



Action Required: No
Action Due: N/A

January 28, 2021

Ms. Terry Garcia Crews
Regional Administrator
Federal Transit Administration, Region III
1835 Market Street, Suite 1910
Philadelphia, PA 19103-2968

Subject: Dulles Corridor Metrorail Project
Amended Record of Decision, Summary of Mitigation Measures

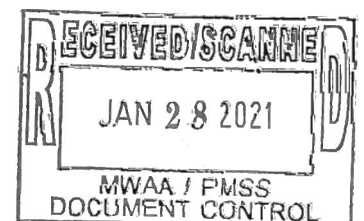
Letter No.: MWAA-P2-16850

Dear Ms. Garcia Crews:

Enclosed, for the Federal Transit Administration's (FTA) information and use, is the updated Dulles Corridor Metrorail Project (Project) Summary of Mitigation Measures to the Amended Record of Decision (ROD), Attachment A Matrix (Matrix). The Matrix, originally dated November 2006, is provided herewith to reflect Project updates for the time period of October 1, 2020 through December 31, 2020. The status of the 2012 FTA Finding of No Significant Impact (FONSI) mitigation measures is also provided.

For Phase 1, outstanding construction punch-list items are being addressed and permits are in the process of being closed with the appropriate permitting agencies. For Phase 2, Package A, (rail mainline, stations, system and yard lead) Final Design is complete and construction activities are well underway with the Design-Build contractor. For Phase 2, Package B (rail yard) Final Design is complete and construction is well underway. For Phase 2, Package P, (ponds) Final Design is also complete and construction is well underway.

The enclosed Matrix contains a total of eighty-two (82) commitments and provides status updates for the implementation of the mitigation commitments, identified by Project Phase. Within the Matrix, a column is included with summaries of the close-out actions of all mitigation items. To date, forty-six (46) mitigation measures have been closed. Thirteen (13) mitigation measures have been partially closed for Phase 1, but not for Phase 2.

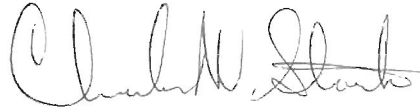


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Per the request of the FTA, the revisions are identified in *italic font*. The Metropolitan Washington Airports Authority continues to work toward fully meeting all ROD commitments.

If there are any questions, please contact James Van Zee at (703) 572-0504.

Sincerely,



Charles W. Stark, P.E.
Senior Vice President
Dulles Corridor Metrorail Project

CWS/ac/bmg

Enclosure: As stated

cc: D. Korzym
S. Cleveland
J. Van Zee
S. Barna
T. Crone
D. Chewning
L. Miller
D. Clark
A. Cunningham
R. Chandnani
A. Anderson
D. Koenig
L. Keeley

2012 PE/EA FONSI Mitigation
and Project Status

Cultural and Historic Resources Effects:

An updated Section 106 Memorandum of Agreement (revised MOA), which identifies specific mitigation commitments required for the Refined LPA was executed in October 2012, including installation of interpretive exhibits, restorative landscaping, and archaeological data recovery. The revised MOA replaces the previous MOA for the Project executed in 2004; however the revised MOA incorporates all of the previous mitigation identified in the 2004 MOA. A copy of the Revised 2012 MOA is included as Attachment B to the FTA FONSI issued on December 17, 2012.

Status:

The Section 106 Annual Activities Report for the year ending December 31, 2020, was updated and planned to be distributed to all MOA signatories and was made available for public review, prior to the required date of January 15, 2021.

Concepts for the Dulles Historic Interpretive Exhibit, including preliminary costs and implementation schedule, were further advanced during Q4 2020. Coordination with WMATA and Airports Authority staff at Dulles Airport continued including obtaining additional imagery for Metrorail linkage and selection of images and development of draft text and content. Following internal reviews and site investigations, the Airports Authority is now advancing the concepts and content in order to consult with DHR regarding the exact size, materials, imagery, colors, and specifications for the exhibits. A submittal was made to obtain SHPO concurrence on the current design concepts and SHPO had no comment. *The concepts are now being advanced to final design and serving as the basis of the selected contractor Design and Production, Inc. to fabricate and install the exhibit.*

Water Resources Effects: Most of the wetlands impacts are within the boundaries of Dulles International Airport. Expansion of wetland areas within the airport would also serve as wildlife attractants, negatively interfering with safe airport operations. Therefore, the additional mitigation required for wetland impacts will be satisfied through the purchase of credits at an approved off-site wetland mitigation bank within the same watershed. Compensation for stream impacts will be purchased at an approved off-site stream mitigation bank. A total of 9.37 acres of wetland credits and 1,111 feet of stream credits will be purchased.

Status:

The Airports Authority has procured Wetlands Studies and Solutions, Inc. (WSSI) and obtained the required stream and wetland mitigation banking credits on behalf of the Airports Authority. It was previously assumed that an additional 176 stream credits would be required by the major permit modification and these additional credits would be purchased from an approved mitigation bank, if necessary, within the same watershed once the final stream credit amount requirements is determined. It is now anticipated that no additional stream credits will be required to be purchased as the Airports Authority anticipates having a surplus of credits due to Loudoun County's mitigation for their re-permitting activities at Ashburn station north. Loudoun County, in cooperation with the adjacent landowners, completed processing approvals received from VDEQ and received a revised permit for impacts to stream and wetland areas previously permitted by Comstock Loudoun Station and the Airports Authority. The Airports Authority received Loudoun County's permit approval and authorization

in August 2016, and although these impacts will now be taken under the Airports Authority permit, approval was granted to construct Ashburn Station area facilities using Loudoun County's mitigation for these impacts. It is anticipated that the Airports Authority will have excess credits available for reuse or dispensation, which were addressed in a draft white paper that was developed to present options for excess credits. This white paper has been updated and submitted for final Airports Authority management action, to initiate the sale of the excess credits back to an approved mitigation bank. An effort is underway to prepare an updated market analysis to determine the potential demand and value of the excess credits.

Land Use Effects: The Airports Authority and the FAA will conduct a separate NEPA environmental review to evaluate the three options that will eliminate the encroachment into the existing Runway 19L-1R RPZ. FAA intends to amend its July 2005 ROD for the Project, which will address FAA regulatory requirements at Dulles International Airport, and identify the steps and timetable required for elimination of the RPZ encroachment.

Status:

The FAA issued a Finding of No Significant Impact (FONSI)/Record of Decision (ROD) on January 8, 2013, for the Phase 2 Preliminary Engineering Design Refinements, which included the aerial Airport alignment. Subsequent to FAA issuing their ROD/FONSI, a waiver request and supporting risk analysis was submitted to FAA by the Airports Authority resulting in FAA's January 22, 2015, Written Re-evaluation and Record of Decision for the Phase 2 Environmental Assessment, which recommended no additional physical modifications of runways or navigational aids are required as mitigation. The Airports Authority received correspondence from FAA dated February 4, 2015, approving the waiver WMATA request for the RPZ encroachment and indicated no additional NEPA analysis needs to be performed that would necessitate any resultant physical mitigation. FAA is requiring that prior to Phase 2 revenue service, additional emergency and standard operating procedures be adopted by WMATA for train operations and the IAD Traffic Control Tower for Runway 19L-1R operations. The Airports Authority transmitted adopted IAD Traffic Control Tower procedures to limit distressed aircraft from landings on Runway 19L-1R via correspondence to FAA dated October 5, 2017 requesting concurrence from FAA that the procedures satisfy the FONSI/ROD requirements for runway operations. The Airports Authority received correspondence dated November 13, 2017 from the FAA Washington Airports Division Office (ADO) concurring that the FONSI/ROD mitigation measure related to air traffic control has been satisfied. WMATA has been notified that they will be required to adopt updated procedures for rail service operations as part of the start-up planning for Phase 2 revenue service to satisfy the two additional mitigation measures related to train operations. *A working group among WMATA, FAA, and MWAA has been formed to address the requirements of implementing the rail service procedures, notifications, training and provisions for signage to prevent rail operators from stopping in the Runway Protection Zone under normal operations.*

Summary of Mitigation Report

| DULLES CORRIDOR METRORAIL PROJECT MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS | | | | | | |
|---|--|---|---|---|--|---|
| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| LAND USE AND SOCIOECONOMICS | | | | | | |
| LU-1 | Continue coordination with Fairfax County, Loudoun County, and the Town of Herndon to encourage appropriate transit-oriented development at station locations. | Monitor compliance during design and construction. | MWAA | Design and Construction | MWAA is coordinating with local jurisdictions related to development plans adjacent to station areas. Coordination with adjacent land developers at Innovation Center, Reston Town Center, Herndon, and Ashburn (Route 772) stations has been ongoing and will continue as the designs progress. This includes coordination of proposed utility system, roads, pedestrian facilities, structures and related facilities. | <ul style="list-style-type: none"> File coordination records. Phase 1 closed. LU-1 will be closed upon completion of Phase 2 construction activities. |
| LU-2 | Incorporate Tysons West station park-and-ride requirements (500 spaces) into Fairfax County Comprehensive Plan. | Monitor compliance during design. | MWAA, in coordination with Fairfax County | Design | Parking guidelines in Fairfax County's Transit Oriented Development Policy and Transforming Tysons Plan include provisions intended to ultimately result in commercial parking for Metrorail passengers similar to that contained within the Rosslyn-Ballston corridor in Arlington County. Fairfax County staff has conducted an interim Metro parking study for Tysons Corridor that has identified at least 500 parking spaces among two potential sites nearby the Tysons West (Spring Hill) Station. The County has contracted for 711 spaces at 1820 Dolly Madison Blvd. and another 100 spaces at 7900 Westpark Drive. In correspondence to MWAA, dated June 23, 2014, FTA concurred that the interim parking adequately addresses the original intent of LU-2 mitigation. | <ul style="list-style-type: none"> This issue is closed, per FTA and Fairfax County. Documentation filed. Item closed. |
| LU-3 | Assist Fairfax County in pursuing joint-development opportunities at the Wiehle Avenue station. | Participate in the Fairfax County joint-development solicitation process. | MWAA | Design | Fairfax County has an FTA-approved joint-development agreement with a developer for a joint development of the north-side facilities at the Wiehle Avenue Station. MWAA has coordinated design interfaces and construction sequencing with developer. Construction of pedestrian bridge extension and communications raceway to the joint development is complete. Garage construction by the County reached Substantial Completion in Q4 2013 and the Garage and access facilities opened to public in July 2014. Roadway improvements are complete. | <ul style="list-style-type: none"> Documentation filed. Item closed. |
| PROPERTY ACQUISITION AND DISPLACEMENTS | | | | | | |
| RW-1 | Conduct all property acquisitions in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended. | Monitor compliance during right of way acquisition and construction. | MWAA | Right of Way Acquisition and Construction | For Phase 1, all property acquisitions necessary for WMATA revenue service were completed in accordance with regulatory requirements. Temporary construction easements have been purchased for Old Meadow Road. Property acquisition activities for Phase 2 are underway, in accordance with regulatory requirements. | <ul style="list-style-type: none"> Phase 1 will be closed upon completion of closeout item work. <i>OMR easement has been completed.</i> All property for Phase 2, Package A has been acquired. RW-1 will remain open until completion of closeout item work for Phase 2. |

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| RW-2 | Prepare detailed Property Acquisition and Relocation Plan. | Monitor compliance during design. | MWAA | Design | Phase 1 Property Acquisition Plan has been completed. The revised Property Acquisition and Relocation Plan for Phase 2, also known as the Real Estate Acquisition Management Plan, which incorporated FTA comments, was approved by FTA in August 2014. | <ul style="list-style-type: none"> Plans are filed. Phase 1 will be closed upon completion of closeout item work. RW-2 will be closed upon completion of Phase 2 property acquisition activities. |
| RW-3 | Provide relocation assistance to all displaced property or business owners without discrimination. | Monitor compliance during right of way acquisition and construction. | MWAA | Right of Way Acquisition and Construction | For Phase 1, all relocations are complete. For Phase 2, one relocation was identified and completed for a month-to-month lease holder for trailer parking space at the Airport. | <ul style="list-style-type: none"> Phase 1 relocations completed in February 2012. Phase 2 relocations completed Documentation filed for Phase 1 and 2 Item closed. |
| RW-4 | Acquire property interest in the median and other parts of the DCR and DIAAH and in parts of the Dulles Airport property sufficient to allow DRPT or WMATA's continuing control and use of Project facilities for the Project's useful life. | Incorporate property transfer and use terms into intergovernmental agreement(s) with MWAA, FAA, and/or U.S. DOT. | MWAA (Rail) in coordination with MWAA and FAA. | Design and right of way Acquisition. | For Phase 1, the necessary property rights are available based upon various agreements. The disposition and conveyance of property to WMATA for transit facilities was developed in conjunction with maintenance agreements. Maintenance and conveyance agreements were executed by all stakeholders, including WMATA, and recorded in land records as necessary, prior to the start of revenue service in July 2014. For Phase 2, property acquisition is ongoing. | <ul style="list-style-type: none"> Phase 1 conveyance was completed with execution of conveyance instruments necessary for WMATA's operation and maintenance. Phase 1 documentation filed. Phase 1 closed. RW-4 will be closed upon completion of property acquisition and execution of maintenance and conveyance agreements for Phase 2. |
| VISUAL and AESTHETIC CONDITIONS | | | | | | |
| VS-1 | Consider designs for Metrorail stations, aerial structures, and portals that are compatible with the surrounding environment. | Monitor compliance during design; include in contract drawings and specs. | MWAA | Design | Phase I design was completed and coordinated per regulatory requirements from PE through FD and obtained Fairfax County SE/2232 approvals for all project elements. Coordination with adjacent developers continued throughout Phase 1 implementation resulting in late adjustments to two pavilion sites, Spring Hill Station and Tysons Corner Station. For Phase 2, FD has incorporated compatible station, aerial guideway and wayside elements that have been coordinated with local stakeholders per regulatory requirements. Phase 2 SE/2232 approvals have been obtained at Herndon South, Innovation Center North and South, and Reston Town Center North and South Station sites. Final Development Plans for Ashburn Station North and South sites were approved by Loudoun County in 2016. | <ul style="list-style-type: none"> Phase 1 SE/2232 and FDP applications filed. Phase 1 closed. Phase 2-related filing efforts ongoing. VS-1 will be closed upon completion of Phase 2 FD and SE/2232 approvals. |
| VS-2 | Provide landscaping at stations. | Include in contract drawings and specifications. | MWAA | Design | Landscape planting at the Phase 1 stations is complete. For Phase 2, landscaping at stations has been included in FD. | <ul style="list-style-type: none"> Phase 1 SE/2232 applications filed. Phase 1 closed. Phase 2-related filing efforts ongoing. Phase 2 walkdown inspections of landscaping at stations will be conducted and any related records and field photos will be filed. VS-2 will be closed upon completion of Project landscaping activities. |

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| VS-3 | Using established WMATA designs, design traction power substations, and tie-breaker stations to be compatible with surrounding environment. | Monitor compliance during design; include in contract drawings and specifications. | MWAA | Design | Wayside facilities were designed to emulate WMATA standard designs in a manner feasible for local compatibility related to landscape and structural appearance. Both Phase 1 and Phase 2 designs were approved through SE/Section 2232 process in 2007. For Phase 2, similar designs were developed in PE through coordination with Fairfax County, in compliance with the 2232 approval, and in accordance with the applicable Loudoun County and Airports Authority requirements. The FD of the Wayside Facilities has been completed. A Section 15.2-2232 approval was obtained in June 2015 that addressed the one location deemed in need of approval for Phase 2, TPSS 13. | <ul style="list-style-type: none"> Phase 1 documentation filed Phase 1 closed. On Phase 2, walkdown and inspections of TPSS and tie-breaker stations to be conducted and associated records filed. VS-3 will be closed upon completion of Phase 2 completion of landscaping activities. |
| CULTURAL RESOURCES/SECTION 4(f) | | | | | | |
| CR-1 | Lower the at-grade Metrorail alignment in the DIAAH median to the extent practicable to preserve historic "peek-a-boo" view sequence of main terminal control tower. | Include in contract drawings. | MWAA | Design | Top of rail elevation was lowered throughout Phase 2 to approximate roadway elevation, except at approaches to the aerial guideway. FD for guideway wall heights west of Route 28/Sully Road were lowered to 32 inches above road elevation to enhance the 'peek-a-boo" effect prior to reaching the terminal. | <ul style="list-style-type: none"> CR-1 will remain open until Phase 2, Package A, mainline guideway walls construction is complete. Ensure contract drawings filed. Item closed. |
| CR-2 | Develop treatment plan and implement specific measures (e.g., interpretive exhibits, public artwork, or photo documentation) to highlight Dulles Airport's unique historic characteristics. | Monitor compliance during design and construction. | MWAA in coordination with VDHR | Design and Construction | Content specific "treatment measures" were incorporated in the treatment plan developed during Phase 2 PE. VDHR staff concurred with the recommended approach including incorporation of restoration of landscape elements from the original Airport campus master plan. Work to advance selected concepts for historic interpretive exhibit at Dulles Airport was initially reviewed by SHPO in March 2017 with no comments and is now being further developed. Concepts and content of exhibits are now being further developed with images and graphic content. Plans were submitted to and approved by SHPO in June 2019, which now allows the issuance of a task order procurement to fabricate and later install the exhibit. | <ul style="list-style-type: none"> Phase 2 treatment plan is now approved by FTA and SHPO. Final treatment plan has been filed. Ensure correspondence is filed. To be closed during Phase 2 Revenue Operations following implementation of historic interpretive exhibit elements defined in the approved Treatment Plan. |
| CR-3 | Consider the historic characteristics and other contributing elements of the Dulles Airport historic district in the design of the station, terminal connections, aerial structures, and tunnel portals. Review these proposed designs with the VA SHPO. | Monitor compliance during design; include in contract drawings and specifications. | MWAA in coordination with VDHR | Design | The Project has continued to coordinate with VDHR the revisions to the Aerial Guideway and Dulles Airport Station, and design elements adjacent to Saarinen Circle such as roadway lighting and barrier design. MWAA received acceptance by VDHR of the final supplement via e-mail in September 2015. | <ul style="list-style-type: none"> Section 106 MOA and FD drawings are filed. Item Closed |

Summary of Mitigation Report

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| PARKLANDS | | | | | | |
| PK-1 | Design and construct Metrorail overpass of the W&OD Railroad Regional Park in accordance with the NVRPA Guideline for the Development of W&OD Trail Bridge Crossings. | Include requirements in contract specifications. Monitor compliance during design and construction. | MWAA | Design and Construction | FD met NVRPA guideline and was reviewed/approved. Work at the NVRPA W&OD was completed in May 2011. | <ul style="list-style-type: none"> W&OD walkdown inspection documentation has been filed. Item closed. |
| PK-2 | Maintain use and access to the W&OD Railroad Regional Park, Pimmit Run Stream Valley Park, Scotts Run Stream Valley Park, and Difficult Run Stream Valley Park during construction. | Monitor compliance during construction. | MWAA | Construction | The NVRPA W&OD bike path was protected during bridge work at that location and access was maintained. Work at W&OD was completed in May 2011. Work completed above the W&OD trail. Construction activities near Fairfax County Difficult Run and Pimmit Run Stream Valley Parks completed in September 2011. Work at McLean Kiss & Ride completed in December 2012. | <ul style="list-style-type: none"> Walkdown inspection documentation has been filed. Item closed. |
| PK-3 | Minimize disruption to the W&OD Railroad Regional Park, Pimmit Run Stream Valley Park, Scotts Run Stream Valley Park, and Difficult Run Stream Valley Park during construction. | Monitor compliance during construction. | MWAA | Construction | Construction planning included minimizing disruption at these locations. Work at the NVRPA W&OD was completed in May 2011. Work completed above the W&OD trail. Fairfax County Difficult Run and Pimmit Run Stream Valley Parks completed in September 2011. Walls at McLean Kiss & Ride completed in December 2012. | <ul style="list-style-type: none"> Walkdown inspection documentation has been filed. Item closed. |
| PK-4 | Following completion of construction, restore all disturbed public parklands to pre-construction conditions. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | Site-specific requirements were included during FD and implemented per drawings and approved E&S Control Plans. There is no parkland associated with the construction of Phase 2. Work in parklands is complete. | <ul style="list-style-type: none"> Walkdown inspection documentation has been filed. Item closed. |
| PK-5 | Continue coordination with Fairfax County and the Northern Virginia Regional Park Authority on the design of the Project in the vicinity of public parklands. | Monitor compliance during design. | MWAA | Design | FD in the vicinity of parklands is complete. Fairfax County and NVRPA were coordinated with during design. There is no parkland associated with the construction of Phase 2. Work in parklands is complete. | <ul style="list-style-type: none"> Walkdown inspection documentation has been filed. Item closed. |

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| SAFETY AND SECURITY | | | | | | |
| SS-1 | Update WMATA Safety and Security Program with elements required by Transportation Security Administration or the Metropolitan Washington Airports Authority. | As required, include necessary elements in contract documents. Monitor compliance during design and construction. | WMATA in coordination with MWAA and TSA | Design and Construction | For Phase 1 and 2, contract provisions for safety and security requirements have been incorporated in D-B procurement contract documents. Additional updates and further coordination occurring during D-B. System Safety and Security Certification. Plans prepared for each phase. Hazard Analyses prepared during each phase. For Phase 2, FAA ROD requires updates to WMATA standard and emergency operating procedures for train operations at Dulles Airport within RPZ for Runway 19L-1R per FAA Re-evaluation and FONSI/ROD for Phase 2 EA. MWAA correspondence dated 10/5/17 was sent to FAA seeking concurrence on compliance with IAD airport procedures. A response was received from FAA dated 11/13/17 concurring that the air traffic control mitigation measure requirement was satisfied. <i>WMATA, MWAA and FAA are currently coordinating on addressing the rail operations mitigation measure component prior to revenue operations. WMATA is currently developing the standard and emergency operations procedures for notifications, training, and instructional signage limiting trains stopping within the Runway Protection Zone.</i> | <ul style="list-style-type: none"> • Closed upon WMATA updates to WMATA standard and emergency operating procedures for train operations at Dulles Airport within RPZ for Runway 19L-1R. • File updates relevant to WMATA contract, requirements and procedures for Dulles RPZ at 19L-1R. |
| SS-2 | Develop mutual aid agreements for emergency response with local jurisdictions. | Monitor compliance during design and construction. | MWAA in coordination with WMATA, Fairfax and Loudoun Counties | Design and Construction | MWAA and other local agencies updated the "Northern Virginia Emergency Services Mutual Response Memorandum of Agreement" in 2009 to ensure a regional approach to the delivery of emergency services using standardized response protocols and operational procedures. | <ul style="list-style-type: none"> • Intergovernmental/interagency agreements and procedures filed. • Phase 1 closed. • Phase 2 not yet closed. |
| SS-3 | Locate tunnel exits of any kind, including vent shafts, emergency access shafts or any other kinds of openings outside the secure zone of the airport. | Include in contract drawings. | MWAA | Design and Construction | Phase 2 tunnel alignment is no longer under consideration in lieu of advancement of aerial station and alignment. All facility exits have been coordinated with MWAA and FAA and are located outside of the secure zone. | <ul style="list-style-type: none"> • Coordination documentation filed. • Item closed. |
| WATER RESOURCES | | | | | | |
| WR-1 | Plant riparian buffers near the affected areas for two streams [Tributaries W-50 and W-51] converted to culvert or pipe. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | Use of native riparian plant materials and re-vegetation is (in Phase 1) or will be (in Phase 2) part of VDEQ E&S Control approvals. In Phase 2, at TBS #8, the tributary stream was not disturbed/converted to culvert in FD. Disturbed areas have been stabilized and replanted. | <ul style="list-style-type: none"> • WR-1 will remain open until Phase 2 construction activities are complete. • Ensure plan sheet showing noted change in design at TBS #8 is filed. • Conduct follow-up permit close-out inspection will be scheduled with MWAA, D-B contractor and the permitting agencies in attendance. • File inspection records and field photos. |

Summary of Mitigation Report

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| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| WR-2 | Provide compensatory mitigation for unavoidable wetlands impacts associated with the Service & Inspection Yard on Dulles Airport property, stations, and ancillary facilities. A 1:1 replacement ratio for impacts to emergent wetlands and 2:1 replacement ratio for impacts to forested wetlands will be used. | Purchase additional credits at an existing regional wetland bank. Monitor compliance during design and construction. | MWAA | Design and Construction | <p>Wetland vegetation that colonized in an existing sedimentation pond was removed in March 2010 during pond restoration by the Project. The Wetland Investigation Report and Preconstruction Notification were provided to USACE and VDEQ in June 2009. Permit to impact 0.13 acres of emergent wetland vegetation was issued by USACE in September 2009, after receiving concurrence from VDEQ in August 2009.</p> <p>Mitigation for impacted wetlands has been incorporated into Phase 2 mitigation activities. USACE Section 404 permit and VDEQ Water Protection Permit state that 8.93 acres of wetland credits and 1,111 feet of stream credits are to be purchased from an approved mitigation bank within the same river watershed and the same or adjacent HUC basin. MWAA awarded a contract in February 2013 and obtained the purchase of these credits from an approved bank with documentation provided to VDEQ.</p> <p>Two permit modification requests have been submitted (April 6, 2014 and February 25, 2015) and approved. As a result of these modifications, MWAA was required to purchase, obtain use rights for, or reallocate at least 176 additional stream credits. Additional permit coordination including use of Loudoun County mitigation for Route 772 North (Ashburn) Station area was provided to MWAA on August 19, 2016, which has reduced this requirement; therefore, additional credits will be reallocated before modified areas are impacted, and any excess credits will be sold back to the approved mitigation bank. As a result of this Route 772 North coordination, the purchase of additional credits is not necessary as the project now has an excess of credits which will be sold as excess to an approved mitigation bank.</p> <p>Compensatory mitigation has been purchased in excess of this requirement.</p> | <ul style="list-style-type: none"> Wetland credit procurement documentation for the original permit has been filed. Additional stream credits will be filed when the total number of credits needed is verified, or plan will be filed for dispensation of any excess stream credits not needed for Phase 2. Credit can be closed upon documentation of compensatory mitigation. |

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| WR-3 | Acquire applicable Federal and state water resource permits required for construction. Incorporate any permit conditions into required mitigation measures. | Include, as applicable, in the contract drawings and specifications. Monitor compliance during design and construction. | MWAA | Design and Construction | <p>MWAA obtained Federal and State permits for Difficult Run and Pimmit Run (August 2008). Notice was provided to VDEQ in July 2009, for work at Pimmit Run, and in July 2010 for work at Difficult Run. MWAA terminated VWP in May 2011, which was replaced by NWP 18. Certificate of Compliance for Pimmit & Difficult Runs was submitted to the USACE October 6, 2011. JPA completed for USACE and VDEQ for stream restoration at West Falls Church Yard. Approvals were received in October 2010 and in December 2010. Construction activity in West Falls Church Yard stream was completed in March 2012. Permit monitoring is complete at West Falls Church Yard after invasive species removal per May 2017 USACE email. Permit closure coordination is ongoing.</p> <p>A Phase 2 VDEQ Water Protection Permit was obtained in June 2011. A Phase 2 USACE Section 404 Permit was obtained on June 15, 2011. A subaqueous bottomland authorization was obtained from VMRC for Phase 2 in October 2011.</p> <p>A permit modification request was submitted to VDEQ and USACE for Package S. The modification was approved in March 2014.</p> <p>A second permit modification request was submitted to VDEQ, VMRC, and USACE in April 2014. VDEQ decided to process the request as a major modification. VDEQ requested additional information, which was provided in September 2014. The modification was issued February 25, 2015. VMRC modifications were issued for various reasons dated October 23, 2014, December 2, 2014, September 8, 2015, October 1, 2015, October 13, 2016, March 28, 2017, June 8, 2017, and July 6, 2017. The VMRC permit was extended September 26, 2018.</p> | <ul style="list-style-type: none"> Notify permitting agencies within 30 days of completion of P1 and P2 construction. Conduct follow-up permit close-out inspection with MWAA, D-B contractor and the permitting agencies in attendance. File inspection records and field photos. |
| WR-4 | Avoid changes in floodplain elevation(s) of more than 1 foot. | Include in the contract drawings and specifications. Monitor compliance during construction. | MWAA | Design and Construction | <p>No flood plain changes of greater than 1 foot occurred during Phase 1.</p> <p>No floodplain changes of greater than 1 foot are predicted by calculations performed by the Phase 2 FD.</p> | <ul style="list-style-type: none"> Records confirming floodplain elevation changes of more than 1 foot were avoided during Phase 1 filed. Records confirming floodplain elevation changes of more than 1 foot were avoided during Phase 2 filed Item closed. |

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| WR-5 | Coordinate design of new crossings with Fairfax and Loudoun Counties to ensure consistency with stream protection policies. | Include in the contract drawings and specifications. Monitor compliance during design and construction. | MWAA | Design and Construction | <p>Provided designs to Fairfax County for review during PE that minimized impacts to RPAs. Obtained Federal and State permits for crossings at Difficult Run and Pimmit Run in August 2008. Received CBPA approval from VDEQ for work within an RPA in March 2009 with another approval received in January 2011. Construction of stream crossings at Pimmit Run and Difficult Run was completed in September 2011, respectively.</p> <p>The requirements for the one affected RPA at Innovation Center Station North have been coordinated through VDEQ. Coordination with VDEQ resulted in approval in February 2016 of the encroachment with regard to the allowable impact to the one RPA at Innovation Center Station North.</p> <p>WQIA for minor impacts to the RPA adjacent to the Innovation Center station north area was approved by VDEQ in Q1 2016 (Package A). No other such approvals are anticipated to be needed for Phase 2.</p> <p>For Package B, the rail yard perimeter does not encroach on wetlands or RPA.</p> | <ul style="list-style-type: none"> • Filed CBPA and WQIA approvals . • Item closed. |
| WR-6 | Coordinate with the Federal Aviation Administration to ensure compliance with FAA Advisory Circular No. 150/5200-33 and control potentially hazardous wildlife from interfering with airport operations and safety. | Monitor compliance during design and construction. | MWAA | Design and Construction | In Phase 2, PE design for stormwater management incorporated FAA requirements near Dulles Airport. FD were coordinated and accepted by FAA and VDEQ. | <ul style="list-style-type: none"> • WR-6 will be closed upon completion of Phase 2 construction. • Documentation of Stormwater Management Plan acceptance by FAA is on file. • Item closed. |
| WR-7 | Coordinate the design of the stormwater management pond at the West Falls Church Yard with the Fairfax County Department of Public Works and Environmental Services and the Virginia Department of Conservation and Recreation to ensure that it meets the stricter of state and county requirements. | Monitor compliance during design and construction. | MWAA | Design and Construction | Coordinated stormwater management for the West Falls Church Yard with VDCR and Fairfax County as part of the SE Amendment approved in February 2010. Stormwater management facility and related stream restoration was approved by VDCR in December 2010. Correspondence was received in May 2017 indicating that no further monitoring is required and the project is considered a successful restoration project by the USACE. | <ul style="list-style-type: none"> • Permit has been closed with associated documentation filed. • Item closed. |
| WR-8 | Coordinate with the Virginia Department of Conservation and Recreation on the design of all Project-related stormwater management facilities to ensure compliance with the provisions of the Chesapeake Bay Preservation Act. | Monitor compliance during design and construction. | MWAA | Design and Construction | <p>McLean Station location was altered during PE per VDCR. VDCR approved Water Quality Impact Assessments and associated project actions for McLean Station and the associated Kiss & Ride (March 2009) and Stormwater Pond #6 (March 2009). Approval for the West Falls Church Yard was received in January 2011. These are the only locations in Phase 1 where the CBPA applies.</p> <p>Per the September 30, 2013 letter from VDEQ, the only location, currently, that will require a WQIA is at Innovation Center Station North which was approved by VDEQ in Q1 2016 (Package A).</p> | <ul style="list-style-type: none"> • Permitting agencies were notified within 30 days of completion of Phase 1 and Phase 2 construction. • Item Closed |

Summary of Mitigation Report

| DULLES CORRIDOR METRORAIL PROJECT MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS | | | | | | |
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| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| WR-9 | Coordinate with the Virginia Marine Resources Commission to determine if the Project encroaches channelward of ordinary high water along streams and, if it does, obtain the required permit. | Monitor compliance during design and construction. | MWAA | Design and Construction | <p>MWAA is the permittee for work impacting waterways. JPA for work at Difficult Run and Pimmit Run was approved in August 2008. A JPA for stream impacts at the West Falls Church Yard was submitted to VMRC in June 2010. VMRC possesses jurisdictional oversight only at Difficult Run. VMRC issued a permit in August 2008. In-stream work was completed at Difficult Run in August 2011; notification provided to VMRC via email in August 2011. Phase 1 complete.</p> <p>For Phase 2 PE, a JPA was submitted to VDEQ in February 2011, along with additional information submitted in March and October 2011. The VMRC issued a permit for clear span bridge crossings of Broad Run and Horsepen Run in October 2011. A permit minor modification request was submitted for Package S by MWAA to VDEQ and USACE and approved in March 2014. Package S construction activities and associated monitoring were completed during Q2 2015, but did not require VMRC approval.</p> <p>A permit modification was submitted in April 2014, for additional impacts to VMRC-regulated streams in the yard lead area. VMRC requested additional information in September 2014. VMRC issued a permit modification on the original permit to include 34.5kV ductbank work at Horsepen Run in December 2014. This original permit was also extended by VMRC to October 31, 2018. Two additional modifications of this permit for additional ductbank work and a temporary bridge crossing were issued by VMRC in September 2015. Modifications to the VMRC permit were issued in October 2016 and March 2017 for the ductbank (impact by directional bore method) beneath a section of Horsepen Run.</p> <p>A permit modification was approved by VMRC on March 28, 2017 for the installation of 2 parallel ductbanks under Horsepen Run Lake. A permit modification was approved June 8, 2017 for a temporary diversion of Horsepen Run for in stream culvert replacement work. A permit modification was approved July 6, 2017 for an additional ductbank boring under Horsepen Lake.</p> <p>The VMRC permit's closure request has been filed.</p> | <ul style="list-style-type: none"> • Phase 1 approved permits from VMRC filed. • Permitting agencies notified within 30 days of completion of Phase 1 construction. • Phase 1 closed. • Permitting agencies to be notified within 30 days of completion of Phase 2 construction. • Conduct follow-up permit close-out inspection with MWAA, D-B contractor and the permitting agencies in attendance. |

Summary of Mitigation Report

| DULLES CORRIDOR METRORAIL PROJECT MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS | | | | | | |
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| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| WR-10 | Comply with all applicable requirements of the Virginia Coastal Resources Management Program. | Monitor compliance during design and construction. | MWAA | Design and Construction | <p>All applicable permits for Phase 1 have been obtained in compliance with the Virginia Coastal Resources Management Program. A JPA for work at Difficult Run and at Pimmit Run was approved in August 2008. The permits issued by the VMRC and the USACE are in compliance with the Virginia Coastal Resources Management Program, and incorporate applicable enforceable policies. Stream Crossings at Difficult Run and Pimmit Run are complete.</p> <p>For Phase 2 PE, a VDEQ Water Protection Permit, a USACE Section 404 permit, and a VMRC subaqueous bottomland permit have been obtained.</p> <p>A permit modification request was submitted to VDEQ and USACE for Package S. The modification was approved in March 2014. Package S construction activities and associated monitoring were completed during Q2 2015.</p> <p>A second permit modification request was submitted to VDEQ, VMRC, and USACE in April 2014. VDEQ decided to process the request as a major modification. VDEQ requested additional information, which was provided in September 2014. The modification was issued February 25, 2015.</p> <p>A permit modification was approved by VMRC on March 28, 2017 for the installation of 2 parallel ductbanks under Horsepen Run Lake. A permit modification was approved June 8, 2017 for a temporary diversion of Horsepen Run for in stream culvert replacement work. A permit modification was approved July 6, 2017 for an additional ductbank boring under Horsepen Lake. The VMRC permit was extended September 26, 2018.</p> | <ul style="list-style-type: none"> • Permitting agencies notified of completion of construction activities within 30 days. • Phase 1 documentation filed. • Phase 1 closed. • On Phase 2, follow-up permit close-out inspection to be conducted with MWAA, D-B contractor and the permitting agencies in attendance. • WR-10 will be closed after completion of Phase 2 construction. |
| WR-11 | Coordinate with the Virginia Department of Environmental Quality to ensure compliance with the Fisheries Management enforceable policy of the Virginia Coastal Resources Management Program. | Monitor compliance during design and construction. | MWAA | Design and Construction | <p>A JPA for Phase I, to perform work at Difficult Run and at Pimmit Run, was approved in August 2008. The permits issued by the VMRC and the USACE incorporate enforceable policies related to fisheries management. Stream Crossings at Difficult Run and Pimmit Run are complete.</p> <p>Airports Authority Phase 1 is working with VDEQ for the task order to convert the swale by the West Falls Church Yard to a ditch. The Airports Authority applied for a VDEQ permit for Old Meadow Road and the West Falls Church Yard swale. A VDEQ permit will be obtained when DCR shoulder design is complete.</p> <p>For Phase 2 PE, a VDEQ Water Protection Permit, a USACE Section 404 permit, and a VMRC subaqueous bottomland permit have been obtained. The permit conditions incorporate enforceable policies related to fisheries management. A permit minor modification request was submitted for Package S by MWAA to VDEQ and USACE and approved in March 2014. Package S construction activities and associated monitoring were completed during Q2 2015.</p> | <ul style="list-style-type: none"> • Permitting agencies notified within 30 days of completion of Phase 1 construction. • Phase 1 closed. • Permitting agencies to be notified within 30 days of completion of Phase 2 construction activities. • Conduct follow-up permit close-out inspection with MWAA, D-B contractor and the permitting agencies in attendance • WR-11 will be closed after completion of Phase 2 construction. |

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| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| WR-12 | Coordinate with the Virginia Department of Conservation and Recreation to ensure compliance with the requirements of the Chesapeake Bay Preservation Act (Virginia Code sections 10.1-2100 <u>et seq.</u>) and the <u>Chesapeake Bay Preservation Area Designation and Management Regulations</u> (9 VAC 10-20-10 <u>et seq.</u>). | Monitor compliance during design and construction. | MWAA | Design and Construction | VDCR approved Water Quality Impact Assessments and associated project actions for McLean Station and the associated Kiss & Ride (March 2009), and Stormwater Pond #6 (March 2009). West Falls Church Yard was approved in January 2011. These are the only locations in Phase 1 where the CBPA applies. Remaining construction punch list activities continue to be monitored for compliance. For Phase 2, initial coordination has occurred as part of PE and will continue during D-B. Currently, Loudoun County does not require riparian buffers related to the Chesapeake Bay Protection Act. The requirements for the one affected RPA at Innovation Center Station North have been coordinated through VDEQ. Coordination with VDEQ resulted in approval in February 2016 of the encroachment with regard to the allowable impact to the one RPA at Innovation Center Station North. | <ul style="list-style-type: none"> Notify permitting agencies within 30 days of completion of construction activities. Phase 1 documentation filed. Phase 1 closed. Conduct follow-up permit close-out inspection with MWAA, D-B contractor and the permitting agencies in attendance. WR-12 will be closed after completion of Phase 2 construction. |
| WR-13 | Design and construct the Project in accordance with the Permitting Plan that the Virginia Department of Conservation and Recreation (the agency responsible for stormwater management) and Fairfax County (the local agency with jurisdiction for implementation of the CBPA) have agreed to. | Monitor compliance during design and construction. | MWAA | Design and Construction | The Phase 1 Permitting plan was completed in January 2007 and shared with regulatory agencies. MWAA tracks and monitors permits. VDCR/VDEQ holds jurisdiction for the CBPA but will consult with Fairfax County. Stormwater management design has been and continues to be coordinated with, and approved by, the VDEQ. The WQIA required at Innovation Center Station North was submitted to VDEQ and approved in February 2016. Fairfax County does not regulate the RPA for the Project. However, Fairfax County regulations regarding encroachments into the RPA are being followed. | <ul style="list-style-type: none"> Latest update of the Phase 1 Permitting Plan has been filed at the Project office. Latest update of Phase 2 Permitting Plan (August 2015) has been filed at the Project office and shared with regulatory agencies. Item closed. |
| NOISE | | | | | | |
| Barrier heights and placements to be implemented during D-B per Wayside Noise Report. | | | | | | |
| NS-1 | All aerial sections of the PE Wiehle Avenue Extension will include parapet walls or trackside barriers to minimize noise impacts due to train operations, consistent with FTA noise criteria. Parapet and/or trackside noise barriers of increased height will be provided at sensitive receptors specified in the Wayside Noise Report (April 2006 and June 2006). | Include in contract drawings. | MWAA | Design | Phase 1 barrier heights and placements have been included in Phase 1 D-B in accordance with Wayside Noise Report and PE Basis of Design Report. Wall installation is complete. Updated noise analyses conducted during Phase 2 PE indicates that no trackside barriers are required in the Phase 2 alignment to meet applicable criteria. One potential area of noise mitigation was evaluated at the Dulles West Office building on Airport property. No mitigation measures have been included in FD. | <ul style="list-style-type: none"> Walkdown inspection(s) documentation and field photos filed Item closed. |
| NS-2 | Install box structure to the new lead track and the existing loop track at the West Falls Church Yard to reduce noise impacts from yard operations. | Include in contract drawings. | MWAA | Design | Construction of the sound cover box is complete. Noise tests/measurements were conducted in February 2014. All noise measurements indicated that the maximum sound levels from all events with trains in the Sound Cover Box and yard lead track enclosure meet the Special Exceptions Condition No. 7 and are below 55 dBA. The April 2014 Noise Test Report was submitted to Fairfax County in May 2014. The Non-RUP No. 142040091 for the West Falls Church Rail Yard was issued in July 2014. | <ul style="list-style-type: none"> Copies of walkdown inspection(s) documentation and field photos filed. Item closed. |

Summary of Mitigation Report

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|---|--|---|--------------------------------------|---------------|--|---|
| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| NS-3 | Analyze reflective highway noise impacts to the Hallcrest Heights residential community during preliminary engineering and/or FD. | Monitor compliance during design. | MWAA | Design | Analysis was performed as part of approved Wayside Noise Report and trackside barrier wall locations were defined during PE as required mitigation. Trackside barrier wall locations included in the track and aerial structure FD comply with previous mitigation commitments. Reflective highway noise impacts have been addressed in the analysis done to support the design of the sound barriers recently implemented along the Dulles Connector Road adjacent to the Hallcrest Heights community. | <ul style="list-style-type: none"> Copies of walkdown inspection(s) documentation and field photos filed. Item closed. |
| NS-4 | Comply with WMATA guidelines, Federal law (for Wolf Trap Farm Park) and local noise ordinances, as applicable, during construction. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | For Phase 1, all construction near Wolf Trap is complete. BMPs and monitoring for noise control were implemented. For Phase 2, Package A, noise control measures, monitoring, and limits are defined in CRC's EMP. CRC obtained a noise ordinance waiver from Fairfax County on August 3, 2016 to allow for the nighttime construction activities at the Herndon-Monroe Park and Ride Lot (paving, marking, utility relocation, and MOT). For Phase 2, Package B, noise control measures and monitoring are defined in HP's EMP. | <ul style="list-style-type: none"> File audit records for audits of D-B contractor environmental program. Phase 1 closed. |
| VIBRATION | | | | | | |
| VB-1 | Utilize dampening materials or devices under switches and crossovers near sensitive receptors, consistent with FTA vibration criteria. | Include in contract drawings. | MWAA | Design | Current design complies with FTA and WMATA criteria for allowable vibration levels along the full project alignment, without use of special materials or devices. | <ul style="list-style-type: none"> Document no special materials were necessary and file. Item closed. |
| TRANSPORTATION EFFECTS – STATION and FACILITY ACCESS | | | | | | |
| SA-1 | Tysons Central 123 Station – Construct dedicated right turn lane for buses on Tysons Boulevard and acceleration lane on Route 123. | Include in contract drawings. | MWAA | Design | Incorporated into design during FD; designed a separated right turn lane with protected bus facility. Construction is complete. | <ul style="list-style-type: none"> Documentation filed Item closed. |
| SA-2 | Wiehle Avenue Station – Construct new left turn lane northbound on Wiehle Avenue. | Include in contract drawings. | MWAA | Design | Construction is complete as part of a Fairfax County joint development project. | <ul style="list-style-type: none"> Documentation filed. Item closed. |
| SA-3 | Wiehle Avenue Station – Construct new left turn lane to the eastbound Dulles Toll Road exit ramp at Wiehle Avenue. | Include in contract drawings. | MWAA | Design | Construction of new left turn lane is complete. Updated traffic analysis shows that these dual left turn lanes are sufficient for adequate traffic operations at this intersection. | <ul style="list-style-type: none"> Documentation filed. Item closed. |
| SA-4 | Wiehle Avenue Station – Widen westbound Sunset Hills Road between Wiehle Avenue and Isaac Newton Square and provide new left turn lane. | Include in contract drawings. | MWAA | Design | Construction is complete as part of a Fairfax County joint development project. | <ul style="list-style-type: none"> Documentation filed. Item closed. |
| SA-5 | Wiehle Avenue Station – Improve private roadway south of Sunset Hills Road to VDOT standards. | Include in contract drawings. | MWAA | Design | Construction is complete and open as part of Fairfax County joint development project. | <ul style="list-style-type: none"> Documentation filed. Item closed. |
| SA-6 | Wiehle Avenue Station – Construct new entry for bus ingress to the north side station facilities from the westbound Dulles Toll Road entry ramp. | Include in contract drawings. | MWAA | Design | Alternate access is provided as part of Fairfax County joint development project. Construction is complete. | <ul style="list-style-type: none"> Documentation filed. Item closed. |

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|---|---|---|--------------------------------------|-----------------|---|---|
| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| SA-7 | Wiehle Avenue Station – Construct new acceleration lane for bus egress from the station facilities onto the westbound Dulles Toll Road. | Include in contract drawings. | MWAA | Design | Alternate egress is provided as part of Fairfax County joint development project. Construction is complete. | <ul style="list-style-type: none"> • Documentation filed. • Item closed. |
| SA-8 | Wiehle Avenue Station – Add bus bays on eastbound Dulles Toll Road exit ramp. | Include in contract drawings. | MWAA | Design | Construction is complete. | <ul style="list-style-type: none"> • Documentation filed. • Item closed. |
| SA-9 | Route 606 Station – Construct new left turn lane to northbound Route 789 at both the north and south station entrances. | Include in contract drawings. | MWAA | Design | Incorporated into FD. The south entrance NB left turn lane was eliminated per consultation with VDOT and Loudoun County. It was determined that adequate intersection levels of service and station access could be provided with a right-in/right-out at the southern entrance. | <ul style="list-style-type: none"> • Documentation filed. • Item closed. |
| SA-10 | Yard Site 15 – Construct new left turn and acceleration lanes on Route 606 for vehicular access to yard facilities. Complete construction of roadway improvements prior to use of the Y15 yard site for construction staging activities associated with the Extension to Wiehle Avenue. | Include in contract drawings. | MWAA | Design | Permanent turn and acceleration lanes were incorporated in Phase 2 PE design Drawing N99-P-005. Permanent and temporary site entrances are no longer co-located. Turn lanes are being planned to be constructed by VDOT concurrent with Yard construction activities. In an e-mail from VDOT dated January 29, 2014, VDOT stated that an acceleration lane is not warranted. In addition, the main driveway entrance, right turn lane at the main driveway entrance, and the traffic signal modification at the main driveway entrance will be included within VDOT's Route 606 Reconstruction Project. The signalized left turn lane from WB VA-606 to the Yard temporary entrance was completed in June 2018 as part of the work by others. | <ul style="list-style-type: none"> • File VDOT D-B plan sheets. • File Executed Administration Agreement between VDOT and MWAA for construction of turn lanes on Route 606. • Item closed. |
| TRANSPORTATION EFFECTS – STATION VICINITY | | | | | | |
| TR-1 | Tysons East Station – Construct second left turn lane from Old Meadow Drive to southbound Route 123. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA, in cooperation with VDOT. | Station Opening | Second left turn lane currently exists as a result of a previous VDOT project. | <ul style="list-style-type: none"> • Photos filed confirming completion of turn lane. • Item closed. |
| TR-2 | Wiehle Avenue Station – Improve right turn lane from eastbound Sunset Hills Road to southbound Wiehle Avenue. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA in cooperation with VDOT. | Station Opening | Improvements provided as part of Fairfax County joint development. Construction is complete. | <ul style="list-style-type: none"> • Documentation filed. • Item closed. |
| TR-3 | Wiehle Avenue Station – Improve right turn lane from westbound Sunrise Valley Drive to northbound Wiehle Avenue. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA in cooperation with VDOT. | Station Opening | Improvements provided as part of Fairfax County joint development. Construction is complete. | <ul style="list-style-type: none"> • Documentation filed. • Item closed. |
| TR-4 | Reston Parkway Station – Add northbound through lane on Reston Parkway at Sunrise Valley Drive intersection. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA in cooperation with VDOT. | Station Opening | MWAA in conjunction with Fairfax County and VDOT has evaluated alternative mitigation measures, at the intersection of Reston Parkway and Sunrise Valley Drive, that are more consistent with current traffic forecasts and consider the range of impacts on adjacent community. Request for concurrence approved by the FTA in January 2016. Selected mitigation has been incorporated into Phase 2 design. | <ul style="list-style-type: none"> • File Phase 2 FD drawing showing improvements. • Item Closed |

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|---|---|---|--------------------------------------|-----------------|---|---|
| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| TR-5 | Reston Parkway Station – Improve right turn lane from southbound Reston Parkway to westbound Sunrise Valley Drive. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA in cooperation with VDOT. | Station Opening | MWAA in conjunction with Fairfax County and VDOT has evaluated alternative mitigation measures at the intersection of Reston Parkway and Sunrise Valley Drive that are more consistent with current traffic forecasts and consider the range of impacts on adjacent community. Request for concurrence was approved by FTA in January 2016. Selected mitigation has been incorporated into the Phase 2 design. | <ul style="list-style-type: none"> File Phase 2 FD drawing showing improvements. Item Closed |
| TR-6 | Herndon-Monroe Station – Add left turn lane from southbound Monroe Street to eastbound Sunrise Valley Drive. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA in cooperation with VDOT. | Station Opening | The added left turn lane currently exists as a result of a previous Fairfax County project. | <ul style="list-style-type: none"> Photos filed confirming completion of turn lane. Item closed. |
| TR-7 | Herndon-Monroe Station –Improve right turn lane from eastbound Sunrise Valley Drive to southbound Fairfax County Parkway. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA in cooperation with VDOT. | Station Opening | MWAA in conjunction with Fairfax County and VDOT has evaluated an alternative mitigation measure at the intersection Sunrise Valley Drive and Fairfax County Parkway that is more consistent with current traffic forecasts and considers the range impacts on the community. The preferred revised mitigation significantly reduces impacts and provides more traffic mitigation. Selected mitigation was approved by the FTA in September 2015 has been incorporated into the Phase 2 design. | <ul style="list-style-type: none"> Photos filed confirming completion of turn lanes. Item closed. |
| TR-8 | Herndon-Monroe Station –Modify lane configuration at the Van Buren (Monroe) Street and Herndon Parkway intersection. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA in cooperation with VDOT. | Station Opening | The existing lane configurations are optimized for existing pavement cross section. | <ul style="list-style-type: none"> Filed relevant information from PE traffic study documenting this statement. Item closed. |
| TR-9 | Route 606 Station – Add right turn lane from southbound Route 789 to westbound Route 606. | Provide funding for improvement. Monitor VDOT design and construction activities. | MWAA in cooperation with VDOT. | Station Opening | MWAA in conjunction with Loudoun County evaluated an alternative mitigation measure at the intersection Route 606 and Moran Drive that is more consistent with current traffic forecasts with similar impacts. FTA approved the revised mitigation of adding a second southbound left turn lane, instead of a second right turn lane, in September 2015 and it is being incorporated. | <ul style="list-style-type: none"> File Phase 2 FD drawing showing improvements. Item closed. |
| TR-10 | Consult with VDOT and Fairfax County to refine the design of the reconstructed portion of Route 7 and associated pedestrian facilities and landscaping along Route 7. | Include in design and construction drawings. | MWAA | Design | Construction is complete. Fairfax County and VDOT actively reviewed Route 7 FD plans and have approved roadway configuration in concert with final traffic analysis. The streetscape and median stormwater management facility has been permitted by VDOT and the revised stormwater management plans have been approved by VDCR. Storm drain, ADA ramp and sidewalk work is complete. There are still structure repairs that will be on-going through spring of 2021. | <ul style="list-style-type: none"> Fairfax County, VDCR and VDOT correspondence and approvals filed. Walkdown and file record of report and field photos filed. Item closed. |

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| TR-11 | In the Tysons Corner area, any new pedestrian crossings and modifications to existing pedestrian crossings will be constructed to meet current VDOT design and safety standards, unless a deviation from these standards is approved by VDOT and Fairfax County to improve the pedestrian environment. | Include in design and construction drawings. | MWAA | Design | All designs affecting VDOT roadways and Fairfax County have been reviewed and approved by those agencies. Pedestrian crosswalks at Route 7 intersections of Spring Hill Road and Tyco Road are included in FD and are based on the request from Fairfax County and have been approved by VDOT. Construction is complete as of September 4, 2020. Ramps at the intersection of Old Meadow Road and Route 123 will be complete by December 31, 2020.. | <ul style="list-style-type: none"> Fairfax County, VDCR and VDOT correspondence and approvals filed. Walkdown and file record of report and field photos filed. Item closed. |
| SECONDARY AND CUMULATIVE EFFECTS | | | | | | |
| (Secondary or cumulative effects to the built and natural environment resulting from additional station area development would be mitigated through compliance with Fairfax and Loudoun counties' land use policies and development permitting processes.) | | | | | | |
| CONSTRUCTION EFFECTS | | | | | | |
| CN-1 | Comply with all applicable laws, regulations, and permit conditions in designing and constructing the Project. | Monitor compliance during design and construction. | MWAA | Design and Construction | Ongoing; an environmental compliance program has been defined and is being implemented. Phase 2 design packages to date have complied with the required laws and regulations. When deviations are required, approval is sought from the AHJ prior to permit issuance or construction. | <ul style="list-style-type: none"> File records of audit of D-B contractor environmental program and regular ongoing environmental walkdowns, including field photos. Phase 1 will be closed upon completion of closeout item work. CN-1 will be closed upon completion of Phase 2 construction. |
| CN-2 | Develop Erosion and Sediment Control Plan that complies with state law. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Design and Construction | Phase 1 E&S Control Plans were approved by VDCR sequentially to match design schedules; first approvals were during Fall 2007. Phase 2 E&S Control Plans have been approved by VDEQ. Additionally, VSMP permits have been obtained and SWPPPs have been approved. CRC and HP will both continue to update the SWPPPs as design and construction progress. | <ul style="list-style-type: none"> Phase 1 VDCR-related correspondence, permit close-out documentation, approved E&S Control drawings filed. Phase 1 will be closed upon completion of closeout item work. Filing of Phase 2 VDCR-related correspondence, permit close-out documentation, approved E&S Control drawings is ongoing. CN-2 will be closed upon completion of Phase 2. |
| CN-3 | Develop Stormwater Management Plan and complies with state law. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Design and Construction | All Phase 1 E&S Control and Stormwater Management Plans were approved by VDCR: Route 7; Route 123; I-66/DCR; DIAAH; McLean, Tysons Corner, Spring Hill, Wiehle Avenue, and Greensboro stations; wayside facilities; West Falls Church Yard; and project laydown areas. Remaining Phase 1 construction punch list activities continue to be monitored for compliance. Phase 2 Stormwater Management Plans for Package A and Package P have been approved by VDEQ (and MWAA for Package B). The designs will continue to be coordinated with all of the appropriate agencies as necessary. | <ul style="list-style-type: none"> Phase 1 VDCR/VDEQ-related correspondence, permit close-out activities, and approved E&S Control drawings filed. Phase 1 will be closed upon completion of closeout item work. Phase 2 VDCR/VDEQ-related correspondence, permit close-out activities, and approved E&S Control drawings continue to be filed. Package P will be constructing many of the SWM facilities initially bid to Package A. CN-3 will remain open throughout Phase 2 past the revenue service date as a result. |

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| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| CN-4 | Use Best Management Practices recommended in the Virginia Stormwater Management Handbook and the Virginia Erosion and Sediment Control Handbook, and the Northern Virginia BMP Handbook for stormwater management and groundwater protection during construction. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | <p>BMPs were included and implemented in Phase 1 E&S plans as required and approved by VDCR. DTP prepared a SWPPP. Remaining Phase 1 construction punch list activities continue to be monitored for compliance (See CN-2). The work to convert the West Falls Church Yard swale to a VDOT ditch is complete</p> <p>For Phase 2, Package A, Package B, and Package P, BMPs are being provided as permitted by VDEQ and MWAA, respectively. All E&S Control Plans are being forwarded to VDEQ and MWAA, for Packages A, B, and P, respectively, for approval prior to permit issuance and construction.</p> | <ul style="list-style-type: none"> File record of audits of D-B contractor environmental program, VDCR/VDEQ correspondence and approvals on E&S Control Plans. Phase 1 will be closed upon completion of closeout item work pending a closeout walk. Complete permit inspection close-out upon completion of construction activities for Phase 2. |
| CN-5 | Use Best Management Practices recommended in the Virginia Stormwater Management Handbook and the Virginia Erosion and Sediment Control Handbook, and the Northern Virginia BMP Handbook to minimize stream disturbance during construction. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | <p>BMPs were included in all Phase 1 E&S and Stormwater Management plans and implemented in the field, as required and approved by VDCR. Remaining Phase 1 construction punch list activities continue to be monitored for compliance (See CN-2).</p> <p>For Phase 2, Packages A and B, BMPs have been included within E&S Control and Stormwater Management plans and have been approved by VDEQ (Package A) and MWAA (Package B).</p> | <ul style="list-style-type: none"> File record of audits of D-B contractor environmental program, VDCR/VDEQ correspondence and approvals on E&S Control Plans. Phase 1 will be closed upon completion of closeout item work. Complete permit inspection close-out upon completion of construction activities for Phase 2. |
| CN-6 | Consult with the Virginia Department of Conservation and Recreation and acquire any permits or approvals necessary for construction in floodplains. | Determine requirements during design and in contract specifications. Monitor compliance during construction. | MWAA | Design and Construction | <p>No floodplain changes of greater than 1 foot occurred during Phase 1. All necessary permits and approvals were obtained to perform work in environmentally-sensitive areas during Phase 1. No floodplain changes of greater than 1 foot are anticipated to occur during Phase 2.</p> <p>VDCR previously indicated to MWAA its intent to review only those floodplain impacts that are within the RPA and other similar environmentally sensitive areas. VDCR/VDEQ approved encroachment to one RPA at Innovation Center Station North in February 2016.</p> | <ul style="list-style-type: none"> Related correspondence with VDCR/VDEQ filed. Phase 1 will be closed upon completion of closeout item work. CN-6 will be closed upon completion of Phase 2 construction activities. |

Summary of Mitigation Report

| DULLES CORRIDOR METRORAIL PROJECT MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS | | | | | | |
|---|--|---|--------------------------------------|-------------------------|---|---|
| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| CN-7 | Consult with the Virginia Marine Resource Commission and, if deemed necessary by the Commission, acquire necessary permits for encroachments in, on, or over state-owned rivers, streams, or creeks from the Commission. | Monitor compliance during construction. | MWAA | Design and Construction | <p>MWAA obtained Federal and State approvals/permits for crossings at Difficult Run and Pimmit Run in August 2008 (Phase 1). Stream Crossings at Difficult Run and Pimmit Run are complete.</p> <p>Phase 2 stream crossings at Horsepen Run and at Broad Run were approved by the VMRC via a permit issued in October, 2011. VMRC issued a permit modification on the original permit to include 34.5kV ductbank work at Horsepen Run in December 2014, and modifications on additional ductbank work and a temporary bridge crossing in September 2015. This original permit was also extended by VMRC to October 31, 2018. A permit modification to the VMRC permit was approved in October 2016 for the ductbank (impact by directional bore method) beneath a section of Horsepen Run.</p> <p>A permit modification was approved by VMRC on March 28, 2017 for the installation of two parallel ductbanks under Horsepen Run Lake. A permit modification was approved June 8, 2017 for a temporary diversion of Horsepen Run for in stream culvert replacement work. A permit modification was approved July 6, 2017 for an additional ductbank boring under Horsepen Lake. The VMRC permit was extended through October 31, 2021 via letter dated September 26, 2018</p> | <ul style="list-style-type: none"> • Permitting agencies notified within 30 days of completion of Phase 1 construction. • Phase 1 walkdown inspection(s) documentation and field photos filed. • Phase 1 will be closed upon completion of closeout item work. • Permitting agency to be notified within 30 days of Phase 2 construction completion. • Attend Phase 2 permit close-out inspection with VMRC. • File Phase 2 record of close-out, field photos and agency correspondence. • CN-7 will remain open until construction activities for Phase 2 are complete. |
| CN-8 | Conduct Project in-stream construction activities in low-flow conditions following Virginia Department of Game and Inland Fisheries guidelines. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | <p>Included in Phase 1 construction planning. Stream Crossings at Difficult Run and Pimmit Run are complete.</p> <p>For Phase 2, a permit modification request was submitted to VDEQ and USACE for Package S. The modification was approved in March 2014.</p> <p>A second permit modification request was submitted to VDEQ, VMRC, and USACE in April 2014. VDEQ decided to process the request as a major modification. VDEQ requested additional information, which was provided in September 2014. The modification was issued February 25, 2015.</p> | <ul style="list-style-type: none"> • Phase 1 documentation of requirements for D-B contractor environmental management documentation filed. • Phase 1 will be closed upon completion of closeout item work. • Continue to file documentation of requirements for D-B contractor environmental management documentation on Phase 2. • CN-8 will remain open until construction activities for Phase 2 are complete. |
| CN-9 | Conduct surveys to determine the presence of mussel species six months prior to any construction activities that affect perennial streams. Relocate all encountered mussels to suitable habitat to avoid construction-related impacts. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | <p>For Phase 1, mussel surveys were conducted in March 2009 at Pimmit Run and in July 2010 at Difficult Run; none were found.</p> <p>CRC has coordinated with VDGIF and has agreed to survey for mussels prior to Phase 2 construction activities in perennial streams. A mussel survey was completed in October 2016 at Innovation North. None were found.</p> | <ul style="list-style-type: none"> • Phase 1 mussel survey reports are filed. • Phase 2 mussel survey report has been filed. • DGIF coordination has been filed. • Item Closed. |

Summary of Mitigation Report

| DULLES CORRIDOR METRORAIL PROJECT MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS | | | | | | |
|---|---|---|--------------------------------------|------------------|--|---|
| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| CN-10 | Prepare and distribute information sheet on the identification and treatment of wood turtles to construction contractors. Require contractors to relocate any wood turtles encountered to suitable habitat in the nearest perennial stream under the supervision of a qualified biologist. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | <p>An environmental awareness bulletin has been prepared and distributed. All Phase 1 project employees received training on wood turtles. Work in applicable habitat is complete.</p> <p>For Phase 2, Package A, CRC has prepared and distributed an environmental awareness bulletin. CRC is training all project employees on recognizing and protecting wood turtles. CRC's environmental staff coordinates wood turtle issues.</p> <p>For Phase 2, Package B, wood turtle information is included within HP's Environmental Awareness training.</p> | <ul style="list-style-type: none"> • Sample Phase 1 training materials are filed. • File sample Phase 2 D-B contractor training materials. • Item Closed. |
| CN-18 | Prior to the start of construction activities, conduct surveys (using a qualified and permitted biologist) to determine the presence of wood turtles in the vicinity of Pimmit Run and Difficult Run. Any wood turtles encountered will be safely relocated to a suitable habitat in the nearest perennial stream. The survey and relocation shall be accomplished just before construction in order to prevent turtles from wandering into the Project area. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Pre-construction | For Phase 1, wood turtle surveys were conducted in March 2009 at Scotts Run and Pimmit Run, January 2010 at Stormwater Pond 6, and in May 2010 at Difficult Run; none were present. Work in applicable habitat is complete. | <ul style="list-style-type: none"> • Phase 1 wood turtle survey reports are filed. • Item closed. |
| CN-19 | Minimize impacts to Pimmit Run and Difficult Run during construction. The mitigation of such impacts includes protection of the floodplains and tributaries of these streams. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | Requirement to minimize impacts was included on civil design drawings. Necessary permit approvals were obtained for Pimmit Run and Difficult Run crossings. Work is complete in these areas. | <ul style="list-style-type: none"> • Filed related correspondence and records of permit close-out activities, including field photos. • Item closed. |
| CN-20 | Limit impacts to riparian buffers of 300 feet in width along Pimmit Run and Difficult Run and of 100 feet in width along all other streams, including intermittent streams. Revegetate using native plant materials within permitted levels of disturbance. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | <p>Requirement has been included on civil design drawings. Construction work is being monitored for compliance.</p> <p>For Phase 2, requirements are now being incorporated in civil design drawings and specifications during D-B.</p> | <ul style="list-style-type: none"> • File any relevant records of ongoing walkdowns and field photos. • Phase 1 will be closed upon completion of closeout item work. • CN-20 will remain open throughout Phase 2. |
| CN-21 | Coordinate with the Virginia Department of Conservation and Recreation to ensure that the requirements of the Virginia Erosion and Sediment Control Law are met. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | Maintaining on-going coordination and communication, including joint field inspections with VDCR/VDEQ for both Phase 1 and Phase 2 of the Project. | <ul style="list-style-type: none"> • On Phase 1, permitting agency were notified within 30 days of construction completion and associated walkdown inspection(s) documentation and field photos filed. • Attend permit close-out inspection and file record of close-out, including field photos. • Notify permitting agency of construction completion within 30 days. • CN-21 will remain open until completion of Phase 2. |

Summary of Mitigation Report

| DULLES CORRIDOR METRORAIL PROJECT MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS | | | | | | |
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| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| CN-22 | Coordinate with the Virginia Departments of Environmental Quality and of Conservation and Recreation to ensure that the requirements for the Virginia Pollutant Discharge Elimination System (VPDES) program are met and VPDES stormwater permit for construction is obtained. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | Registered under VDCR General Permit for construction discharges in October 2007, and updated registration in April 2009. VDCR issued a statement indicating renewed eligibility in July 2009 under the VPDES general permit registration. Remaining construction activities continue to be monitored for compliance (See CN-21). For Phase 2, a VSMP General Permit for Construction has been issued for the project and referenced in all plan sets. Monitoring will be an on-going effort as construction continues. | <ul style="list-style-type: none"> On Phase 1, permitting agency were notified within 30 days of construction completion and associated walkdown inspection(s) documentation and field photos filed. Notify permitting agency within 30 days of completion of construction activities. Attend permit close-out inspection with D-B contractor and permitting agency. File related correspondence and records of permit close-out activities, including field photos. |
| CN-11 | Comply with local regulations governing noise and vibration during construction and use construction methods that minimize vibration. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | BMPs and monitoring for noise and vibration were incorporated in DTP's CECP. Fairfax County issued a variance allowing nighttime construction in October 2007 and extended it in September 2008, October 2009, October 2010, October 2011, September 2012, and October 2013. The current variance expired on March 30, 2014. For Phase 2, BMPs and monitoring for noise and vibration have been incorporated in CRC's EMP and HP's EMP. CRC obtained a noise ordinance waiver from Fairfax County on August 3, 2016 to allow for the nighttime construction activities at the Herndon-Monroe Park and Ride Lot (paving, marking, utility relocation, and MOT. CRC also obtained a noise waiver for the construction of a Pedestrian Bridge over Sunrise Valley Drive at the Innovation Center station in 2017. | <ul style="list-style-type: none"> Phase 1 Fairfax County Noise Variance correspondence filed. Phase 1 will be closed upon completion of closeout item work. File Noise Variance correspondence with Fairfax County, Loudoun County and Town of Herndon, as applicable. CN-11 will remain open until completion of Phase 2. |
| CN-12 | Comply with VDEQ requirements for fugitive dust control (9 VAC 5-50-60 et. seq.) and open burning (9 VAC 5-40-5600 et. seq.). | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | Dust control has been incorporated into construction for Packages A and B. Open burning is not permitted. Construction activities are being monitored for compliance. For Phase 2, BMPs and monitoring for fugitive dust and open burning have been incorporated into CRC's EMP and HP's EMP and into the construction E&S Control Plans for each Package. Construction activities are being monitored for compliance. | <ul style="list-style-type: none"> Continue to monitor dust control efforts during field inspections and audits of D-B contractor's environmental program. File dust control related correspondence and audit reports/field photos. Phase 1 will be closed upon completion of closeout item work. CN-12 will remain open until completion of Phase 2. |

Summary of Mitigation Report

| DULLES CORRIDOR METRORAIL PROJECT MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS | | | | | | |
|---|--|--|--------------------------------------|-------------------------|--|---|
| Mitigation ID | Mitigation Commitment¹ | Implementation and Monitoring | Responsible Party² | Timing | Status | Mitigation Close-out Activities |
| CN-13 | Prepare maintenance of traffic plans to address construction-related traffic management and detours. | Develop maintenance of traffic plans and monitor compliance during construction. | MWAA in coordination with VDOT. | Design and Construction | <p>MOT report and plans were developed during PE for Phase 1 in February 2006. Detailed plans were submitted to VDOT as part of VDOT permitting of construction. Contractor MOT plans were approved by VDOT for localized activities. Construction work is being monitored for compliance. Phase 1 is continuing to do MOT plans for task orders with VDOT approval.</p> <p>For Phase 2, Package A, CRC's MOT plans have been and continue to be coordinated with VDOT and MWAA prior to permit issuance or construction.</p> <p>For Phase 2, Package B, construction entrance to the site is being maintained in accordance with MOT plans and is being coordinated with Route 606 VDOT activities.</p> <p>Phase 2, Packages P, G and K will develop their own site-specific MOT plans as required by their contracts.</p> | <ul style="list-style-type: none"> • VDOT Land Use Permits and MWAA Construction Permits are not issued without an approved MOT plan – no individual documentation needed. • File relevant D-B contract Division 01 requirements. • Phase 1 will be closed upon completion of closeout item work. • CN-13 will remain open until completion of Phase 2. |
| CN-14 | Maintain access (pedestrian and vehicular) to existing businesses during construction. Communicate with affected businesses and residents in order to minimize construction effects. | Develop outreach program and monitor compliance during construction. | MWAA | Construction | <p>Access to all businesses and residential properties has been maintained during Phases 1 and 2 in accordance with adopted outreach plans for each phase. Continuing to talk to businesses and residents affected by task order work, or near Phase 1 close-out construction.</p> <p>For Phase 2, access requirements coordination with relevant AHJs is ongoing and will be implemented during construction.</p> <p>For Phase 2, Package A, CRC's plan for MOT is in place. MOT report and plans to be developed. Detailed plans were submitted to applicable agency as part of permitting. CRC's MOT plans were approved by applicable agency for localized activities. A construction hotline has been established.</p> <p>For Phase 2, Package B, a community outreach program has been established and procedures have been implemented.</p> | <ul style="list-style-type: none"> • Phase 1 will be closed upon completion of closeout item work. • File Phase 2 Outreach Program documents. • File relevant D-B Contract requirements. • CN-14 will remain open until completion of Phase 2. |
| CN-15 | Engage affected stakeholders to participate in the development of mitigation measures for construction effects and maintenance of traffic plans. | Develop outreach program and monitor compliance during design and construction. | MWAA | Design and Construction | <p>MWAA continues to coordinate Phase 1 closeout task orders with VDOT.</p> <p>In Phase 2, Packages A and B, there is ongoing outreach to affected businesses, residents and commuters continued by MWAA, CRC and HP. In the past 5 years, more than 900 outreach sessions have been held. Monthly traffic and construction notifications average 150. A 24-hour hotline is available to the public. The Outreach team and the Contractor continue to inform nearby businesses and residents of ongoing work.</p> | <ul style="list-style-type: none"> • Phase 1-related documents filed. • Phase 1 will be closed upon completion of closeout item work. • File Phase 2 Outreach Program documents. • File relevant D-B Contract requirements. • CN-15 will remain open until completion of Phase 2. |
| CN-16 | Coordinate construction activities with VDOT for Commonwealth-owned roadways and MWAA for Dulles Airport property, including the DIAAH. | Monitor compliance during construction. | MWAA in coordination with VDOT. | Construction | <p>VDOT and MWAA review designs and issue permits as required. MWAA continues to prepare MOT plans for Phase 1 closeout task orders. VDOT approves all MOT (except where MWAA approves it on the DIAAH).</p> | <ul style="list-style-type: none"> • File relevant cooperative agreements • Phase 1 will be closed upon completion of closeout item work. • File relevant D-B contract Division 01 requirements. |

Summary of Mitigation Report

| DULLES CORRIDOR METRORAIL PROJECT MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS | | | | | | |
|---|--|---|--------------------------------|--------------|---|--|
| Mitigation ID | Mitigation Commitment ¹ | Implementation and Monitoring | Responsible Party ² | Timing | Status | Mitigation Close-out Activities |
| CN-17 | Comply with federal, state, and local regulations governing the use and handling of hazardous materials during construction. | Include requirements in contract specifications and monitor compliance during construction. | MWAA | Construction | <p>D-B Contractor compliance on Phase 1 was maintained during construction per DTP's CECP. In March 2011, DTP obtained its own EPA SQG ID number. In November 2011, MWAA changed its status from a LQG to a CESQG, now recognized as a VSQG.</p> <p>D-B Contractor compliance on Phase 2, Package A, is being maintained during construction per CRC's EMP. In June 2016, CRC changed its status from a SQG to a CESQG and back to a SQG in October 2019, for Phase 2, Package A of the Project.</p> <p>For Phase 2, Package B, HP intends to obtain an EPA ID number only when and if necessary.</p> | <ul style="list-style-type: none"> • File records of related hazardous materials correspondence and training records. • Phase 1 will be closed upon completion of closeout item work. • CN-17 will remain open until completion of Phase 2. |

Notes:

¹ See the Final Environmental Impact Statement and the 2006 EA for complete descriptions of the mitigation measures.

² Additional agencies may monitor compliance or review activities associated with permits and regulatory approvals; up to June 2007, the DRPT was the lead sponsoring agency and the primary responsible party for implementing mitigation commitments. However, effective June 28, 2007, the MWAA became the lead agency and is now the responsible party instead of DRPT. MWAA is aware that as a condition of any grant, FTA will require that the project sponsor construct the Project in accordance with this ROD and the environmental record referenced herein.

Acronyms/Abbreviations Used in Status Column:

AHJ - Authority Having Jurisdiction
 BMP - Best Management Practices
 CBPA - Chesapeake Bay Preservation Act
 CECP - Construction Environmental Control Plan
 CESQG - Conditionally Exempt Small Quantity Generator
 CIT - Center for Innovative Technology
 CRC - Capital Rail Constructors
 D-B - Design-Build
 dBA - A-weighted sound level
 DCR - Dulles Connector Road
 DIAAH - Dulles International Airport Access Highway
 DRPT - Virginia Department of Rail and Public Transportation
 DTP - Dulles Transit Partners
 EA - Environmental Assessment
 EMP - Environmental Management Plan
 EPA - Environmental Protection Agency
 E&S - Erosion and Sediment
 FAA - Federal Aviation Administration
 FD - Final Design
 FDP - Final Development Plans
 FTA - Federal Transit Administration

HP - Hensel Phelps
 HUC - Hydrologic Unit Code
 ID - Identification
 JPA - Joint Permit Application
 LQG - Large Quantity Generator
 MWAA - Metropolitan Washington Airports Authority
 MOT - Maintenance of Traffic
 NVRPA - Northern Virginia Regional Park Authority
 PE - Preliminary Engineering
 ROD - Record of Decision
 RPA - Resource Protection Area
 RPZ - Runway Protection Zone
 SE - Special Exception
 SHPO - State Historic Preservation Office
 SWPPP - Stormwater pollution prevention plan
 SQG - Small Quantity Generator
 TBS - Tie-Breaker Station
 TPSS - Traction Power Sub-Station
 TSA - Transportation Security Administration
 USACE - U.S. Army Corps of Engineers
 U.S. DOT - U. S Department of Transportation

VAC - Virginia Administrative Code
 VDCR - Virginia Department of Conservation and Recreation
 VDEQ - Virginia Department of Environmental Quality
 VDGIF - Virginia Department of Game and Inland Fisheries
 VDHR - Virginia Department of Historic Resources
 VDOT - Virginia Department of Transportation
 VMRC - Virginia Marine Resources Commission
 VPDES - Virginia Pollutant Discharge Elimination System
 VSQG - Very Small Quantity Generator
 WMATA - Washington Metropolitan Area Transit Authority
 W&OD - Washington and Old Dominion
 WQIA - Water Quality Impact Assessment



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