



National Institutes
of Health



MD 355 CROSSING – UPDATE

OCTOBER 4, 2016



PURPOSE AND NEED

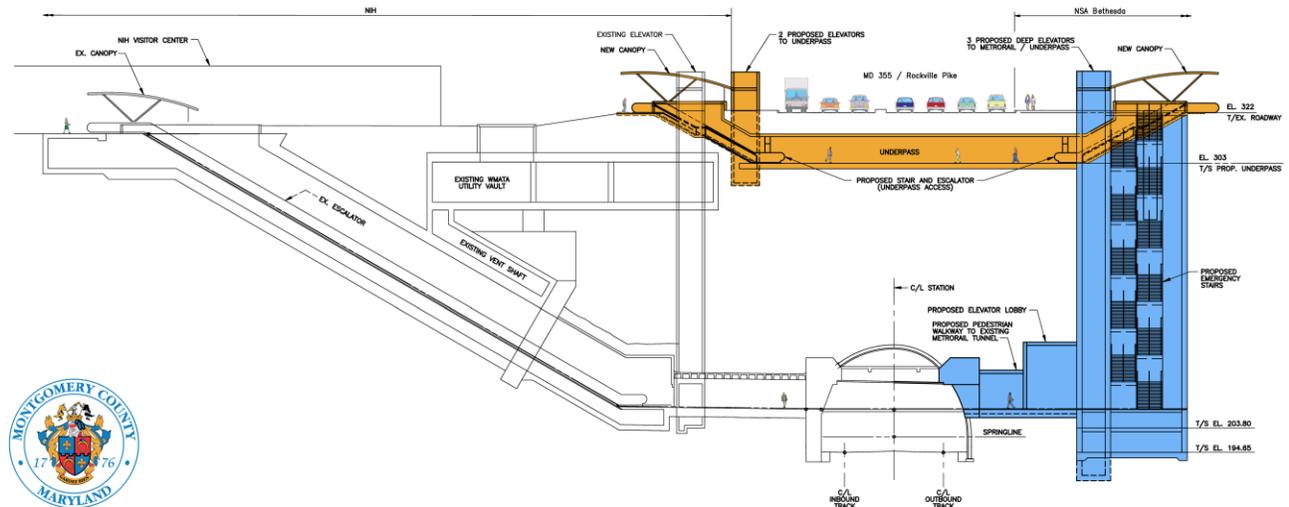
- Enhance Access to Mass Transit
- Improve Mobility and Safety of Pedestrians and Bicyclists Crossing MD 355
- Improve Traffic Operations at the Existing Intersection of South Wood Road, South Drive and MD 355



CONCEPTUAL SOLUTION

- Shallow Underpass
 - Surface Transit Users
 - Pedestrians
 - Cyclists
 - Community
- Deep Elevator Shaft
 - WMATA Red Line Patrons

Montgomery County Department of Transportation



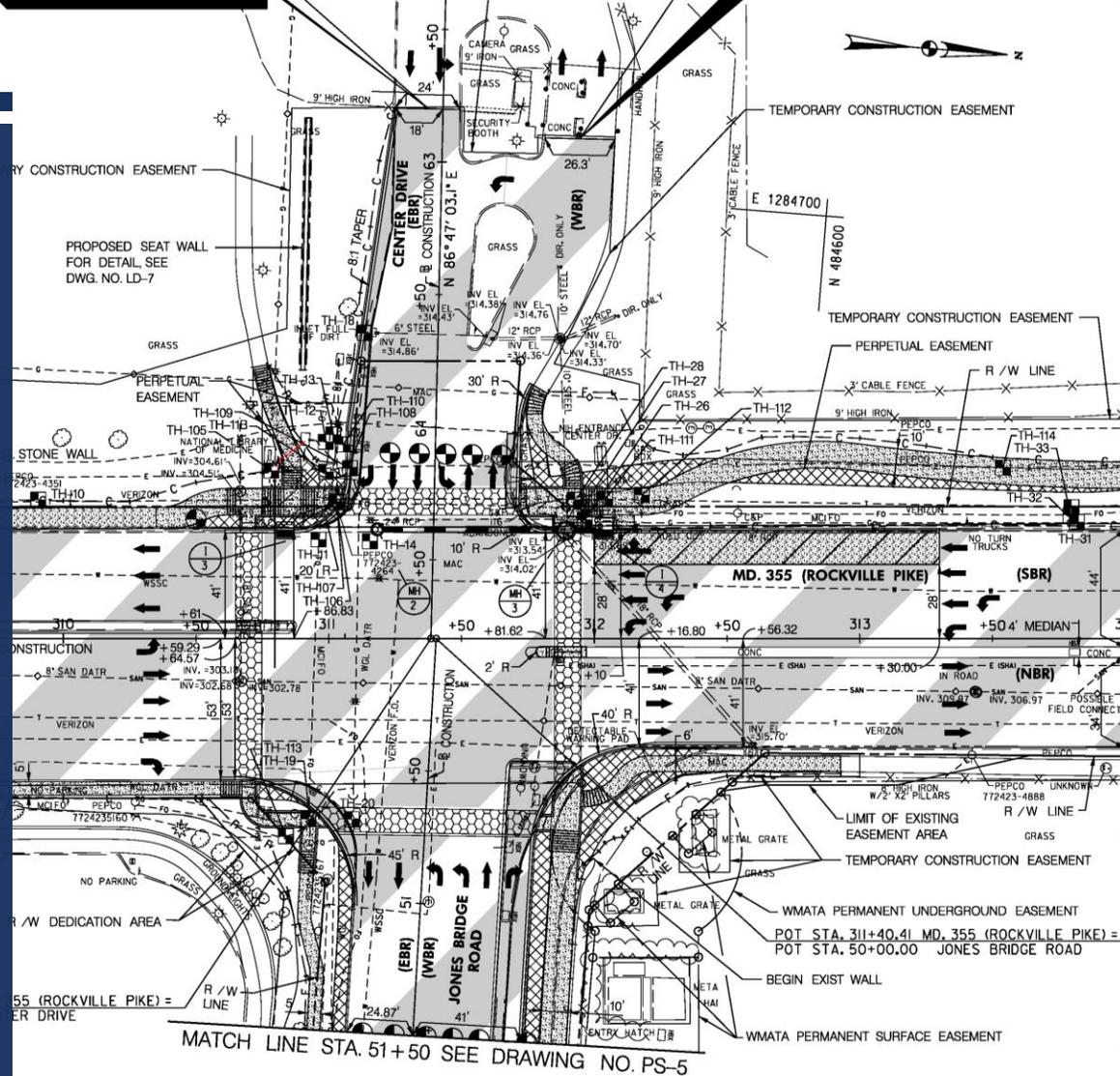
URS

MD 355 Crossing (BRAC)

Revised February 2013

PROJECT SCOPE

- SHA Intersection Improvement
- MD 355 and Jones Bridge Road



MATCH LINE STA. 314+00 SEE DRAWING NO. PS-3

MATCH LINE STA. 51+50 SEE DRAWING NO. PS-5

NOTE: FOR ADDITIONAL STAKEOUT INFORMATION, SEE INTERSECTION DETAIL ON DWG. NO. DE-5

CONCRETE BUS PAD

DATUM: NAD 83/91 Horizontal
NAVD 88 Vertical

ROADWAY LEGEND	R/W PLAT NUMBER	CROSS REFERENCE	REVISIONS
	55635	ITEM	SHEET NOS.

31 LF	MD 355 - STA. 310+86.83, LT. TO CENTER DR.
140 LF	CENTER DR. - STA. 62+80 TO STA. 63+82.98
45 LF	CENTER DR. - STA. 63+82.98 TO STA. 64+21.77, LT. TO STA. 310+86.83
16 LF	CENTER DR. - STA. 64+21.77, LT. TO STA. 310+86.83
19 LF	MD 355 - STA. 311+81.62, TO STA. 311+81.62
123 LF	MD 355 - STA. 312+07, TO STA. 313+00
6 LF	MD 355 - STA. 310+59.29, TO STA. 310+59.29
73 LF	MD 355 - STA. 310+64.57, RT. TO JONES BRIDGE RD.
74 LF	JONES BRIDGE RD. - STA. 50+76.39 TO STA. 50+76.39
61 LF	JONES BRIDGE RD. - STA. 50+76.39 TO STA. 50+76.39
33 LF	MD 355 - STA. 312+16.80 TO STA. 312+16.80

MONOLITHIC CONCRETE MEDIAN 4 FEET (STD. NO. MD 64)

9 LF	MD 355 - STA. 310+65.3 TO STA. 310+65.3
5 LF	MD 355 - STA. 311+78 TO STA. 311+78
14 LF	MD 355 - STA. 311+83 TO STA. 311+83

STANDARD TYPE A 8 INCH X 16 INCH (STD. NO. MD 64)

73 LF	MD 355, STA. 310+67, LT. - CENTER DR.
76 LF	MD 355, STA. 311+90, LT. - CENTER DR.
III LF	MD 355, STA. 310+59, RT. - JONES BRIDGE RD.
56 LF	JONES BRIDGE RD., STA. 50+77, LT., MD 311

REMOVAL OF EXISTING

2 CY	MD 355 - STA. 308+00 TO STA. 310+00
23 CY	JONES BRIDGE RD. - STA. 50+54, LT.
17 CY	JONES BRIDGE RD. - STA. 50+70 TO STA. 50+70
1 CY	JONES BRIDGE RD. - STA. 50+56.19

REMOVAL OF EXISTING

1 CY	MD 355 - STA. 310+40 TO STA. 310+40
1 CY	MD 355 - STA. 310+75 TO STA. 310+75
2 CY	CENTER DR. - STA. 64+04 TO STA. 64+04
2 CY	MD 355 - STA. 311+95 TO STA. 311+95
8 CY	MD 355 - STA. 312+51 TO STA. 312+51
1 CY	MD 355 - STA. 310+75 TO STA. 310+75
5 CY	JONES BRIDGE RD. - STA. 50+82 TO STA. 50+82
5 CY	JONES BRIDGE RD. - STA. 51+00 TO STA. 51+00

GRINDING HOT MIX ASPHALT PAVEMENT

10950 SY	MD 355 - STA. 308+00 TO STA. 310+00
1370 SY	JONES BRIDGE RD. - STA. 50+48 TO STA. 50+48
2149 SY	CENTER DR. - STA. 62+80 TO STA. 63+82.98

NOTE: QUANTITIES ABOVE REFLECT TWO LANE MIX ASPHALT PAVEMENT 0" TO 2"

5 INCH CONCRETE

2589 SF	MD 355 - STA. 308+00 TO STA. 310+00
293 SF	CENTER DR. - STA. 63+78.66 TO STA. 63+78.66
241 SF	CENTER DR. - STA. 63+83.31 TO STA. 63+83.31
2402 SF	MD 355 - STA. 311+72.36 TO STA. 311+72.36
41 SF	MD 355 - STA. 312+06, LT. 45' X 8.4'
1384 SF	MD 355 - STA. 308+00 TO STA. 310+00
256 SF	MD 355 - STA. 310+67.29, RT. TO JONES BRIDGE RD.
300 SF	JONES BRIDGE RD. - STA. 50+91 TO STA. 50+91
1021 SF	JONES BRIDGE RD. - STA. 50+44.94 TO STA. 50+44.94
615 SF	MD 355 - STA. 311+95 TO STA. 312+51



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
HIGHWAY DESIGN

BRAC INTERSECTION IMPROVEMENT
MD 355 & JONES BRIDGE ROAD

ROADWAY

SCALE: 1" = 30' ADVERTISED DATE: MAY 2015

ORIGINAL PROJECT FUNDING

Source	Funding
DOD Office of Economic Adjustment – 355 Crossing	\$40 million
DOD Office of Economic Adjustment – Jones Bridge Road	\$5 million
DOD Defense Access Roads Program	\$28 million
Total	\$73 million

ROUNDED TO NEAREST MILLION

PROPOSALS

Challenge

- Two Proposals Received on 7/17/15
- Both Exceeded Available Funding
- \$46 Million Funding Shortfall

Solution

- Secure Additional Funds
- Negotiated Cost Savings

ADDITIONAL PROJECT FUNDING

Source	Funding
DOD Office of Economic Adjustment – Additional Funding	\$34 million
Repurposed Earmark – Federal funds via SHA	\$2 million
Total	\$110 million
Approximate Remaining Shortfall	\$11 million

ROUNDED TO NEAREST MILLION

DELETE GRANITE FROM UNDERPASS USE ARCHITECTURAL CONCRETE

- Consistent with South Gate
- No Impact to Historic View Sheds
- Saves \$230,000



PRELIMINARY RENDERING FROM RFP – FINAL DESIGN WILL VARY

REDUCE UNDERPASS WIDTH

- Reduces Traffic Impacts (shorter construction)
- Less Rock Excavation
- Less Concrete
- Delete WMATA Tile Floor
- No Impact on Capacity to Move Pedestrians
- Saves \$700,000



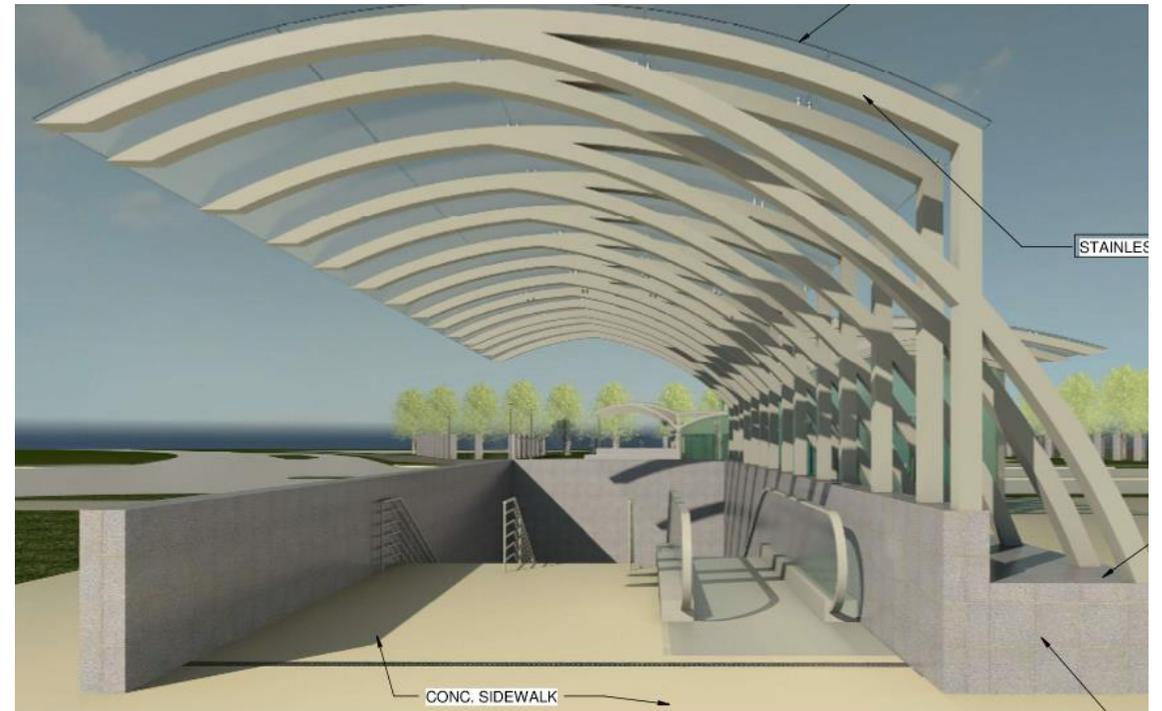
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DELETE UNDERPASS ESCALATORS

- RFP Contemplated One @ Each End (Up Only)
- No Impact on ADA Access
 - ADA Access via Two Elevators @ Each End
- No Impact on Capacity to Move Pedestrians
- Saves \$900,000



PRELIMINARY RENDERING FROM RFP – FINAL DESIGN WILL VARY

DELETE UNDERPASS CANOPIES

- Not Necessary if Escalators are Deleted
- County Will Remove Snow
- Reduces Impacts to Historic Viewsheds
- Saves \$1.5 Million



PRELIMINARY RENDERING FROM RFP – FINAL DESIGN WILL VARY

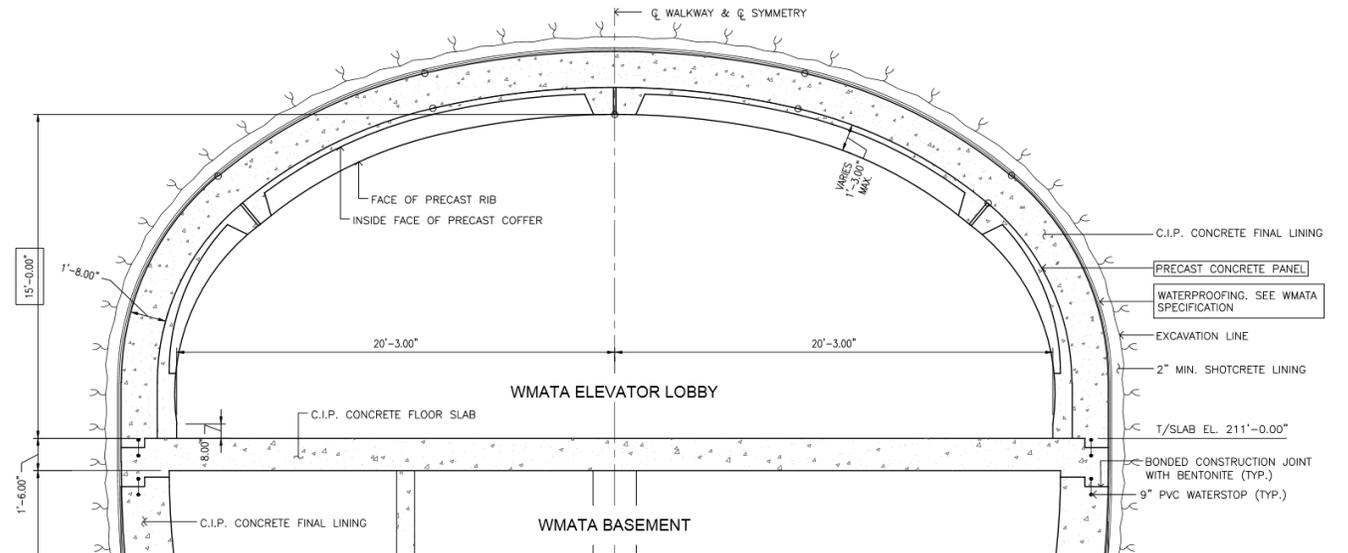
MODIFY CONSTRUCTION METHOD TO ELIMINATE OVERHEAD UTILITY RELOCATION

- Innovative Construction Techniques Under Power Lines
- Greatly Reduces Impacts to NIH
- Adds \$500,000 to Construction Contract
- Saves \$3.5 Million in Utility Relocation Costs
- Net Savings of \$3 Million



CHANGE DEEP SHAFT ELEVATOR LOBBY FINAL LINER

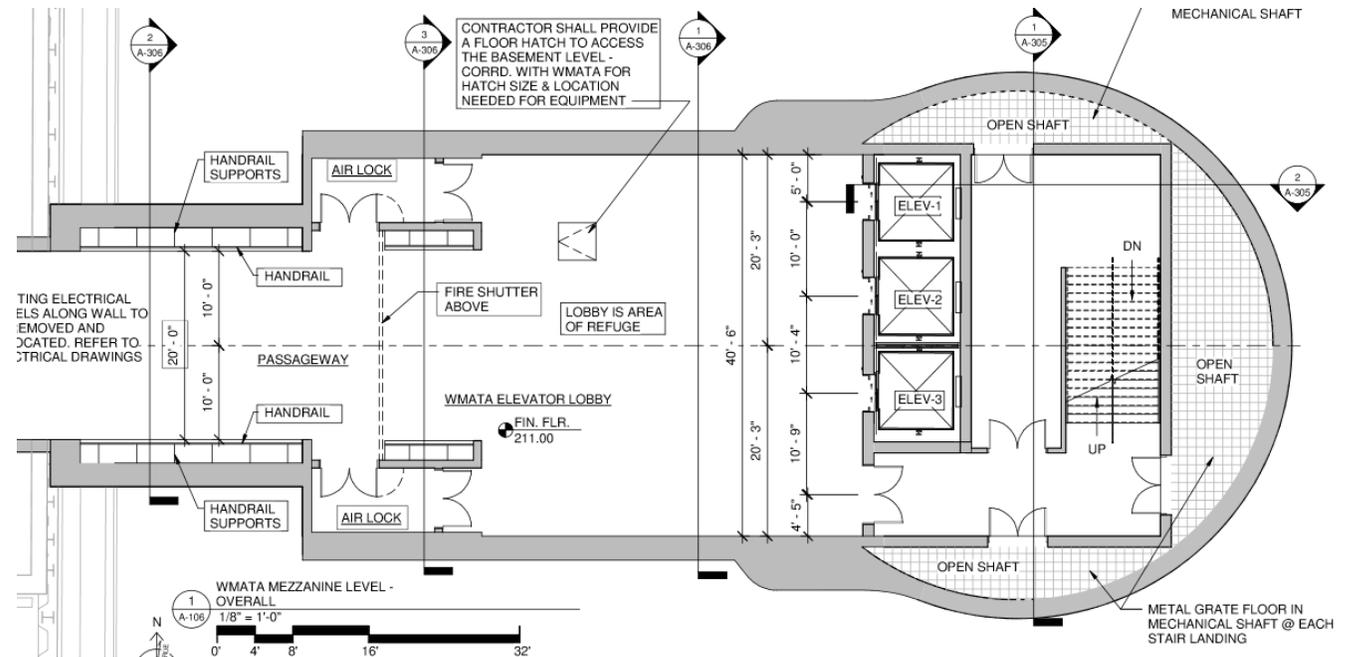
- Existing Mezzanine Ceiling is Drop Spline
- RFP Contemplates Precast Barrel with Ribs & Acoustic Panels
- Provide CIP Concrete with Acoustic Panels
- Saves \$450,000



PRELIMINARY RENDERING FROM RFP – FINAL DESIGN WILL VARY

REDUCE DEEP SHAFT DIAMETER

- Reduces Rock Excavation and Concrete
- Delete One Elevator
 - Two Elevators Provide 2.8x Required Vertical Circulation Capacity
 - No Impact on Safety
- Saves \$4 Million



CURRENT ACTIVITY

- Surveying
- Soil Borings
- Design

UPCOMING CONSTRUCTION

- Early 2017
 - Work Inside NSAB Fence
 - Utility Relocation
- Mid 2017
 - Start Deep Shaft
- Late 2017
 - Start Underpass
- Final Completion – Mid 2020

SCHEDULE SUBJECT TO CHANGE



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