



ALTERNATIVE RETAINED FOR DETAILED STUDY - GREEN ALTERNATIVE (EAST BYPASS)



13

113 US 113 North / South Study

DESCRIPTION OF THE GREEN ALTERNATIVE

The Green Alternative begins at the existing split between SR 1 and US 113. It follows the existing SR 1 bypass of Milford as far south as Wilkins Road, including the addition of one lane in each direction to existing SR 1 in this area. (An interchange is proposed at NE Front Street as part of a separate project.) The alignment then curves to the south, with adjacent interchanges with SR 1 and SR 30. The alignment continues to the southwest, north of and roughly parallel to Johnson Road. It crosses Johnson Road just west of Cubbage Pond Road, continuing southwest, south of Lincoln. It crosses Greentop Road and curves to the west, bridging over Greentop Road, the railroad, and Old State Road. It vins into US 113 just south of Haflinger Road at a full interchange.



NATURAL ENVIRONMENT

Advantages

- Lowest wetland impacts
- Wetland impacts to only small medium quality systems on unnamed tributary to Cedar Creek and unnamed tributary to Cubbage Pond
- Low State Natural Area and Resource Area impacts
- Low Waters of the US impacts
- Low potential Federally listed RTE impacts
- Low forest impacts
- Moderate agricultural impacts
- No potential effect on wellhead protection areas
- No potential effect on excellent groundwater recharge areas
 Low potential effect on good groundwater recharge zones

Disadvantages

Extends parallel, for some distance, to Cubbage and Clendaniel Ponds

CULTURAL RESOURCES

Advantages

- No direct impacts to National Register of Historic Places architectural properties
- Low potential indirect effects on National Register of Historic Places architectural properties (approximately 3 properties)
- Low impact to areas with potential high and moderate sensitivity for early historic-period archeological resources
- Lowest impact to areas with potential high and moderate sensitivity for prehistoric archeological resources

Disadvantages

Impacts a known archeological site

COMMUNITY / ENGINEERING / TRAFFIC

Advantages

- Low number of affected properties
- Moderate acres of affected properties
- Takes advantage of existing SR 1 shorter length of construction on new alignment
- Good consistency with Livable Delaware
- Lowest cost alternative
- Low impact to existing businesses
- No school properties would be directly impacted
- All existing roads remain open, passing over or under the alternative
- A moderate number of existing residential properties (28) and farm properties (9) would be acquired
- Access would be modified for a low number of commercial properties (2) and a moderate number of farm properties (5)
- A low number of businesses (3) would be acquired
- Moderate number of existing communities (8) are within 900 feet of the Green Alternative (4 are along existing SR 1)
 - Blueberry Hill Woods Haven Matlinds Estates
 Lincoln Village Meadows at Shawnee Hudson Pond Acres
 - Hudson Mill Knollac Acres II

Disadvantages

Opposed by Greater Lincoln Community

3 commercial properties would be acquired

- Proximity to Lincoln community
- Impacts to Greentop community
- Greater overall length than On-Alignment and West Bypass Alternatives
- A high number of existing residential properties (601) and farm properties (82) lie within 900 feet of the centerline. Note: 418 residential properties and 34 farm properties are located along SR 1
- The Christian Tabernacle and the Pentecostal Church of God are located within 900 feet of the Green Alternative
- The greatest number of vacant lots (31) in approved subdivisions would be acquired
- Access to a large number of residential properties (27), would be modified

RESOURCE & REGULATORY AGENCY COMMENTS

Because the East Bypass Alternatives directly impact less and lower quality natural resources, they are considered less environmentally damaging alternatives than the West Bypass Alternatives.

The environmental resource and regulatory agencies consider the East Bypass Alternatives preferable to the West Bypass Alternatives.

Because the Green and Purple Alternatives directly impact less and lower quality natural resources, they are considered less environmentally damaging alternatives than the Brown Alternative, which impacts and divides the higher quality wooded wetland and habitat complex around Herring Branch.

The environmental resource and regulatory agencies consider the Green and Purple Alternatives preferable to the Brown Alternative

The Green and Purple Alternatives have less potential to affect historic buildings than the On-Alignment and West Bypass Alternatives.

The Green and Purple Alternatives are generally less likely to affect areas with a higher probability to contain prehistoric archeological sites than the On-Alignment, West Bypass, and Brown Alternatives.

PUBLIC COMMENTS TO DATE

- Working Group favors the East Bypass Alternatives and requested the Brown Alternative be evaluated.
- Greater Lincoln Community favors the Brown Alternative and opposes the Green and Purple Alternatives.

Comparison of Retained Alternatives

ovilipai	IOUII UI	nctai	IIGU AI	LGI IIQI	1469		
	No-Build	Yellow	Orange	Dise	Green	Purple	Brown
Wedlands and Waters of the US							
Widenia (sone)		1.4	8.5	10.6	1.0	1.4	4.1
Woders of the LDI disear feet:	0	699	1.109	1,362	521	288	1.060
Historic Resources		- 10					
Number of Historic Properties within Study-Area * Number of Properties Patentially Subject to Section 41) *		1					- 1
Number of Connections *		-					- 1
Archaeological Resources				_			
Number of Known Archaeological Sites in the Limit of Disturbance *	0						
Prehipping Sensibility in the Limit of Disturbance*							
High Sensitivity Area (acres / %)	0	7 (1.8%)	16 (2.3%)	18 (3.8%)	4(1.7%)	2(10%)	10.00
Moderate Sensitivity Area Secret / No	0	49 (12.1%)	72 (30.4%)	\$9 (75,7%)	22 (5.9%)	22 (5.9%)	55 (74.9%)
Low Sensitivity Area (some / %)	0	56 (16.3%)	166 (21.2%)	128 (24.8%)	28 (8.7%)	48 (12,0%)	68 (17.4%)
Stight Sensitivity Area (sores / %)		270 (71.8%)	469 369 750	297 (59.7%)	332 (83.7%)	210 (81.1%)	292 (99.0%)
Early Historic Period Sensitudy in the Limit of Childucturce*							
High Senathdy Area (acres / %)		232.6%	5.00,8%	22 (6.1%)	832.750	4.0.8%	4.(1.7%)
Moderate Sensitivity Area (acres / %) Low Sensitivity Area (acres / %)		9 (2.3%) <1 (0.1%)	24 (6.2%)	28 (6.2%)	8 (1.9%) 0 (0.0%)	8 (0.0%) 9 (0.0%)	11 (3.0%) 0 (0.0%)
Low Sensitivity Area (some / %)				632 (92.7%)			
Stight Sensitivity Area (acres / %)		265 (97.2%)	629 (95.2%)	433 (90.7%)	280 (96.0%)	268 (96.5%)	362 (95.3%)
Later Heteric Period Sensituty in the Limit of Disturbance* Extent Locations*		29	36	28	- 11	17	- 10
High Sendody Locations		192	e e	- 0	30	22	e e
Moderate Security Locations	0	- 1	-	- 1	- 1	- "	- 1
Low Sensitudy Locations	0	· ·	19	- 19	-	- 11	111
Section (III) Properties		-					
	0						- 0
Number of Publicky Owned Widdle and Widerland Refuges	0		6		0	0	0
Number of Historic Properties	0		0		0		
Section 6(f) Properties							
Properties purchased by Land & Wilder Conservation Fund (LMCF) (number)							
Ann (sens)							
Properties purchased by Delaware Trust Fund (2019) (number)			-				
Avec (scree) Valoual Areas		-					
33/6 Resource Areas			22				
NO.01 Area			29	30			- 1
Sars. Threatened and Endangered Species							
Potential Rare. Threatened and Endancered Species Areas (spres) *		1	,	- 11	1	1	4
Other Considerations							
Agricultural Districts (Ten-Year) (number of properties)	0		4	2	1		0
(acres within properties)	0		29				
	0	3	3	3	4	5	3
(acres within properties)	0	12	12	12	21	22	12
Forestand 2002 Land Use (kows)		17	79	71	19	18	26
State Forest Lands	0	0	0	- 0			0
Property Impacts Properties attended (numbers of)		362	291	258	194	101	127
Propriet allegate (Section 1)	0	272	201	479	181	270	479
Access Rights		2/2	1001	422	252	2.0	6.19
Acquisitions (numbers of affected properties)		76	54	74	80	41	- 62
	0	29 (290)	52 (51/1)	59 (55/2)	58 (28(31)	48 (02/08)	22 (2010)
	0	12	5	3	,	10	17
	0	25	1	- 11	2	1	
CBW	0	0	1	1	0		0
Modified Access (numbers of affected properties)	0	20			36	26	29
Recdutor	0	30			27	20	14
Agricultural	0	11	2	2	- 1	4	-
Convertid Cities	0	53		4	2	2	4
Cod		-		-			-
Preliminary articipated cost range (Il millions)		\$418.5511	\$411.5511	\$124 - \$295	\$200, \$205	\$337 - \$411	\$111.5015
Liveble Delineare		2000,8817					2 pt.12
Considency with State Strategies and local comprehensive plans."	NA.	VERY POOR	FAR	POOR	9000	9000	9000"
Engineering							
Existing US 1730R 1 tenuth (miles)							
	12.2	12.2	17	14	12	12	11.1
Resource Last 112 of his principal (wides) Trace length of aboverance length (wides) Trace length of aboverance (wides)		12.2 0.0	1.7 10.8	8.4 7.2	9.3 4.6	13 44	15.1 4.0

**Search of the Control of the Contr