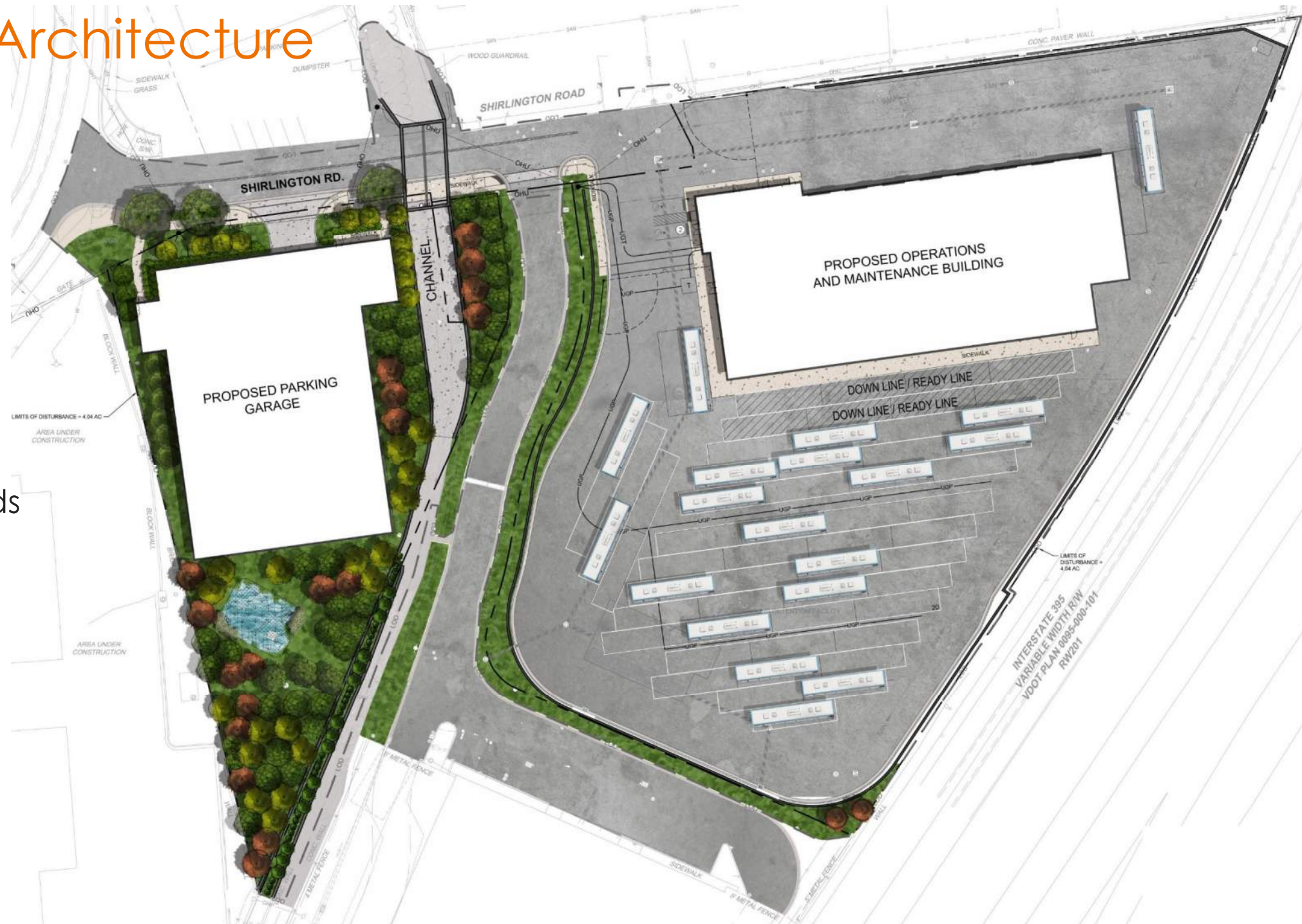
Landscape Architecture

Met on site with Arlington County's Urban Forester

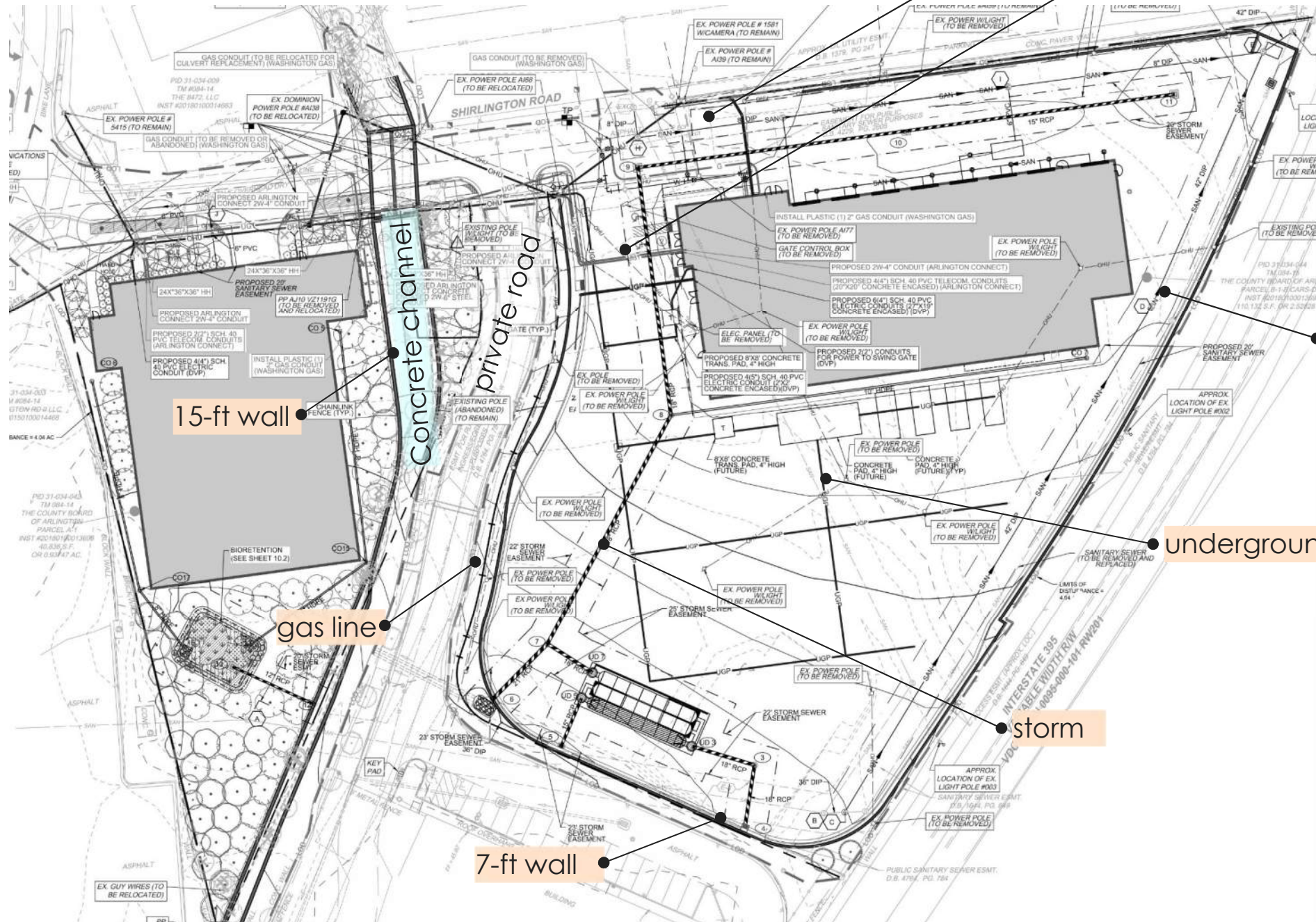
Site Area = 3.52 acres

Tree Canopy Req. =
10% Site Area =
15,333 SF canopy

Canopy currently exceeds
the requirements



Utility Coordination & Site Constraints



water

telecom

15-ft wall

concrete channel
private road

gas line

20-ft sanitary easement

underground power

storm

7-ft wall

Sustainability

Arlington's Facility Sustainability Policy

Energy Efficient: 25% Savings vs Code

3rd Party Sustainability Certification – pursuing LEED Silver



Passive Strategies:

- High-Performance Envelope
- Window: Wall Ratio
- Optimized Daylight

Active Strategies:

- Low-Maintenance HVAC
- Solar-Ready
- Fleet Electrification

Solar Ready and Battery Electric Buses

Solar Ready

- Building structure designed to accommodate future PV panel loads
- PV ready-electrical infrastructure
- Visibility to promote energy generation

BEB

- designed to accommodate future fleet electrification
- looking at various options
- flexible and eye for the future

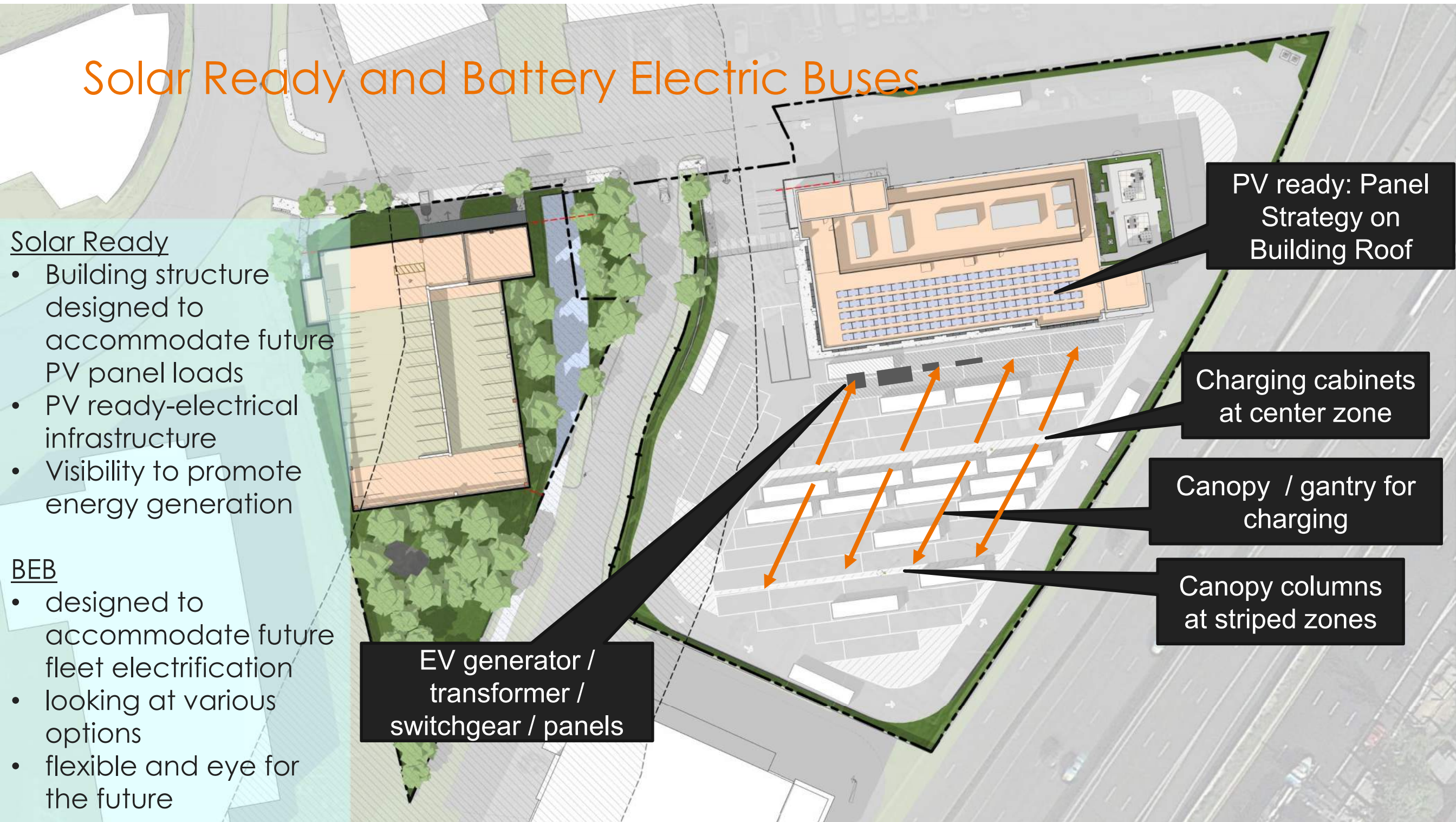
EV generator /
transformer /
switchgear / panels

PV ready: Panel
Strategy on
Building Roof

Charging cabinets
at center zone

Canopy / gantry for
charging

Canopy columns
at striped zones



Vehicular Circulation

Employee personal vehicles

CubeSmart access

repair bay safety zone

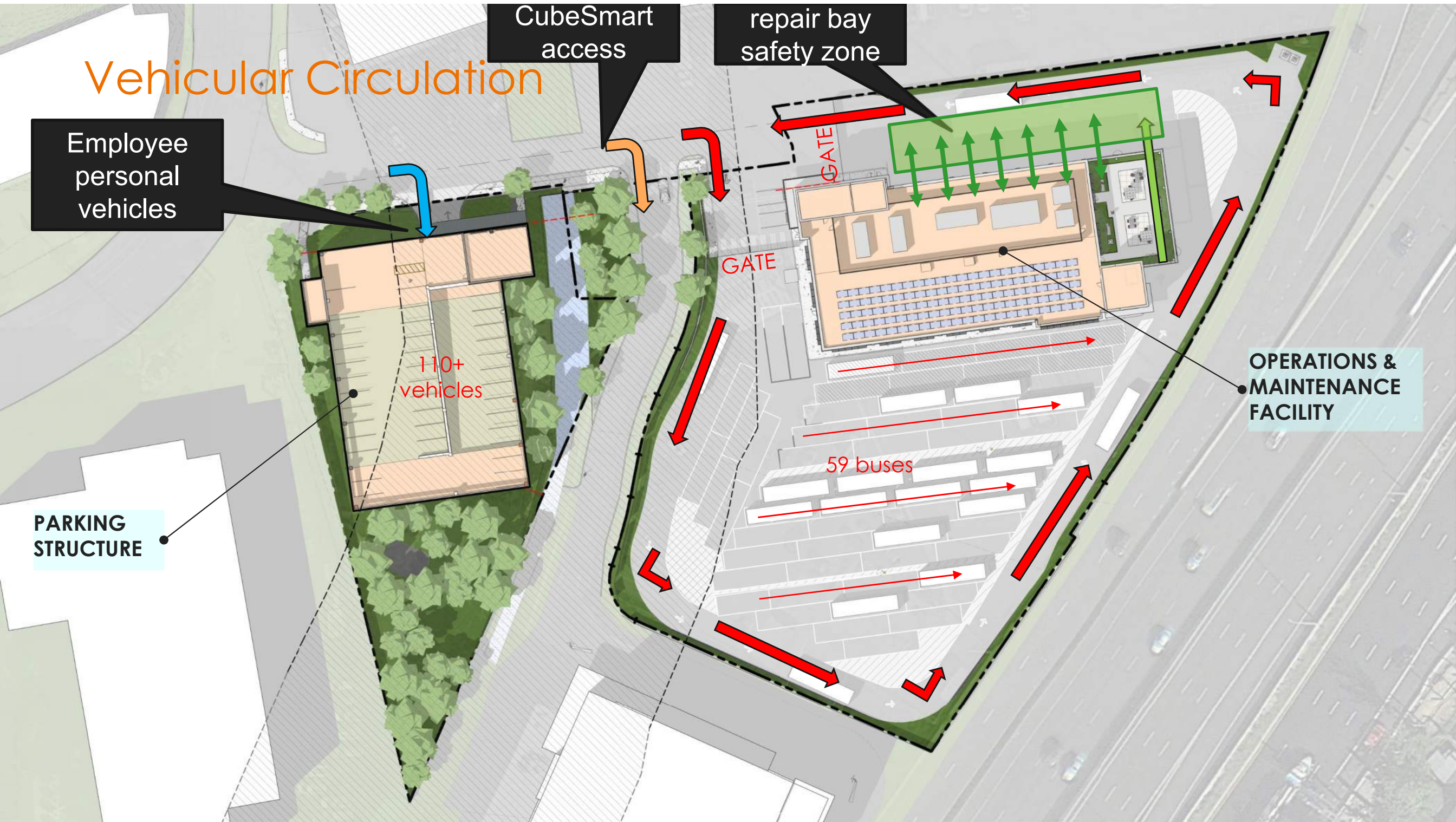
110+ vehicles

GATE

59 buses

OPERATIONS & MAINTENANCE FACILITY

PARKING STRUCTURE



Pedestrian Circulation

personal vehicle entry

pedestrian entry to admin bldg

sidewalk

CubeSmart access

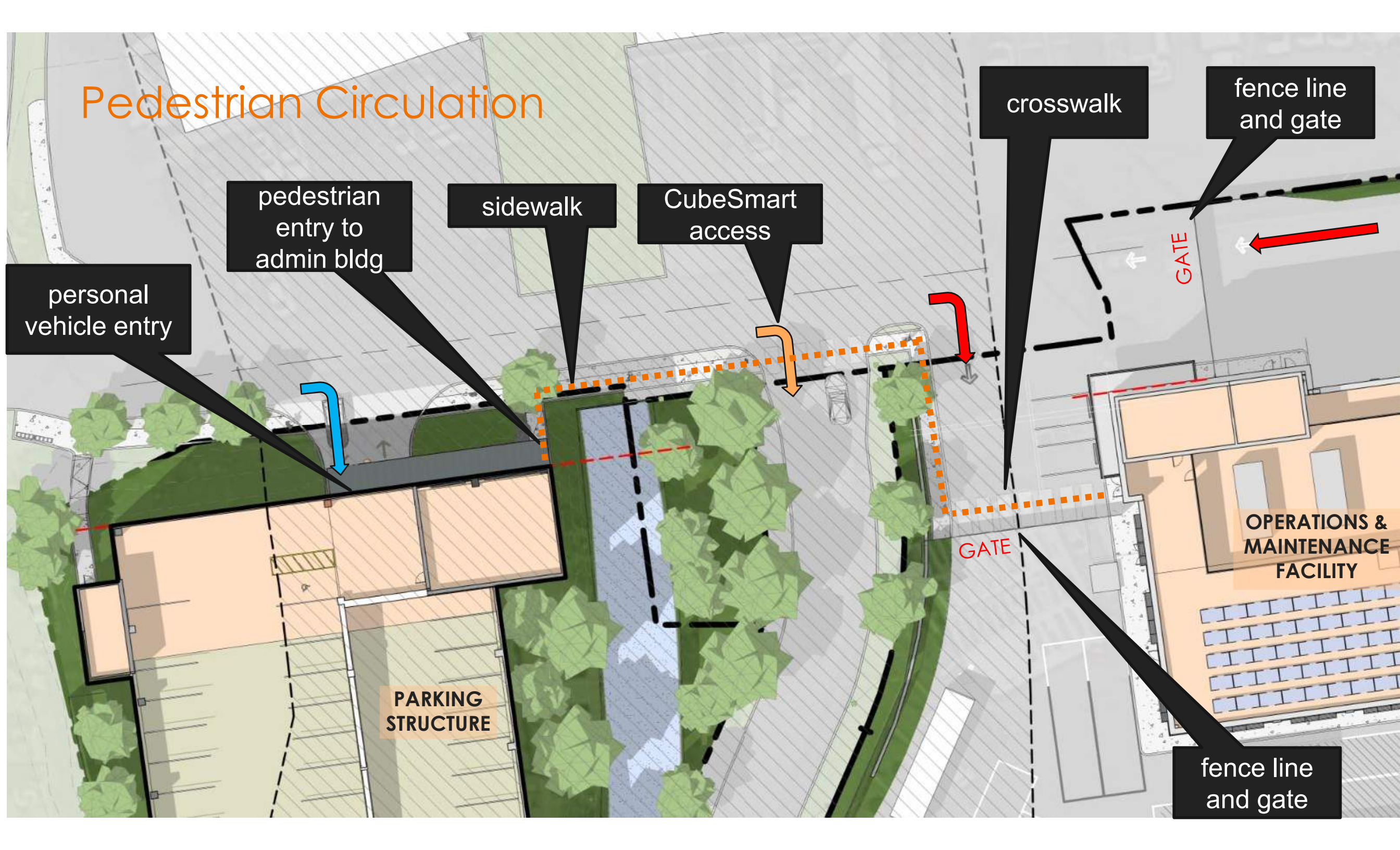
crosswalk

fence line and gate

PARKING STRUCTURE

OPERATIONS & MAINTENANCE FACILITY

fence line and gate



Pedestrian Safety

pedestrian entry to Ops/Maint/Admin

crosswalk

fence line and entry gate



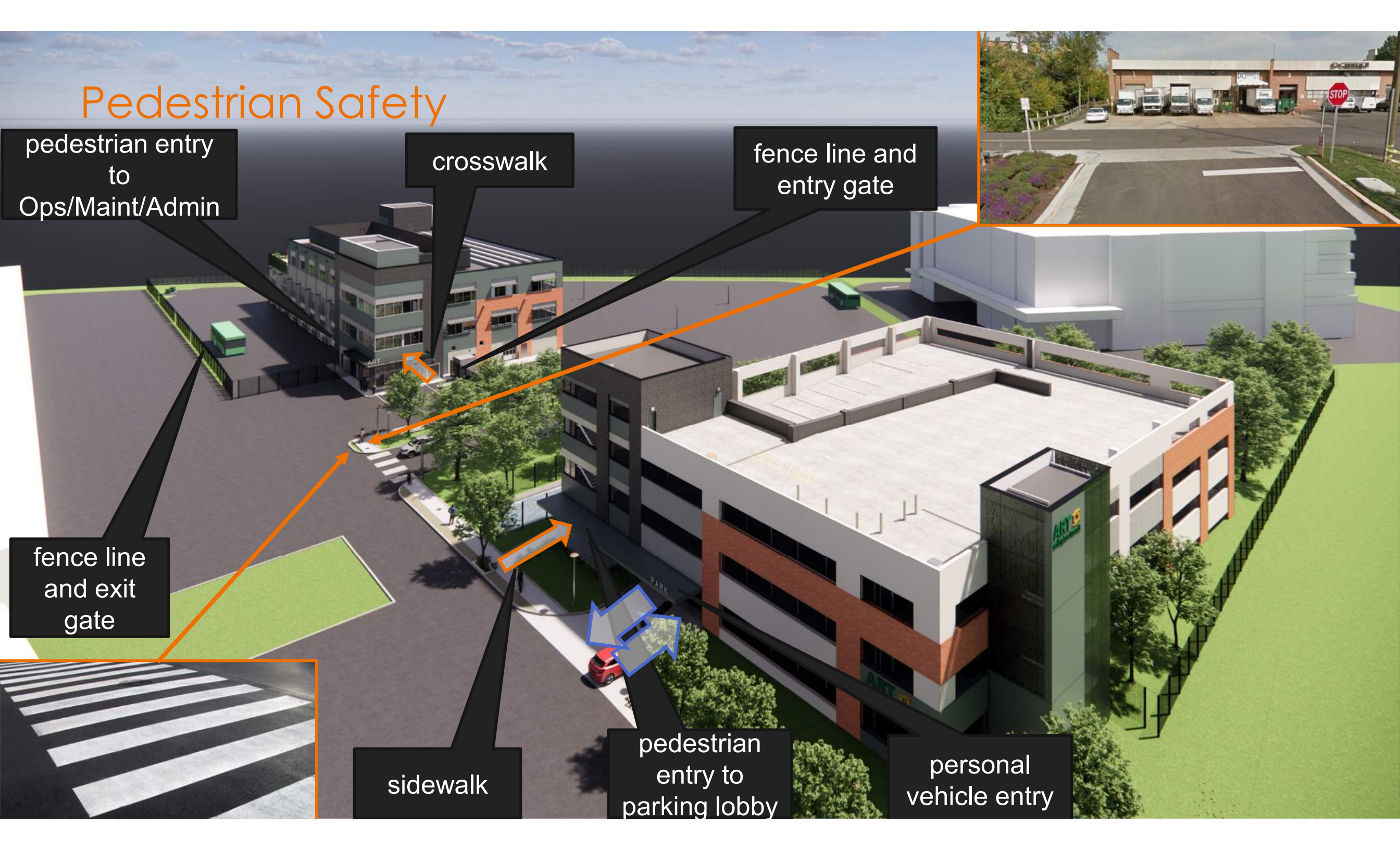
fence line and exit gate



sidewalk

pedestrian entry to parking lobby

personal vehicle entry



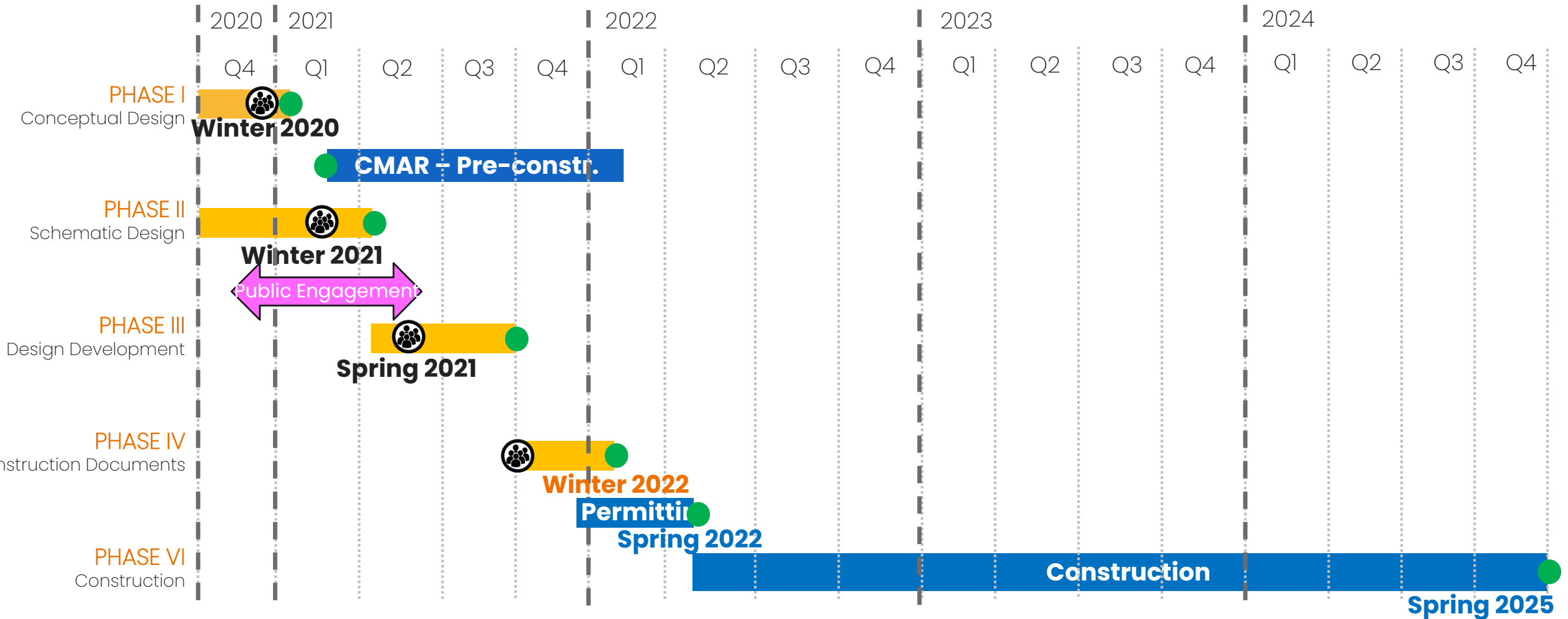
Next Steps

Project Timeline

WE ARE HERE



- In Progress
- Construction Manager at Risk (CMAR)
- Milestone
- ⊙ Community and/or PFRC Meeting



Next Steps

Previous

- PFRC Meeting #1 Dec 2020: Concept Master Plan
- PFRC Meeting #2 Feb 2021: Schematic Massing and Exterior Building Aesthetics
- PFRC Meeting #3 Jun 2021: Updated Exterior Aesthetics

Today – PFRC Meeting #4

- Project Update

Next Steps

- Construction Documents
- Permitting
- County Board (GMP Approval)
- Construction

Q&A



ART Operations and Maintenance Facility

Arlington County Transit Division

- **Pierre Holloman** – Assistant Transit Bureau Chief
 - pholloman@arlingtonva.us
- **William Jones** – Transit Services Manager
 - wjones@arlingtonva.us

Arlington County Facilities and Engineering Division

- **John Mir** – Facilities Design and Construction Manager
 - jmir@arlingtonva.us

Thank You!