

APPENDIX B:
MITIGATION MEASURES TABLE

Table B-1. Mitigation Measures by Impact Topic

Impact Topic	Mitigation Measures
Land Use	<ul style="list-style-type: none"> Implement Environmental Protection Measures listed under Topography and Soils, Noise, and Transportation to reduce fugitive dust, construction noise, and traffic disruptions near construction sites respectively, which could indirectly affect adjacent land uses.
Topography and Soils	<ul style="list-style-type: none"> Obtain a <i>Maryland General Permit for Stormwater Associated with Construction Activity</i> to manage soil erosion, sedimentation, and compaction associated with the construction of the Proposed Action. Prepare sedimentation and erosion control plan and implement best management practices (BMPs) consistent with the Maryland Department of the Environment's (MDE) current <i>Standards and Specifications for Soil Erosion and Sediment Control</i> (2011). Revegetate temporarily disturbed areas as soon as possible to minimize erosion and sedimentation.
Noise	<ul style="list-style-type: none"> Prepare and submit a noise-suppression plan to Prince George's County before construction, which identifies the most appropriate and reasonably available noise-suppression equipment, materials, and methods to reduce noise levels to acceptable levels during construction. Prepare a noise monitoring program. Coordinate with the U.S. Department of Agriculture regarding anticipated noise levels for Beltsville Agricultural Research Center facilities throughout the construction phase to ensure noise impacts to on-site staff are maintained at acceptable Occupational Safety and Health Administration (OSHA) levels. Require construction workers to wear appropriate protective gear during loud activities in accordance with OSHA safety requirements to prevent hearing damage or other adverse impacts. Conduct work on weekdays during standard daylight working hours.
Air Quality	<ul style="list-style-type: none"> Comply with MDE's vehicle idling requirements by turning off equipment and vehicles when not in use. Use ultra-low sulfur diesel (ULSD), propane, or natural gas as a fuel source in equipment and vehicles to the extent possible to minimize carbon dioxide (CO₂) and sulfur dioxide (SO₂) emissions. Use dust palliatives and follow construction BMPs to minimize and control fugitive dust emissions. Use Tier 4 compliant engines and maintain motorized equipment in good working order according to manufacturer's recommendations. Promote carpooling and prohibit engine idling by passenger vehicles once at the work site.
Climate Change and Greenhouse Gas	<ul style="list-style-type: none"> Comply with MDE's vehicle idling requirements by turning off equipment and vehicles when not in use. Use ULSD, propane, or natural gas as a fuel source in equipment and vehicles to the extent possible to minimize CO₂ and SO₂ emissions.

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	<ul style="list-style-type: none"> • Ensure water application does not increase erosion or result in increased down-gradient sedimentation of waterways. • Locate equipment and staging zones as far as practicable from sensitive receptors such as residences, schools, and childcare facilities. • Use recycled asphalt pavement when safe to do so. • Minimize tree removal in final design and maximize replanting where possible. • Use LED lights for all temporary construction lighting, where safe to do so. • Utilize locally sourced materials to reduce transportation emissions where applicable as recommended.
Water Resources	<ul style="list-style-type: none"> • Obtain and adhere to appropriate permits (or letters of exemption) from the MDE and U.S. Army Corps of Engineers to comply with Sections 404/401 of the Clean Water Act (CWA) and comply with all BMPs established through this consultation process. • Obtain a Maryland General Permit for Stormwater Associated with Construction Activity to manage stormwater associated with the construction of the Proposed Action. As more than 1 acre of land would be disturbed, the Bureau of Engraving and Printing (BEP) would prepare and adhere to a state-approved erosion and sediment control plan and submit a Notice of Intent to meet the requirements of the federal National Pollutant Discharge Elimination System program. BEP would also manage stormwater discharges and maintain water quality through compliance with existing Total Maximum Daily Loads. Adherence to these requirements would ensure that runoff from the Project Area during construction would have no potential to further degrade water quality in receiving surface water bodies located downstream in the region of influence. • Comply with Maryland Tier II Antidegradation Review policies. • Comply with Maryland's Erosion and Sediment Control Regulations, Stormwater Management Regulations, the Maryland Stormwater Management and Erosion & Sediment Control Guidelines for State and Federal Projects and associated technical memoranda. • Demarcate the construction limits of disturbance (LOD) in the field to prevent encroachment on unpermitted surface water resources. • When excavating below the groundwater table, incorporate measures that minimize potential impacts to local shallow groundwater, including dewatering these areas, preventing discharge of any water potentially contaminated during the construction/demolition process, and restoring sites to natural subsurface conditions prior to construction. • If not already required through the federal and/or state wetland permitting processes, mitigate wetland fills through on-site or off-site replacement, purchase of wetland mitigation bank credits, or payment of in-lieu fee. • Utilize emission free physical vapor deposition and direct to plate laser engraving to eliminate chromium and nickel air and wastewater discharge. • Implement a wiper solution recycling system to reduce wastewater discharge quantity from the replacement facility. • Incorporate Environmental Site Design practices including, but not limited to submerged gravel wetlands, micro-bioretenion, and/or swales to the maximum

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	<p>extent practicable in accordance with the 2000 <i>Maryland Stormwater Design Manual</i>.</p> <ul style="list-style-type: none"> Design stormwater management facilities to manage the mandated rainfall intensities per the National Oceanic and Atmospheric Administration Atlas 14 data. The 10-year and 100-year post-development peak discharges will be designed to be below the respective pre-development (i.e., current existing conditions) peak discharge flow rates, as required by MDE. The project will meet MDE's quantity management requirement.
Biological Resources	<ul style="list-style-type: none"> Comply with the applicable provisions of the CWA, Section 438 of the Energy Independence and Security Act, and Executive Order 13508 to control and manage erosion and minimize discharge, such as the preparation of a site-specific erosion and sediment control plan and incorporation of green infrastructure and low impact development design features and techniques. Adhere to the National Capital Planning Commission's tree preservation and replacement policies, as outlined in the Comprehensive Plan for the National Capital, and the Maryland Forest Conservation Act, including preparation of a Forest Conservation Plan if required. Adhere to site design guidelines and mitigation measures established by the Critical Area Commission's <i>Guide to the Conservation of Forest Interior Dwelling Birds in the Chesapeake Bay Critical Area</i> (2000). Use only native species in landscaping and revegetation techniques to prevent the introduction and proliferation of invasive species. Incorporate ecological connectivity and wildlife corridors as design progresses to the extent practicable Incorporate pollinator habitat in utility rights-of-way and roadways where possible. Limit or avoid site clearance activities (e.g., tree removal) within the migratory bird nesting season (i.e., May 1 to September 10) to the extent possible. Apply conservation measures identified through consultation following the U.S. Fish and Wildlife Service (USFWS) Interim Guidance Framework for the northern long-eared bat (NLEB), valid through April 1st, 2024, to reduce potential impacts to the NLEB. These measures may include avoiding tree removal activities within the active season (April 1- Nov 14). There is currently no USFWS guidance for the tricolored bat; however, should the species be listed, BEP would follow applicable USFWS guidance.
Cultural Resources	<ul style="list-style-type: none"> Implement an Inadvertent Discovery and Mitigation Plan. Place construction fencing along the LOD to prevent damage to sensitive areas. A trained archaeologist would be on site during ground-disturbing activities. BEP should continue ongoing coordination and consultation with the Maryland Historical Trust under Section 106.
Aesthetics and Visual Resources	<ul style="list-style-type: none"> Conduct work during standard daylight working hours.
Socioeconomics	<ul style="list-style-type: none"> No applicable mitigation measures.
Environmental Justice (EJ)	<ul style="list-style-type: none"> Minimization and mitigation measures planned for all resources to limit or prevent adverse environmental impacts ensure that the communities with EJ concerns

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	<p>would not experience disproportionate or adverse human health or environmental effects.</p> <ul style="list-style-type: none"> • Hold public meeting with outreach to communities with EJ concerns to answer questions, record concerns, and determine if project design or agency actions can address them.
Protection of Children	<ul style="list-style-type: none"> • Maintain a safe perimeter around construction work zones and restrict access using signage and barricades. • Follow mitigation measures for Hazardous and Toxic Materials and Waste and Health and Public Safety. • Follow construction BMPs for Topography and Soils, Water Resources, and Air Quality.
Transportation	<ul style="list-style-type: none"> • Ensure that the construction of roadway improvements does not prohibit normal traffic flow; should temporary road closures be required, schedule these to occur during low-volume traffic periods, such as at night. • Stage construction equipment at the intersection or roadway area undergoing improvements; off-road heavy construction equipment, such as graders, loaders, and excavators, would be mobilized to and from the work site only at the start and finish of construction at each area. • Ensure all work on Maryland State Highway Administration (MD SHA) roadways conforms to the latest approved SHA Specifications entitled "<i>Standard Specifications for Construction and Materials</i>," the Administration's <i>Book of Standards for Highways and Incidental Structures</i>, and the latest <i>Manual on Uniform Traffic Control Devices</i>. • Ensure all work on federal and NPS roadways conforms to the latest approved <i>Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects 2014, FP-14</i>, and other applicable federal standards. • Establish alternate lanes, where necessary, to ensure safe and regular traffic flow around the construction zone. • All federal, state, and county construction safety measures would be implemented, monitored, and maintained by the construction contractor at each construction work area. • Ensure no interruptions to existing public transit routes. • Construction vehicles and vehicles delivering materials will travel on main roads, avoiding travel directly through residential neighborhoods. • Hauling routes to the construction site will be designated and signage will be posted to direct construction traffic to and away from active construction sites. • To the extent possible, establish construction activity hours such that construction workers and construction vehicles would not travel during the peak hours of the local region of influence. • For road work within Beltsville Agricultural Research Center, construction vehicles will access work sites from the Poultry Road entrance along Powder Mill Road, to the extent practicable. • Consult with local planning authorities regarding all proposed construction activities within the Powder Mill Road right-of-way.

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	<ul style="list-style-type: none"> Construction vehicles will follow existing truck restrictions on regional and local roadways, such as the restriction of commercial trucks on portions of the Baltimore-Washington Parkway. Truck traffic will be routed along Powder Mill Road, Edmonston Road/Kenilworth Avenue, and the Capital Beltway to minimize its use of collector and local roads.
Utilities	<ul style="list-style-type: none"> Provide advance notice to potentially affected end users of any anticipated utility disruption to allow for adequate planning. Coordinate with utility providers on anticipated disruptions. Obtain all required permits before utility work commences and adhere to permit conditions. Verify underground utility locations with Miss Utility prior to the start of any construction activities. Move all utilities to accommodate the appropriate clearance distances from utility cables to signal structures and cables in accordance with the latest requirements of the Maryland High Voltage Act and National Electric Safety Code Sections 233 and 234.
Hazardous and Toxic Materials and Waste	<ul style="list-style-type: none"> Proper use and storage of hazardous materials, including the presence of spill containment kits at construction sites. Adhere to construction BMPs and ensure all equipment is maintained in good working order and that refueling is performed by experienced workers to ensure fuel spillage does not occur. Adhere to compliance measures required by the MDE construction general permit.
Health and Public Safety	<ul style="list-style-type: none"> Comply with OSHA safety regulations and SHA Work Zone Safety and Mobility Policy.