Attachment 3

Agenda Item #10.
PGCPB May 6, 2021

Super Conducting Magnetic Levitating Train (SCMagLev)

Draft Environmental Impact Statement

Presentation to Prince George's County Planning Board Leadership

May 6, 2021

Staff Comments on the Draft Environmental Impact Statement (DEIS)

Project consists of construction of a magnetic levitation train system (SCMagLev) between Baltimore, Maryland and Washington, DC. Proposed speed is 300 mph

- Both tunnel and viaduct (aerial section) considered.
- Three stations are proposed: Baltimore City, BWI, and Washington DC. Note – no stations are proposed in Prince George's County but two station location options are proposed in Baltimore City.
- Three Train Maintenance Facilities (TMF) are proposed but only one location will be selected. Two of the three TMF's are proposed are in Prince George's County.
- Two Fresh Air/Emergency Egress (FA/EE) sites have been identified in the County.

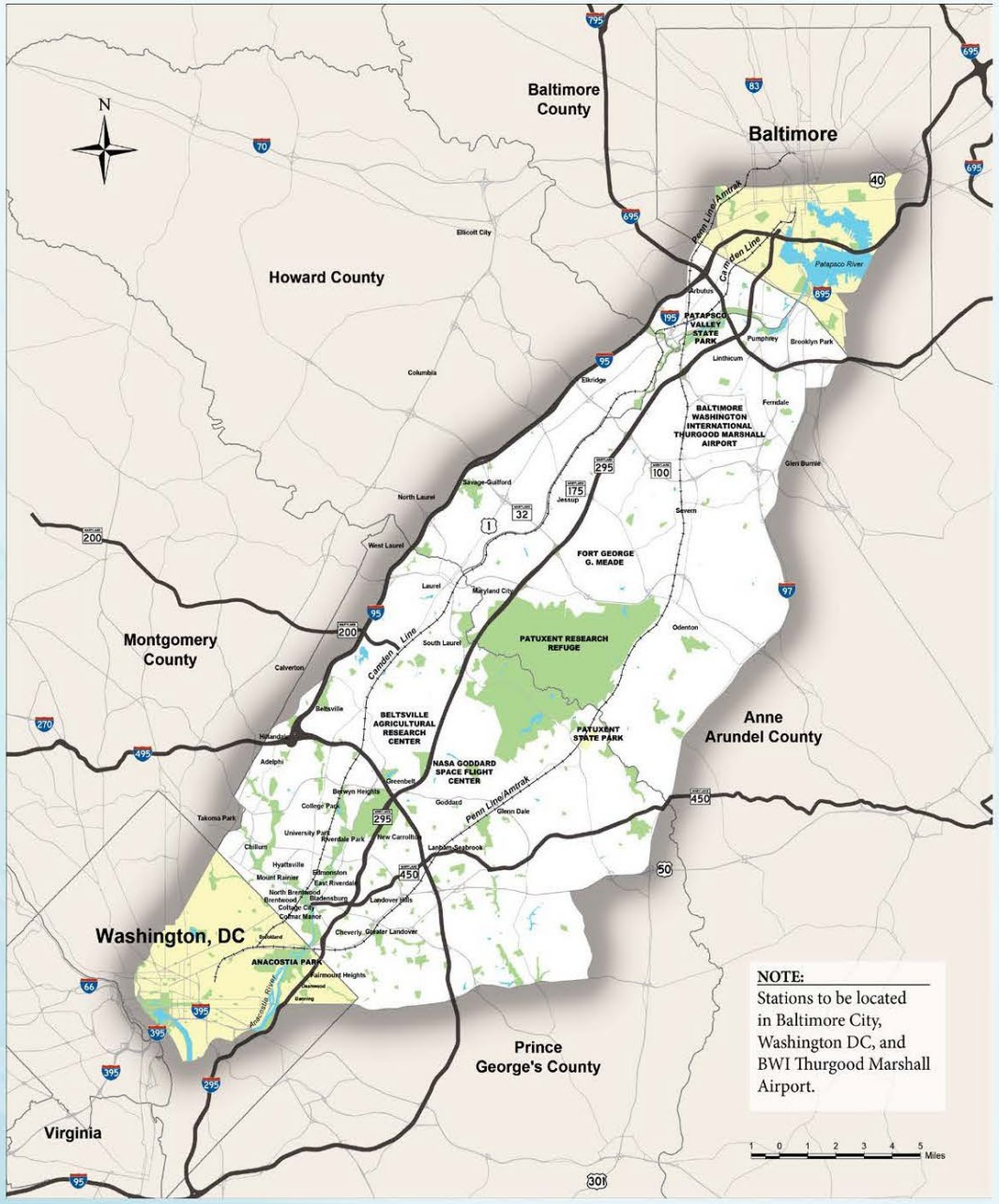
Differences between SCMagLev and High-Speed Rail (HSR)

SCMaglev

- New Proprietary Technology
- New Rail System/incompatible with existing system
- Requires exclusive ROW/alignment
- No tested operations under comparable conditions
- No existing regulations

HSR

- Existing Technology
- Existing rail system in service
- Could use existing rail ROW/alignment
- Currently operational
- Existing regulations

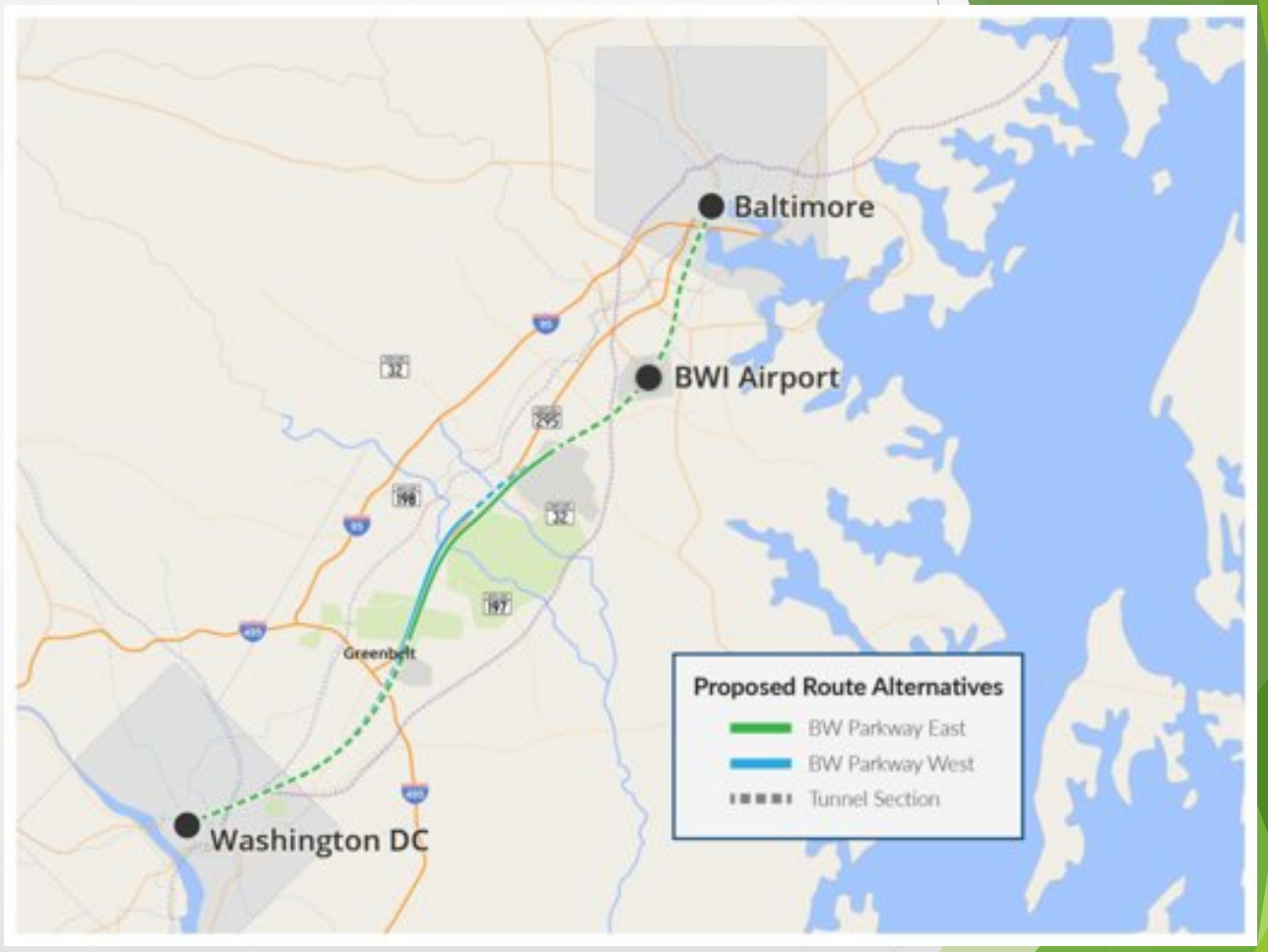


- Approximately 40 miles long by 10 miles wide
- Sensitive natural and cultural resources
- Majority of land ownership is private
- Multiple Federal, state, and county-owned lands

SCMagLev Route

While 2 alignments (J/J1) are being considered, the general alignment in Prince George's County:

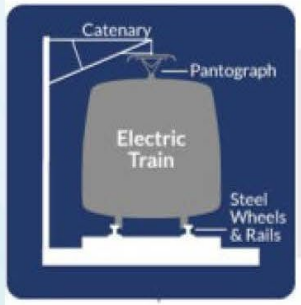
- Enter the County at the Patuxent River near Laurel via an above ground viaduct
- Follows the B/W Parkway through the City of Greenbelt
- In tunnel at the Capital Beltway as it extends south toward Bladensburg.
- Crossing under the Anacostia River just south of the Bladensburg Waterfront Park and under Colmar Manor Park to the District of Columbia Line.

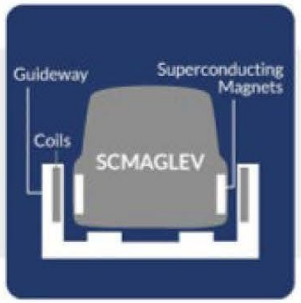


What is SCMaglev?

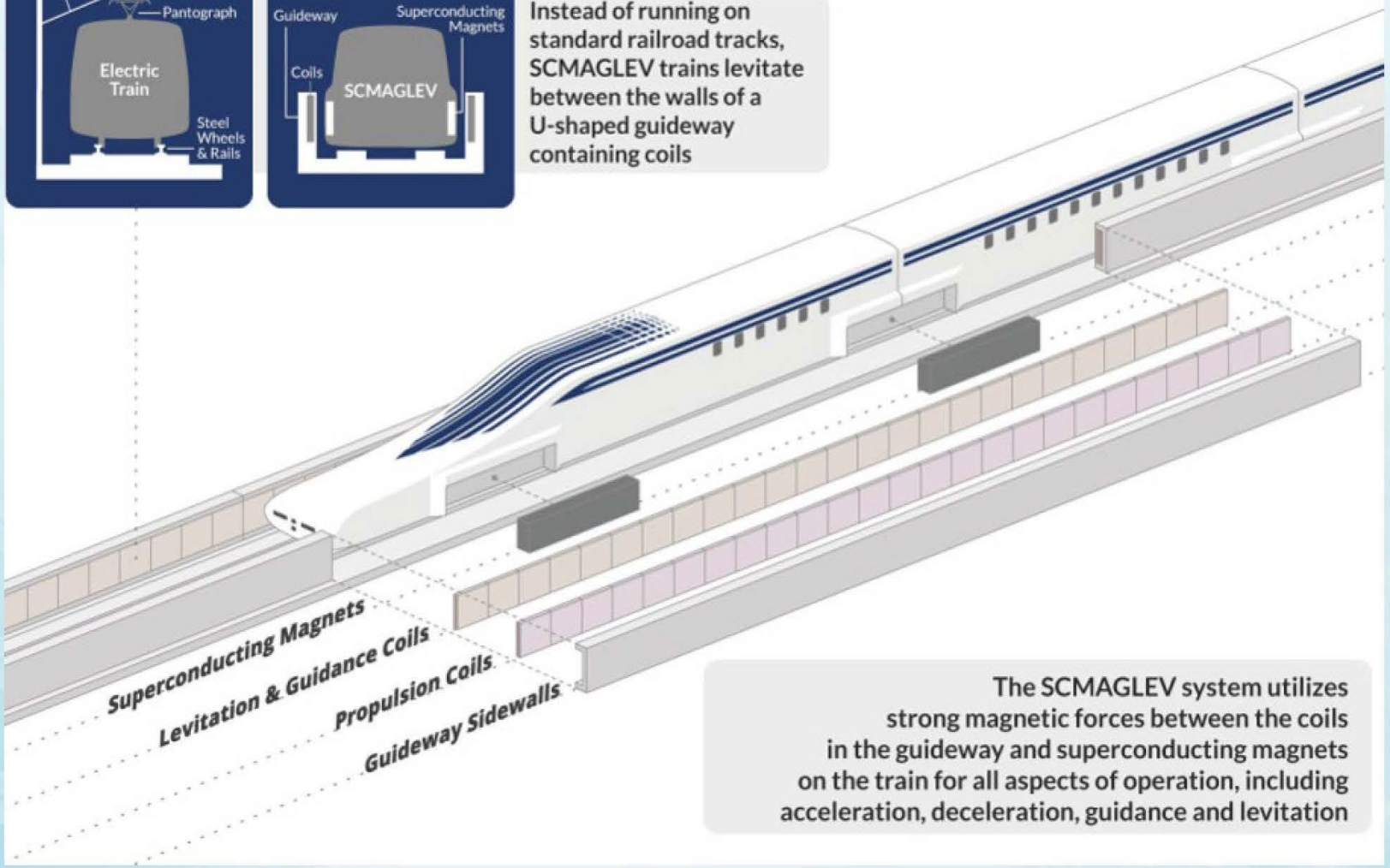
- The SCMaglev is a magnetic levitation system that uses powerful magnetic forces for all aspects of operation—acceleration, deceleration, guidance and levitation—resulting in operating speeds of over 300 miles per hour in everyday service, and travel times unlike anything traditional trains can achieve.
- The SCMaglev trains levitate between the walls of a unique concrete structure known as a guideway. The U-shaped guideway has walls surrounding the trains on both sides, making the system free from derailment.
- The keys to the SCMaglev system's high speed and acceleration are the magnetic forces acting between powerful superconducting magnets located on board the trains and two sets of coils that are installed in the walls of the guideway.

How SCMAGLEV Works





Instead of running on standard railroad tracks, SCMAGLEV trains levitate between the walls of a U-shaped guideway containing coils



The SCMAGLEV system utilizes strong magnetic forces between the coils in the guideway and superconducting magnets on the train for all aspects of operation, including acceleration, deceleration, guidance and levitation

SCMAGLEV Train

SCMagLev - Draft Environmental Impact Statement (DEIS)

- DEIS released for public comment on January 15, 2021.
- Main report is almost 600 pages of written material and adds 31 Appendices and multiple map sets.
- Six Virtual Public Hearings held on April 6, 8 and 10, 2021 – two sessions per day.
- M-NCPPC staff including representatives from the Office of the General Counsel, Prince George's County Planning Department and the Department of Parks and Recreation have completed review of this project document. Consultant staff also assisted in this review.

DEIS Areas of Major Concern

- The DEIS lacks details and specificity on numerous items but staff has selected the most serious ones below:
  - Communities/Environmental Justice
  - Fresh Air/Emergency Egress (FA/EE)
  - Environmental
  - Parkland
  - Transportation
- Areas where adverse effects are not being taken seriously include: environment, noise, ridership projection, social justice, and vibration.
- Lack of detail with regards to providing meaningful mitigation.

Communities / Environmental Justice

- Impacts to residential neighborhoods and parkland impacting both human and wildlife communities.
  - Noise, vibration, loss of woodland, loss of recreational amenities, truck traffic, local roadway damage
- Bisect established communities
  - Loss of the Greenbelt pedestrian bridge, mature/historic forests and the relocation of parkland/ballfields/amenities with no replacements mentioned
- Negative property valuations based on noise, vibration and proximity to viaduct during construction and operation. Trains are proposed to operate between 5:00 a.m. to 11:00 p.m. while the maintenance facilities would operate on a 24-hour basis.
- Mitigation measures are lacking in clarity or are not addressed.

Fresh Air / Emergency Egress Facilities (FA/EE)

Two sites have been identified – the WSSC parking lot and Martins Woods area. Both are designed to be five stories high and proposed near residential neighborhoods. These locations are inconsistent with our Master Plans for the area. The construction timeline is seven years.

1. WSSC site adjacent to the Bladensburg Waterfront Park
   - Impacts to Anacostia water quality
   - Noise, vibration (during construction) and visual impacts are significant
2. Martins Woods located at MD 410 and Kenilworth Avenue
   - Located in a residential area that proposes to operate as a staging area and shaft entrance for the tunnel boring machine during construction.
   - Noise, truck traffic, dust, and visual impacts of this 24-hour, 7-day per week operation are a concern.
   - Purple Line Maintenance facility is currently under construction across the street from this location.

FA/EE Veterans Highway and Riverdale Road

Figure 4.9-2: CAA #4 – Illustrative Rendering of FA/EE Proposed in New Carrollton, Looking East

Environmental

- Overall, approximately 1,000 acres of property in the county will be impacted. These include: 57-89 acres of wetland area and wetlands of special state concern, 7,600 to 7,800 linear feet of streams, 31-39 acres of Tree Conservation Area, groundwater, Rare, Threatened and Endangered species (RTE) plant and animal habitat, watersheds, significant, mature forested area, 397 – 573 acres of Forest Interior Dwelling Species (FIDs) habitat.
- The Beltsville Agricultural Research Center (BARC) is located in a designated Priority Preservation Area (PPA) of the County, and is proposed as sites for the Trainset Maintenance Facility (TMF). While one location will be selected, impacts to the site are irreversible because of an existing number of on-site RTEs.
- A 200-acre (roughly the size of Enterprise Golf Course) TMF is proposed to the Patuxent Research Refuge (PRR) as it would fragment the mature forest and disturb a continuous block of multi-layer and high functioning habitat.

Parkland

- A Maintenance of Way (MOW) facility (where maintenance equipment and materials for the guideway are stored) is proposed for the M-NCPPC owned Springfield Road Community Park. This means that an industrial use is in the backyard of approximately 16 single-family homes. This could be a particularly inappropriate placement for this facility due to the proximity of the single-family homes and surrounding community.
- The DEIS team indicated other parkland impacts are “minor” or of “no” significant impact. We disagree. Some of the community facilities for neighborhoods are impacted.
  - Example: The proposed construction of a power substation adjacent to South Laurel Neighborhood Park may not impact the footprint of the park, but it will certainly impact the environmental setting and usability of a park that is designed for young children. Additional information is needed to fully determine parkland impacts.

Figure 3.4-6: MOW Facility Illustration

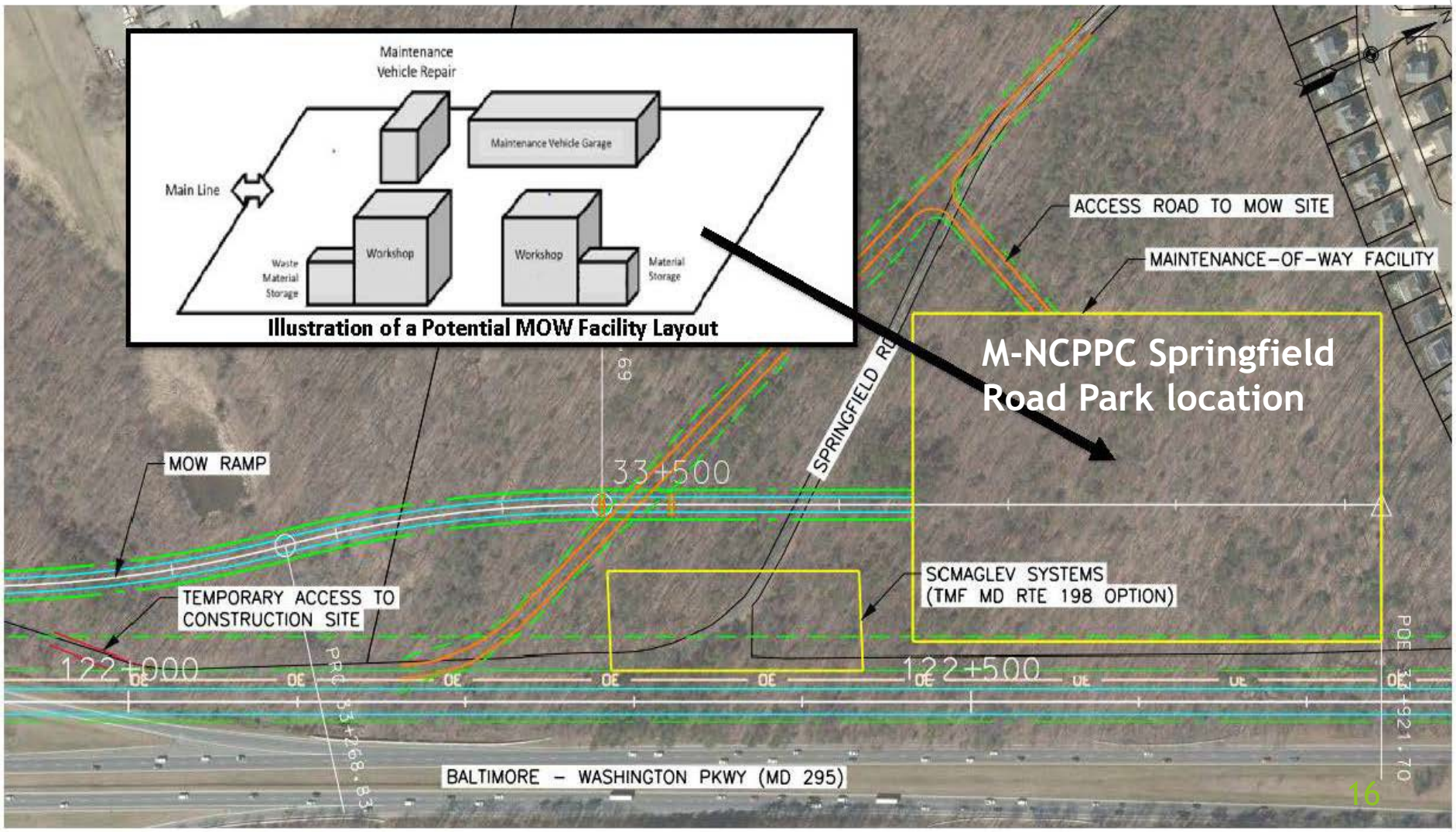
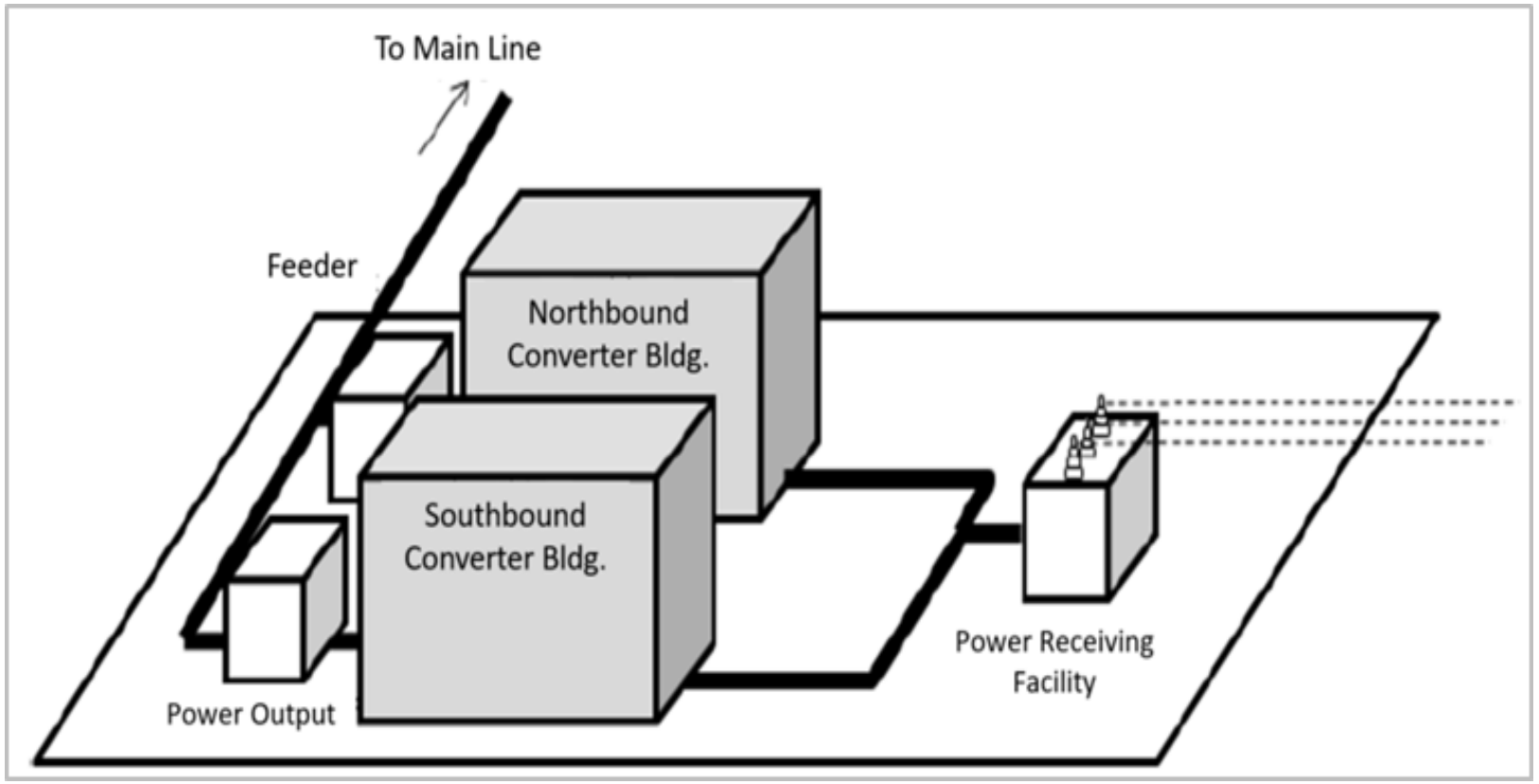


Illustration of a Proposed MOW Facility for the Build Alternatives J1-01 and J1-04 (MD 198 TMF)

Figure 3.4-14 Electric Power Substation Layout



Transportation

- Ridership projections in the DEIS appear to be unreasonably optimistic and are mainly based upon assumptions that ridership will be siphoned from AMTRAK and MARC.
- The proposal to transport 23+ million cubic yards of spoil over local roads and regional highways is ill-advised for any number of reasons. Identification of landfill disposal sites and specific haul routes for each load has not been specified. Impacts to the community are concerning.
- The realignment of roads based on project impacts will not be the responsibility of the County as suggested in the DEIS.

Train Maintenance Facility Locations

The Project Team is looking for one TMF location for the SCMaglev system but three locations are under consideration – one in Anne Arundel County and two in Prince George's County. The currently proposed locations are:

- 1. MD 198 - NE quadrant of BWP/MD 198 interchange in Laurel (Anne Arundel County)
- 2. BARC West – BARC forest at north of Powder Mill Road and west of BWP
- 3. BARC Airstrip (East) – Springfield Road and east of BWP

Preferred DEIS Alternatives

Federal Railroad Administration

- Not selected to date

Baltimore Washington Rapid Rail

- Prefer Alignment J-03 and BARC West TMF

BARC West TMF

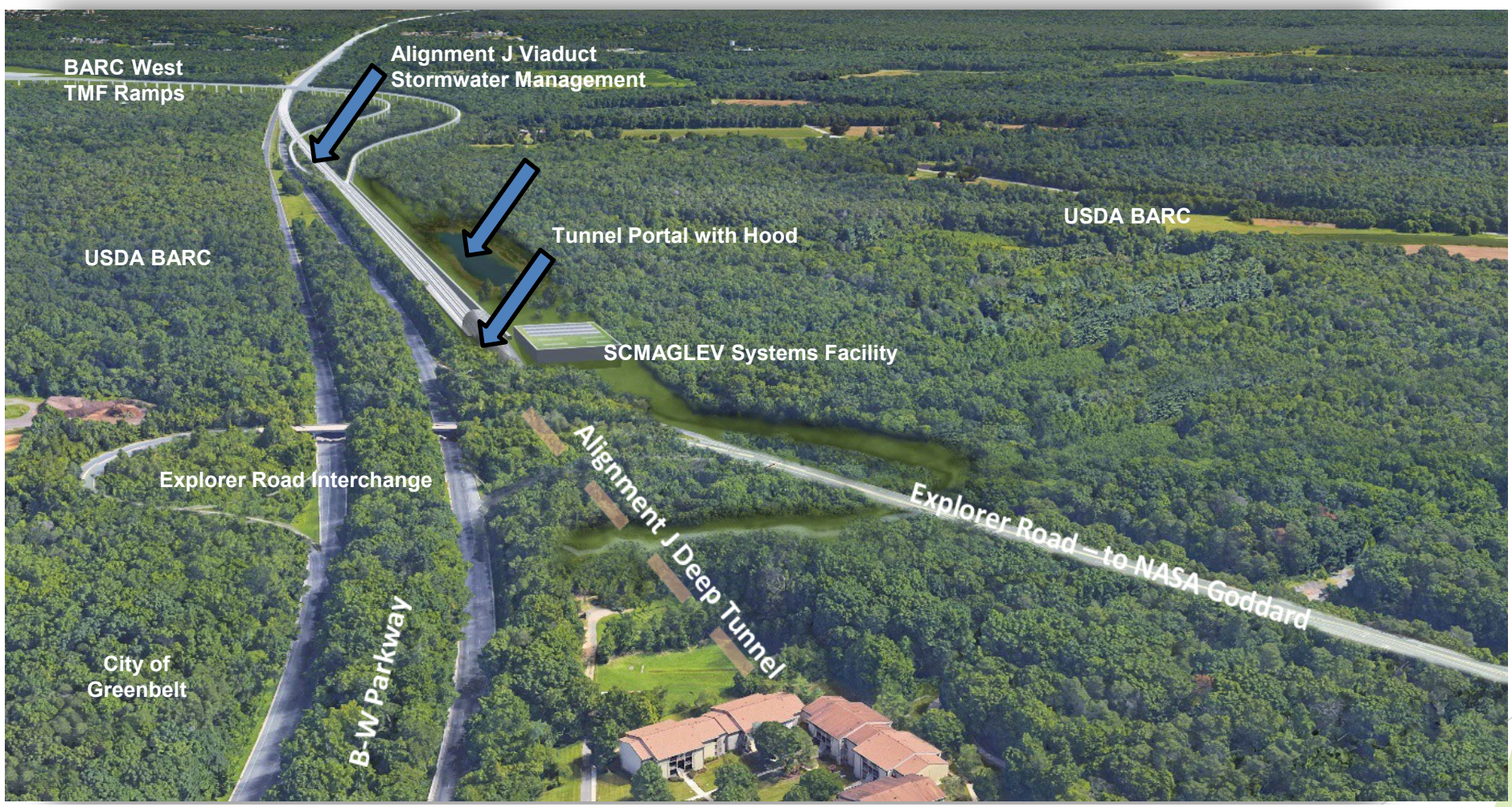


Figure 4.9-3: CAAs #5, #6, #7, #8, #9 – Illustrative Rendering of Alignment J Tunnel Portal at Explorer Road Interchange with Ramps to BARC West TMF, Looking North

BARC West TMF

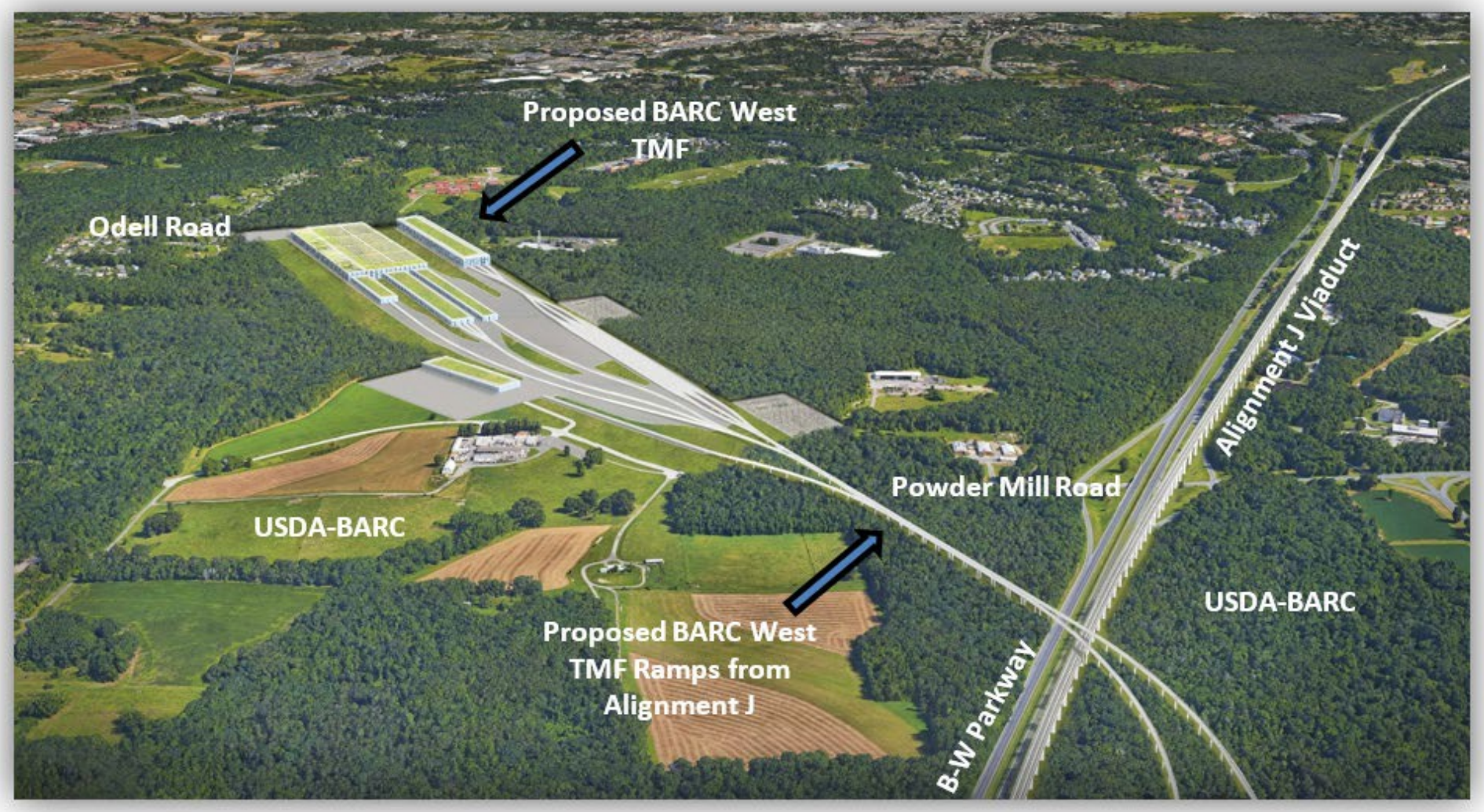


Figure 4.9-13: CAAs #5, #6, and #8 - Illustrative Rendering of Proposed BARC West TMF and Corresponding Ramps with Alignment J, Looking North

BARC Airstrip TMF (East)

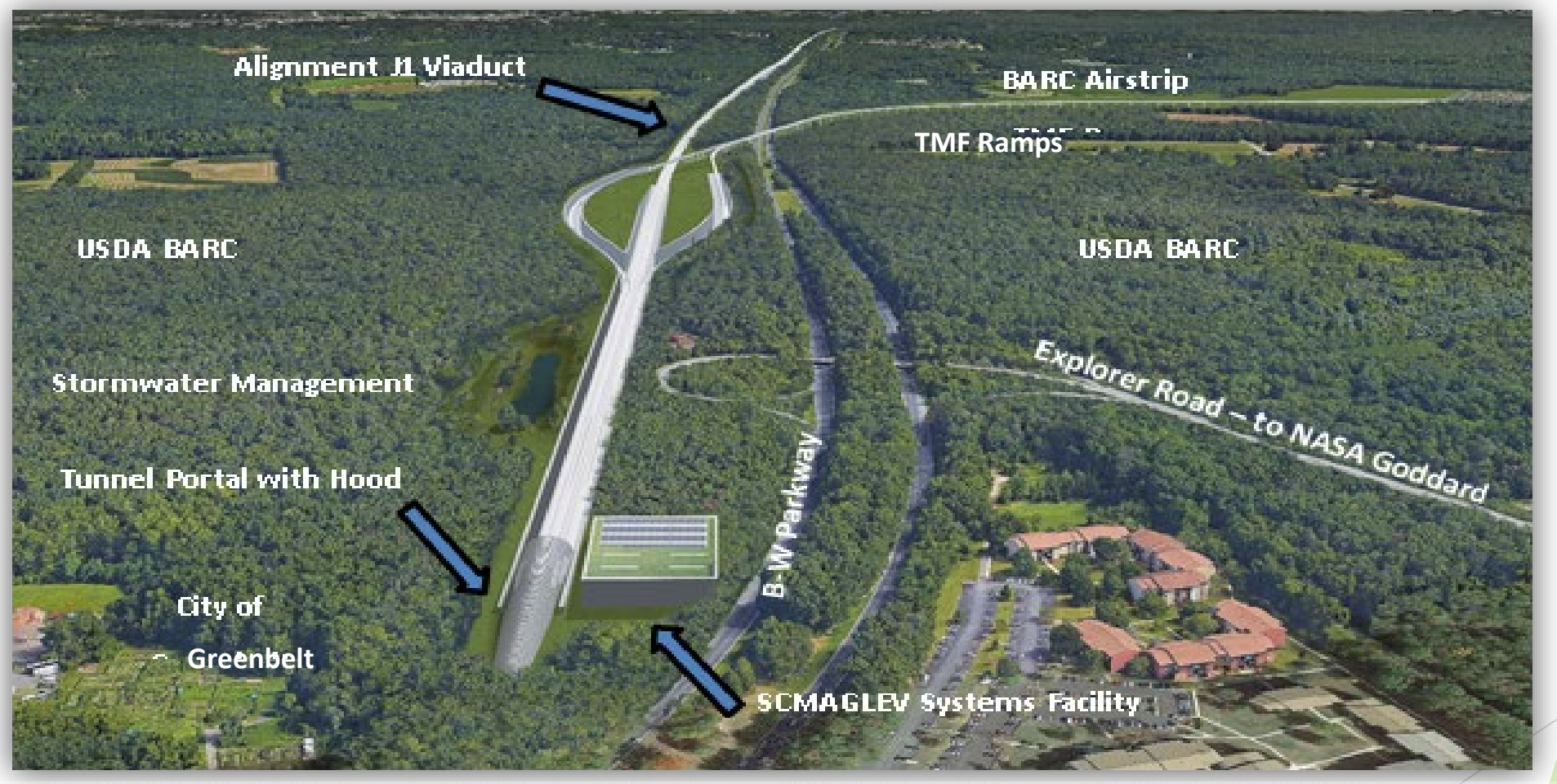


Figure 4.9-4: CAAs #5, #6, #7, #8, #9 – Illustrative Rendering of Alignment J1 Tunnel Portal at Explorer Road Interchange with Ramps to BARC Airstrip TMF, Looking North

BARC Airstrip TMF (East)

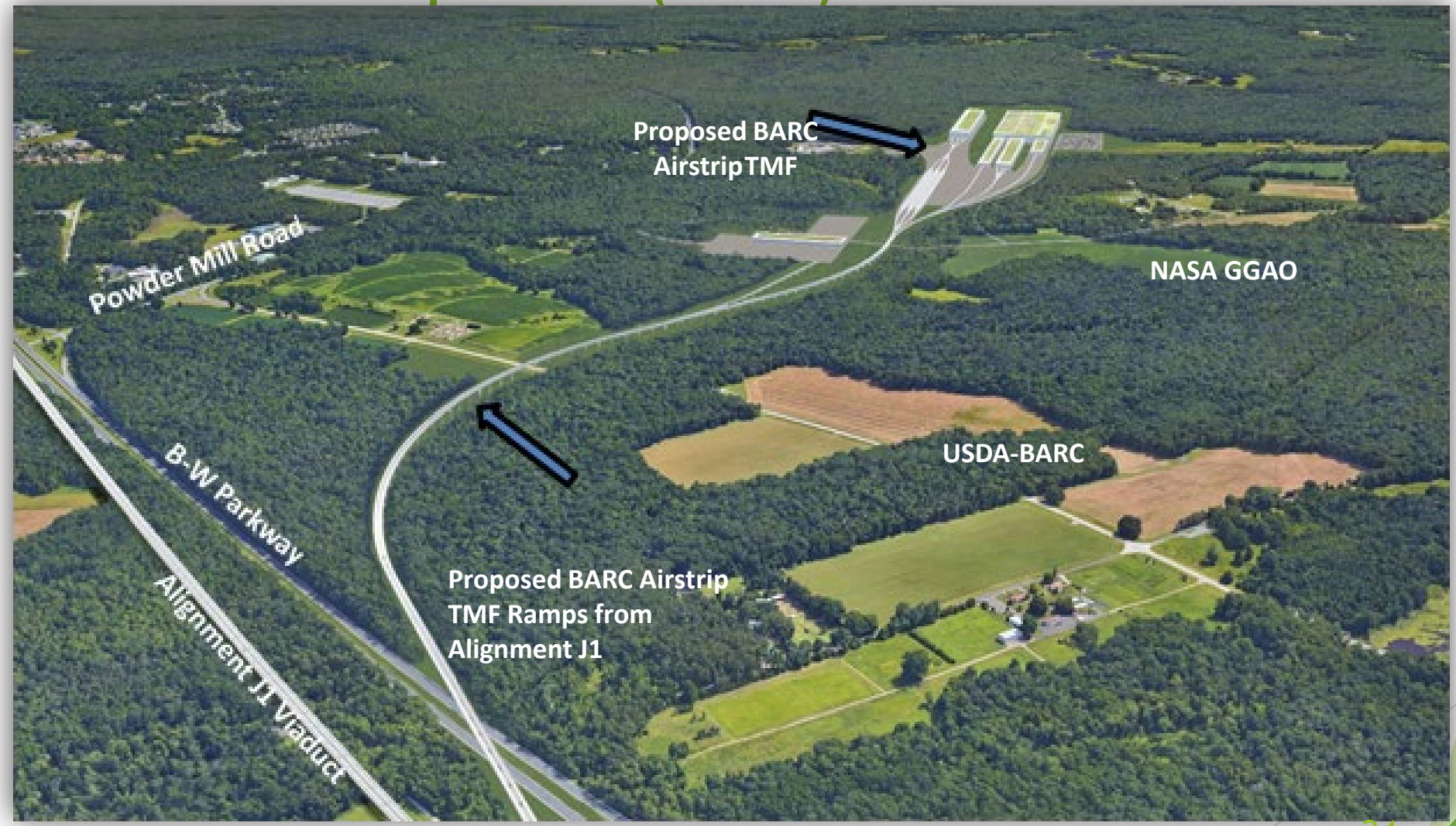


Figure 4.9-12: CAAs #5 and #6 - Illustrative Rendering of Proposed BARC Airstrip TMF and Corresponding Ramps with Alignment J1, Looking East

Illustrative Rendering of SCMAGLEV Viaduct Section Near US Department of Agriculture Beltsville Agricultural Research Center (USDA-BARC) Property at Powder Mill Road, looking southwest from B-W Parkway

Summary of Prince George's County Impacts

- Two Maintenance Facilities identified (both are very impactful)
- 15 miles of aerial viaduct and eight miles of tunnels
- Road realignments along Springfield Road, Odell Road & Powder Mill Road
- Two tunnel boring launch sites also serve as FA/EE locations
  - Impacts to local roads, neighborhoods and businesses during the 7-year planned construction.
- Tunnel portal locations between 330 feet and 1,600 feet – noise impacts
- Loss of M-NCPPC Springfield Road Park and impacts to other parks
  - Loss of trails and ballfields at the federal and local parkland level
- Negative economic impacts to surrounding neighborhoods and the County
- Fragmented communities, neighborhoods, parkland and important open spaces including the County's Priority Preservation Area

Next Steps

- https://www.bwmaglev.info/index.php

- Comments on the DEIS will be accepted by the FRA/MTA Project Team until May 24, 2021 at 11:59 pm at info@bwmaglev.info