



STATE OF DELAWARE  
**DEPARTMENT OF TRANSPORTATION**

800 BAY ROAD  
P.O. BOX 778  
DOVER, DELAWARE 19903

June 8, 2009

CAROLANN WICKS, P.E.  
SECRETARY

Mr. Hassan Raza  
Division Administrator  
Federal Highway Administration  
300 South New Street, Room 2101  
Dover, DE 19901-6726

JUN 08 2009

Dear Mr. Raza:

The attached information supports the Department's Project Development Committee's environmental determination for the following project:

**24-122-01 NH-K008(5)**  
**SR 1, THOMPSONVILLE GRADE SEPARATED INTERSECTION**

This project will be administered under the FHWA Stewardship Agreement. Your approval in this determination is requested as per 23 CFR Part 771. Please provide a copy of the signed approval form to Terry Fulmer, Environmental Studies Manager at DeIDOT. Thank you.

Sincerely,

Natalie Barnhart  
Chief Engineer

NB:gs

Attachments

cc: Kathy English, Director, Finance (ATT)  
Terry Fulmer, Environmental Studies Manager, Transportation Solutions  
Thad McIlvaine, Project Manager, South Project Development, Transportation Solutions  
Mike Simmons, Assistant Director, South Project Development, Transportation Solutions  
Beth Alexander, Senior Accountant, Finance  
Stephanie Johnson, Senior Fiscal Management Analyst  
Beverly Swiger, Controller, Finance  
Earle Timpson, Assistant Director, Finance

# COMBINED PROJECT INITIATION AND PROJECT NUMBER REQUEST

STATE	FEDERAL
PROJECT NO: <u>24-122-01</u>	PROJECT NO: <u>NH-K008(5)</u>
FUNDING: <u>77/00-ROAD SYSTEM</u> YEAR: <u>2009</u>	FUNDING: <u>Q050-NATIONAL HIGHWAY</u>
COUNTY: <u>KENT</u> DISTRICT: <u>SOUTH</u>	PERCENT: <u>80%</u>
MAINT RD. NO. <u>K 00008</u>	

PROJECT TITLE: SR 1, THOMPSONVILLE GRADE SEPARATED INTERSECTION

DETAILED LOCATION:

INTERSECTION OF SR 1 AND THOMPSONVILLE ROAD (K19), NORTH OF MILFORD

DETAILED WORK DESCRIPTION & TYPICAL SECTION:

CONSTRUCTION OF A GRADE SEPARATED INTERSECTION AT THE INTERSECTION OF SR 1 AND THOMPSONVILLE ROAD. THOMPSONVILLE ROAD WILL BE RELOCATED TO THE NORTH AND EXTENDED TO THE WEST TO THE INTERSECTION OF TUB MILL POND ROAD AND CHURCH HILL ROAD. THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF SR 1 AND THOMPSONVILLE ROAD WILL BE REMOVED.

PROJECT JUSTIFICATION:

PART OF THE CORRIDOR CAPACITY PERSERVATION PROGRAM; WILL ENHANCE SAFETY AND IMPROVE TRAFFIC FROW ALONG SR 1 AND PROVIDE AN ALTERNATE ROUTE TO ACCESS WEST MILFORD.

Operations/Maintenance Cost per Year\$ 0.00      Starting FY: 0000

Project Assigned to: PD SOUTH      \$16,000,000.00      Available for: CONSTRUCTION Phase

Authorization to Proceed: *Paul Ly*      Date: 6/4/09  
(Capital Program Administrator, Finance)

**Environmental:**

- Class I (EIS)     
  Class II (CAT. EX)     
  (c) (d)     
  Class III (EA)     
  4(f) EVALUATION REQUIRED

**Public Involvement:**

- |   |   |   |   |
|---|---|---|---|
| Level A:<br><input type="checkbox"/> Public Hearing<br><input type="checkbox"/> "If" Notice | Level B:<br><input type="checkbox"/> Public Hearing<br><input type="checkbox"/> Public Workshop<br><input type="checkbox"/> "If" Notice | Level C:<br><input checked="" type="checkbox"/> Public Workshop<br><input type="checkbox"/> Mtg. With adjacent Property owners<br><input type="checkbox"/> Public Mtg. By Sponsor | Level D:<br><input type="checkbox"/> No Public Involvement<br><input type="checkbox"/> Mtg. With adjacent Property owners |
|---|---|---|---|

**Planning Projects:**

- Study Only (Environmental impacts and level of public involvement to be determined)

NOTES, COMMENTS MADE BY PROJECT DEVELOPMENT COMMITTEE:

*Natalie Bumbart*

Chairperson, Project Dev. Committee

*6/8/09*

Date

**CATEGORICAL EXCLUSION EVALUATION**

**PROJECT CHECKLIST AND PROJECT LEVEL DETERMINATION FORM**

Project Title: SR 1, Thompsonville Grade Separated Intersection

Project Location: SR 1 @ Thompsonville Road (K19) Intersection

State Contract No.: 24-122-01

Federal Aid No.: NH-K008(5)

<b>ADVERSE IMPACTS/EFFECTS</b>	<b>None</b>	<b>Possible</b>	<b>Probable</b>	<b>Comment</b>
<b>Right-of-Way Requirements</b>				
A. Private			<b>X</b>	The proposed improvements will require 45.13 acres of Right-of-Way from twenty-eight affected properties.
B. Public	<b>X</b>			
C. 4(f)	<b>X</b>			
D. 6(f)	<b>X</b>			
<b>Relocations</b>				
A. Homes			<b>X</b>	The project will require the relocation of s16 residences, 13 of which have been acquired through the Advanced Acquisition process.
B. Businesses	<b>X</b>			
C. Non-Profit	<b>X</b>			
<b>Social Impacts</b>				
A. Local	<b>X</b>			
B. Regional	<b>X</b>			
<b>Environmental Justice</b>				
A. Minority	<b>X</b>			
B. Low-Income	<b>X</b>			
<b>Economic Impacts</b>				
A. Local	<b>X</b>			
B. Regional	<b>X</b>			
C. Statewide	<b>X</b>			
<b>Cultural Resources</b>				
<b>(Listed, nominated, eligible)</b>				
A. National Register	<b>X</b>			Harvey Property K-07503 is eligible to the National Register of Historic Places, however DelDOT, on the behalf on FHWA, and in consultation with DE SHPO concluded that this undertaking will not result in an adverse effect.
B. State Listing	<b>X</b>			
C. Other	<b>X</b>			
<b>Air Quality</b>				
A. Local	<b>X</b>			DelDOT has determined that the construction of this grade-separated intersection is not a "regionally significant" activity.
B. Statewide	<b>X</b>			
<b>Noise</b>				
A. Residential	<b>X</b>			
B. Commercial	<b>X</b>			
C. Sensitive Receptors	<b>X</b>			
D. Other	<b>X</b>			
<b>Hazardous Waste</b>		<b>X</b>		Contract plans and specifications will contain provisions for proper disposal of any contaminated materials that potentially may be encountered.
<b>Water Quality</b>				
A. Surface Water	<b>X</b>			
B. Ground Water	<b>X</b>			
<b>Hydrological Impacts</b>				
A. Stream relocation	<b>X</b>			
B. Stream channelization	<b>X</b>			
C. Stream stabilization	<b>X</b>			
D. Flood Plain	<b>X</b>			

**CATEGORICAL EXCLUSION EVALUATION**

**PROJECT CHECKLIST AND PROJECT LEVEL DETERMINATION FORM**

Project Title: SR 1, Thompsonville Grade Separated Intersection

Project Location: SR 1 @ Thompsonville Road (K19) Intersection

State Contract No.: 24-122-01

Federal Aid No.: NH-K008(5)

ADVERSE IMPACTS/EFFECTS	None	Possible	Probable	Comment
<b>Fish &amp; Wildlife</b>				
A. Endangered Species	X			
B. Habitat	X			
<b>Wetlands</b>				
A. Project Area		X		Wetland impacts total 0.0768 acres.
B. Up or Down Stream	X			
<b>Land Use</b>				
A. Direct	X			
B. Secondary	X			
<b>Natural Resources</b>				
A. Farm Lands	X			
B. Woodlands	X			
C. Conservation Areas	X			
D. Coastal Zone	X			
<b>Modal Choice</b>				
A. Pedestrian	X			
B. Bicycle	X			
C. Mass Transit	X			
<b>Access</b>				
A. Maintenance of Traffic			X	Thompsonville Road will be closed during a portion of the construction duration. A detour will be in place. All MOT and public notification will follow the DE MUTCD,
B. Elderly	X			
C. Handicapped	X			
D. Children	X			
E. Pedestrians	X			
F. Bicyclists	X			
G. Public Transit & those who depend upon it	X			
<b>Permits</b>				
A. ACOE			X	Nationwide Permit
B. Coast Guard	X			
C. DNREC	X			
D. County	X			
E. City or Municipality	X			

*[Signature]*  
7/14/09

Categorical Exclusion Recommendation

*117(c)(1)*

per 23CFR771.

Concurrence: Federal Highway Administration

*[Signature]*  
for Division Administrator

7/15/09  
Date

Comments:

## CATEGORICAL EXCLUSION EVALUATION

**SR 1, Thompsonville Grade Separated Intersection**  
**Contract No. 24-122-01**  
**Federal Aid Number NH-K008(5)**

### **Project Location and Description**

The SR1, Thompsonville Road Grade Separated Intersection is located in Kent County, Delaware, at the intersection of SR1 and K19 (Thompsonville Road). A project location map is attached. The SR1, Thompsonville Road Grade Separated Intersection is a component of the SR1 Corridor Capacity Preservation Program, which addresses the 31-mile section of SR1 between Nassau in Sussex County and the Dover Air Force Base (DAFB) in Kent County. SR1 serves as the main north-south highway access to the Delaware beach resort areas. The Thompsonville Road (K19) intersection is located approximately 12 miles south of DAFB in Kent County. The existing signalized "T" intersection consists of northbound and southbound SR1 and eastbound and westbound Thompsonville Road. SR1 is a four-lane divided highway with uncontrolled access. Existing Average Daily Traffic (ADT) for SR1 is 32,568, future ADT (2030) is 48,000. Thompsonville Road is a two-lane rural roadway that provides access to the communities of Thompsonville and South Bowers Beach. Existing Average Daily Traffic (ADT) for Thompsonville Road is 950, future ADT (2030) is 6,000.

### **Purpose and Need**

The purpose of the SR1, Thompsonville Grade Separated Intersection Project from both a regional and local perspective, is to improve safety and traffic operations within the project area by eliminating the at-grade intersection to address the need to separate through versus local traffic and to ensure safety by restricting access.

The Delaware Department of Transportation (DelDOT) has identified the SR1/Thompsonville Road intersection as one of seven Hazardous Spot Locations as identified in the SR1 Corridor Capacity Preservation Program. For the period from January 2003 to December 2008, this intersection experienced a total of 69 accidents.

From an operational perspective, the SR 1 Thompsonville road intersection began to experience deteriorating Level of Service and Volume to Capacity ratios during the 1990's due mainly to summer peak traffic. Based on analysis for the SR 1 Corridor Capacity Preservation Program, the intersection met failing conditions during AM and PM peak in 2001 and 2005. By the year 2010, the SR1/Thompsonville Road intersection is expected to experience failing conditions even during non-peak seasons. Accordingly this project is consistent with DelDOT's Long Range Transportation Plan, the Dover/Kent Metropolitan Planning organization (MPO) Long Range Transportation Plan, DelDOT's SR1 Corridor Capacity Preservation Program and the Livable Delaware Initiative developed by the Office of State Planning.

## **Summary of Alternatives Considered**

Consistent with the requirements of the National Environmental Policy Act (NEPA), a full range of transportation alternatives were considered during the preliminary study phase of this project as outlined in the Summary of Alternatives report dated February 2003 (revised February 2004). This report further discussed and evaluated the factors that were used to compare alternatives, including: public comments, wetland impacts (based on field delineation), potential impacts to cultural resources, impacts to agricultural preservation properties, construction cost and right-of-way impacts. Based on this analysis, Alternative G was selected as the preferred alternative. Alternative G provides an acceptable level of traffic service, while addressing the project purpose and need and minimizing impacts to the natural, cultural and socio-economic resources (Preferred Alternative Map Attached).

## **SUMMARY OF IMPACTS**

### **Right-of-Way Requirements**

The proposed improvements will require 45.13 acres of Right-of-Way from 28 affected properties.

### **Relocations**

The project will require a total relocation of 16 residences, 13 of which have been acquired through the Advanced Acquisition process. Two of the remaining relocations are pending in the Advanced Acquisition process and the final relocation will be acquired through the normal Real Estate process once Final Right of Way plans are complete. All properties have been and will continue to be acquired in accordance with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

### **Social Impacts**

The project area was evaluated to determine potential disruption to neighborhoods, communities and quality of life. Two communities are found within the project study area: Colony West and Lynch Heights. Colony West is located west of SR1, south of the proposed intersection, and is comprised of high-density residential areas adjacent to low density residences, with some commercial areas. Lynch Heights is located east of SR1, south of the proposed intersection and is comprised of low-density residential areas. Analyses of community disruptions included determining if the project's completion would result in dividing or bypassing a neighborhood. In addition, preserving the quality and character of a neighborhood was examined by assessing the effect of the project on access and traffic on the communities. Based on these analyses, the project would generally improve the quality of life and is not anticipated to impose any local or regional impacts on the surrounding communities.

The percentage of minority population in each of the census blocks varies within the study area (5.6%-35.4%). On average, the study area census blocks contain a lower minority percentage (22.8%) than the average for the State of Delaware (25.4%) and the average for Kent County (26.5%).

The census block within the project study area with the smallest low-income population was 5.4% while the largest low-income population was 8.5%. The median household income for the

study area is \$43,753, which is higher than the Kent County median Household income of \$40,950 (U.S. Census Bureau - 2000 Census).

Environmental Justice requires that minority and low-income communities are specifically included in public participation and outreach programs. Public workshops were held on this project to allow for comments and questions from the general population. No concerns were raised with regard to low income and minority population issues at any of the workshops. The project will not negatively impact any Environmental Justice communities, including minority or low-income populations.

The SR 1, Thompsonville Grade Separated Intersection project area is dominated primarily by agricultural land uses, with residential land uses along Thompsonville Road and residential and commercial land use adjacent to SR1.

As an intersection improvement, a primary purpose of which is to improve safety and mobility, the project is consistent with the planned future land uses for the project area.

Thru traffic on SR 1 will be maintained throughout the construction duration, however the project will require periodic lane restrictions on SR 1. A detour will be required on Thompsonville Road in order to construct a portion of Thompsonville Road, Ramp A and Ramp B. The detour will close Thompsonville Road from Jenkins Pond Road to SR 1 to all except local traffic. Access will be maintained on all roads to all businesses and residences throughout the duration of the contract. Businesses and residences located adjacent to the work zone will be provided forty-eight (48) hour prior written notice of the start of construction, construction and schedule details as well as contact information. Maintenance of traffic and public notification requirements will comply with the current Delaware Manual on Uniform Traffic Control Devices (MUTCD). Some of the specific requirements are called out in the general contract plan notes. More specific Maintenance of Traffic (MOT) plan details, in conformance with the MUTCD, will be submitted by the contractor at the project's preconstruction meeting. In addition, the District Maintenance Office will submit weekly traffic reports to the Transportation Management Center (TMC), DelDOT public relations and the Public Works Offices for the City of Milford and Kent County. Lanes closures will also be posted on the Department's website.

The project is consistent with the bicycle network being planned for this area of Kent County. Once the grade separation is built this stretch of SR 1 would be a limited access facility that typically does not allow pedestrian or bike traffic. The project includes a bridge over SR 1 on Thompsonville Road with shoulders to allow for safe passage of bicyclists.

## **Cultural Resources**

A historic structures survey and Phase I archeology survey were initially conducted to identify historic properties under 36 CFR 800.4. Further archeological survey was completed including a Phase 1A Cultural Resources Assessment and Phase I Archeological survey of those portions of the Area of Potential Effect (APE) not previously surveyed. Though the three above referenced reports recommended no structures or archeological sites as eligible to the National Register of Historic Places (NRHP), the Phase I Architectural report conducted for the Architectural Properties in the Milford Study Area/U.S. 113, which encompassed the Thompsonville project area, determined that the Harvey Property K-07503 was eligible for listing in the NRHP. The Harvey Property is within the Thompsonville project's APE.

The Harvey Property is impacted by the SR 1 Thompsonville project, however, DeIDOT, on the behalf on FHWA, and in consultation with the Delaware State Historic Preservation Office (SHPO) concluded that this undertaking will not result in an adverse effect. The SHPO has concurred with this finding (Finding of No Adverse Effect Approved August 15, 2008, letter attached). The agencies' decision for no adverse effect is based on the nature of the undertaking, project location and the eligible properties' current setting, as well as the landscaping design plan to reduce the view-shed impact to the site. Despite new visual components caused by a new bridge and roadways, the introduction of visual elements does not change or adversely affect the historic character or history of the fruit stand, the one contributing feature of the property fronting on SR 1. Construction of the project will require only a minor Temporary Construction Easement from the Harvey Property, therefore, the SHPO has also concurred that the conditions at 23CFR774.13(d) apply. As a result the project is exempt from the Section 4(f) approval process. (letter attached).

### **Air Quality**

The SR 1 Thompsonville Grade Separated Intersection is located within the U.S. Environmental Protection Agency (EPA) designated Kent County, Delaware Non-attainment Area for Ozone. This project is a safety project and the proposed construction parameters of this project will not add any vehicle miles traveled in the project area. This project was deemed "Not Regionally significant" by the Delaware Interagency Transportation Conformity Workgroup and therefore would not trigger a new regional analysis under the rules for transportation conformity. In concurrence with the EPA and the Delaware Department of Natural Resources and Environmental Control (DNREC), FHWA and FTA have determined that the Air Quality Conformity Determination - Kent County Portion of the 2008-2013 Delaware Capital Transportation Program for the Kent County, Delaware Ozone Non-attainment Area adequately address and meet the requirements as specified in the November 1993 Federal Conformity Rule and it's subsequent amendments. The existing Air Quality Conformity determination for Kent County, Delaware will stay in effect until Jan 9, 2010 or until such time as a new regional analysis is deemed necessary. This project is identified in the current Capital Transportation Program (CTP) FY 2009-2014, the State Transportation Improvement Plan (STIP) and the Transportation Improvement Plan (TIP) approved on October 14, 2008.

At a project level, there will be no meaningful changes in traffic volumes, vehicular mix, location of the existing facility or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such, this project will generate minimal air quality impacts for the Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxics (MSAT) concerns. Consequently, this project is exempt from an analysis for MSATs.

Some temporary degradation in air quality may result from construction activities. This condition will be remedied at the completion of the project.

### **Noise**

For the purpose of this project, a Noise Sensitive Areas (NSA) is defined as picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals. Six NSAs were identified for this project. The projected design year 2025 noise levels indicate that the 67 dBA Noise Abatement Criterion (NAC) will be exceeded at four (4) out of the six (6) NSAs, for both the No-Build and the build alternatives. As the 67 dBA NAC is currently exceeded at these

NSAs and the noise levels will not increase by 10 dBA or more, these four (4) NSAs are not considered impacted.

Temporary increases in noise levels may be attributed to construction activities. This condition will be remedied at the completion of the project.

### **Hazardous Waste**

AN prepared an Environmental Assessment Report for the Thompsonville Service Road Project was prepared in August 2004. That report concluded that there are six properties within the project limits that are currently used, or were likely used in the past, as automobile dealerships/service or auto repair operations. Therefore, based on the increased potential for encountering petroleum contaminated soil and/or groundwater, the recommended contract item and specification to remove and dispose of any contamination has been added to the contract in accordance with all Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), and Department of Natural Resources and Environmental Control (DNREC) requirements.

### **Water Quality**

A stormwater management plan has been developed in accordance with DNREC criteria to minimize adverse effects to water resources. The plan includes measures to address both quantity and quality controls that: capture and treat at least the first inch of runoff from a storm event; maintain groundwater recharge volume; have 24-hour retention of the one year storm event; and prevent an increase in the frequency and magnitude of overbank flooding generated by the project. Adverse impacts to water quality during construction will be minimized through strict adherence to DelDOT erosion and sediment control procedures.

### **Threatened and Endangered Species**

Coordination with DNREC's Natural Heritage and Endangered Species Program (DNHP) and the U.S. Fish and Wildlife Service (USFWS) was conducted to determine if any state or federal threatened or endangered plants, animals, or natural communities were known to be present within the proposed project area.

As stated in DNREC letter dated January 9, 2004, there are no records of state-rare or federally listed plants, animals or natural communities located at this project site. Also, according to USFWS letter dated February 9, 2004, their database indicated that no proposed or federally listed endangered or threatened species are known to exist within the project impact area with the exception of occasional transient individuals. Therefore, no Biological Assessment (BA) or further Section 7 Consultation with the USFWS is required. The National Marine Fisheries Service (NMFS) has indicated that no threatened and endangered species within the purview of NMFS was found within the project area (Letters Attached).

### **Wetlands**

An inventory of existing conditions in the project area was conducted to identify potential wetland areas. This inventory included review of the USFWS's National Wetland Inventory (NWI) Mapping, DNREC's System Wide Monitoring Program (SWMP)

wetland mapping (Frederica, DE), the Soil Survey of Kent County and field reconnaissance surveys. On-site wetland investigations were conducted throughout the study area. Three small wetland areas were identified and delineated.

Based on the U.S. Army Corps of Engineers (USACE) requirements, there are three "Waters of the U.S." identified within the study area. A detailed discussion of the "Wetlands and Waters of the U.S." is provided under a separate cover in a report entitled "Wetlands and Waters of the U.S." Identification and Delineation Report (December 2003, DRAFT). The Thompsonville wetland boundaries were verified by the USACE through a jurisdictional determination (JD) on December 3, 2004.

The total area of impacts to wetlands is less than one-tenth of an acre for this project, so no mitigation is necessary. The project will be permitted using USACE Nationwide Permit 23. Since the drainage area is less than 800 acres the project is consistent with the provisions of Delaware Code Chapter 72, Section 7217, Special Exemption (a), as amended by Senate Bill 186 and a DNREC Subaqueous Lands permit is not required.

The required permits should be routine and will be obtained during the Final Design Phase of the project.

## **CONCLUSION**

The SR 1 Thompsonville Grade Separated Intersection project adequately meets the project needs, including reducing congestion and improving the safety of the intersection while maintaining the rural character of the corridor. Based on the above and supported by the attached CEE checklist, it can be concluded that no adverse social, economic, or environmental effects will occur.

We recommend a Categorical Exclusion classification, Class II, per 23 CFR 771.117(d)(1).

Prepared by:  
B. Thad McIlvaine, P.E., Project Manager  
Transportation Solutions, South Design