

ALTERNATIVES RETAINED FOR DETAILED EVALUATION

YELLOW ALTERNATIVE



PURPLE ALTERNATIVE



BROWN ALTERNATIVE



GREEN ALTERNATIVE



RETAINED ALTERNATIVES - COMPARISON OF CULTURAL RESOURCES

ALTERNATIVES	No Build Alternative	YELLOW	PURPLE with spur	PURPLE with spur interchange option 2	BROWN North Option	BROWN South Option	GREEN North with spur	GREEN North with spur interchange option 2	GREEN South with spur	GREEN South with spur interchange option
Potential Impacts on Cultural Resources										
Historic Properties¹										
Count of Properties to be evaluated for Direct Effects ²	0	4	0	0	0	0	0	0	0	0
Count of Properties to be evaluated for Visual and Audible Effects ³	0	13	12	13	9	9	10	11	11	12
Count of Properties to be evaluated for this Alternative ⁴	0	15	12	13	9	9	10	11	11	12
Total Area of Limit of Disturbance (acres)	0	1,073	1,038	1,096	921	907	856	922	840	907
Predictive Model: Pre-Historic Sensitivity in the Limit of Disturbance										
High Sensitivity Area [acres % of total area]	0	16	17	18	20	21	21	21	20	19
Moderate Sensitivity Area [acres % of total area]	0	89	152	157	251	254	228	235	200	206
Low Sensitivity Area [acres % of total area]	0	562	577	618	527	504	591	550	547	597
Nil Sensitivity Area [acres % of total area]	0	204	113	126	103	127	88	101	88	101
Predictive Model: Historic Sensitivity in the Limit of Disturbance										
High Sensitivity Area [acres % of total area]	0	41	7	9	6	5	7	8	5	7
Moderate Sensitivity Area [acres % of total area]	0	307	199	236	216	212	198	236	198	238
Low Sensitivity Area [acres % of total area]	0	514	654	674	691	688	624	663	652	681
Area of Potential Effects										
Number of Historic Properties ⁵	0	15	12	13	9	9	10	11	11	12
Potential Section 4(f) Properties										
Number of Historic Properties ⁶	0	4	0	0	0	0	0	0	0	0

Date of Alternative Design Update	Date of Impact Update	11/23/05		11/18/05		11/22/05		11/18/05		11/22/05	
		Count	%	Count	%	Count	%	Count	%	Count	%
		11	100%	11	100%	11	100%	11	100%	11	100%
		11	100%	11	100%	11	100%	11	100%	11	100%

Note 1: Historic Properties are resources Listed on or Determined Eligible for the National Register of Historic Places based on Consultant Recommendations dated 11/23/2005

Note 2: Properties to be evaluated for Direct Effects include any property within the limit of disturbance for the Alternative and also include situations where demolition of all or some of the contributing components to the resource is proposed

Note 3: Properties to be evaluated for Visual and Audible Effects are located within 600 feet of the centerline of the Alternative

Note 4: Number of Properties to be evaluated for this Alternative reflects the unique number of historic properties with potential direct, visual or audible effects. Because some properties will be evaluated for more than one effect type, this number is NOT the total of the three lines above it.

Note 5: Number of properties Listed on or Determined Eligible for the National Register of Historic Places (Consultant Recommendations) that may be directly, visually or audibly affected by the Alternative (within 600 feet of the centerline). This number is THE SAME as the Number of Properties to be Evaluated for this Alternative (see above)

Note 6: Number of resources Listed on or Determined Eligible for the National Register of Historic Places (Consultant Recommendations) that may be directly affected by the Alternative (within the limit of disturbance). Assumes that Archeological Sites are generally exempted from Section 4(f) protection. This number is THE SAME as the Number of Properties to be evaluated for Direct Effects (see above)

RETAINED ALTERNATIVES - COMPARISON OF ENGINEERING FEATURES

ALTERNATIVE		No Build Alternative	YELLOW	PURPLE	PURPLE with spur interchange option 2	BROWN North	BROWN South	GREEN North	GREEN North with spur interchange option 2	GREEN South	GREEN South with spur interchange option 2
General Considerations		0	\$694	\$515	\$874	\$551	\$541	\$531	\$502	\$507	\$611
ENGINEERING CONSIDERATIONS											
Preliminary Cost (\$ millions)		0	14.4	16.9	16.9	15.5	15.9	17.5	17.5	17.3	17.3
Total length of alternative (miles)		0	1,073	1,038	1,056	921	907	856	922	840	907
Total Area of Limit of Construction (acres)		0	338	137	146	100	102	123	130	122	130
Number of Properties Impacted		0	4	4	4	5	5	5	5	5	5
Interchange(s)											
1	Location(s) Type		Levels Road/SR15 Split Diamond	Levels Road/SR15 Diamond	Levels Road/SR15 Diamond	Levels Road/SR15 Diamond	Levels Road/SR15 Diamond	Levels Road/SR15 Diamond	Levels Road/SR15 Diamond	Levels Road/SR15 Diamond	Levels Road/SR15 Diamond
2	Location(s) Type		North of Middletown Slip Ramps	Armstrong Corner Road Diamond	Relocated US 301 Diamond	SR896 at the base of Summit Bridge Partial Cloverleaf	SR896 at the base of Summit Hill Diamond	Armstrong Corner Road Diamond	Relocated US 301 Diamond	Armstrong Corner Road Diamond	Relocated US 301 Diamond
3	Location(s) Type		SR1 at Boyds Corner Road	SR1 at Boyds Corner Road Directional	SR1 at Boyds Corner Road Directional	SR896 north of Summit Aviation Partial Cloverleaf	SR896 north of Summit Aviation Partial Cloverleaf	Jamison Corner Road Diamond	Jamison Corner Road Diamond	Jamison Corner Road Diamond	Jamison Corner Road Diamond
4	Location(s) Type		SR15/SR896/Choptank Road	SR15/SR896/Choptank Road Diamond	SR15/SR896/Choptank Road Diamond	Jamison Corner Road Diamond	Jamison Corner Road Diamond	SR1 North of Toll Plaza Directional	SR15/SR896/Choptank Road Diamond	SR15/SR896/Choptank Road Diamond	SR15/SR896/Choptank Road Diamond
5	Location(s) Type		Trumpet			SR1 North of Toll Plaza Directional	SR1 North of Toll Plaza Directional				
6	Location(s) Type										
7	Location(s) Type										
Overpass(es)											
1	Location(s) Number		11 Strawberry Lane	11 Strawberry Lane	10 Strawberry Lane	8 Strawberry Lane	8 Strawberry Lane	9 Strawberry Lane	8 Strawberry Lane	9 Strawberry Lane	8 Strawberry Lane
2	Location(s)		Middletown Business & Technology Park	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road	Bunker Hill Road
3	Location(s)		Bunker Hill Road	Bohemia Mill/Armstrong Corner Road	Bohemia Mill/Armstrong Corner Road	Bohemia Mill Road	Bohemia Mill Road	Bohemia Mill/Armstrong Corner Road	Bohemia Mill/Armstrong Corner Road	Bohemia Mill/Armstrong Corner Road	Bohemia Mill/Armstrong Corner Road
4	Location(s)		Broad Street	US 301 Local	Norfolk-Southern Railroad	Old School House Road	Old School House Road	US 301 Local	Norfolk-Southern Railroad	US 301 Local	Norfolk-Southern Railroad
5	Location(s)		Mari Pitt Road	Norfolk-Southern Railroad	SR 896	Churchtown Road	Churchtown Road	Norfolk-Southern Railroad	SR896	Norfolk-Southern Railroad	SR896
6	Location(s)		Existing US 301	SR 896	Jamison Corner Road	Norfolk-Southern Railroad	Norfolk-Southern Railroad	SR896	SR896	SR896	SR896
7	Location(s)		Norfolk-Southern Railroad	Jamison Corner Road	Jamison Corner Road	Raleedge Road	Raleedge Road	Hyetts Corner Road	Hyetts Corner Road	Hyetts Corner Road	Hyetts Corner Road
8	Location(s)		SR896	SR 896	SR 896	SR 896	SR 896	SR 896	SR 896	SR 896	SR 896
9	Location(s)		Jamison Corner Road	Shallowcross Lake Road	Shallowcross Lake Road	Hyetts Corner Road	Hyetts Corner Road	Hyetts Corner Road	Old Schoolhouse Road	Hyetts Corner Road	Old Schoolhouse Road
10	Location(s)		SR896	SR896	SR896	SR896	SR896	SR896	SR896	SR896	SR896
11	Location(s)		SR896	SR896	SR896	SR896	SR896	SR896	SR896	SR896	SR896

Note 1: Cost Estimate includes Right of Way Costs