

# ALTERNATIVE RETAINED FOR DETAILED STUDY - YELLOW ALTERNATIVE (ON-ALIGNMENT)

## 113 US 113 North / South Study

### **DESCRIPTION OF THE YELLOW ALTERNATIVE**

The Yellow Alternative improvements begin at the existing split between SR 1 and US 113. The northbound and southbound lanes of US 113 will generally remain in their existing locations north of Haven Lake, but access will be limited throughout Milford. Rehoboth Boulevard will pass over US 113 and connect to Warner Road, with a series of access roads allowing existing businesses to access the roadway network. Ramps on and off the highway will be provided at Airport Road/ NW Tenth Street and SR 14. SR 14 will be relocated to the south, adjacent to the railroad, and US 113 will pass over the relocated highway, the railroad, and Haven Lake on a new bridge.

From Haven Lake to Herring Branch and from Haflinger Road/ Clendaniel Road to Hudson Pond. US 113 will shift off the existing alignment; the existing northbound lane will become a two-way local access road, the southbound lanes will be used for northbound travel, and new southbound lanes will be constructed to the west. New bridges will carry US 113 over Old Shawnee Road, SR 36, and Johnson Road/Fitzgeralds Road. Haflinger Road/Clendaniel Road will cross over US 113 on a bridge. On- and off-ramps will be provided in both directions at SR 36 and Johnson Road/Fitzgeralds Road. Southbound on- and off-ramps will be provided at Old Shawnee Road and Hudson Pond Acres

### NATURAL ENVIRONMENT

Low wetland impacts

**Advantages** 

- Wetland impacts to previously disturbed systems along existing US 113
- Low State Natural Area and Resource Area impacts
- Low forest impacts
- Moderate Waters of the US impacts
- Few agricultural districts and easements impacted
- Moderate potential effect on excellent groundwater recharge areas

#### Disadvantages

- Potential 4(f) impact BMX Park
- Potential Federally listed RTE impact- swamp pink
- Potential effect on Milford wellhead protection area

### **CULTURAL RESOURCES**

#### **Advantages**

Lowest impact to areas with potential high sensitivity for early historic-period archeological resources • Moderate impact to areas with potential high sensitivity for prehistoric archeological resources

#### Disadvantages

- Unavoidable direct impacts to multiple National Register of Historic Places architectural properties -Section 4(f) - fatal flaw for Federal fundin
- Highest potential indirect impacts to National Register of Historic Places architectural properties
- Highest impact to areas with potential high sensitivity for later historic-period archeological resources
- Impacts a known archeological site

### **COMMUNITY / ENGINEERING / TRAFFIC**

#### **Advantages**

- Shortest overall length
- Takes advantage of existing US 113 right of way
- The alignment is at grade as it passes adjacent to residential communities
- No school properties would be directly impacted
- Lowest number of farm properties (33) within 900 feet of Yellow Alternative
- Low number of existing residential properties (29) and farm properties (12) to be acquired

#### Disadvantages

| Kent County              | Sussex County                       |                      |                      |
|--------------------------|-------------------------------------|----------------------|----------------------|
| - Salevan's 2nd Addition | - Hudson Mill                       | - Haven Lake Estates | - Central Parke      |
| - W.&N. Rogers Dev       | - Hudson Pond Acres                 | - Lincoln Village    | (under construction) |
| - North Shores-Sec.1     | <ul> <li>Evergreen Acres</li> </ul> | - Lake Lawn Estates  |                      |

- High number of property acquisitions required (76)
- Highest number of commercial property acquisitions (35)
- Greatest disruption of access to existing businesses (53)
- Very poor consistency with Livable Delaware
- Greatest impact on traffic during construction
- High cost alternative
- The Milford Church of Christ, Faith Independent Baptist Church, the Reformation Evangelical Church and property of the New Hope Baptist Church are located within 900 feet of the Yellow Alternative
- High number of residential properties (603) within 900 feet of the Yellow Alternative
- Requires modifying access to highest number of residential properties (30) and commercial properties (53)
- Six Milford School District properties lie within 900 feet of the centerline including portions of Milford High School, Milford Middle School and the headquarters of the Milford School District



#### February 2007

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### **RESOURCE & REGULATORY AGENCY COMMENTS**

The Yellow Alternative has greater potential effects on historic buildings than the West or East Bypass Alternatives. The Federal Highway Administration has commented that the direct impacts on historic properties make the Yellow Alternative not feasible and prudent under Section 4 (f) of the USDOT Act of 1966.

The East and West Bypass Alternatives are feasible and prudent avoidance alternatives to the Yellow On-Alignment Alternative under the Section 4 (f) federal regulation.

The Yellow On-Alignment Alternative and the East Bypass Alternatives have less overall potential to affect archeological sites than do the West Bypass Alternatives.

#### **PUBLIC COMMENTS TO DATE**

- Opposition to Yellow Alternative voiced by City of Milford, emergency service providers, and some Working Group members.
- Some support and opposition from members of the public.

|   | No-Build | Yellow                   | Orange                 |                       | Green              |                      |             |
|---|----------|--------------------------|------------------------|-----------------------|--------------------|----------------------|-------------|
| nds and Waters of the US  |          | -                        |                        |                       |                    |                      |             |
| Indands (acres)<br>Indens of the US (inner Sect)  | 0        | 1.4                      | 8.5                    | 12.6                  | 1.0                | 1.4                  | 4.1         |
| isters of the Uts (mean teet)<br>50 Resources   | 0        | 635                      | 5,549                  | 1,262                 | 821                | 364                  | 1,060       |
| unber of Historic Properties within Study Area "  |          | - 18                     |                        | 7                     | 1                  | 4                    | 4           |
| unter of Properties Potentially Subject to Section 4() *  |          | 8                        | 0                      | 0                     | 0                  | 0                    | 4           |
|   | 0        | 1                        | 0                      | 0                     | 1                  | 0                    | 0           |
| ratagical Resources   |          |                          |                        |                       |                    |                      |             |
| inber of Known Archaeological Sites in the Limit of Disturbance *                                   | 0        | 1                        | 1                      | 1                     | 1                  | 1                    | 1           |
| ehistoric Sensitivity in the Limit of Daturbance <sup>®</sup><br>High Sensitivity Ama (acres.1 %)   |          | 7.0.850                  | 16 (2.1%)              | 19/3 (54)             | 4/11151            | 2 (1.0%)             | 8/7/065     |
| Moderate Senativity Area (acres / %)  | 6        | 45 (13 15)               | 70(12.4%)              | 59(11,7%)             | 2225 5551          | 22 (5.9%)            | 55.134.855  |
| Low Sensibility Area (scree./ %)  |          | 54 (14,2%)               | 144 (21,2%)            | 124 (24.8%)           | 28 (8,7%)          | 49 (12,2%)           | 69 (17,4%)  |
| Stight ServeDuty Ama (some / %)   | 0        | 270 (71.8%)              | 449 (66.7%)            | 297 (59.7%)           | 222 (K1.7%)        | 372 (81.7%)          | 252 (89.0%) |
|   |          |                          |                        |                       |                    |                      |             |
|   | 0        | 2(0.4%)                  | 5-(0.8%)               | 20 (6.1%)             | £(2.1%)            | 6 (7.5%)             | 8(17%)      |
|   | 0        | 9 (2.3%)<br><1 (2.1%)    | 34 (5.0%)              | 24 (5.2%)<br>0.10.0%) | 8(1.9%)<br>0/0.0%) | 8 (2.0%)<br>0 (2.0%) | 11 (2.0%)   |
| Low Sensitivity Ama (scens./ %)<br>Stote Sensitivity Ama (scens./ %)                                | 0        | <1 (2.1%)<br>265-197-2%) | 0(0.0%)<br>629 (94.2%) | 63.092753             | 2(0.0%)            | 268 (96.5%)          | 262 (95.3%) |
| Stight Senetively Area (acres) 15)<br>for Hestoric-Period Senetivels in the Linit of Disturbance 7  | 0        | sec (87.2%)              | war (412%)             | was (#0.7%)           | .aux (96/3%)       | Jan (86.3%)          | A2 (85.3%)  |
| Extent Locations <sup>1</sup>   | 6        | 29                       | 24                     | 20                    | 11                 | -0                   | 16          |
|   | č        | 152                      | 4                      |                       | 22                 | 22                   | 42          |
|   | 0        | 5                        | 4                      | 5                     | 3                  | 2                    | 4           |
|   | 0        | 54                       | 19                     | 18                    | 9                  | 13                   | 55          |
| n Q1) Properties  |          |                          |                        |                       |                    |                      |             |
| inber of Publicly-Owned Parks and Recreation Areas  | 0        | 0                        | 0                      | 0                     | 0                  | 0                    | 4           |
| nder of Publicly-Owned Wildle and Waterfoul Refuges<br>Inter of Historic Properties                 | 0        |                          | 0                      | 0                     | 0                  | 0                    |             |
| nder af Hotara, Praambes '  | °        |                          | °                      | 0                     | °                  | °                    |             |
| (b) Properties<br>openies purchased by Land & Water Conservation Fund (LWCF) (number)               |          |                          |                        |                       | 0                  |                      | 4           |
| Ana (azes)  |          | 0                        | 0                      | 0                     | 0                  | 0                    | 4           |
| operties purchased by Delaware Trust Fund (DTF) (number)  |          | 1                        | 0                      | 0                     | 9                  | 9                    |             |
|   | 0        | 1                        | 0                      | 0                     | 0                  | 0                    | a           |
| 1.87935   |          |                          |                        |                       |                    |                      |             |
| ra Rassurge Aleas   | 0        | 1                        | 22                     | 26                    | 1                  | 1                    | 1           |
| Cural Areas   | 0        | 1                        | 29                     | 20                    | 1                  | 1                    | 1           |
| Newatered and Endangened Species<br>dential Rare, Threatered and Endangened Species Areas (acres) * |          |                          |                        | *1                    |                    |                      |             |
| nenna Kare, menaenen ans ensemplere aprove Anas (anim)<br>Fenelderetinea                            | -        |                          |                        |                       |                    |                      |             |
| ricultural Districts (Ten Hear) Inumber of properties)  |          |                          | 4                      | 2                     | 1                  | 1                    | 0           |
| (acres within properties)   | 0        | 0                        | 29                     | 11                    | D                  | 0                    | 0           |
| (aurea work) properties)<br>ricultural Preservation Easements (Permanent) (number of properties)    | 0        | 2                        | 2                      | 3                     | 4                  | 5                    | 3           |
| (acres within properties)   | 0        | 52                       | 52                     | 12                    | 21                 | 22                   | 12          |
| restand, 2002 Land Use (acres)  | 0        | 17                       | 29                     | 29                    | 19                 | 11                   | 28          |
| ra Fond Lands<br>In Ingesta   | 0        | 0                        | 0                      | 0                     | 0                  | 0                    | 4           |
| ty impacts<br>contex affected inumbers of   |          | 142                      | 261                    | 19                    | 194                | 146                  | 117         |
| periode anisotial (state acres)   | č        | 272                      | 664                    | 429                   | 282                | 370                  | 419         |
| Rights  |          |                          |                        |                       |                    | 1                    |             |
| quistions (numbers of affected properties)  | 0        | 21                       | 59                     | 78                    | 70                 | 47                   | 42          |
| Residential: total (wisting residences/approved lots)   | 0        | 29, (29, 0)              | 52,551)                | 59(587)               | 58 (28:21)         | 48,0216              | 22(205)     |
|   | 0        | 52                       | 5 N                    | 5                     | 9                  | 12                   | 12          |
| Connectal<br>Other  | 0        | 25                       | 1                      | 55                    | 3                  | 3                    | 6           |
| Other<br>diffed Access Inumbers of affected properties)   |          | 0<br>20                  | 1                      | 1                     | 0<br>34            | 28                   | 28          |
| eter Acons (numbers if attected properties)<br>Resources  |          | 20                       |                        |                       | эн<br>12           | 28                   |             |
| Astorius  | ě        | 11                       | 2                      | 2                     | 5                  | 4                    | 1           |
|   | 0        | 52                       | 0                      | 4                     | 2                  | 2                    | 1           |
| Connecial<br>Other  | 0        | 2                        | 1                      | 0                     | 0                  | 0                    |             |
| iminary antiquated cost carge & millions)   |          | \$118 - \$512            | \$422 - \$512          | \$324 - \$395         | 1299-1365          | \$227 - \$411        | \$319-\$415 |
| Detavare  |          |                          |                        |                       |                    |                      |             |
| winterclar with State Strate-sizes and local comprehensive states <sup>14</sup>                     | NA       | VERY POOR                | FAR                    | POOR                  | 6000               | 6000                 | 9000 "      |
| sting US 113/SR 1 (equilibrium)   | 12.2     | 12.2                     | 12                     | 8.4                   | 9.9                | 1.9                  | 15.1        |
| posed UR 112 cth alignment length (miles)   | 0.0      | 0.0                      | 92.8                   | 72                    | 4.8                | 4.0                  | 4.0         |
|   |          |                          |                        |                       |                    |                      |             |

### **Comparison of Retained Alternatives**