

***SR 26, ATLANTIC AVENUE
FROM CLARKSVILLE TO ASSAWOMAN CANAL***

***ENVIRONMENTAL ASSESSMENT
and
SECTION 4(f) EVALUATION***

May 2008



***DelDOT Contract Number: 24-112-10
Federal Aid Project Number ESTP – S026(6)***



*Department of Transportation
Federal Highway Administration*

FEDERAL HIGHWAY ADMINISTRATION

DELMAR DIVISION

SR 26, Atlantic Avenue

From Clarksville to Assawoman Canal
Sussex County, Delaware

ADMINISTRATIVE ACTION

ENVIRONMENTAL ASSESSMENT
and
SECTION 4(f) EVALUATION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
and
DELAWARE DEPARTMENT OF TRANSPORTATION

Submitted Pursuant to: 42 U.S.C. 4332(2)(c); 49 U.S.C. 303
23 U.S.C. 128(a) and CEQ Regulations (40 CFR 1500 et seq)

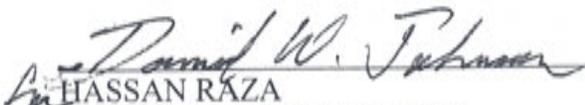
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Date



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6/2/2008

Date

SUMMARY

*SR 26, Atlantic Avenue from Clarksville to Assawoman Canal
Environmental Assessment and Section 4(f) Evaluation*



*U.S. Department of Transportation
Federal Highway Administration*



*STATE OF DELAWARE
Department of Transportation*

A. ADMINISTRATIVE ACTION

Federal Highway Administration

- (X) Environmental Assessment
- () Draft Environmental Impact Statement
- () Final Environmental Impact Statement
- () Finding of No Significant Impact
- (X) Section 4(f) Evaluation

B. INFORMATIONAL CONTACTS

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C. DESCRIPTION OF PURPOSE AND NEED

The proposed transportation improvement project is located in the southeastern portion of Delaware's southernmost County, Sussex County (see **Figure I-1**). The SR 26, Atlantic Avenue project extends 3.94 miles between Omar and Powell Farm Roads in Clarksville and the Assawoman Canal (see **Figure I-2**).

The *purpose* of the SR 26, Atlantic Avenue Improvement Project (SR 26 Project) is to reduce traffic congestion and improve safety on SR 26 from Clarksville to the Assawoman Canal. The *1999 Systems Analysis and Needs Report* for SR 26 identified four primary project goals:

- Reduce traffic congestion
- Improve traffic safety
- Improve roadway conditions
- Delineate driveway access

These goals were developed to address the following project *needs*:

- **Traffic Congestion** – Increase in population, tourism and development has decreased mobility along SR 26. SR 26 currently provides an east-west linkage between US 113 and the Delaware Beach area. The existing two-lane road cannot handle current or future traffic which is especially severe during peak summer months. Traffic congestion is further exasperated due to the fact there is limited separation of turning vehicles from mainline through traffic. There are limited separate left-turn lanes or right-turn lanes therefore through lanes become blocked by vehicles waiting for the opportunity to make left turns into residences and businesses along the roadway or slowing down to make right turns.
- **Safety** - Accident rates in the study area exceed state and county averages for similar roadways. Numerous, non-standardized access points in the corridor increase the potential for crashes. Lack of sufficient pedestrian and bike facilities along the roadway largely limits multi-modal travel options and increases the safety risks for those attempting to walk or bike along the existing roadway. No standard clear zone exists within the project limits and there are some locations where utility poles are located within the paved areas outside of the roadway, which are dangerous in run off of the road type accidents.
- **Roadway Deficiency** – SR 26 provides the primary east-west route between US 113 and SR 1. The current two-lane roadway typical section is of sub-standard design for a Principal Arterial highway and does not support the function of this type of roadway and cannot sufficiently handle the through-traffic demand. The roadway lacks sufficient sidewalks for pedestrians and has limited shoulders for bicyclists limiting the system connectivity for these travel modes along the roadway. In addition, the segment of SR 26 is inconsistent with the three-lane upgraded highway segment east of the Assawoman Canal. The roadway would serve as the primary evacuation route in emergency situations.
- **Economic development** – The project limits are contained within the Towns of Ocean View and Millville, which are designated as growth areas. The project area is experiencing substantial increases in population, tourism and residential and commercial development. Development capacity in this planned growth area is being restricted by traffic congestion. Many of these businesses are dependent on seasonal tourism which could benefit from improved accessibility to businesses.

D. SUMMARY OF ALTERNATIVES CONSIDERED

The alternatives considered are as follows:

- No-Build
- Combination Alternative ABC
- Alternative D
- Revised Alternative D

The No-Build Alternative and the three build alternatives are described in detail in section **II. Alternatives Considered**. They are summarized below.

No-Build Alternative

The No-Build Alternative represents the existing roadway conditions of SR 26 in the project area, with only routine maintenance and minor roadway and safety improvements being undertaken in the future. The No-Build Alternative serves as a baseline for comparison to the build alternatives.

Existing SR 26 is a two-lane east-west roadway located in southern Sussex County, Delaware. The existing roadway is a nominal 22 feet wide, consisting of two travel lanes varying from 10 feet to 12 feet in width, with shoulders varying from 0 feet to 5 feet in width, and having minimal drainage and limited sidewalks. In many areas the existing utilities are located adjacent to or within the pavement, rendering the clear zone non-existent in these areas. There are more than two hundred seventy parcels adjacent to the roadway within the project limits. The parcels are of mixed residential and commercial uses, and many of these parcels have open, un-channelized access points.

Combination Alternative ABC

Following extensive coordination with the Delaware State Historic Preservation Office (DESHPO), the Federal Highway Administration (FHWA), and the Delaware Department of Transportation (DelDOT) to avoid and minimize impacts to sensitive resources, Combination Alternative ABC was developed. This alternative widens the existing roadway to create two 11-foot travel lanes with 5-foot shoulders/bike lanes. The western portion of the project—from Clarksville to west of Railway Road—would incorporate an open drainage section with no sidewalks. The eastern portion of the project, from west of Railway Road to the Assawoman Canal was designed with a curb and gutter, closed drainage, and a 5-foot sidewalk. In both the open and closed drainage sections, all utilities would be relocated beyond the clear zone.

Three intersections would be improved beyond the addition of left turn lanes: SR 26/Omar Road/Powell Farm Road (Clarksville), Central Avenue and West Avenue. The Clarksville intersection would be realigned to allow SR 26 to have through movement, and additional turn lanes would be incorporated. This would allow for a safer intersection with fewer points of conflict. The SR 26/Central Avenue intersection would be re-aligned to allow a smoother through movement on Central Avenue. Turn lanes are also being proposed for this intersection. A new traffic signal is proposed for West Avenue, as well as left turn lanes from SR 26 onto West Avenue. Additional improvements—such as bypass lanes at un-signalized intersections and continuation of the proposed bike lane through the signalized intersections—are included in this alternative.

This alternative would include the delineation and channelization of many of the open access points within the project limits. The addition of curb and gutter, grass strips and the removal of pavement within the entrances would allow for more controlled movements at these points. Each proposed entrance would meet DelDOT's standards for either residential or commercial entrances.

During the analysis of the Combination Alternative ABC, it was determined that a shared center left turn lane was needed to help control traffic at the numerous access points. Without the shared center left turn lane, considerable traffic back-ups would occur mid-block. This would create a safety issue as well as a congestion problem. Therefore, as a result of this analysis, Combination Alternative ABC was found not to meet two of the four stated goals of the project.

Alternative D

This alternative is similar to the Combination Alternative ABC, including the construction of travel lanes and shoulders, the limits of open and closed drainage sections, proposed intersection realignments and creation of defined access points. It generally follows the avoidance and minimization of impacts to sensitive resources but is a wider typical section, adding continuous shared center left turn lanes for the entire project limits instead of adding left turn lanes at intersections, as proposed under Combination Alternative ABC.

This alternative widens the existing roadway to create two 11-foot travel lanes with 5-foot shoulders/bike lanes and 12-foot wide continuous shared center left turn lanes. The western portion of the project, from Clarksville to Old Mill Road, incorporates an open drainage section with no sidewalks. The eastern portion of the project, from Old Mill Road to the Assawoman Canal, was designed with a curb and gutter, closed drainage and a 5-foot sidewalk. In both the open and closed drainage sections, all utilities will be relocated beyond the clear zone.

This alternative also includes the re-alignment of the SR 26 and Cedar Drive intersection. This is in addition to the three intersection improvements mentioned under Combination Alternative ABC. Presently this intersection is at a skew to SR 26. The intersection would be re-aligned to be perpendicular to SR 26. This would improve safety and traffic flow at this intersection.

Revised Alternative D (Preferred Alternative)

Revised Alternative D is a refinement of Alternative D and shares the same typical section. Once Alternative D was developed, DelDOT continued coordination with the DESHPO and FHWA in order to minimize impacts to the historic and natural resources within the project limits. In some areas, certain design details, such as reducing the width of the grass strip, adding closed drainage within the open section, and adding retaining walls were incorporated into Alternative D. These details helped to minimize impacts to the historic resources and allowed for some displacements to be reduced to strip acquisitions instead. Stormwater management and drainage needs have also been refined in this Alternative.

One change to the proposed horizontal alignment of preliminary Alternative D has been implemented in this Alternative. This change consists of a shift in the alignment, beginning at a point approximately 300 feet west of Tyler Avenue, which will avoid displacing two parcels, effectively reducing their impacts to strip acquisitions. As design advanced, the storm-water management pond locations, areas and sizes were also revised. The changes to the linear right-of-way to avoid and minimize impacts has also resulted in revised drainage, grading and final relocation of utilities. Drainage in front of the historic Hiestand property, located on the south side of SR 26 near Irons Lane, was originally designed under Alternative D as an open drainage section; however, in order to limit acquisition from this National Register of Historic Places (NRHP)-eligible property, Revised Alternative D included a redesigned closed drainage system with curb and gutter.

Revised Alternative D is the Preferred Alternative because it meets all four of the project goals, while minimizing impacts to the historic and natural resources within the project limits. As stated above, Combination Alternative ABC was found not to satisfy the goals of reducing congestion or improving safety. While Preliminary Alternative D met all the project goals, the design was conceptual and would not meet all State and Federal design requirements.

The Preferred Alternative meets the goals of reducing congestion and improving safety by adding the continuous shared center left turn lane. This additional lane provides room for emergency vehicles to respond. The lane may also be utilized during an evacuation for any weather or homeland security event.

The shared center left turn lane also allows motorists who wish to make left turns mid-block to do so outside of the through travel lanes. Without this lane, vehicles waiting to turn left would have to stop in the through travel lane, thereby impeding traffic flow, because the proposed 5-foot shoulder would not be wide enough for through vehicles to pass around them. This situation would not only add to the congestion on the roadway, it would also create an unsafe condition.

E. SUMMARY OF ENVIRONMENTAL RESOURCES & CONSEQUENCES

A summary of the impacts resulting from implementation of the proposed safety and operational improvements along the 3.94-mile long segment of SR 26 from the intersection of Omar and Powell Farm Roads in Clarksville to the Assawoman Canal is provided in **Table S-1**. Avoidance, minimization and mitigation of impacts were coordinated with the Federal Highway Administration, the United States Fish and Wildlife Service, the Delaware Department of Natural Resources and Environmental Control, the Delaware State Historic Preservation Office, and the United States Army Corps of Engineers.

The need to reduce traffic congestion, improve safety, establish defined property entrances and exits, and improve roadway conditions was coordinated with and approved by the SR 26 Advisory Committee, a group that included local government leaders, business owners, developers, and local residents. Public involvement workshops were held at key project milestones and input from those workshops was used to advise DelDOT on how to most efficiently and effectively revise the alternatives in order to meet the transportation improvement needs of the citizens of Delaware and the communities and businesses in the project area.

Except for the residential and business displacements, which are minimal, the right-of-way acquired is primarily strip takes along the roadway frontage and would not have an adverse effect on any of the resources listed in **Table S-1** and discussed in detail in section **III. Environmental Resources and Consequences**.

Table S-1: Summary of Impacts for Each Alternative

	Unit of Measure	No Build	Combination Alternative ABC	Alternative D	Revised Alternative D
Socio-Economic and Cultural Resource Impacts					
<i>Impacts to Private Properties</i>	No. [Acres]	0 [0]	177 [9.33]	196 [12.04]	229 [20.59]
Residential	Acres	0	5.24	2.7	4.64
Business/Institutional	Acres	0	3.11	8.32	12.15
Agricultural	Acres	0	0.98	1.02	3.80
<i>Relocations</i>	No.	0	8	16	9
Residential Relocations	No.	0	7	13	5
Business Relocations	No.	0	1	3	4
<i>Communities/Institutions/Facilities</i>	No.	0	7	7	7
Educational Facilities	No.	0	0	0	0
Churches/[Cemeteries]	No./[No.]	0/[0]	4/[2]	4/[2]	4/[2]
Public Parks/Recreational Areas	No.	0	0	0	0
Emergency/Law Enforcement Services	No.	0	0	0	0
Environmental Justice Communities	No.	0	0	0	0
<i>Historical/Archeological</i>					
Historical Property	No. [Acres]	0 [0]	2 [0.10]	6 [0.20]	5 [0.17]
Archeological Sites	No.	0	0	0	0
Natural Environmental Resource Impacts					
<i>Soils</i>					
Prime Farmland Soils	Acres	0	0.98	1.02	3.80
Soils of Statewide Importance	Acres	0	0	0	0
<i>Water Resources</i>					
*Wetlands	No. [Acres]	0 [0]	4 [0.0169]	4 [0.0370]	4 [0.0637]
*Waters	No. [Acres]	0 [0]	3 [0.0192]	4 [0.0273]	4 [0.0974]
New Impervious Surface	Acres	0	3.27	7.71	7.71
Floodplains	Acres	0	3.43	3.25	3.25
<i>Wildlife Habitat</i>					
Rare and Endangered Species Habitat	Yes/No	No	No	No	No
Forest Cover	Acres	0	0.015	0.29	0.29
<i>Air Quality, Noise and Hazardous Materials</i>					
Air Quality Impacts	Yes/No	No	No	No	No
Noise Impacts	Yes/No	Yes	Yes	Yes	Yes
Potential Hazardous Material (Sites)	Yes/No [No.]	No [0]	Yes [7]	Yes [7]	Yes [7]
Project Cost (2008 U.S. dollars)					
Estimated Construction Cost	\$ million	0	15.3	20.1	28
Estimated Right-of-Way Cost	\$ million	0	23.5	27.6	30
Total Cost	\$ million	0	38.8	47.7	58
Total Project Length	Miles	0	3.94	3.94	3.94

*Mitigation to replace impacted areas elsewhere in the project area will be undertaken to offset impacts. Measures would be undertaken for erosion and sediment control and stormwater management to reduce runoff.