

# Evaluation Matrix (2 of 2)

## ENVIRONMENTAL

	Criterion	Measure	Alt 1 (2 Tracks)	Alt 2 (2 Tracks)	Alt 3A (4 Tracks)	Alt 3B (4 Tracks)	Alt 3C (4 Tracks)	Alt 11A (4 Tracks)	Alt 11B (4 Tracks)
ROW	26. Surface Right-of-Way Acreage Required, by land use type <sup>2</sup>	Acres	Residential: 0 Acres Commercial: 0 Acres Industrial: 0 Acres Other: 0 Acres <b>Total: 0 Acres</b>	Residential: 4.7 Acres Commercial: 0.6 Acres Industrial: 0 Acres Other: 4.1 Acres <b>Total: 9.4 Acres</b>	Residential: 0 Acres Commercial: < 0.1 Acres Industrial: 4.8 Acres Other: 2.4 Acres <b>Total: 7.2 Acres</b>	Residential: 1.9 Acres Commercial: 3.1 Acres Industrial: 5.1 Acres Other: 6.5 Acres <b>Total: 16.6 Acres</b>	Residential: 0.6 Acres Commercial: 1.7 Acres Industrial: 9.5 Acres Other: 4.2 Acres <b>Total: 16.0 Acres</b>	Residential: 5.1 Acres Commercial: 1.7 Acres Industrial: 0.1 Acres Other: 5.3 Acres <b>Total: 12.2 Acres</b>	Residential: 0.3 Acres Commercial: 0.6 Acres Industrial: 2.5 Acres Other: 7.4 Acres <b>Total: 10.8 Acres</b>
	27. Estimated Surface Parcels Impacted	# of Parcels	0	130	10	100	40	160	40
	28. Area of Excavation (including open cut)	Acres	0 Acres	8.23 Acres	8.6 Acres	16.1 Acres	20.0 Acres	8.9 Acres	12.2 Acres
	29. Area of Permanent Open Cut	Acres	0 Acres	Existing openings as they are today; no other permanent open cut	2.8 Acres	9.6 Acres	9.5 Acres	4.1 Acres	4.6 Acres
Community Resources	30. Estimated Residential Building Displacements	# Displaced	0	< 10	< 10	50	20	140	10
	31. Estimated Business Displacements	# Displaced	0	< 5	< 5	10	10	20	15
	32. Estimated Community Facility Displacements <sup>3</sup>	# Displaced	0	1	0	6	1	2	2
	33. Estimated Residential Properties Impacted, but Residence Not Displaced <sup>4</sup>	# of Parcels	0	100	< 5	15	< 5	10	< 5
	34. Estimated Non-Residential Properties Impacted with No Displacement <sup>3</sup>	# of Parcels	0	20	< 5	10	10	15	5
	35. Right-of-Way Impacts within Minority Population Areas	Acres	0 Acres	8.6 Acres	2.5 Acres	12.0 Acres	10.6 Acres	8.0 Acres	3.4 Acres
	36. Right-of-Way Impacts within Low Income Population Areas	Acres	0 Acres	4.1 Acres	2.6 Acres	7.4 Acres	1.7 Acres	5.6 Acres	7.2 Acres
	37. Impacts to Baltimore City's West Baltimore MARC Station Master Plan	Minor Moderate Severe	None – Compatible with West Baltimore MARC Station Master Plan	None – Compatible with West Baltimore MARC Station Master Plan	None – Compatible with West Baltimore MARC Station Master Plan	Moderate – Excavation would impact portions of industrial land proposed for redevelopment. MARC Station could remain between Franklin and Mulberry Streets.	Moderate – Excavation would impact portions of industrial land proposed for redevelopment. MARC Station could remain between Franklin and Mulberry Streets.	Severe – Requires demolition of American Ice Co. and adjacent buildings proposed as central hub of redevelopment efforts. Relocates W. Baltimore MARC station platforms south.	Severe – Requires demolition of American Ice Co. and adjacent buildings proposed as central hub of redevelopment efforts.
	38. Parks Potentially Impacted	# of Parks	0	4 – Eutaw Pl Median Park, Park Ave Median Park, Mt. Royal Median Park, Fitzgerald Park	0	1 – Lafayette and Payson Park	0	0	0
	39. Estimated Area of Parkland Impacted	Acres	0 Acres	0.1 Acres	0 Acres	< 0.1 Acres	0 Acres	0 Acres	0 Acres
Cultural Resources	40. Estimated Historic Buildings Displaced	# of Buildings	0	< 5	< 5	60	30	140	20
	41. Area of Surface disturbance within Historic District	Acres	0 Acres	8.6 Acres – Bolton Hill, Old West Baltimore, and Baltimore & Potomac Railroad Historic Districts	12.0 Acres – Monroe-Riggs, Baltimore & Potomac Railroad, and Midtown-Edmondson Historic Districts	25.3 Acres – Edmondson Avenue, Baltimore & Potomac Railroad, Greater Rosemont, Midtown-Edmondson, and Monroe-Riggs Historic District	20.3 Acres – Baltimore & Potomac Railroad, Edmondson Avenue, Greater Rosemont, Midtown-Edmondson, and Monroe-Riggs Historic Districts	16.0 Acres – Baltimore & Potomac Railroad, Midtown-Edmondson, and Monroe-Riggs Historic Districts	16.4 Acres – Baltimore & Potomac Railroad, Edmondson Avenue, Midtown-Edmondson, and Monroe-Riggs Historic Districts
	42. Known Archaeological Resource Sites Impacted	# of Sites	0	0	0	0	0	0	0
Natural Resources	43. Stream Impacts	Linear Feet	0 Feet	0 Feet	0 Feet	0 Feet	0 Feet	0 Feet	0 Feet
	44. Wetland Impacts	Acres	0 Acres	0 Acres	0 Acres	0 Acres	0 Acres	0 Acres	0 Acres
	45. Estimated Street Trees Impacted	# of Trees	0	80	< 10	< 10	< 10	30	< 10
	46. Forested Land Impacted	Acres	0 Acres	0.1 Acres	1.5 Acres	2.5 Acres	3.7 Acres	1.1 Acres	2.8 Acres
Other Environmental	47. Number of Known Section 4(f) Properties Impacted <sup>5</sup>	Number of Properties	0	8	4	9	7	5	6
	48. Hazardous Materials Sites Identified	# of Low, Medium, and High Priority Sites (and Total #)	N/A	38 Low, 24 Med, 11 High (73 Total)	60 Low, 28 Med, 8 High (96 Total)	72 Low, 34 Med, 9 High (115 Total)	92 Low, 51 Med, 12 High (155 Total)	73 Low, 28 Med, 8 High (109 Total)	73 Low, 28 Med, 9 High (110 Total)
	49. Number of Buildings with Potential Noise Impacts	# of Buildings	0 Severe 0 Moderate	260 Severe 1,300 Moderate	<10 Severe 250 Moderate	180 Severe 1,080 Moderate	110 Severe 980 Moderate	210 Severe 70 Moderate	30 Severe 240 Moderate
	50. Estimated Number of Sites with Potential Vibration Impacts	# of Sites	0	TBD	TBD	TBD	TBD	TBD	TBD
	51. Permanent Visual Impacts	Minor Moderate Severe	None	TBD	TBD	TBD	TBD	TBD	TBD

<sup>2</sup> Does not include existing Amtrak ROW. Includes temporary and permanent

<sup>3</sup> Includes schools, churches, community centers, libraries, hospitals, police and fire stations

<sup>4</sup> Permanent or temporary impacts to property

<sup>5</sup> Includes : NRHP listed or eligible historic districts, and individual properties listed or eligible for NRHP

Note: All surface area impacts based on estimate limit of disturbance for conceptual design. Includes portal area only and does not include vent/egress shafts.

Criteria highlighted in blue are emphasized by the Project Team in the alternatives evaluation.