



# ART Operations and Maintenance Facility

Public Facilities Review  
Committee (PFRC)

Meeting #5

May 4, 2022



# Agenda

1. Welcome, Introductions
2. Project Updates
3. 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
- **Oswaldo Ramos**, P.E. – Timmons Group – Civil Engineer

# 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
- PFRC Meeting #4 Sep 2021: Project Update

## Today – PFRC Meeting #5

- Project Update

## Next Steps

- Permitting
- County Board (GMP and Use Permit Approval)
- Construction

Updated Exterior Aesthetics

# 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

**Auto Repair**

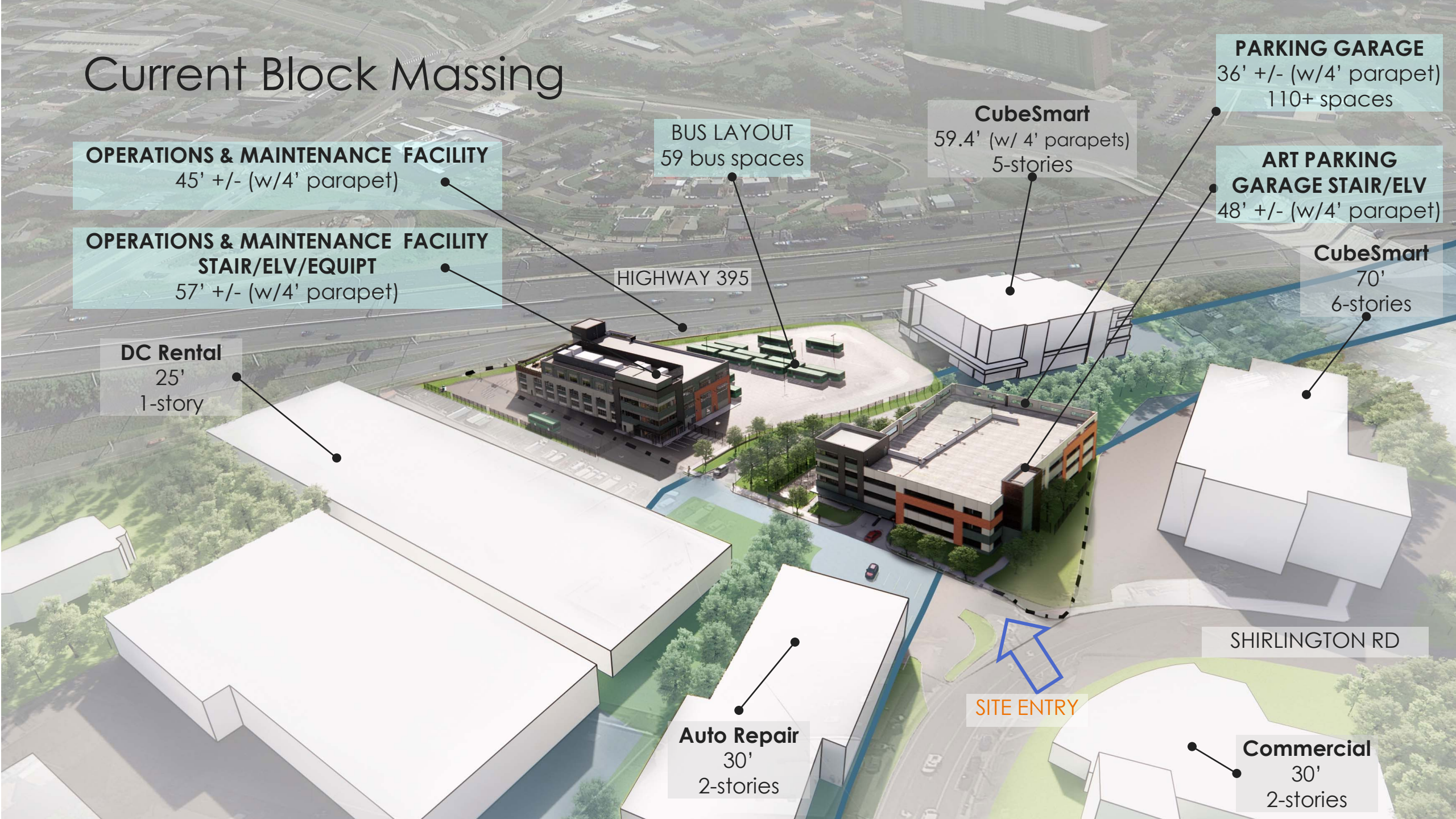
30'  
2-stories

**SITE ENTRY**

SHIRLINGTON RD

**Commercial**

30'  
2-stories



# Shirlington Approach View



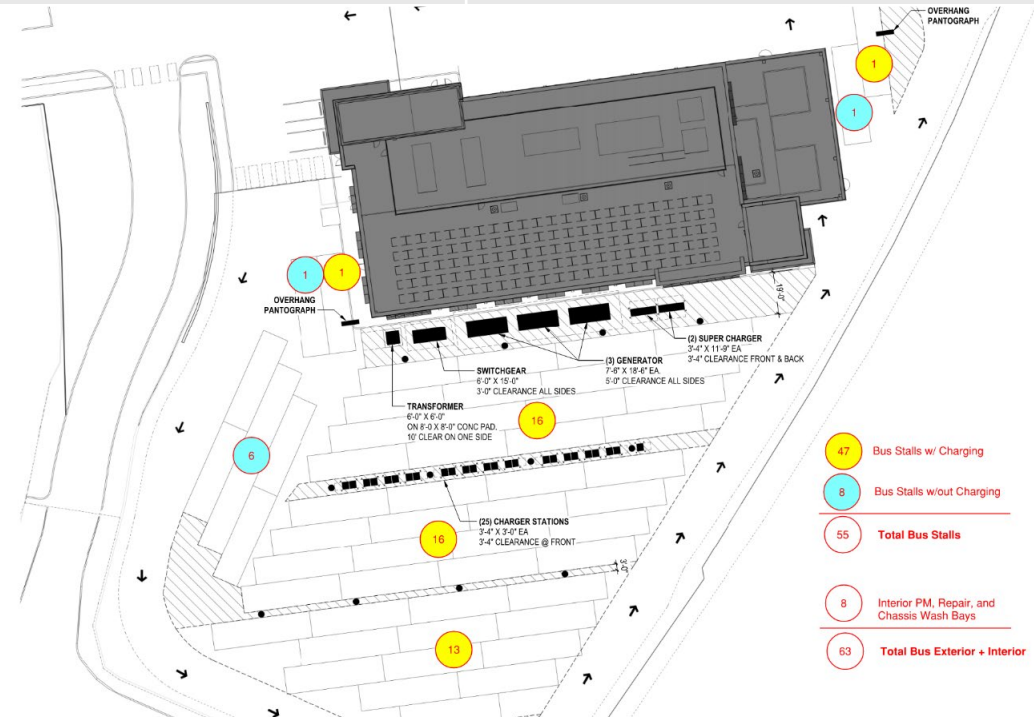
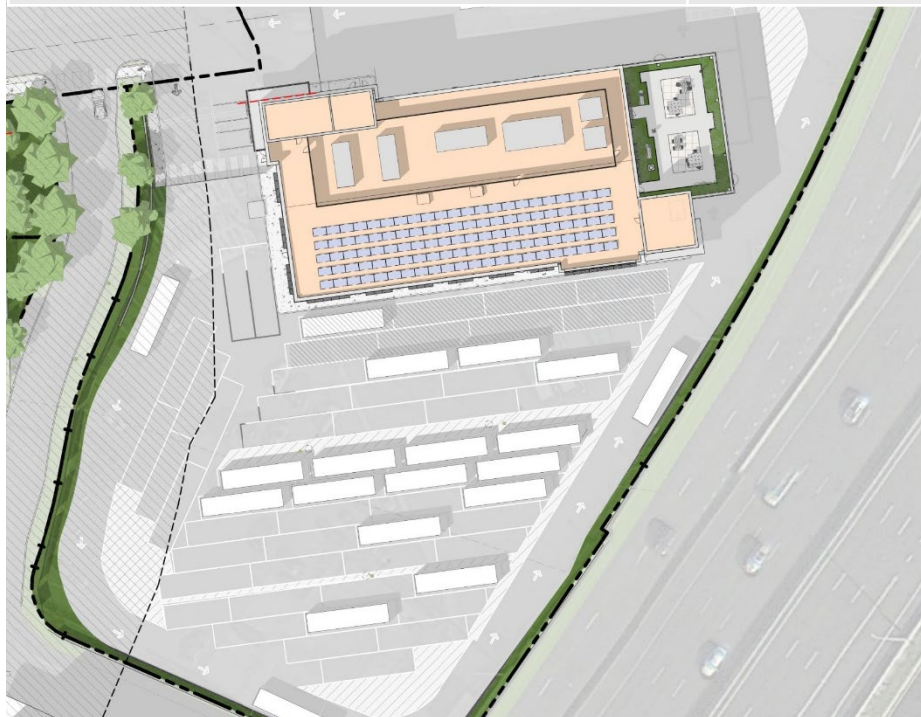


# Shirlington Approach View

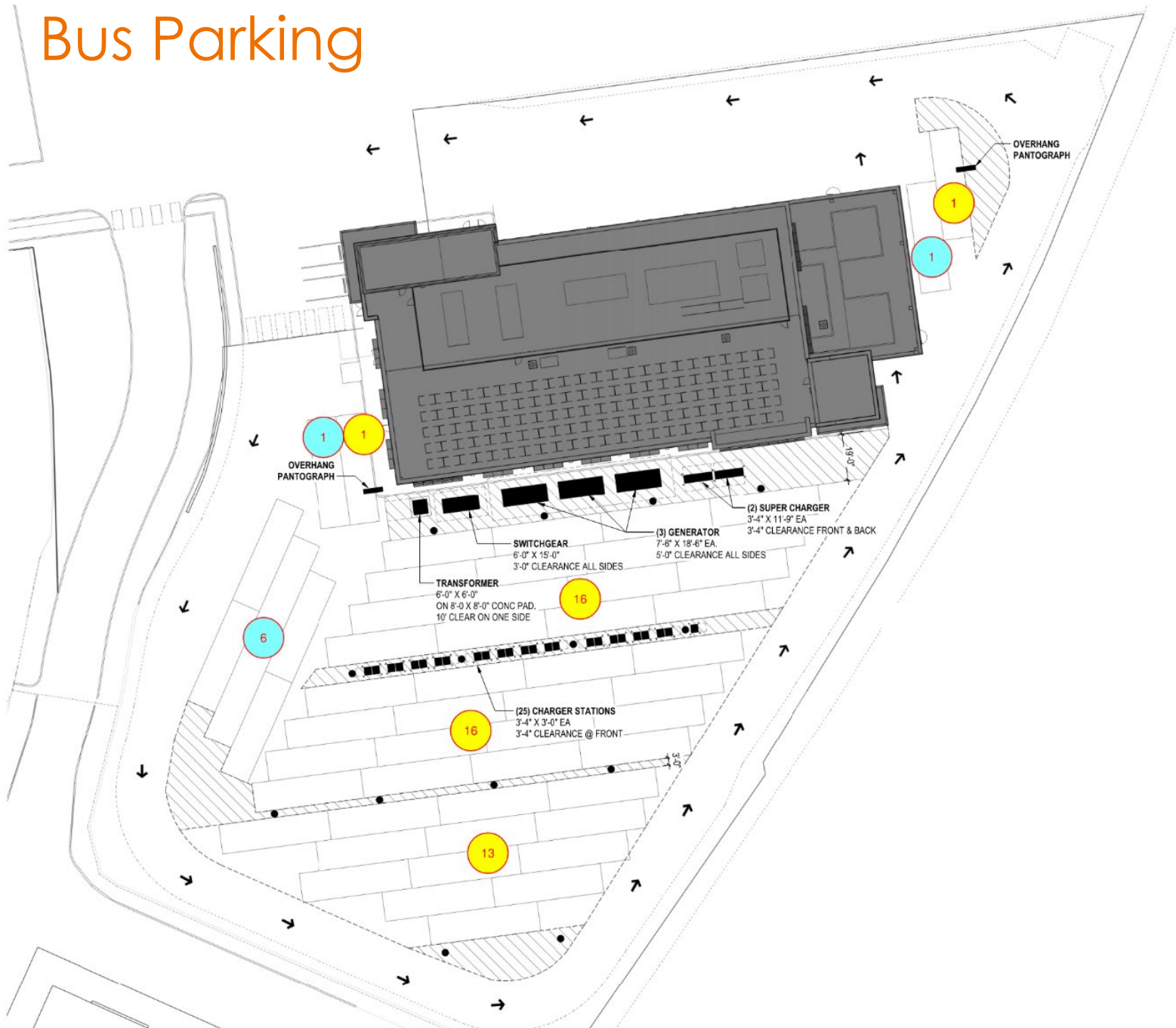


# Bus Parking

Site w/ CNG	Description	Site w/ BEB
No	Fueling on Site	Yes
59	# Exterior Bus Parking Stalls	55
8	# Interior Bus Bays	8
67	Total Buses (Exterior + Interior)	63



# Bus Parking



47

Bus Stalls w/ Charging

8

Bus Stalls w/out Charging

55

**Total Bus Stalls**

8

Interior PM, Repair, and Chassis Wash Bays

63

**Total Bus Exterior + Interior**

View From 395



# Pantograph Infrastructure



# Future Pantograph Infrastructure w/ Photovoltaic Panels



# Future Pantograph Infrastructure w/ Photovoltaic Panels

PV Canopies on  
Parking Garage



PV on ART Operations  
& Maintenance Facility



PV on BEB  
Infrastructure



# Phasing

## Phase 1

- Transformer
- Switchgear
- Generator (1)
- Underground electrical ductbanks
- Overhead infrastructure for (45) stations with pantographs and PV Panels for first (16)
- Charging Cabinets (8)

## Phase 2

- Additional generators (2)
- Remaining (29) Pantographs plus (2) Mast pantographs and fast chargers
- The remaining Charging Cabinets (15)





# Aerial View – Approach View



# Initial GMP: AOMF Building & Parking Structure

- Energy Cost Savings 39.34%
- Equivalent to 15 EA points + 1 pt. for Regional Priority
- 23.7 % Renewable Energy Production equal to 3 points + 1 pt. for EP
- 5 pts. under LEED v4.1 for Renewables
- LEED **Gold** – 70 Anticipated points



Total PV Area 10,955 SF

# Phase 1: AOMF Building w/ PV on Roof + Parking Garage + BEB Structure

Total PV Area 40,874 SF

- Energy Cost Savings 81%
- Equivalent to 18 EA points + 1 pt. for Regional Priority
- LEED Renewable Energy Production equal to 3 points, OR 5 points under LEED v4.1 + 1 pt. EP
- LEED **Gold** – 73 Anticipated points



# Comparative Analysis

	Energy Cost Savings	Renewable Energy Production	Utility Cost Saving per Year
AOMF BLDG	20.48%	0%	\$ 21,683
AOMF BLDG + PV on Roof	28.04%	9.48%	\$ 29,657
AOMF BLDG + PV on Roof + Parking	39.34%	23.70%	\$ 41,619
AOMF BLDG + PV on Roof + Parking + BEB (only first 16 bus spaces)	54.15%	42.33%	\$ 57,289

## Full PV Installation

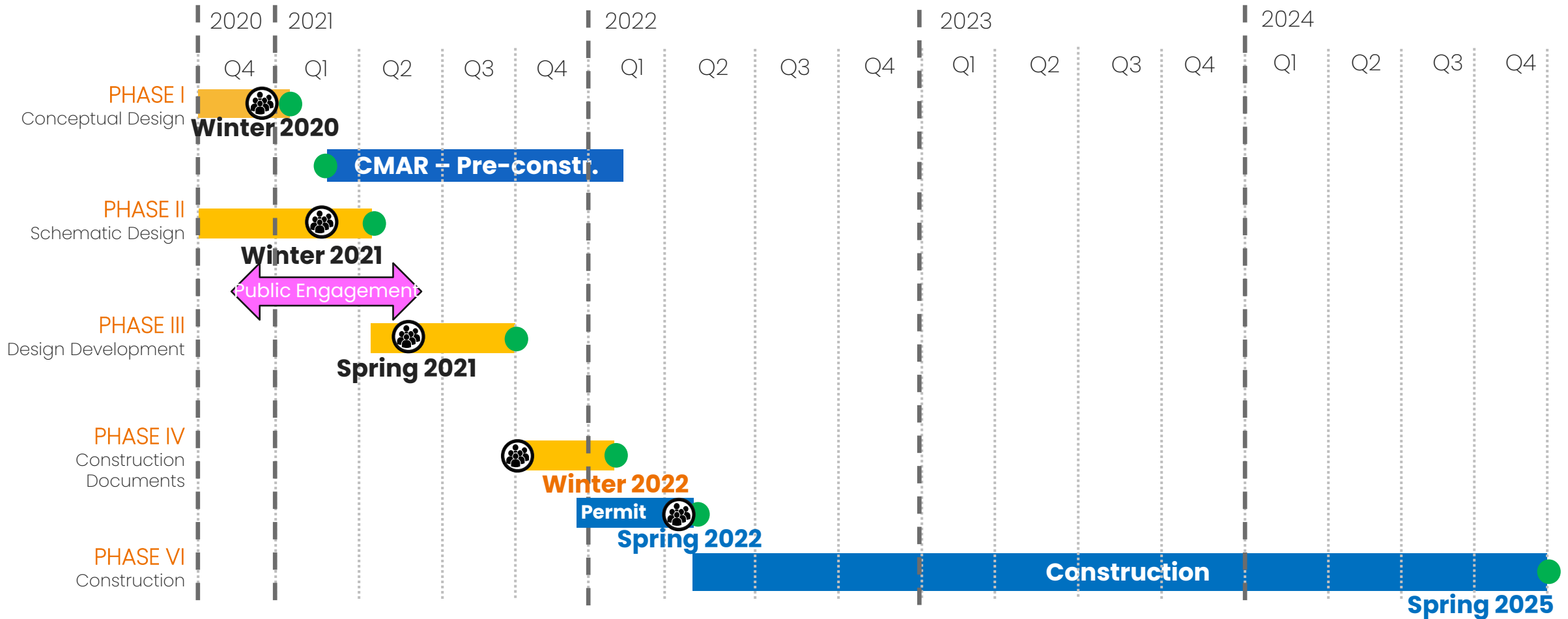
- AOMF BLDG and PV on Roof + Parking Structure + **BEB Structure**
- Total PV Area = **40,874 SF** (4,355 SF + 6,600 SF + 10,792 SF + 19,127 SF)
- Energy cost savings of 81% (~2,416 MMBtu), means potential to offset over 81% of total building's annual consumption
- Saving \$67,118 in utility costs every year

Next Steps

# Project Timeline

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

WE ARE HERE



# Q&A



**ARLINGTON**  
VIRGINIA



## ART Operations and Maintenance Facility

### Arlington County Transit Division

- **Pierre Holloman** – Assistant Transit Bureau Chief
  - [pholloman@arlingtonva.us](mailto:pholloman@arlingtonva.us)
- **William Jones** – Transit Services Manager
  - [wjones@arlingtonva.us](mailto:wjones@arlingtonva.us)

### Arlington County Facilities and Engineering Division

- **John Mir** – Facilities Design and Construction Manager
  - [jmir@arlingtonva.us](mailto:jmir@arlingtonva.us)

# Thank You!