



US 113 North / South Study

CONTRACT NO. 22-127-01

Comparison of Retained Alternatives



	No-Build	Yellow	Orange	Blue	Green	Purple	Brown
Wetlands and Waters of the US							
Wetlands (acres)	0	1.4	8.5	10.6	1.0	1.4	4.1
Waters of the US (linear feet)	0	689	1,149	1,262	521	346	1,050
Historic Resources							
Number of Historic Properties within Study Area ¹	0	18	6	7	3	4	4
Number of Properties Potentially Subject to Section 4(f) ²	0	8	0	0	0	0	0
Number of Cemeteries ³	0	1	0	0	1	0	0
Archaeological Resources							
Number of Known Archaeological Sites in the Limit of Disturbance ⁴	0	1	1	1	1	1	1
Prehistoric Sensitivity in the Limit of Disturbance ⁵							
High Sensitivity Area (acres / %)	0	7 (1.8%)	16 (2.3%)	19 (3.8%)	4 (1.1%)	3 (1.0%)	8 (2.0%)
Moderate Sensitivity Area (acres / %)	0	45 (12.1%)	70 (10.4%)	59 (11.7%)	22 (5.5%)	22 (5.9%)	55 (14.6%)
Low Sensitivity Area (acres / %)	0	54 (14.3%)	144 (21.2%)	124 (24.8%)	38 (9.7%)	46 (12.0%)	66 (17.4%)
Slight Sensitivity Area (acres / %)	0	270 (71.8%)	449 (66.1%)	297 (59.7%)	332 (83.7%)	310 (81.1%)	250 (66.0%)
Early Historic-Period Sensitivity in the Limit of Disturbance ⁶							
High Sensitivity Area (acres / %)	0	2 (0.4%)	5 (0.8%)	20 (4.1%)	8 (2.1%)	6 (1.5%)	6 (1.7%)
Moderate Sensitivity Area (acres / %)	0	9 (2.3%)	34 (5.0%)	26 (5.2%)	8 (1.9%)	8 (2.0%)	11 (3.0%)
Low Sensitivity Area (acres / %)	0	<1 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Slight Sensitivity Area (acres / %)	0	365 (97.2%)	639 (94.2%)	453 (90.7%)	380 (96.0%)	368 (96.5%)	362 (95.3%)
Later Historic-Period Sensitivity in the Limit of Disturbance ⁷							
Extant Locations ⁸	0	39	34	26	19	17	16
High Sensitivity Locations	0	152	42	48	30	33	42
Moderate Sensitivity Locations	0	5	4	5	3	3	4
Low Sensitivity Locations	0	14	19	18	9	13	11
Section 4(f) Properties							
Number of Publicly-Owned Parks and Recreation Areas	0	0	0	0	0	0	0
Number of Publicly-Owned Wildlife and Waterfowl Refuges	0	0	0	0	0	0	0
Number of Historic Properties ¹	0	8	0	0	0	0	0
Section 6(f) Properties							
Properties purchased by Land & Water Conservation Fund (LWCF) (number)	0	0	0	0	0	0	0
Area (acres)	0	0	0	0	0	0	0
Properties purchased by Delaware Trust Fund (DTF) (number)	0	1	0	0	0	0	0
Area (acres)	0	1	0	0	0	0	0
Natural Areas							
State Resource Areas	0	1	33	36	1	1	1
Natural Areas	0	1	29	30	1	1	1
Rare, Threatened and Endangered Species							
Potential Rare, Threatened and Endangered Species Areas (acres) ⁹	0	1	9	11	1	1	4
Other Considerations							
Agricultural Districts (Ten-Year) (number of properties)	0	0	4	2	1	1	0
(acres within properties)	0	0	39	11	0	0	0
Agricultural Preservation Easements (Permanent) (number of properties)	0	3	3	3	4	5	3
(acres within properties)	0	12	12	12	21	33	12
Forestland: 2002 Land Use (acres)	0	17	79	79	19	18	26
State Forest Lands	0	0	0	0	0	0	0
Property Impacts							
Properties affected (numbers of)	0	342	291	258	194	146	127
Properties affected (total acres)	0	272	664	409	382	370	419
Access Rights							
<i>Acquisitions (numbers of affected properties)</i>							
Residential: total (existing residences/approved lots)	0	29 (29/0)	52 (51/1)	59 (58/1)	59 (28/31)	48 (32/16)	20 (20/0)
Agricultural	0	12	5	5	9	10	17
Commercial	0	35	1	11	3	3	6
Other	0	0	1	1	0	0	0
<i>Modified Access (numbers of affected properties)</i>							
Residential	0	96	6	6	34	26	28
Agricultural	0	30	3	0	27	20	14
Commercial	0	11	2	2	5	4	8
Other	0	53	0	4	2	2	6
Other	0	2	1	0	0	0	0
Cost							
Preliminary anticipated cost range (\$ millions)	0	\$418 - \$512	\$420 - \$513	\$324 - \$395	\$299 - \$365	\$337 - \$411	\$339 - \$415
Livable Delaware							
Consistency with State Strategies and local comprehensive plans ¹⁰	N/A	VERY POOR	FAIR	POOR	GOOD	GOOD	GOOD ¹⁰
Engineering							
Existing US 113/SR 1 length (miles)	12.2	12.2	1.7	6.4	9.9	9.9	11.1
Proposed US 113 off-alignment length (miles)	0.0	0.0	10.8	7.2	4.6	4.6	4.0
Total length of alternative (miles)	12.2	12.2	12.5	13.6	14.5	14.5	15.1

¹ Historic properties are resources listed on or determined eligible for the National Register of Historic Places; eligibility status is based on consultant recommendations, reviewed by DelDOT and SHPO staff, as of January 2007, consensus has been reached on most recommendations. Study area encompasses all properties on tax parcels within 600 feet of the centerline of the alternative.

² Section 4(f) applies to historic properties directly impacted by an alternative; properties evaluated for direct impacts 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.

³ Includes only those cemeteries directly impacted by an alternative.

⁴ Archaeological sites on file with SHPO; most have not yet been evaluated for National Register eligibility; note that the limit of disturbance (here and in subsequent rows) does not include future stormwater management and other needs such as wetland mitigation sites.

⁵ GIS inductive model based on known sites and environmental parameters, intended as a planning tool for estimating the relative likelihood for sites to be present in the limit of disturbance; note that potential archaeological significance has not been assessed; current as of May 2005.

⁶ GIS model based on environmental parameters and current theory regarding early historic settlement, intended as a planning tool for estimating the relative likelihood for sites to be present in the limit of disturbance; note that potential archaeological significance has not been assessed; current as of May 2005.

⁷ Point locations for properties derived from historical maps and documents and assessed for likelihood of survival based on subsequent disturbances; note that potential archaeological significance has not been assessed; includes a 300-foot buffer around each point to account for mapping inaccuracies; current as of May 2005.

⁸ Standing historic-period structures.

⁹ Anticipated impacts to rare, threatened and endangered species based on coordination to date with DNREC. Detailed evaluation and coordination with DNREC and US Fish and Wildlife Service is continuing. The data represented in the potential rare, threatened and endangered (RTE) species areas row are not exhaustive. These data represent known occurrences of RTE species, not potential habitat for RTE species.

¹⁰ Based on consultation with the Office of State Planning Coordination, Kent and Sussex Counties, and the City of Milford; meeting held March 7, 2006. Because the Brown alternative was added after that date, additional consultation is required.



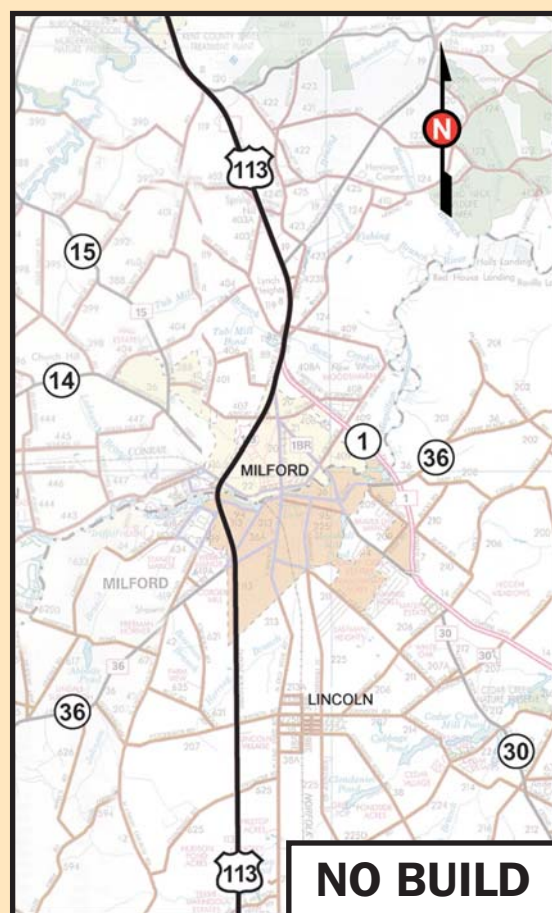
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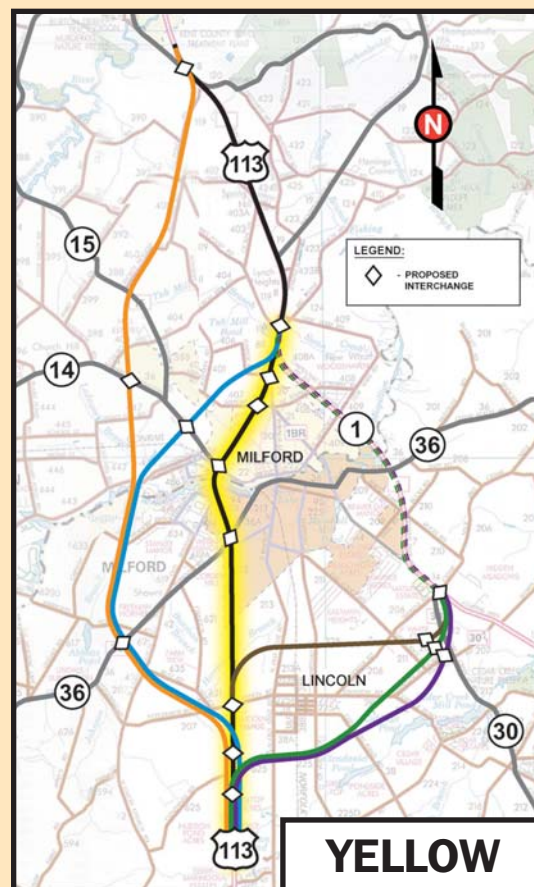


ALTERNATIVES RETAINED FOR DETAILED STUDY

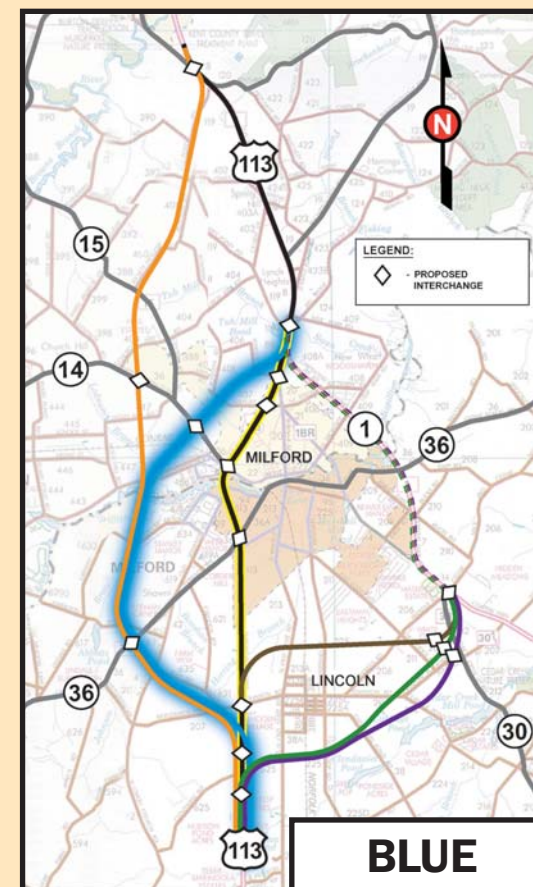
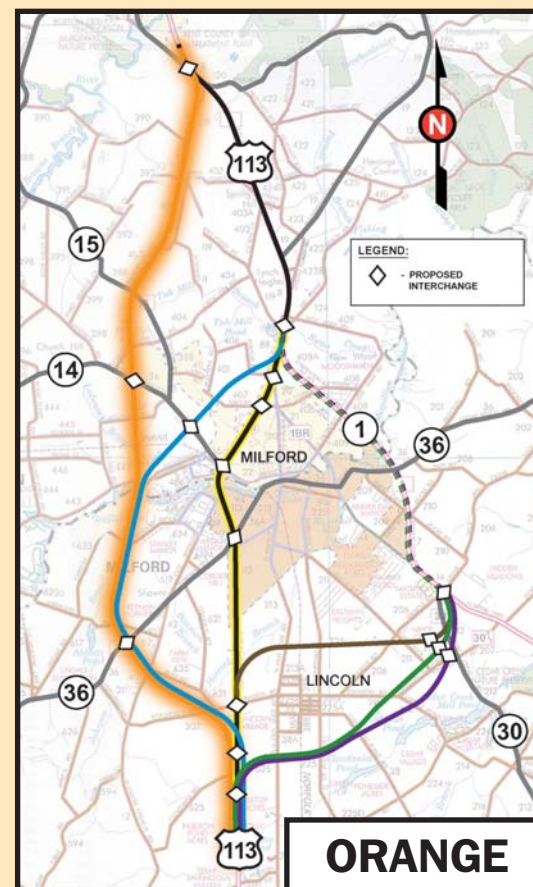
NO BUILD



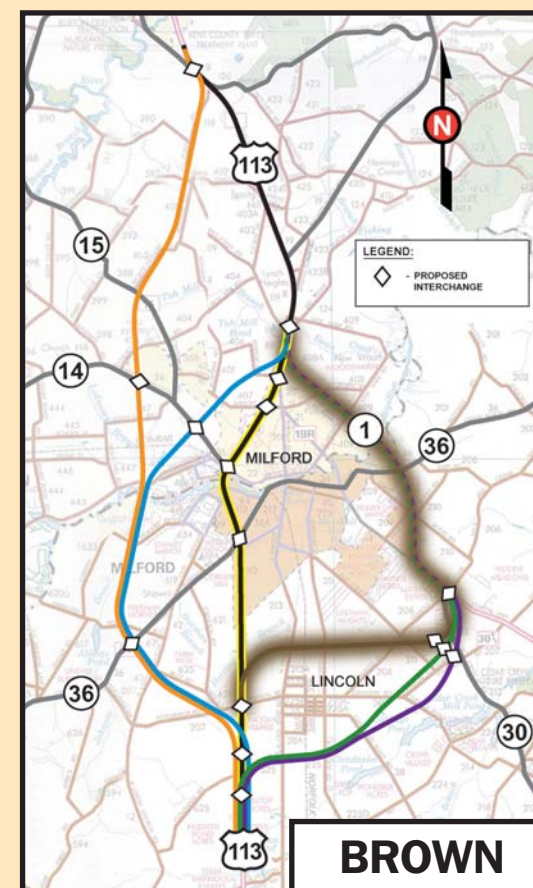
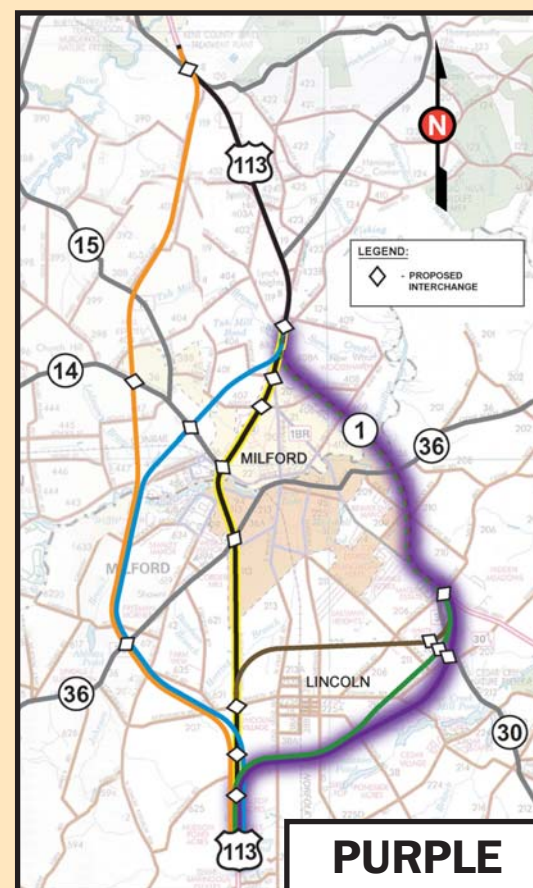
ON-ALIGNMENT



WEST BYPASS ALTERNATIVES



EAST BYPASS ALTERNATIVES



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