DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
ATTN: REGULATORY BRANCH
2 HOPKINS PLAZA
BALTIMORE MD 21201

May 24, 2021

Operations Division

Mr. Paul Nissenbaum
Associate Administrator for Railroad Policy and Development
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Mr. Nissenbaum:

This is in response to the Federal Railroad Administration (FRA) January 2021 draft Environmental Impact Statement (DEIS) for the proposed Baltimore-Washington Superconducting Maglev project (SCMAGLEV), and the request for comments.

The U.S. Army Corps of Engineers, Baltimore District (Corps), as a cooperating agency in the preparation of the DEIS for the project, is pleased to provide the following comments on the DEIS. In this regard, we look forward to working with your agency as the final document is developed to ensure that the information presented in the NEPA document is adequate to fulfill the requirements of Corps regulations, the Clean Water Act Section 404(b)(1) Guidelines, and the Corps public interest review process.

As background, the Clean Water Act Section 404(b)(1) Guidelines contain the substantive environmental criteria used by the Corps in evaluating discharges of dredged or fill material into waters of the U.S. A fundamental precept of the regulatory program is that impacts to waters of the US, including jurisdictional wetlands, will be avoided and minimized where it is practicable to do so. Under Section 404, only the least environmentally damaging practicable alternative can receive Department of the Army authorization. Note that an alternative is practicable if it is available and capable of being done after taking into consideration cost, logistics, and existing technology in light of overall project purposes.

Please be aware that the Corps has yet to conduct a thorough evaluation of all areas where waters of the United States are proposed to be impacted by the SCMAGLEV system. However, at this point in the review, the Corps offers the following comments on the DEIS:

A. Chapter 3: Alternatives Considered

1. The Alternative Refinements Section (Section 3.2.3) specifies that the Project Sponsor will apply “newly adopted design criteria provided by the Japanese designers and operators of existing SCMAGLEV systems.” Based on this updated design criteria, it was determined that disaggregated footprints could not meet

operational and maintenance requirements. The current explanation for the "newly adopted design criteria" is insufficient. Train Maintenance Facility (TMF) site development requirements should be fully described in this chapter of the Final Environmental Impact Statement (FEIS) to demonstrate the need for a consolidated, approximately 180-acre site. Based on this additional assessment, the Corps will be able to comprehensively evaluate the practicability of the Patapsco Avenue TMF alternative.

2. The Power Facilities Section (Section 3.3.2.6) indicates that the SCMAGLEV project would require seven substations, two substations at the TMF and five required for the mainline alignment, either build Alternatives J or J1. Each substation would require approximately 7 acres and be primarily aboveground. It appears that only one substation is shown on Sheet 5A of 14 in Appendix B, Build Alternatives for Build Alternatives J-01 thru J-06. Is this information correct? Please clarify whether the impacts tables to waters of the United States include impacts (both permanent and temporary) from additional power facilities, relocation of major utilities, and permanent relocation of public roadways.

3. The Stormwater Management Section (Section 3.3.2.11) describes a variety of design methods/strategies that may be used to manage SCMAGLEV stormwater drainage. The Corps understands that a variety of methods may be employed, but is there a particular method that is planned to be employed more than others? Please clarify whether the impact tables for waters of the United States include impacts from the larger stormwater management basins described in Table 3.4-8. Please note, additional detail on stormwater management design and facility specifications will be needed to determine an accurate accounting of impacts and discharges to waterways under Section 404 and 401 respectively.

4. The Construction Phase Facilities Section (Section 3.3.2.12) references staging and/or laydown areas. In addition to the identified staging/laydown areas shown in the Build Alternatives mapping in Appendix B, the Project Sponsor has identified three larger potential staging areas to store precast superstructure segments for the elevated guideway. Have these sites been delineated for potential wetlands and waterways? Are impacts to wetlands and waterways at the above-mentioned sites included in the impact tables? Please clarify. Temporary staging and laydown areas will likely result in an increase in jurisdictional wetland and waterway impacts for the Corps.

B. Appendix C: Alternatives Analysis Development Summary

1. It is the Corps responsibility to ensure that the Train Maintenance Facility, and other ancillary facilities are the least environmentally damaging practicable alternative. The Corps is concerned that the three TMFs evaluated in the DEIS (BARC West, BARC Airstrip, and MD 198) may not be the least damaging alternatives in their currently designed footprints. Additionally, if these TMF properties become unavailable or are not capable of being constructed for certain reasons, there would

be no other TMF alternatives to evaluate. The Corps has determined that this is not prudent for a study of this magnitude. Therefore, it is strongly recommended that FRA analyze the practicability of additional TMF facilities. Specifically, the Greenbelt property owned by BARC/Greenbelt listed as ID:1 in Table C-3: Additional TMF Locations Considered, 2018 Alternatives Report and the Beltsville property owned by PEPCO/Konterra Associates LLC listed as ID:5 in Table C-3. Both locations provide sufficient area for the new standardized TMF requirements without disaggregation of facilities. The Corps strongly recommends that these two alternative TMF sites be fully evaluated in the FEIS. Should FRA disagree with this recommendation, the FEIS should comprehensively describe why these two alternative sites were not retained for detailed study.

2. Further, the Corps strongly recommends that the Patapsco Avenue TMF be reevaluated for practicability. We recognize that the site requires at-grade facilities on both sides of Patapsco Avenue and additional property acquisition may be required for the Patapsco site to meet new TMF size requirements. These additional acquisitions for the Patapsco Avenue TMF and site design constraints (i.e. consolidated vs disaggregated, location, and safety) should be studied in detail and disclosed to the public in the FEIS.

3. Please fully describe the overall costs for the evaluated TMF facilities. Was cost the only or main factor for eliminating specific TMF alternatives? The Corps strongly recommends reevaluating TMF alternatives that were removed primarily due to increased cost and the alternatives listed above (ID:1 and ID:5, Table C-3). We understand that FRA has included a cost matrix in Appendix G.11, Part L of the DEIS; however, **overall** cost information should also be included in Appendix C of the FEIS in order to determine the site's practicability under the 404b(1) Guidelines. Note that a more costly alternative can still be a practicable alternative provided it meets the overall project purpose. The inclusion of a detailed cost analysis matrix in Appendix C would help determine the practicability of TMF alternatives.

4. The Beltsville property (ID:5, Table C-3) appears to result in lower overall impacts to wetlands and waterways. Please describe any site constraints and quantify preliminary impacts to wetlands and waterways on the site for evaluation purposes.

5. The Corps recommends that FRA evaluate the practicability of tunneling 100% of the alignment. The Corps understands that Capital Cost Information for tunneling the entire alignment is provided in Appendix G.9, Part K; however, this information does not sufficiently address the practicability of tunneling the entire alignment. Please include overall cost information in the cost analysis matrix (requested above). Additionally, please provide narrative in Appendix C discussing other potential limitations with regard to the practicability of tunneling the entire alignment.

6. The Alternatives Report, November 2018 (Section C.2.2) indicates that a screening factor during the development of alternatives included property acquisitions and displacements (residential, commercial and community resources). From the Corps

perspective, this may not be an acceptable criterion for the elimination of potential TMF alternatives. TMF alternatives removed from consideration based on residential/commercial displacement and acquisition impacts should be reevaluated for practicability. Did the project conduct any kind of survey(s) to determine the opinions of the residential properties that would have to be bought out in order to construct these TMFs? It is possible that if residents or commercial entities were in favor of being bought out, one or more of these TMF sites could provide a less damaging environmental alternative to the three sites being currently evaluated.

7. At the BARC West, BARC Airstrip, and MD 198 TMF facilities, please discuss and/or evaluate the practicability of relocating streams around the perimeter of the site to minimize impacts to streams.

8. The BARC Airstrip site appeared desirable because the majority of the TMF could be placed on prior disturbed land, although the entrance and exit ramps would have to be placed in nontidal wetlands of special state concern (NTWSSC) associated with Beaver Dam Creek. Please discuss and/or evaluate the practicability of avoiding the impacts to the NTWSSC by realigning the facility or entrance/exit ramps. Has the BARC Airstrip TMF been evaluated for the maximum potential to move the TMF facility into the airfield itself and minimize impacts to Beaver Dam Creek and wetlands?

9. The BARC Airstrip site is located in relatively close proximity to the NASA Goddard Geophysical and Astronomical Observatory (GGAO). It is referenced in certain Exhibits that BWRR has indicated that it would be able to mitigate NASA's concerns associated with frequency interference, EMF, vibrations, and light impacts. The Corps recommends that BWRR initiate in-depth consultation with NASA to discuss the proposed mitigation measures and determine whether a TMF facility at BARC Airstrip could satisfy NASA's safety and operational concerns. The results/conclusions of this consultation should be included in the FEIS. As you know, the Corps conducts the alternatives analysis pursuant to requirements in the Clean Water Act Section 404(b)(1) Guidelines and the National Environmental Policy Act. Additionally, the Corps considers alternatives as part of its public interest review evaluation. Safety is one of the Corps' Public Interest Review (PIR) factors and narrative concerning BARC Airstrip's overall safety would assist in our evaluation of practicable and reasonable alternatives.

10. The availability of an alternative is a key factor considered in the Section 404 (b)(1) Guidelines analysis. Please discuss whether the two BARC TMF sites are available. Has BARC and/or the US Congress approved this non-conforming use of the property? For clarification purposes, the Corps recommends including an availability matrix in Appendix C of the FEIS.

11. Additionally, discuss whether the MD 198 site is available. In addition, does the Department of Labor, City of Washington, DC, or US Congress need to approve the use of this site for a TMF?

12. The Refinements to Alternatives Section (Section C.3) specifies that newly adopted design criteria resulted in the increased train size from 12-car to 16-car trains. Please provide better justification regarding the newly adopted design criteria. Explain why the new criteria requires a 16-car train.

C. Chapter 4.07: Environmental Justice

1. The Environmental Consequences Section (Section 4.5.4) discusses impacts to community facilities. The Adams Place is an Emergency Shelter in Washington D.C. that would be displaced by each of the Build Alternatives. The Woodlands Job Corps is a community facility that provides residential career training/job placement programs for low-income individuals in Laurel, Maryland that would be displaced by each Build Alternative that includes the MD 198 TMF. The Medmark Treatment Center is an addiction treatment facility that helps people overcome opioid addiction in Baltimore, Maryland that would be displaced by each Build Alternative that includes the Cherry Hill Station. The mitigation for displacing these facilities, as currently written in Section 4.5.4, is not sufficient. Please provide additional mitigation strategies in the FEIS. Will displaced properties be rebuilt within their respective communities? If not, how will FRA/project proponent mitigate for the loss? This must be described in the FEIS.

D. Chapter 4.10: Water Resources

2. Please ensure that any stream relocation is classified as a permanent impact in the FEIS for the Corps.

3. Page 4.10-19 mentions that streams may be placed in lengthy culverts to facilitate the construction of the TMF. The length of streams placed in culverts is considered by the Corps as a permanent loss and mitigated for as such. As an alternative to culverting streams, an alternative should be evaluated to realign streams around the perimeter of the TMF facility to avoid piping and minimize impacts.

E. Chapter 4.11: Wetlands and Waterways

1. Build alternatives J1-01 thru J1-06 cross under the Little Patuxent River, floodplain, and adjacent wetlands in tunnel. This significantly reduces aquatic impacts compared to the sponsor's preferred alternative (J-03), which crosses on viaduct structure. The Corps requests that FRA evaluate the practicability of crossing the Little Patuxent in tunnel for Alternative J.

2. Page 4.11-14 states "waterway relocations will be a direct temporary impact with potential for long-term effects noted above". This statement is incorrect. The Corps considers waterway relocations permanent impacts to waters of the United States. Impact tables in the FEIS must be updated to reflect this change.

3. Note that ephemeral streams are not considered Federally regulated waters of the U.S. Consideration should be given to eliminating these impacts from the impact tables.

4. Please provide Best Management Practices (BMP's) examples in reference to impacts at the laydown/stockpile areas? Have impacts to waters/wetlands been quantified for laydown/stockpile areas? Please clarify.

5. In the Mitigation Section (Section 4.11.5.2), please add language demonstrating that alternatives resulting in adverse impacts to waters of the United States would require mitigation based on the 2008 Environmental Protection Agency (EPA) and USACE Mitigation Rule and the mitigation plan will be placed on Corps public notice to satisfy federal requirements.

6. As briefly described in Section 4.11.5.2, the Corps will require compensatory mitigation to address the loss of unique habitat features in impacted waters of the United States. As stated in Exhibit C, the SCMAGLEV system is likely to remove features such as, but not limited to, bald cypress swamps, oxbows, forested wetland canopy coverage, and large woody debris. These habitat features provide unique functions for the aquatic species. The Corps would like to emphasize that high-quality streams and wetlands will need to be mitigated using natural, reference-reach style restoration to the maximum extent practicable. Rock-heavy, stabilization-oriented stream restoration projects should be avoided, and the restoration should seek to enhance the full suite of wetland and waterway functions impacted by SCMAGLEV. Please consider adding clarifying language.

F. Corps Public Interest Review (PIR) Factors

1. The following Corps PIR factors are not directly addressed (or were not found to be sufficiently addressed during the review timeframe) in an appendix/document section: Navigation, Shore Erosion and Accretion, Conservation, Flood Hazards, and Mineral Needs. Please provide information on the omitted PIR's in the FEIS. The Corps evaluates all (21) PIR factors listed in Corps regulations. It is important to note that one specific factor cannot by itself force a specific decision, but rather the decision represents the net effect of balancing all PIR factors.

2. Floodplain Values is one of the Corps PIR factors. Please discuss how impacts to floodplains of the Anacostia and Patuxent Rivers affect that habitat, and water quality, particularly those that require clearing of vegetation. How will impacts to other floodplains affect their current usages? Has an effort been made to minimize key floodplain habitat impacts to the extent practicable? Will floodplain impacts result in an increased risk of flooding to any properties?

3. Water Quality and Water Supply & Conservation are two Corps PIR factors. Please discuss how impacting existing wells (e.g., from tunneling) and associated aquifers will affect water quality and water supply/conservation. More detail will be needed

about the minimization of impact to subsurface water quality, and how runoff will be captured and disposed. If the wells themselves are impacted, how would the water quality and supply to the owners change?

4. Fish & Wildlife Values is one of the Corps PIR factors. Currently, all three TMF facilities would result in at least 90 acres of forest clearing as well as impacts to terrestrial and aquatic species and habitat. Please provide narrative that describes specific avoidance and minimization measures to reduce impacts to potentially affected federally listed threatened and endangered species (i.e. Northern Long Eared Bat, Yellow Lance, Swamp Pink, Migratory Birds). Are there alternative site layouts that could be used that will not impact federally threatened and endangered species? Detailed coordination with US FWS, NMFS, and DNR will be required on potential adverse impacts to ESA species.

5. Safety is one of the Corps PIR factors. Many of the alternatives would be impacting wetlands and other land types on properties that contribute towards some aspect of public safety (ex: NSA, NASA, etc). Provide narrative discussing how project impacts will affect these organizations. Will they still be able to complete their current and/or future plans to protect public safety? What level of coordination has been conducted with these facilities/property owners?

6. Recreation is one of the Corps PIR factors. Are the wetland impacts on local property impacting land that is currently being used for any form of recreation? If so, is it possible to 'mitigate' for the land used for recreation on other areas of these properties? Please provide narrative.

G. General Comments

1. Upon selection of a preferred alternative, the Corps will require more detailed aquatic resource impact tables. The Corps understands that these impacts rely heavily on construction and engineering details after a preferred alignment is chosen. For each potential linear crossing or appurtenant/ancillary structure in a water of the United States, the following site specific information will be required when applicable:

    a. universal transverse mercator (UTM) coordinates, county, waterway name;
    b. a brief characterization of the crossing area (perennial stream, intermittent stream, forested wetland, non-forested wetland, etc.)
    c. proposed method of crossing (bore, trench, fill with culvert, fill with bridge, grading, etc.);
    d. length of proposed crossing;
    e. type and amount of dredged or fill material proposed to be discharged;
    f. acreage of proposed temporary and permanent adverse impacts to waters of the United States, including wetlands. Please note that permanent conversion will be considered a permanent impact.

2. Please ensure that all ancillary facilities needed for the SCMAGLEV construction (for example, the 1-acre temporary slurry facility) are located outside of wetland and waters of the US. If this is unavoidable due to project constraints, please ensure that all these facilities are shown on the impact plates and included in impact totals.

3. Construction should be phased in a manner that minimizes impacts to wetlands and waters to the maximum extent practicable. For example, temporary access roads that cross wetlands or waterways should be utilized for the minimum time frame needed for construction before being rehabilitated to their pre-construction conditions.

4. Upon determination of a preferred alternative, the Corps will need detailed design plans with existing and proposed contours clearly shown for all above-ground aspects of the SCMAGLEV system to evaluate any fill or grading impacts to wetlands or waterways. All limits of disturbance (LODs) should be minimized to the maximum extent practicable for construction and construction access. An erosion & sediment control plan will be required to show the best management practices (BMPs) used to minimize adverse impacts to wetlands and waterways during construction. Planting plans will be needed to show how temporarily impacted wetlands will be restored to their pre-construction conditions. The Corps understands that the project design is at a relatively conceptual phase and that more detailed plans will be submitted in the future.

5. Please discuss the viaduct pier spacing and other potential avoidance and minimization measures in Chapter 3 and/or Appendix C of the FEIS.

6. The Corps has questions about the disposal of the 23-28 million cubic yards of spoil produced because of the tunneling and grading involved associated with the project. Please discuss the potential for excavated spoil to impact waters of the United States in Chapter 4.11.

7. The potential use of spoil material for coastal and island enhancement projects will likely require permitting under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Further, these project reviews may require additional coordination with the Corps' Navigation Branch, NMFS, the National Oceanic and Atmospheric Administration (NOAA), and MDE's Tidal Wetlands Division. Please note that excavated soil from deep tunnel may not be a viable material for coastal enhancement projects. Future geotechnical analysis will be needed to determine the suitability of the material for coastal/island enhancement and potential presence of contaminants in the spoil material.

8. Please clarify whether the identified landfills have the capacity to take all the spoil material if it is determined unfit for coastal enhancement or use on construction sites. Any aquatic resource impacts associated with the spoil placement for

coastal/island enhancement projects, landfills, or construction sites will need to be included in the impact totals and mitigation requirements for the project.

9. The SCMAGLEV crosses or is located on numerous Federal properties. Please describe the status of these Federal agencies decision to either grant or deny access to their specific properties.

10. Please provide a concise table which describes total cost information for the single and complete project (i.e., total cost to construct either Alternative J or J1, including the TMF and all required ancillary facilities).

Thank you for the opportunity to comment on the DEIS. Additional comments may result from additional review, site visits, consultation, and resource agency/public input. We look forward to coordinating with FRA as the NEPA process proceeds. Should you have any additional questions concerning the issues raised in this letter or if you wish to schedule a meeting, please do not hesitate to contact me at (410) 962-5691 or have your staff contact Ms. Jamie Larkin of my staff at (410) 962-4522 or by email at Jamie.H.Larkin@usace.army.mil

Sincerely,

DAVIA.JOSEPH.P.1229279170 Digitally signed by DAVIA.JOSEPH.P.1229279170 Date: 2021.05.24 07:41:34 -04'00'

Joseph P. DaVia
Chief, Maryland North Section

Cc (via email):

Ms. Marlys Osterhues, FRA