



Dulles Corridor Metrorail Project

PHASE 2

MONTHLY COST AND SCHEDULE UPDATE

AS OF JANUARY 31, 2019

MARCH 2019



DULLES CORRIDOR
METRORAIL PROJECT



Phase 2 Cost Summary

January Expenditures	\$	13.7 Million
Total Expenditures	\$	2.032 Billion
Total Budget	\$	2.778 Billion
Total Forecast	\$	2.778 Billion



Phase 2 Contingency Allocation

<u>Total Contingency</u>	<u>\$ 551.5 Million</u>
Contingency Allocated through December 2018	\$ 277.0 Million
Contingency Allocated in January 2019	\$ 16.0 Million
Total Contingency Allocated through January 2019	\$ 293.0 Million
<u>Remaining Contingency</u>	<u>\$ 258.5 Million</u>



January Contingency Allocation

Total Contingency Allocated in January 2019	\$ 16.0 Million
Package A – Capital Rail Constructors (CRC)	\$9.3 Million
<ul style="list-style-type: none">• 1) Roofer Wage Scale Modification; 2) Differing Site Condition (DSC) - Geotechnical at Utility Crossing (Part B); 3) DSC- II-B Revisions to Pipe Quantities; 4) Disposition of Fabricated FIB96 Girders; 5) Herndon Station Reconfiguration; 6) Modification of Wiehle Avenue Train Control Room; 7) Ashburn Station Safe Dispersal Area	\$ 8,610,600
<ul style="list-style-type: none">• Paper Copies of Submittals	\$650,000
<ul style="list-style-type: none">• Miscellaneous Changes (changes less than \$100,000)	(\$7,000)



Guideway & Stations Design-Build Activities

Current

- All Design Packages completed and issued for construction.
- 11 Design Changes reviewed/processed by Metropolitan Washington Airports Authority (Airports Authority) in February.
- 44 Identified Design and Field Changes in Progress:
 - 14 yet to be submitted by CRC
 - 16 in Review process (6 with Airports Authority and on schedule, 10 with CRC)
 - 14 in Issued for Permit/Issued for Construction production process
- 10 submittals approved by Airports Authority Building Codes Department and 7 by the Department of General Services in February.
- 134 Supplier Submittals reviewed/processed in February.
- 30 Non-Conformance Reports resolved in February.



Guideway & Stations Design-Build Activities

Upcoming

- Electricians continue to pull cables from the guideway to the Traction Power Substation (TPSS), Automatic Train Control and Communications rooms on the west at grade section of the Project.
- Stations – Continue ceiling, electrical, plumbing, escalator and elevator installation and testing. Loudoun Gateway pedestrian bridge tying into the new Loudoun County erected parking garage was set by the Loudoun County contractor. Innovation ceiling panels are being installed throughout the stations and bridges as Quality and Code inspections are completed and passed. Roofing of the vault roofs at Ashburn and Loudoun Gateway Stations is continuing during good weather.
- Track – At grade track is being adjusted on the west and cable trough lids are being installed after all necessary cables are pulled through the areas between stations and wayside facilities.



Reston Elevator Glass Panel Installation





Assemble Elevator Cabs at Herndon North





Install Curtain Wall Frames at Herndon North





Installing 30 inch Storm Drain at TPSS #12





First Test Trains for Dynamic Testing on Phase Two Guideway





Backfilling Innovation North Sound Wall





Installing Elevator Doors at Loudoun Gateway Station





Installing/Welding Handrails at Ashburn Station





Installing Framing and Panels Over Gates at Dulles Station





Package B



January Contingency Allocation

Package B – Hensel Phelps (HP)	\$ 6.7 Million
• Global Time Extension Offered	\$5,130,150
• Fire Pump and Fire Protection Systems (settled at \$2,162,000)	\$1,322,500
• Service and Inspection Building (SIB) Elevator Change - Americans with Disabilities Act Accessibility Guidelines	\$144,505
• Fall Protection for Skylights (settled at \$168,000)	\$105,000
• Miscellaneous Changes (changes less than \$100,000)	\$ 46,970



Rail Yard and Maintenance Facilities Design-Build Activities

Current

- All Design Submittal Packages complete & issued for construction.
- 88 Design and Field Changes In Process:
 - 71 under comment resolution phase
 - 17 received and reviewed by the Airports Authority in January
- 49 Construction Submittal Packages reviewed/processed and 105 Submittals were in comment resolution phase in January.
- 72 Discrepancy Reports to date:
 - 23 currently open
 - 1 resolved in January
- 67 Issues Requiring Resolution (IRR) to date:
 - 25 open
 - 42 resolved



Washington Metropolitan Area Transit Authority (WMATA) Rail Yard & Maintenance Facility Design- Build Activities

Current Construction - Buildings

- Interior work on Maintenance of Way Building (MWB) and SIB office spaces are nearly complete except for the installation of WMATA procured modular furniture. HP is conducting walk throughs of spaces in preparation of the final punchlist.
- Trainwash Facility equipment and track installation continues.
- Embedded track installation in the SIB has begun.
- BBM Railway Equipment is working to complete fabrication and installation of car hoist equipment in the SIB, replacing the shutdown Macton Corporation.
- Awaiting HP plan to bring Bridge Cranes into Buy America compliance.



WMATA Rail Yard & Maintenance Facility Design-Build Activities

Construction – Site and Yard

- Landscaping and stormwater quality structure construction continues.
- Remedial trackwork, end loop tracks, replacing running rail and restraining rail has begun.
- Transportation Building interior and platforms work continues.
- Salt Dome construction near completion.
- Security fencing near completion.
- The guardhouse at the permanent entrance is to be delivered and installed in the near future.



Painting Fire Mains in the SIB





Beginning Paint Booth Installation in SIB





Lubrication Tank Room in MWB





Installing Hydraulic Elevator Pump in MWB





MWB Upper Mezzanine Office Carpet Installation





Transportation Building Mechanical Room





Bio-Retention Pond Under Construction





SIB Machine Shop



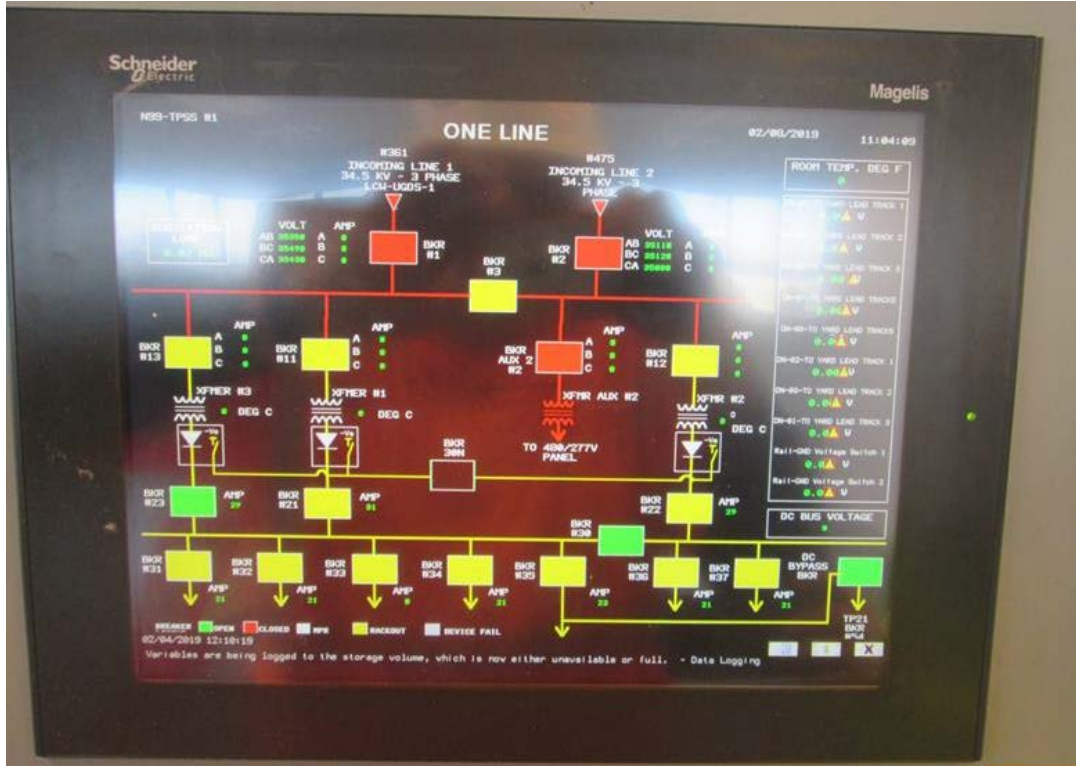


MWB Maintenance Bay





Power Interface Panel in Yard Control Room





Salt Dome





METROPOLITAN
WASHINGTON
AIRPORTS AUTHORITY

MWAA.COM
DULLESMETRO.COM



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@Dulles_Airport

@Dulles_Toll_Road



reaganairport

FlyDulles

dullestollroad





**DULLES CORRIDOR METRORAIL PROJECT - PHASE 2
MONTHLY COST SUMMARY
As of January 31, 2019**

Description	Budget Amount	Total Forecast	Expenditures to Date		Contract NTP	Contract Substantial
			Amount	Total Percent		
		b	c	c/b		
DULLES CORRIDOR METRORAIL PROJECT - PHASE 2						
DESIGN-BUILD Package A	1,193,777,000	1,419,118,184	1,225,873,729	86%	8-Jul-13	7-Aug-19
DESIGN-BUILD Package G	0	6,966,000	413,071	6%	22-Aug-18	11-Aug-20
DESIGN-BUILD Package P*	0	26,586,161	1,605,731	6%	14-Jun-18	11-Jun-21
DESIGN-BUILD Package B + S	273,280,530	299,516,749	246,903,523	82%	18-Nov-13	23-Dec-18
ROW	58,600,000	57,316,200	25,884,819	45%	8-Jul-13	30-Sep-17
WMATA	305,324,718	280,759,119	172,738,865	62%	N/A	3-Feb-20
PRELIMINARY ENGINEERING	75,000,000	75,000,000	73,266,056	98%	15-Jul-09	30-Dec-13
PROJECT MANAGEMENT	320,802,137	354,432,160	284,892,735	80%	N/A	2-Jan-19
CONTINGENCY	551,451,179	258,540,991				
TOTAL FOR DCMP	2,778,235,564	2,778,235,564	2,031,578,529			

*Final Completion extends to 6/12/2023 due to additional 2 years of maintenance



**DULLES CORRIDOR METRORAIL PROJECT - PHASE 2
CONTINGENCY ALLOCATION
As of January 31, 2019**

Description	Amount in million (\$)	
DULLES CORRIDOR METRORAIL PROJECT - PHASE 2		
Total Contingency	\$	551.5
Contingency Allocated through December 2018	\$	277.0
Expended Contingency in January 2019*	\$	16.0
Total Contingency Allocated through January 2019	\$	293.0
Remaining Contingency	\$	258.5

*See table below for details

Package A (CRC)		\$9.3 Million
Bundled changes: 1) Roofer Wage Scale Modification; 2) Differing Site Condition (DSC) - Geotechnical at Utility Crossing (Part B); 3) DSC- II-B Revisions to Pipe Quantities; 4) Disposition of Fabricated FIB96 Girders; 5) Herndon Station Reconfiguration; 6) Modification of Wiehle Ave Train Control Room; 7) Ashburn Station Safe Dispersal Area	\$	8,610,600
Paper Copies of Electronic Submittals	\$	650,000
Miscellaneous Changes (changes less than \$100,000)	\$	(7,000)
Package B (HP)		\$6.7 Million
Global Time Extension	\$	5,130,150
Fire Pump and Fire Protection Systems (Settled at \$2,162,000)	\$	1,322,500
Service and Inspection Building (SIB) Elevator Change - Americans with Disabilities Act Accessibility Guidelines	\$	144,505
Fall Protection for Skylights (Settled at \$168,000)	\$	105,000
Miscellaneous Changes (changes less than \$100,000)	\$	46,970



Airport	Project No	Description	Budget Amount
DULLES CORRIDOR METRORAIL PROJECT - PHASE 2			
DESIGN-BUILD Package A			
DCMP	5401	Package A - Mainline (CRC)	1,177,777,000
DCMP	5406	Commodity Escalation	16,000,000
DCMP	5408	Contingency amount	
DCMP	5408	Secondary mitigation amount	
SUBTOTAL - DESIGN-BUILD Package A			1,193,777,000
DESIGN-BUILD Package B+S			
DCMP	5402	Package B - Yard	269,280,530
DCMP	5402	Package S - Yard Site Preparation	incl above
DCMP	5406	Commodity Escalation	4,000,000
DCMP	5408	Contingency amount	
DCMP	5408	Secondary mitigation amount	
SUBTOTAL - DESIGN-BUILD Package B+S			273,280,530
ROW			
DCMP	5404	Land & Relocation	47,225,000
DCMP	5404	Support Services	11,375,000
DCMP	5408	Contingency	
SUBTOTAL - ROW			58,600,000
WMATA			
DCMP	5405	WMATA Vehicles	205,868,200
DCMP	5405	WMATA other costs	90,205,767
DCMP	5405	WMATA Non Revenue Vehicles	9,250,751
DCMP	5408	Contingency	
SUBTOTAL - WMATA			305,324,718
PRELIMINARY ENGINEERING			
DCMP	5406	PRELIMINARY ENGINEERING	75,000,000
SUBTOTAL - PRELIMINARY ENGINEERING			75,000,000
PROJECT MANAGEMENT			
DCMP	5406	MWAA Staff	34,000,000
DCMP	5406	MWAA Allocated Cost	13,560,000
DCMP	5406	Rent	9,200,000
DCMP	5406	Relocation, IT, Furniture	2,700,000



Airport	Project No	Description	Budget Amount
DCMP	5406	MWAA ODCs	17,060,000
DCMP	5406	Insurance (OCIP)	49,082,137
DCMP	5406	PMSS	140,000,000
DCMP	5406	VDOT	10,000,000
DCMP	5406	DRC Prof Svcs	2,500,000
DCMP	5406	PSI (Special Inspections)	14,000,000
DCMP	5406	DGS	2,000,000
DCMP	5406	TRIP II	2,000,000
DCMP	5406	Dept of Conservation & Recreation (DCR)	2,000,000
DCMP	5406	MWAA Permits/Inspection	4,000,000
DCMP	5406	Power for System Testing	16,000,000
DCMP	5406	Historical/Archaeologic	2,700,000
DCMP	5408	Contingency	
SUBTOTAL - PROJECT MANAGEMENT			320,802,137
CONTINGENCY			
DCMP	5408	Contingency - Package A	289,067,231
DCMP	5408	Secondary mitigation amount - Package A	0
DCMP	5408	Contingency - Package B	109,006,387
DCMP	5408	Secondary mitigation amount - Package B	0
DCMP	5408	Contingency - ROW	5,860,000
DCMP	5408	Contingency - WMATA	30,532,472
DCMP	5408	Contingency Project Management	116,985,089
SUBTOTAL - CONTINGENCY			551,451,179
TOTAL FOR DCMP - PHASE 2			2,778,235,564