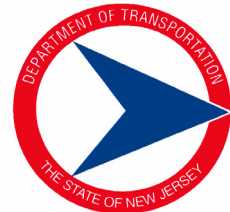


**United States Army Corps of
Engineers – Section 404
Individual Permit Application**

November 2007

**US Department of Transportation
Federal Highway Administration
New Jersey Department of Transportation**



**I-295/I-76/Route 42 DIRECT CONNECTION
UNITED STATES ARMY CORPS OF ENGINEERS – SECTION 404 INDIVIDUAL
WETLANDS PERMIT APPLICATION
CAMDEN COUNTY, NEW JERSEY**

TABLE OF CONTENTS

	<u>Page No.</u>
1.0 INTRODUCTION.....	1
2.0 DEPARTMENT OF THE ARMY INDIVIDUAL PERMIT APPLICATION (ENG FORM 4345).....	2
2.1 Application Block 16 – Other Location Descriptions.....	3
2.2 Application Block 18 – Nature of Activity.....	4
2.3 Application Block 19 – Project Purpose.....	4
2.4 Application Block 20 – Reason for Discharge	7
Application Block 21 – Types of Materials Being Discharged	7
Application Block 22 – Surface Area of Discharge	7
3.0 ENVIRONMENTAL QUESTIONNAIRE (NAP FORM 1653).....	9
4.0 INDIVIDUAL PERMIT APPLICATION CHECKLIST	10
4.1 Contact Information	11
4.2 Project Location	11
4.3 Project Description.....	11
4.4 Avoidance, Minimization and Compensation.....	12
No Build Alternative.....	13
Alternative – G2.....	14
Alternative – H1.....	15
Alternative – D1.....	16
Alternative – K.....	17
Alternative – D (Preferred Alternative)	18
4.5 Plan Completeness	19
4.6 Additional Information	20
4.7 Mitigation Plan.....	20

**I-295/I-76/Route 42 DIRECT CONNECTION
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TABLE OF CONTENTS (CONTINUED)

LIST OF TABLES

Table 1	Latitude/Longitude Coordinates Along Project
Table 2A	Summary of Permanent Impacts
Table 2B	Summary of Temporary Impacts
Table 3	Water Quality Treatment Summary
Table 4	Upland and Wetland Vegetation Observed within the Project Area
Table 5	List of Possible Wildlife Species and Documented Sightings
Table 6	Alternative Comparison Matrix
Table 7	Alternative Comparison Metrics
Table 8	Lists of Other Certifications or Approvals/ Denials Received from Other Federal, State, or Local Agencies for Work Described in this Application
Table 9	Addresses of Adjoining Property Owners, Lessees, etc. Whose Property Adjoin the Waterbody

LIST OF FIGURES

Figure 1	Project Location Map
Figures 2-5	Alternative D Ecological Impacts
Figure 6	Alternative G2 Alignment
Figure 7	Alternative H1 Alignment
Figure 8	Alternative D1 Alignment
Figure 9	Alternative K Alignment
Figure 10	Alternative D Alignment
Figure 11	On-site Areas Inspected for Potential Wetland Mitigation
Figure 12	Off-site Areas Inspected for Potential Wetland Mitigation

LIST OF APPENDICES

Appendix A	Color Photographs of Project Area Wetlands
Appendix B	Agency Correspondence

SECTION 1.0

1.0 INTRODUCTION

Dewberry-Goodkind, Inc. (Dewberry) has prepared this application on behalf of the New Jersey Department of Transportation (NJDOT) for the proposed I-295/I-76/Route 42 Direct Connection Project. The purpose of this document is to submit a Section 404 Individual Permit Application to the United States Army Corps of Engineers (USACE) for review and approval.

An Environmental Impact Statement (EIS) is currently being prepared for this proposed project. As a result, elements of the proposed project are still in the preliminary stages of design and some specific information is not yet available. As part of the scoping process of the EIS, 26 conceptual alternatives were identified for consideration. After extensive community involvement and input from regulatory agencies, six alternatives (five build alternatives and a No Build Alternative) were chosen to advance for further study as part of the EIS process. The six alternatives selected for further analysis were those that would have relatively lower impacts to both the built and natural environment. Further community involvement, input from regulatory agencies and evaluation of potential impacts has identified Alternative D as the Preferred Alternative.

This application was prepared using the best information available for Alternative D as of the date of submittal. A Record of Decision on the EIS is expected in 2009. After approval of the EIS, more detailed information will be submitted with the final design for review and approval by the USACE.

SECTION 2.0

2.0 DEPARTMENT OF THE ARMY INDIVIDUAL PERMIT APPLICATION (ENG FORM 4345)

USACE ENG FORM 4345 follows this page. All blocks that require additional narrative that do not fit into the space allotted on the Form are found as subsections of this section (Section 2.0).

**APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)**

OMB APPROVAL NO. 0710-003

Public reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, Searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-003), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in, or affecting, navigable waters of the United States; the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)


1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED
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(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME New Jersey Department of Transportation	8. AUTHORIZED AGENT'S NAME & TITLE (an agent is not required) Brian Sayre, Natural Resources Director
6. APPLICANT'S ADDRESS 1035 Parkway Avenue, Trenton, New Jersey, 08625	9. AGENT'S ADDRESS 600 Parsippany Road, Parsippany, NJ, 07054
7. APPLICANT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business 609-530-2991	10. AGENT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business 973-739-9400

11. **STATEMENT OF AUTHORIZATION**

I hereby authorize **Brian Sayre** to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

 **11/15/07**
APPLICANT'S SIGNATURE DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) I-295/I-76/Route 42 Direct Connection	
13. NAME OF WATERBODY, IF KNOWN (if applicable) Little Timber Creek; Tributary of Big Timber Creek	14. PROJECT STREET ADDRESS (if applicable) NA
15. LOCATION OF PROJECT Camden County NJ COUNTY STATE	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) See Section 2.1 (Application Block 16) of this USACE Section 404 Individual Wetlands Permit Application.	
17. DIRECTIONS TO THE SITE From Philadelphia take I-76 across the Walt Whitman Bridge into New Jersey. Continue on I-76 until you reach the I-295/76/ Route 42 Interchange.	

18. NATURE OF ACTIVITY (Description of project, include all features)

See Section 2.2 (Application Block 18) of this USACE Section 404 Individual Wetlands Permit Application

19. PROJECT PURPOSE (Describe the reason or purpose of the project, see instructions)

See Section 2.3 (Application Block 19) of this USACE Section 404 Individual Wetlands Permit Application

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. REASON(S) FOR DISCHARGE

See Section 2.4 (Application Block 20) of this USACE Section 404 Individual Wetlands Permit Application

21. TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS

See Section 2.4 (Application Block 21) of this USACE Section 404 Individual Wetlands Permit Application

22. SURFACE AREA IN ACRES OF WETLANDS OR OTHER WATERS FILLED (see instructions)

See Section 2.4 (Application Block 22) of this USACE Section 404 Individual Wetlands Permit Application

23. IS ANY PORTION OF THE WORK ALREADY COMPLETE? YES ☐ NO ☒ IF YES, DESCRIBE THE WORK

24. ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, ETC. WHOSE PROPERTY ADJOINS THE WATERBODY (If more than can be entered here, please attach a supplemental list)

See Table 9 located in the USACE Section 404 Individual Wetlands Permit Application

25. LIST OF OTHER CERTIFICATIONS OR APPROVALS/DENIALS RECEIVED FROM OTHER FEDERAL, STATE, OR LOCAL AGENCIES FOR WORK DESCRIBED IN THIS APPLICATION

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
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See Table 8 located in this USACE Section 404 Individual Wetlands Permit Application

* Would include but is not restricted to zoning, building and flood plain permits.

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

Bruce Hawthorn
SIGNATURE OF APPLICANT

11/15/07
DATE

Brian Sayre
SIGNATURE OF AGENT

11/14/07
DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

Instructions For Preparing A Department of the Army Permit Application

Blocks 1 thru 4 - To be completed by Corps of Engineers.

Block 5 - APPLICANT'S NAME. Enter the name of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked "Block 5".

Block 6 - ADDRESS OF APPLICANT. Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked "Block 6".

Block 7 - APPLICANT PHONE NUMBERS. Please provide the number where you can usually be reached during normal business hours.

Block 8 - AUTHORIZED AGENT'S NAME AND TITLE. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer or any other person or organization. Note: An agent is not required.

Blocks 9 and 10 - AGENT'S ADDRESS AND TELEPHONE NUMBER. Please provide the complete mailing address of the agent, along with the telephone number where he/she can be reached during normal business hours.

Block 11 - STATEMENT OF AUTHORIZATION. To be completed by applicant if an agent is to be employed.

Block 12 - PROPOSED PROJECT NAME OR TITLE. Please provide name identifying the proposed project (i.e., Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center).

Block 13 - NAME OF WATERBODY. Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14 - PROPOSED PROJECT STREET ADDRESS. If the proposed project is located at a site having a street address (not a box number), please enter it here.

Block 15 - LOCATION OF PROPOSED PROJECT. Enter the county and state where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked "Block 15".

Block 16 - OTHER LOCATION DESCRIPTIONS. If available, provide the Section, Township, and Range of the site and/or the latitude and longitude. You may also provide a description of the proposed project location, such as lot numbers or tract numbers. You may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile down from the Highway 14 Bridge). If a large river or stream, include the river mile of the proposed project site, if known.

Block 17 - DIRECTIONS TO THE SITE. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site.

Block 18 - NATURE OF ACTIVITY. Describe the overall activity or project. Give approximate dimensions of structures such as wingwalls, dikes, (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked "Block 18".

Block 19 - PROPOSED PROJECT PURPOSE. Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

Block 20 - REASONS FOR DISCHARGE. If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

Instructions For Preparing A Department of the Army Permit Application

Block 21 - TYPES OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS.

Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

Block 22 - SURFACE AREAS OF WETLANDS OR OTHER WATERS FILLED. Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked "Block 22".

Block 23 - IS ANY PORTION OF THE WORK ALREADY COMPLETE? Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identify the authorization if possible.

Block 24 - NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, etc., WHOSE PROPERTY ADJOINS THE PROJECT SITE. List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked "Block 24".

Block 25 - INFORMATION ABOUT APPROVALS OR DENIALS BY OTHER AGENCIES. You may need the approval of other Federal, State, or Local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) of each application. You need not have obtained all other permits before applying for a Corps permit.

Block 26 - SIGNATURE OF APPLICANT OR AGENT. The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

DRAWINGS AND ILLUSTRATIONS - GENERAL INFORMATION

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View, or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on an 8.5 X 11 inch plain white paper (tracing paper or film may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate and contain all necessary information.

2.1 Application Block 16 – Other Location Descriptions

TABLE 1
(Also See Figure 1)

LATITUDE/LONGITUDE COORDINATES ALONG PROJECT ALIGNMENT (NAD 83)	
LATITUDE	LONGITUDE
I-76	
39° 53' 19.32"	75° 06' 17.08"
39° 52' 45.73"	75° 06' 10.87"
I-295	
39° 51' 48.99"	75° 06' 37.26"
39° 52' 20.08"	75° 05' 05.85"
Route 42	
39° 51' 51.73"	75° 06' 03.28"
Ramp A	
39° 52' 01.69"	75° 06' 03.16"
Ramp B	
39° 52' 30.45"	75° 05' 52.99"
Ramp C	
39° 52' 30.42"	75° 05' 52.94"
Ramp D	
39° 52' 26.08"	75° 05' 49.25"
Ramp E	
39° 51' 59.46"	75° 06' 08.86"
Ramp F	
39° 52' 15.29"	75° 05' 09.24"

2.2 Application Block 18 – Nature of Activity

See Part I. C. of the Environmental Questionnaire (Section 3.0 of this application)

2.3 Application Block 19 – Project Purpose

Purpose

The purpose of this project is to improve traffic safety, reduce traffic congestion and meet driver's expectations by providing the direct connection of the I-295 mainline to improve the interchange of I-295/I-76/Route 42.

Need

There is a significant accident history at the interchange. The interchange's existing roadways include a number of geometric deficiencies that can be considered contributing factors to the high number of accidents. The deficiencies were identified from NJDOT record construction drawings and Structural Inventory and Appraisal Sheets.

Improve Safety

Accident data for the years 1995 through 2000 were reviewed. Since statewide accident rates were available for 1995, 1996, and 1999, a comparison of the accident rates on I-295, I-76 and Route 42 for these years was made with the statewide average.

During the 1995 to 1999 period, the I-295 roadway segments from M.P. 26.4 to M.P. 28.2 had accident rates over seven times the statewide average. Of these segments, M.P. 26.4 and 27.6 and M.P. 28 to 28.2, lengths that encompass the area of the interchange with Route 42 and I-76, had a substantially higher number of accidents than sections of I-295 immediately north and south of the interchange. For example, in 1995, M.P. 26.4 to 27.0 had almost seven times more accidents than the statewide average, while M.P. 26.8 to M.P. 27.1 had the most accidents in each of the analyzed years.

All six segments of Route 42 (from M.P. 13.2 to M.P. 14.28) had accident rates in excess of the statewide average. In 1996, four segments (from M.P. 13.45 to M.P. 14.28) had accident rates, per million vehicle miles, greater than the statewide average. In 1999, four segments (from M.P. 13.44 to M.P. 14.28) had accident rates, per million vehicle miles, greater than the statewide average. In the years 1995, 1996 and 1999, one segment had an accident rate four times the statewide average.

I-76 accident rates were similar to those of I-295 and Route 42 in the 1995-1999 time frame. For 1995, four segments (from M.P. 0.0 to M.P. 0.8) had accident rates which exceeded the statewide average. One segment had an accident rate twice the statewide average. In 1996 five segments (from M.P. 0.0 to M.P. 0.8) had accident rates greater than the statewide average, with one segment being three times the statewide average. On I-76 in 1999, three segments (from M.P. 0.0 to M.P. 0.53) had accident rates in excess of the statewide average. In 1999, one segment had an accident history four times greater than the statewide average. Segments that were over-represented, in all three years that

were compared with statewide averages, were M.P. 0.0 to 0.3 and 0.3 to 0.5. These segments mainly encompass the area in which I-76 is combined with I-295.

Geometric and Structural Deficiencies

The existing interchange has numerous substandard geometric design elements. These include horizontal curvature, stopping sight distance, superelevation, shoulder widths, and acceleration and deceleration lane lengths. These are present along I-295, I-76, Route 42 and ramps at various locations. Since a majority of the improvements will be on new alignments, these substandard features will be addressed as part of the project.

In addition to the geometric deficiencies noted above, several bridges within the interchange have been identified as structurally deficient or functionally obsolete due to substandard vertical and horizontal clearances. Once again, since a majority of the improvements will be on new alignments, these structures will be replaced as part of the project.

Driver Expectations

While there is a definite need to correct the geometric deficiencies in existing ramps and structures, driver expectations also play a large role in the high accident rates at the interchange and necessitate improved safety. The posted speed limits on the existing ramps that serve the through-traffic on I-295 are inconsistent with typical operating speeds on an interstate highway. The posted speed limit on all of the highway approaches to the interchange is 55 mph. The 20 mph discrepancy between the posted speed limits (and higher operating speeds) on the approach highways and the 35 mph speed on the ramps can be considered as a contributing factor in the interchange's overall poor accident record.

Operational Deficiencies

The lack of a direct connection for through movement on I-295, significant weaving problems, deficient connecting ramps, and high volumes of traffic all result in operational deficiencies (or congestion) within and near the interchange. The operational deficiencies on I-295, I-76 and Route 42, particularly the queuing of traffic and poor Levels of Service (LOS) that cause excessive delays, impact not only regional traffic and commuters using the highways, but local arterials and neighborhood streets as well. Excessive delays at the interchange result in highway traffic exiting onto surrounding local arterials, thereby further adding to congestion in the region. The diverted traffic, in turn, causes congestion on local roads, compromises traffic and pedestrian safety, increases noise levels, and lowers air quality in the community, which disproportionately tax the capacity and life of local roadways.

The effective operation of any roadway network, be it highway, local arterial or street intersection, is measured by the LOS categories ranging from A to F. LOS A represents the most favorable operating conditions with little or no delay. LOS F is the worst operating condition occurring when demand volume exceeds the capacity of the roadway resulting in severe congestion. Of the eight ramps studied in detail, five operate at a LOS E or worse for at least one of the two peak hours (AM and PM). In addition, a weaving

condition exists on I-76/Route 42 between Ramp E and Ramp A. Traffic on Ramp E wishing to proceed north on I-76 must weave with traffic from northbound Route 42 proceeding north on I-295. Due to the volumes of traffic involved in this section of the interchange (specifically the high volume of traffic from Ramp E proceeding to Ramp A) this section of the roadway experiences failure. It should be noted that the traffic exiting Ramp E and proceeding on Ramp A is “through” traffic that could be expected to stay on mainline I-295 if a mainline section of the highway were available.

2.4 Application Block 20 – Reason for Discharge

Table 2A (Summary of Permanent Impacts) and Table 2B (Summary of Temporary Impacts) contain the information requested in Application Block 20 – Reason for Discharge.

Application Block 21 – Types of Materials Being Discharged

Table 2A (Summary of Permanent Impacts) and Table 2B (Summary of Temporary Impacts) contain the information requested in Application Block 21 – Types of Materials Being Discharged.

Application Block 22 – Surface Area of Discharge

Table 2A (Summary of Permanent Impacts) and Table 2B (Summary of Temporary Impacts) contain the information requested in Application Blocks 22 – Surface Area of Discharged.

As mentioned above, an EIS is currently being prepared for this proposed project based on preliminary highway design. Therefore, all of the areas and volumes of potential fill materials (i.e. impacts) to wetlands and waters of the US that are provided herein are approximate. The following assumptions were developed to evaluate and estimate the wetland impacts:

- Freshwater (Non-Tidal) wetland impacts are calculated from the wetland delineation line downgradient to the Spring High Tide Line or Upper Wetland Boundary Line (whichever is higher in elevation);
- Tidal wetland impacts are calculated from the Upper Wetland Boundary or Spring High Tide Line (whichever is higher in elevation) downgradient to the edge of construction or to the edge of Open Water;
- Open Water impacts are calculated from the edge of Open Water to the limit of construction;
- Ten feet of temporary impacts is assumed for the construction of retaining walls in wetlands not along Little Timber Creek due to the need for construction work areas;
- Ten foot temporary impact is assumed for the construction of the outfalls in wetlands. Impacts as a result of the construction of headwalls, end sections, riprap, and gabions are quantified as permanent impacts;
- Five foot permanent impact is assumed beyond the proposed fill slopes to account for the potential slump of fill materials and the minor erosion of soils upgradient of the silt fence;
- For roadway removal abutting wetlands, five feet of temporary impacts are assumed beyond the existing fill slopes;
- Along Little Timber Creek (Wetland TF) where riprap is proposed, a ten foot permanent impact is assumed. A ten foot temporary impact beyond the permanent impact due to construction work areas is assumed; and

- It is assumed that there will be no temporary impacts to wetlands and or waters in the form of riprap placement. However, if it is determined that temporary construction access areas require stabilization in the form of riprap, these erosion countermeasures and their mitigation will be more thoroughly covered in the Final Design and included in Table 2B of the Section 404 Permit Application

In summary, approximately 1.971 acres of USACE jurisdictional wetlands and waters will be permanently impacted by the proposed project based on the following categories of regulated fill:

- 0.637 acres (27,750 ft²) of freshwater tidal wetlands
- 1.278 acres (55,670 ft²) of freshwater non-tidal wetlands
- 0.056 acres (2,440 ft²) of Open Waters

In summary, approximately 0.983 acres of USACE jurisdictional wetlands and waters will be temporarily impacted by the proposed project based on the following categories of regulated fill:

- 0.568 acres (24,740 ft²) of freshwater tidal wetlands
- 0.313 acres (13,640 ft²) of freshwater non-tidal wetlands
- 0.102 acres (4,440 ft²) of Open Waters

SECTION 3.0

3.0 ENVIRONMENTAL QUESTIONNAIRE (NAP FORM 1653)

USACE, Philadelphia District NAP FORM 1653 Environmental Questionnaire follows this page. For Parts I, III, and IV, responses are provided after each question within the respective sections of the FORM. For Part II, the ENVIRONMENTAL IMPACT CHECKLIST table, the QUALIFYING REMARKS are provided immediately following the table.

ENVIRONMENTAL QUESTIONNAIRE
FOR CORPS OF ENGINEERS PERMIT APPLICATIONS
Philadelphia District, Corps of Engineers
Philadelphia, Pennsylvania 19107
CENAP-OP-R

INTRODUCTION AND INSTRUCTIONS

The District Engineer is required by law to assess the initial, cumulative, and long-term effects of any proposed permit on all aspects of the environment.

To speed the analysis of the probable impact of the proposed work, each applicant is required to submit appropriate environmental data as part of a permit application. We ask that you provide a thorough description of your proposed project and answer each question as it applies to the work and the results of that work. Complete and accurate answers will prevent unnecessary delays in processing your permit application.

Parts I and II will be filled out by all applicants. Part I is self-explanatory. In Part II, the Environmental Impact Checklist, you should indicate the impacts of your project on all aspects of the environment that are listed. Use the space under "Qualifying Remarks" to indicate the specific impacts that your project will have. This may include types of plants or animals affected, specific adverse, beneficial, or mitigative effects, changes to existing conditions, etc. Although space for answers has been provided, you may wish to supply additional information on attached pages. If you do not anticipate an impact on a certain item, simply place a check in the "No" column.

Part III will be filled out by all applicants applying for a permit to perform dredging.

Part IV will be filled out by all applicants applying for a permit to perform filling operations. This includes activities such as filling behind bulkheads.

Refer any questions you may have concerning this supplemental form to the Regulatory Branch at (215) 656-6728.

PART I

I. PROJECT DESCRIPTION:

- A. **General Site Location: Accurately locate the project site with respect to State, county, or other subdivision, and in relation to streams and rivers.**

The project site is located in three municipalities: Gloucester City, and the Boroughs of Bellmawr and Mt. Ephraim, all of which are located in Camden County, New Jersey. The project area includes a section of Little Timber Creek which bisects the project area as it runs from east to west; and a section of an unnamed tributary to Big Timber Creek in the southeastern portion of the project area (see Figure 1). Little Timber Creek flows to the Delaware River, approximately one mile downstream of the project area.

- B. **Specific Site Locations: Completely locate the project site with respect to cove, creek, property owner, plot number, etc.**

As stated above in Item A, the project area is bisected by Little Timber Creek which runs from east to west. The southwest corner of the project site contains an unnamed tributary of Big Timber Creek. This tributary trends from northeast to southwest before it enters Big Timber Creek approximately 900 feet southwest of the project area boundary. Multiple property owners exist within the project area and these parties will be identified in the final design.

- C. **Description of Proposed Action: Carefully describe the action proposed, including the method of construction, equipment, and materials to be used. Details in your description are important. Attach additional sheets if necessary.**

The Preferred Alternative for the proposed project (Alternative “D”) involves providing a direct connection for through-traffic on I-295 to improve roadway geometry, increase mainline and ramp design speeds, eliminate substandard weaving conditions, and improve safety. Beginning in the vicinity of the Grenloch Secondary Railroad Bridge over I-295, Mainline I-295 will shift slightly south and elevate to a third level viaduct over Browning Road and Route 42 and a second level viaduct over Ramp C. The roadway will meet existing I-295 pavement north of the Creek Road overpass. The I-295 alignment will cross I-76/Route 42 at a skew through an unused portion of New St. Mary’s Cemetery.

Vehicles on northbound Route 42, whose destination is I-295 northbound, will exit on Ramp A. This ramp configuration, in conjunction with the

new I-295 mainline alignment, will eliminate the current substandard weaving condition with Ramp E at this location. Ramp A will cross under Ramp E and then cross over Route 42 northbound before joining the elevated I-295 northbound alignment just north of Browning Road.

Ramp B will provide the movement from southbound I-295 to northbound I-76. Ramp C will provide the movement from southbound I-295 to southbound I-76/Route 42. Ramp B and Ramp C will exit I-295 from the right. Ramp B will follow a similar alignment to its existing one to meet I-76 northbound. Ramp C will split from Ramp B and cross under Ramp D, I-76, Browning Road, and I-295 to connect with Route 42 north of the Creek Road Bridge.

Ramp D is the move from I-76 southbound to I-295 northbound. Ramp D will exit I-76 in much the same way that it does now. The Ramp D alignment will cross over I-76, over Ramp C, and under I-295 before merging with I-295 northbound south of Bell Road.

Northbound I-295 traffic heading north to I-76 will utilize Ramp E which follows essentially the same alignment as it does now.

Southbound I-76 traffic heading to I-295 southbound will utilize Ramp F. Ramp F will divert from I-76 from the right (existing exit is from the left), and then pass under Browning Road. Ramp F will first run parallel to Ramp C and then run adjacent to I-295 southbound. Ramp F will rise from a depressed section at Browning Road to an elevated section as it ties into I-295 southbound prior to Essex Avenue.

A summary of design features is as follows:

- Northbound and Southbound I-295 are side-by-side
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct crosses over Ramp C and Browning Road
- Ramp D on viaduct crosses over I-76/Route 42, Ramp C and under I-295
- Two lane ramps except for Ramp F, which is one lane
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph (Design Speed: 60 mph)
- Ramp Speed Limits: 40 mph (Design Speed: 45 mph)

Typical large scale construction equipment (bulldozers, excavators, loaders, cranes, etc.) will be used for earthmoving, pile driving, and material transport/installation of structures. Materials used will be typical road and bridge construction materials including crushed stone, clean fill soils, concrete, asphalt, and steel.

- D. Purpose of Proposed Action: Define the purpose of the proposed structure or work. For example, the purpose of bulkheading may be to stabilize an eroding bank; whereas, the purpose for a pier may be for the mooring of a private boat, for access to a public or private facility, for a marina, or for another purpose.**

All of the proposed construction is directly related to the installation of a direct connection for through-traffic on I-295. Short-term dewatering will be required and temporary cofferdams will be utilized during construction to allow for the installation of deep foundation elements. Fill will be placed in some areas of open waters, tidal wetlands, and non-tidal wetlands to build roadways. Retaining walls will be erected in selected areas to reduce open water, wetland, and floodplain impacts. Riprap and/or rock gabion structures will be placed in selected areas along Little Timber Creek to provide scour countermeasures for highway structures. Culverts and bridges will be used to allow for unimpeded stream flow. Floodwalls and/or berms will be used to isolate roadways from a 100-year tidal event occurring on Little Timber Creek. The impacts, as well as the avoidance, minimization, and compensation aspects are more fully described in Part II and subsequent sections of this application.

- E. Submit color photographs of the site, with explanations of the views shown (prints only). Photographs help us to better understand your project. The more photographs you provide, the easier it is to understand and process your application.**

Color photographs have been included in Appendix A.

PART II – ENVIRONMENTAL IMPACT CHECKLIST			
ENVIRONMENTAL IMPACT	YES	NO	QUALIFYING REMARKS
A. Physical			
1. Topography	X		(See Part II Qualifying Remarks)
2. Geological Elements and Leaching		X	(See Part II Qualifying Remarks)
3. Air		X	(See Part II Qualifying Remarks)
4. Transportation	X		(See Part II Qualifying Remarks)
5. Handling of Hazardous Materials	X		(See Part II Qualifying Remarks)
6. Spoil Disposal	X		(See Part II Qualifying Remarks)
7. Sewage and Solid Wastes		X	(See Part II Qualifying Remarks)
8. Water Resources			
a. Water Quality	X		(See Part II Qualifying Remarks)
b. Hydrography, Circulation, Littoral Drift.		X	(See Part II Qualifying Remarks)
c. Ground Water		X	(See Part II Qualifying Remarks)
B. Biological			
1. Vegetation			
a. Terrestrial	X		(See Part II Qualifying Remarks)
b. Aquatic	X		(See Part II Qualifying Remarks)
2. Fish and Wildlife			
a. Mammals	X		(See Part II Qualifying Remarks)
b. Birds	X		(See Part II Qualifying Remarks)
c. Amphibians	X		(See Part II Qualifying Remarks)
d. Reptiles	X		(See Part II Qualifying Remarks)
e. Fish	X		(See Part II Qualifying Remarks)
f. Shellfish		X	(See Part II Qualifying Remarks)
g. Invertebrates	X		(See Part II Qualifying Remarks)
3. Rare or Endangered Species		X	(See Part II Qualifying Remarks)

ENVIRONMENTAL IMPACT	YES	NO	QUALIFYING REMARKS
C. Cultural			
1. Land Use	X		(See Part II Qualifying Remarks)
2. Population Density and Trends		X	(See Part II Qualifying Remarks)
3. Regional Development	X		(See Part II Qualifying Remarks)
4. Historic Places	X		(See Part II Qualifying Remarks)
5. Archaeological Sites		X	(See Part II Qualifying Remarks)
6. Aesthetics	X		(See Part II Qualifying Remarks)
7. Utilities		X	(See Part II Qualifying Remarks)
8. Transportation Systems	X		(See Part II Qualifying Remarks)
9. Recreation	X		(See Part II Qualifying Remarks)
10. Public Health	X		(See Part II Qualifying Remarks)
D. Other Factors			
1. Secondary Effects	X		(See Part II Qualifying Remarks)
2. Controversiality	X		(See Part II Qualifying Remarks)
3. Is significant dredging involved?		X	(See Part II Qualifying Remarks)
4. Is significant filling involved?	X		(See Part II Qualifying Remarks)

Part II (Qualifying Remarks)

The following sections identify each of the four major types of potential impacts (Physical, Biological, Cultural, and Other Factors) that may result from the proposed construction activities. Under each major type, a description is included for each item elaborating on the nature of the impact. Those items that the proposed construction activities will not impact are identified as “No Impact.”

A. Physical

1. Topography:

Topographical impacts will be related to cutting, filling, grading activities and the installation of piles and construction of roadway structures throughout the interchange. Significant cuts of Made Land will be required and the installation of deep foundation elements may result in minor short-term settlement of adjacent loose sand materials. Most of the floodplain impacts would be associated with fill along Little Timber Creek in tidal areas.

2. Geological Elements and Leaching:

Data from the NJ Bureau of Geographic Information and Analysis and Camden County Soil Classification Survey were reviewed. No disturbance to economically valuable or important geological resources will occur as a result of the proposed project. Leaching of contaminants or pollutants from the soil is not expected to be of concern. The study area is within the Coastal Plain physiographic province and as such may contain acid producing soil deposits. Areas to be excavated within the study area will be evaluated for the presence of acid producing deposits, and where encountered, will be addressed with mitigation standards as outlined by the New Jersey Department of Environmental Protection (NJDEP) Division of Water Resources. Construction would cause disturbance of subsurface materials by excavations and placement of deep foundations for structures. Short-term dewatering will occur during construction which would depress the water table locally for a short period, and induce flow toward the excavation. As mentioned above in Part I D, the installation of deep foundation elements such as piles may result in vibratory impacts and possibly minor short-term settlement of adjacent loose sand materials, however this will not result in significant geologic impacts.

3. Air:

The proposed project would not increase concentrations of Carbon Monoxide that would result in any violations of the National Ambient Air Quality Standard. Air quality is not expected to be affected by the proposed construction activities, other than temporary impacts related to the operation of construction equipment. During construction, all practical means will be used to control dust from leaving the project site. Upon completion of the project, air quality is expected to improve due to reduced traffic congestion and idling times.

4. Transportation:

Transportation will be impacted in two ways: a) there will be temporary disturbance of traffic flow during the construction period, but all practical means will be employed for the maintenance and protection of traffic; b) there will be improved traffic safety and reduced congestion by improving the direct connection of the I-295 mainline and the interchange of I-295/I-76/Route 42 after construction is completed.

5. Handling of Hazardous Materials:

Information regarding potential hazardous waste sites was obtained from available NJDEP databases and a site reconnaissance of the study area. Based on this information, three potential hazardous waste sites may be encountered during construction. Since the highway design is still in the preliminary stages, details as to the handling of hazardous waste for this proposed project have yet to be developed. However, any hazardous materials or wastes encountered during construction of the proposed roadway will be handled, stored, and disposed in accordance with all local, state, and federal regulations. Specific remedial actions to be conducted by NJDOT as part of the roadway construction will be addressed in the final design, construction plans, and specifications accordingly.

6. Spoil Disposal:

Soils would be excavated from the tidal marshes adjacent to Little Timber Creek in order to place riprap along highway structures, install underground utilities, and for installation of proposed highway structures such as “boat sections.” Any excavated areas that require backfill would be filled with clean soil meeting NJDOT standards as well as NJDEP requirements as set forth in the Technical Requirements for Site Remediation. Even though acid-producing soils and potentially hazardous sites may exist within the study area, appropriate mitigation measures would be undertaken to ensure that backfill material would not be acid-producing or hazardous. Therefore, no acid-producing soils or contaminated soils would be used as backfill. Excess excavated spoil will be transported offsite and properly disposed at an approved disposal site in accordance with all applicable regulatory requirements.

7. Sewage and Solid Wastes:

The proposed project will not result in the release of sewage and/or solid waste because there is no generation of such material as a result of the proposed construction activities, nor from future use of the proposed roadway improvements.

8. Water Resources

a. Water Quality:

Potential impacts to surface water quality relate mainly to non-point source stormwater runoff impacts. However, the existing roadway provides little or no water quality treatment. The greatest potential for long-term impacts to surface water quality associated with this project would be increased highway-derived contaminants in stormwater runoff reaching Little Timber Creek and Big Timber Creek and surrounding wetlands. Some of the most common pollutants found on highway surfaces include bacteria, heavy metals, inorganic salts, nutrients (e.g., nitrogen, phosphorus), organic matter, pesticides, and dropped or windblown particulates, such as dust, clay, glass and silt. These pollutants find their way into the surrounding environment via precipitation and stormwater runoff.

Although the proposed project would result in an increase of approximately 19 acres of impervious area, the anticipated unrestricted flow of vehicles would reduce conditions of stopping, idling, and delays, and result in less time for traffic to deposit pollutants. Additionally, the insignificant (0.01%) ratio of cumulative impervious roadway surface to total watershed area for the receiving waters (dilution ratio) is sufficient to protect aquatic life downstream within the watershed. The proposed water quality treatment measures are summarized in Table 3.

The majority of the highway interchange area would drain to proposed bioretention basins prior to discharging to outfalls. Stormwater treatment facilities within the interchange area would treat the required area/volume of stormwater runoff in accordance with NJDEP stormwater management requirements. There are areas that cannot be treated (along I-295 east and west of the interchange, I-76 north of the interchange, and Route 42 south of the interchange) due to right-of-way, elevation and grade constraints. The remaining untreated drainage would continue to discharge, via existing and proposed storm sewer outlets, to Little Timber Creek or into conveyance systems discharging to Big Timber Creek. However, overall the project would still meet NJDEP stormwater management requirements.

The bioretention basins would be designed and utilized to meet the current NJDEP stormwater management requirements (N.J.A.C. 7:8). Each bioretention basin would consist of a soil bed planted with native vegetation located above underdrained sand and stone layers. Stormwater runoff entering the bioretention basin would be filtered first through the vegetation, and then through the soil and sand mixture, removing significant quantities of pollutants contained in total suspended solids (TSS) before being conveyed by the underdrain system to the outlet and receiving waterway or storm sewer. The basin would be designed such that the water quality storm, defined by NJAC 7:8 as 1.25 inches of rainfall within 2 hours, would pass through the basin in this manner, thereby resulting in the removal of 90 percent of the TSS from the runoff. The outlet structure typically would consist of a rectangular structure with a combination of orifice and weir openings set above the maximum water quality storm level, designed to regulate the outflow rate as required.

In conjunction with the roadway drainage systems, one stormwater pumping station would be required for areas where gravity flow is insufficient in the vicinity of Ramp C. The pump station is within the NJDOT right-of-way. Access will be obtained through the lands of the Annunciation B.V.M. Church. The proposed stormwater pumping station would provide additional water quality treatment measures through screening of runoff and deposition of solids within the wet well areas of the facility.

In addition, short-term water quality impacts can occur resulting from construction-related soil erosion that can increase turbidity and suspended solids, lower dissolved oxygen, and alter pH values. Water quality impacts due to soil erosion and sedimentation during construction would be minimized through implementation of a soil erosion and sediment control plan in accordance with NJDOT standards. Dewatering effluent is expected to be discharged to surface water and a NJPDES General Permit would be required. Construction techniques, such as prefabrication of drainage structures, also can reduce erosion and sedimentation concerns.

Table 3 - Stormwater Management - Water Quality Treatment Summary

Water Quality Treatment Required					Water Quality Treatment Provided		
New Pavement (Acres)	TSS Removal Rate (%)	Reconstructed Pavement (Acres)	TSS Removal Rate (%)	Total Required (Acres)	Pavement Draining to Basins (Acres)	TSS Removal Rate (%)	Total Provided (Acres)
(1)	(2)	(3)	(4)	(5) = (1x2) + (3x4)	(6)	(7)	(8) = (6x7)
19	0.80	23	0.50	27	33	0.90	30

Water Quality Treatment Required = Total suspended solids (TSS) removal required by NJDEP Stormwater Management Rules (N.J.A.C. 7:8).

New Pavement = Net increase in pavement including credit for existing pavement removed.

Reconstructed Pavement = Area of pavement removed and replaced within the footprint of existing pavement.

TSS Removal Rate = Removal rate required as per N.J.A.C. 7:8.

Total Required = Total EQUIVALENT pavement requiring water quality treatment based on 100% TSS removal.

Pavement Draining to Basins = Sum of all pavement areas draining to the 5 proposed bioretention basins.

Total Provided = Total EQUIVALENT pavement receiving water quality treatment based on 100% TSS removal.

b. Hydrography, Circulation, Littoral Drift:

Hydrography, circulation, and littoral drift will not be impacted by the proposed construction activities.

c. Ground Water:

During construction, and at the completion of this project, there would be no significant new pathways created for highway runoff to reach the Potomac-Magothy-Raritan (PRM) aquifer because the aquifer is confined. The principal recharge areas for the PRM aquifer are located along the Delaware River approximately two miles west of the study area. Additionally, if minor localized changes to shallow groundwater recharge do occur, they would not affect the water supply because there are no shallow potable wells (as determined by a NJDEP well search) within the study area. In addition, the public supply wells are not located in areas where the proposed improvements would occur. No adverse groundwater quality impacts are anticipated because there are no shallow potable wells in the study area.

The proposed additional pavement reduces the groundwater recharge with the elimination of the pervious area. Proposed bioretention basins include provisions that allow for groundwater recharge, if needed, by allowing the underdrain system for each basin to infiltrate to underlying soils. In a similar manner, if groundwater recharge is not required or not desired, the underdrain for each bioretention basin can be fitted with an impermeable liner to prevent runoff from infiltrating to underlying soils.

Based on the project size and volume of excavation below groundwater, dewatering activities beyond thirty days in a year and 100,000 gallons per day (gpd) are expected. A short-term water use permit-by-rule would be applicable since the dewatering is related to construction activity and cofferdams would be utilized. Stormwater pumping facilities are proposed for low lying areas, but will be designed so that they do not inadvertently pump groundwater.

B. Biological

1. Vegetation

A list of species identified in both the upland and wetland portions of the project area is provided in Table 4, showing their wetland indicator status and organized by strata.

a. Terrestrial:

The proposed construction would impact approximately 19 acres of upland vegetation. Most of the upland vegetation area impacted is classified by NJDEP as woodland. More than half of the total upland vegetation impacted would be located within the interchange, and according to NJDEP, this upland vegetation area is identified as deciduous. All of the upland impacts would be in these previously disturbed, isolated areas within the interchange or along the fringe of larger contiguous, wooded areas. Since only typical urban/suburban plant and animal species were observed in these areas, this loss of upland vegetation does not constitute a significant impact.

According to the New Jersey No Net Loss Reforestation Act, any loss of more than one-half acre of forested area would need to be replaced. Therefore, a reforestation plan would be developed in accordance with the requirements of the Act. Native trees will be planted to replace the upland forested habitat which would be impacted.

b. Aquatic:

Wetland impacts associated with the proposed construction are related to the new roadways, installation of culverts/bridges, driving of pilings, shading, and the placement of embankment fill. The impacts to open water and wetland resources in the project area will be mitigated with on-site creation of wetlands, which is discussed later in this application. The following assumptions were developed to help in the quantifying of wetland impacts:

- Freshwater (Non-Tidal) wetland impacts are calculated from the wetland delineation line down gradient to the Spring High Tide Line or Upper Wetland Boundary Line (whichever is higher in elevation);
- Tidal wetland impacts are calculated from the Upper Wetland Boundary or Spring High Tide Line (whichever is higher in elevation) down gradient to the edge of construction or to the edge of Open Water;
- Open Water impacts are calculated from the edge of Open Water to the limit of construction;
- Ten feet of temporary impacts is assumed for the construction of retaining walls in wetlands not along Little Timber Creek due to the need for construction work areas;
- Ten foot temporary impact is assumed for the construction of the outfalls in wetlands. Impacts as a result of the construction of headwalls, end sections, riprap, and gabions are quantified as permanent impacts;
- Five foot permanent impact is assumed beyond the proposed fill slopes to account for the potential slump of fill materials and the minor erosion of soils up gradient of the silt fence;
- For roadway removal abutting wetlands, five feet of temporary impacts are assumed beyond the existing fill slopes;
- Along Little Timber Creek (Wetland TF) where riprap is proposed, a ten foot permanent impact is assumed. A ten foot temporary impact beyond the permanent impact due to construction work areas is assumed; and
- It is assumed that there will be no temporary impacts to wetlands and or waters in the form of riprap placement. However, if it is determined that temporary construction access areas require stabilization in the form of riprap, these erosion countermeasures and their mitigation will be more thoroughly covered in the Final Design and included in Table 2B of the Section 404 Permit Application.

No specimen trees or unique plant communities, other than wild rice, were observed during the wetland delineation effort. Wild rice, an important food source for migrating birds, is found in stands throughout the Little Timber Creek tidal area in association with pickerel weed and common smartweed or marshpepper smartweed. The proposed construction

project is expected to provide a benefit to these stands through the removal of Al Jo's Curve (existing Ramp C), which currently fragments the wetlands supporting wild rice along Little Timber Creek in the west side of the project area. The removal of Al Jo's Curve will allow for wetland creation and planting of wild rice in these mitigation areas.

2. Fish and Wildlife

A list of mammals, birds, amphibians, and reptiles commonly found in the project area is listed in Table 5. Species that were observed during site investigations are marked with an "X" next to their name. Even though potential habitat may exist within the study area, there are no unique habitat niches that exist within any portion of the study area, except for stands of wild rice in the Little Timber Creek tidal area, which were discussed earlier.

a. Mammals

The observed mammalian species include: raccoon, eastern grey squirrel, and white tailed deer. The proposed construction may cause minor displacement of habitat for these species, but their long term survival is not considered a concern in regard to this project.

b. Birds

The observed bird species in the project area include: mallard, turkey vulture, red-tailed hawk, red-bellied woodpecker, downy woodpecker, hairy woodpecker, Northern flicker, Eastern phoebe, tree swallow, Northern rough-winged swallow, American robin, gray catbird, Northern cardinal, song sparrow, red-winged blackbird, and common grackle. While the proposed construction may cause minor displacement of habitat for these species, their long term survival is not considered a concern in regard to this project. In addition, the proposed reforestation, and wetland mitigation activities will compensate for the loss of this habitat.

c. Amphibians

The green frog was the only species observed out of those known to be common in the project area. Some habitat utilized by this species and other aquatic fauna will be lost due to the clearing of vegetation and placement of fill materials in wetlands. However, the proposed mitigation activities will compensate for the loss of this habitat.

d. Reptiles

Of the reptile species known to be common in the project area, none were observed during site investigations; however, it is likely that some species of turtles, snakes, and lizards, do reside within the project area. Although the proposed project is likely to result in some loss of habitat for these species, proposed mitigation activities will compensate for this loss of habitat.

e. Fish

The area where construction impacts along Little Timber Creek are likely to occur is mainly tidal mudflat. Sheet pile installation and construction activities near Little Timber Creek may temporarily increase sediment within the watercourse. However, due to the relatively narrow width and shallow depth of the channel, no significant impact is anticipated. Modifications of the stream would be limited to culvert removal, culvert extension, and bank restoration. Any impact to benthic habitat would be temporary, except in the case of the culvert extension. A soil erosion and sediment control plan would be prepared and implemented to minimize impacts associated with bank erosion and channel cuts during construction. Stream areas disturbed by construction activity would receive stream restoration measures. The culvert removal and bank/stream restoration activities associated with the removal of Al Jo's Curve would result in a long-term benefit for aquatic ecology by "day-lighting" these additional portions of Little Timber Creek.

No timing restrictions are anticipated for work within the Little Timber Creek corridor. When there is potential for a substantial increase in turbidity, cofferdams or other turbidity control measures will be utilized. While it is possible that warmwater fish species do exist in the area, according to the National Marine Fisheries Service, no fish species of concern are known to exist within the Little Timber Creek watershed (See Appendix B for Agency Correspondence).

f. Shellfish

According to the 2004 State of New Jersey Shellfish Growing Water Classification Charts (NJDEP, Land Use Management, Water Monitoring & Standards, Bureau of Marine Water Monitoring) the approved areas for harvesting shellfish do not coincide within the project area. These shellfish growing waters are located along the coast of Atlantic Ocean, specifically in the vicinity of the Raritan Bay, Toms River, Barnegat Inlet, Mullica River, Greater Egg Harbor River, and Townsends Inlet. In addition, shellfish growing waters are identified at the mouth of the Delaware River, at the Delaware Bay. These shellfish waters are limited to less than two miles upstream of the Bay. The project area is located more than 40 river miles upstream of this area. While there may be limited numbers of freshwater mussels in the project area, no significant impacts to shellfish are anticipated.

g. Invertebrates

The 2000-2001 Ambient Biomonitoring Network (AMNET) benthic macroinvertebrate sampling was conducted in Little Timber Creek by the NJDEP on Devon Avenue in Bellmawr, approximately 3,400 feet east (upstream) of the study area. Little Timber Creek is considered moderately impaired because macroinvertebrate richness is reduced, in particular the Ephemeroptera, Plecoptera, and Trichoptera (EPT) species, and there is a reduction in the community balance and number of pollutant intolerant species present.

The lack of or low number of EPT species observed suggests that physiochemical impacts, as well as habitat degradation, are contributing to biological impairment.

The impacts on mudflats and associated invertebrates by this proposed project would be minimized through the use of cofferdams, where necessary, to separate work areas from any potentially ecologically sensitive areas. An increase in impervious area associated with road upgrades would be mitigated through the proposed drainage system which would provide for pretreatment of runoff from stormwater through the use of detention and bioretention facilities and grass-lined swales. This new drainage system would result in the enhancement of the stormwater treatment over the existing system. In addition, the proposed wetland mitigation activities will compensate for the loss of invertebrate habitat due to filling activities in wetlands.

3. Rare or Endangered Species

A letter dated September 11, 2003 from the Natural Heritage Program lists no rare bird species within the study area. In addition, the October 9, 2003 US Fish and Wildlife Service correspondence states “Except for a occasional transient bald eagle (*Haliaeetus leucocephalus*), no other federally listed or proposed threatened or endangered flora or fauna under Service jurisdiction are known to occur within the vicinity of the proposed project site”. The June 27, 2002 *Camden County Rare Species and Natural Communities Presently Recorded in the New Jersey Natural Heritage Database* lists the peregrine falcon (*Falco peregrinus*) and the red-headed woodpecker (*Melanerpes erythrocephalus*) as the only threatened or endangered bird species expected to occur within Camden County. Refer to Appendix B for copies of the correspondence.

Based upon the extensive field work performed within the study area by qualified scientists (i.e., wetland delineation, NJDEP Letter of Interpretation agency field check, ecological studies, bird surveys, turtle surveys, etc.) no threatened and endangered species were identified. Furthermore, the project team field work was conducted in all portions of the study area, during both the spring and fall migratory periods as well as the breeding season, and there were never any observations of threatened and endangered species.

C. Cultural

1. Land Use

The proposed project would result in adverse impacts related to land use or zoning. Although a total of 13 residences are proposed to be relocated, all residential relocations would be conducted pursuant to the Federally Assisted Programs Act of 1970, as amended in the Federal Uniform Relocation Act Amendment, effective March 2, 1989 (Chapter 50 NJ Public Laws of 1989). Five community facilities would be impacted by the proposed construction activities, but they would continue to function in their present locations. Below is a description of the five facilities and the manner in which they would be affected.

- Bellmawr Baseball League Fields – The proposed acquisition would take the grassy area beyond the outfield fence.
- Bellmawr Park Elementary School Playground – The proposed acquisition would take a ballfield, which would have to be relocated. However, there is adequate space for relocation of the ballfield on the school property.
- New St. Mary’s Cemetery – The proposed acquisitions on this property would include the Harrison-Glover House, which is used as an office, and undeveloped land. The office would be relocated on the property. No cemetery plots will be impacted by the proposed project.
- Annunciation B.V.M Church and Annunciation Regional School – A small permanent acquisition is proposed for this property. During construction, a temporary diversion easement will impact parking. However, temporary parking will be provided.
- Resurrection Christ Cemetery – The proposed acquisition on this property is vacant land, which would not affect the cemetery plots.

One business relocation would be required for the proposed project. All project-related relocation payments and services are provided pursuant to the Federal Uniform Assistance and Real Property Acquisition for Federal and Federally Assisted Programs Act of 1970, as amended in the Federal Uniform Act Amendment, effective March 2, 1989 (Chapter 50, New Jersey Public Law of 1989).

2. Population Density and Trends

The proposed project is not expected to impact population density or trends, as it does not open any land to potential residential development.

3. Regional Development

The proposed project is expected to positively impact regional development by allowing for more efficient movement of existing traffic through the project area.

There is a proposed development in the Borough of Bellmawr that is currently in the preliminary design stages, located in the abandoned landfill areas between I-295 and Route 42, along Big Timber Creek. The proposed project will not preclude the possibility of this development. However, the scale and size of the development is dependent upon improvements to the regional transportation networks.

4. Historic Places

As part of the preparation of the EIS, potential impacts to archaeological and historic architectural resources were assessed. As part of this evaluation, only one historic property was identified—the Bellmawr Park Mutual Housing Historic District. In addition, a Section 4(f) evaluation was conducted that also considered potential impacts to the historic district.

The Bellmawr Park Mutual Housing Historic District was found eligible for listing in the National Register of Historic Places. The proposed project would require right-of-way takings, as well as the demolition of 12 residences within the Historic District. All residential relocations would be conducted pursuant to the Federally Assisted Programs Act of 1970, as amended in the Federal Uniform Relocation Act Amendment, effective March 2, 1989 (Chapter 50 NJ Public Laws of 1989). As the proposed project would require the demolition of properties located within the historic district, it would result in an adverse impact.

A number of buildings within the historic district would experience a slight increase in noise levels with the proposed project, while other buildings will experience a decrease in noise levels. The increases are attributed to an increase of local road traffic. In addition, construction of the highway structure and noise walls would create a visual intrusion on properties within the historic district, resulting in a visual impact.

5. Archaeological Sites

A Phase I/II Archaeological Investigation was conducted for the proposed project in May, June and August 2004, and May and August 2005. The investigation determined that three archaeological sites would be impacted by the proposed project. However, these three sites were found to not be eligible for inclusion in the National Register of Historic Places based on the recovery and analysis of the soil morphology and artifact collection recorded. In addition, these sites do not have the potential to yield new information important in prehistory or history.

6. Aesthetics

The proposed project will change the visual quality of the area due to the construction of a new one-level structure throughout the interchange. Additionally, new noise walls would be constructed on top of this structure to abate noise impacts. The combined heights of both structures and noise walls are approximately 49 feet. Due to the heights of the structures and noise walls, a visual impact would occur.

7. Utilities

The proposed construction is not expected to adversely impact utilities of the area. There will be a need for electric power for lighting the roadway, but the additional demand will be provided by connection to existing lines. A Feasibility Assessment Report was prepared for the New Jersey Department of Transportation in July 2006. As part of this report, construction plans were sent to the following utility companies for them to show their facilities from as built records, etc.:

- PSE&G – Electric
- Verizon – Telephone
- Comcast – Cable Television
- PSE&G – Gas

- Camden County Municipal Utilities Authority – Sanitary Sewer
- Borough of Bellmawr – Sanitary Sewer
- Borough of Bellmawr – Water
- New Jersey American Water Company – Water
- Haddon Heights – Water

Plans were not received back from PSE&G Electric, therefore a field visit identified electrical facilities at each of the local road crossings.

The proposed construction was evaluated to determine potential utility impacts. The evaluation identified the need for temporary and permanent relocations of utility facilities. Prior to commencement of the proposed construction, a subsurface utility engineering firm will designate the utilities within the project limits. This information will be sent to utility companies for verification.

8. Transportation Systems

The proposed project will improve the transportation system of the surrounding area by providing a direct connection for the I-295 mainline and the interchange of I-295/I-76/Route 42. This will result in reduced congestion and improved flow of traffic, safety, and efficiency of travel. In addition, the proposed project will not preclude the possibility of a Port Authority Transit Corporation (PATCO) rail extension in the vicinity.

Temporary construction impacts would include traffic control for I-295/I-76/Route 42, which would require the reduction of lane widths, the elimination or narrowing of shoulders and numerous shifts in traffic in order to construct the proposed improvements. In many instances, a live lane would be adjacent to a median barrier. All existing lanes would be maintained during peak periods, while lane closings would be allowed at night. Ramps would remain operational at all times, with all lanes being open during peak periods. In some instances, traffic would need to be split around a construction zone. Temporary widenings would be required in many areas in order to maintain the existing number of lanes. Temporary connections would be required between new and existing pavement on both the ramps and the mainline. Construction of the proposed project would require numerous stages, resulting in numerous changes in traffic patterns.

9. Recreation

As mentioned above, the Bellmawr Park Elementary School Playground and Bellmawr Park Baseball League Fields will be impacted by the proposed project. Aside from these two instances, recreation will not be impacted by the proposed project. Little Timber Creek is not listed on “Segments of Publicly owned New Jersey streams Open to Angling” produced by the New Jersey Division of Fish and Wildlife (NJDFW). The NJDFW list of Delaware River boat access sites shows that the closest of these sites is located approximately 2.4 miles downriver (on the Delaware River) from the point at which Little Timber Creek enters the Delaware River. The removal of Al Jo’s Curve, which currently fragments the existing wetlands, would enhance the recreational opportunities of the area and open it up for a proposed public access and wetland viewing area.

10. Public Health

Public health will not be adversely impacted by the proposed construction. As mentioned above, dust abatement activities will be used to control dust during construction. Maintenance and protection of traffic will be conducted as part of the construction activities. Public health will benefit upon completion of the proposed project as a result of the reduced traffic congestion, improved roadway safety, and reduction of vehicular emissions by reducing idling time.

D. Other Factors

1. Secondary Effects

As identified in the Draft Interstate Access Request submitted to the FHWA, traffic for the five build alternatives flows well through the interchange when compared to the No Build. However, I-295 southbound traffic will slow (especially in the AM) as it reaches the Route 168 interchange. Likewise, I-295 northbound traffic (especially in the PM) is affected by the existing geometrics at the Route 168 interchange and the heavy volumes on I-295 and Route 168. NJDOT has identified the need to improve operations at the Route 168 interchange and has a project in Feasibility Assessment to investigate this. These possible future improvements will not be precluded by the proposed I-295/I-76/Route 42 project. In addition, the timing of construction will be such that the two projects will not adversely affect one another.

A Section 404 Individual Permit Application has been submitted for the proposed I-295/Route 42 Missing Moves Project, located to the south of the project area. This project is presently on hold and its alignment will likely be shifted slightly resulting in reduced impacts to the aquatic environment. However, once the Missing Moves Project advances, it will not be precluded by the I-295/I-76/Route 42 Direct Connection project.

Some of the secondary effects of the project have been discussed above and the majority of them are expected to be positive. These include improved flow of traffic through the

area, improved safety, reduced vehicular emissions, and improved stormwater treatment. The impacts to waters, wetlands, and upland areas will be compensated via mitigation activities. In addition, the waters/wetlands in the mitigation areas will be of higher quality functions and values than those that are impacted as a result of the proposed project, because the existing aquatic resources are adversely impacted by roadway runoff.

2. Controversiality:

Several residents presented photographs and other information regarding bird sightings within the study area. Several photographs of raptors and woodpeckers were presented for review. The residents believed that there may have been threatened or endangered species present within the study area. Representatives from the project team met with several residents on June 8, 2004 and reviewed photographs in June 2005 regarding the bird sightings and clarified the species shown on the photographs. None of the birds in the photographs were identified by project scientists as threatened or endangered species.

The proposed I-295 alignment crosses I-76/Route 42 at a skew through New St. Mary's Cemetery. However, coordination and meetings between the NJDOT and the Cemetery have confirmed that this area of the cemetery is unused and the new alignment will not impact any current grave sites.

Several existing noise walls, designed under the previously existing noise wall regulations, exceed the current height limit of 18 feet. The current noise walls provide considerable protection from traffic noise; therefore, more effort is required to mitigate the anticipated noise levels. For areas where existing noise wall segments would require removal to accommodate the highway design, NJDOT will use "in kind" replacement noise wall designs that exceed the current NJDOT Traffic Noise Policy.

3. Is significant dredging involved?

There will be no dredging involved in association with the proposed construction. However, there will be limited excavation in order to place riprap along embankments and retaining walls, and install underground utilities including roadway drainage pipes.

4. Is significant filling involved?

The filling required for the project is summarized in Table 2A in Section 2.0 (Department of the Army Individual Permit Application, ENG 4345). Impacts to these natural resources will be avoided and minimized to the greatest extent possible through adjusting the alignment of the roadway and by proposing the construction of retaining walls where economically feasible to avoid placing additional fill materials. The proposed project would result in the following permanent impacts to wetlands and waters due to fill:

- 0.637 acres (27,750 ft²) of freshwater tidal wetlands
- 1.278 acres (55,670 ft²) of freshwater non-tidal wetlands
- 0.056 acres (2,440 ft²) of Open Waters

The temporary impacts will typically be located adjacent to permanent impacts and in areas of the work zone that must be utilized by equipment for the construction of the roadway. These temporary impacts will be restored in place and planted with native vegetation after the completion of construction. The proposed project would result in the following temporary impacts due to equipment access and/or fill materials (clean crushed stone/soil) placed in wetlands and waters:

- 0.568 acres (24,740 ft²) of freshwater tidal wetlands
- 0.313 acres (13,640 ft²) of freshwater non-tidal wetlands
- 0.102 acres (4,440 ft²) of Open Waters

More detailed information concerning the areas and volumes of fill associated with specific structures and design elements of the proposed project will be provided in the final design.

Part III

Not applicable; dredging is not part of the proposed work.

Part IV

CONSIDERATIONS OF A FILLING PROPOSAL:

- A. Describe in detail the existing characteristics of the area proposed for filling (i.e. aquatic area, marsh, mudflat, swamp, etc.). In your description, be sure to include the types of vegetation present and the types of animals that use the area. Provide photographs.**

Portions of the proposed project will require the filling of areas of freshwater tidal wetlands, freshwater non-tidal wetlands, open tidal waters, and open non-tidal waters in various areas along the existing and proposed highway alignments. The approximate areas of fill are shown in Figures 2-5. More detailed illustrations of the proposed fill areas will be provided in the construction plans, to be submitted with the final design. A description of the areas of proposed impacts is provided below, with reference to the wetland areas to be filled. The types of fill, areas to be impacted, and the quantities of anticipated fill materials are provided in Table 2A. At the time of the submittal of this Section 404 Permit Application, photographs of some wetland areas (C, R, S, and T) were unavailable. Photographs of these wetlands will be provided with the final design.

Wetland TD (Photographs 26-29) consists of tidal and non-tidal freshwater wetlands and open tidal waters located on the inside of Al Jo's Curve, completely surrounded by highway embankments. Its boundary is defined by the limits of the toe of slope of these embankments. The fringes of this wetland will be filled due to the extension of an existing culvert running under I-295, the road surface of Ramp D, and retaining walls. The vegetation in this wetland is diverse with prominent species being jewelweed, pickerel weed, sweet gum, red maple, purple loosestrife, water pepper, arrow arum, and silky dogwood. Large stands of Japanese knotweed are invading the perimeter of the wetland and large patches of poison ivy and common reed are also present. This area may be used by various wildlife species including mammals, birds, amphibians, fish, and invertebrates.

Wetland C is a non-tidal freshwater wetland located in the infield portion of the highway between the current location of Ramp D and I-295. It will be impacted by the construction of a drainage basin, fill for the road surface of Ramp D, and associated retaining walls. The vegetation present is predominantly emergent invasive species such as common reed and Japanese knotweed. This area may be used by various wildlife species including birds, amphibians and invertebrates.

Wetland TE (Photographs 19-22) consists of tidal and non-tidal wetlands located in the infield portion of the highway where the I-295 southbound lanes split on their approach to I-76. The fringe of this wetland will be impacted by fill due to the construction of Ramp B and associated retaining walls. Of the 30 wetland plant species identified in this wetland and its periphery, the most abundant are: jewelweed, common reed, red maple, arrowwood, sweet gum, arrow arum, red osier dogwood, marsh pepper, pickerel weed,

wild rice, and purple loosestrife. This area may be used by various wildlife species including mammals, birds, amphibians, fish, and invertebrates.

Wetland TF (Photographs 1, 2, 11, 12) consists of tidal and non-tidal freshwater wetlands. It is the largest wetland in the project area and is located to the north of I-295 southbound where the lanes split, west of their approach to I-76 and south of the residential properties in Mount Ephraim. The southern fringes of this wetland will be impacted by fill associated with the construction of Ramp C and associated embankment materials and retaining walls. From the noise barrier at Al Jo's Curve eastward to Bell Road, along the south side of the marsh, the vegetation grades from herbaceous to hardwoods as the elevation increases away from the marsh. The prominent species in this wetland are wild rice, pickerel weed, arrow arum, common reed, sweet gum, red maple, jewelweed, arrowwood, and spice bush. It should be noted that the stands of wild rice in this wetland are located towards the central portion of this wetland and will not be impacted by the proposed construction activities. This area may be used by various wildlife species including mammals, birds, amphibians, fish, and invertebrates.

Wetlands N, P, and AJ (Photographs 13 and 16) consist of thin strips of wetlands along the toe of the slope of the I-295 northbound corridor north of the New St. Mary's Cemetery. Wetland N consists predominantly of emergent vegetation with only a few deciduous trees present. Wetland P is located furthest to the west of these areas. Wetland AJ was added during the agency field review of the wetlands. The wetlands will be impacted by fill and embankment materials associated with construction of Ramp D. These areas may be used by various wildlife species including mammals, birds, amphibians, fish, and invertebrates. The vegetation observed in these wetland areas is as follows:

Wetland N Vegetation – Deciduous tree species found here are: black walnut, tree-of-heaven, sumac, and sweet gum. Herbaceous species, however, are dominant including: blackberry, Japanese knotweed, white snake root, jewelweed, goldenrod, narrow-leafed sundrops, sensitive fern, common reed, grape, and Japanese honeysuckle.

Wetland P Vegetation – The tree canopy consists of deciduous species scattered thinly across the area. These are: black walnut, tree-of-heaven, red maple, sweet gum, and sumac. This area is predominantly an herbaceous community with a large diversity of species including: switch grass, foxtail, goldenrod, jewelweed, Canada thistle, white snakeroot, pokeweed, common reed, Japanese honeysuckle, nodding smartweed, sedge, sensitive fern, swamp beggar-ticks, purple loosestrife, and poison ivy. Some shrubs are also present: spice bush, sweet pepper bush, and young sassafras.

Wetland AJ Vegetation – This is an extremely small wetland area delineated during the site visit with NJDEP in the fall of 2003. The vegetation is consistent with that described in wetland areas P and N. It will be impacted by fill from the construction of Ramp D and the associated retaining wall.

Wetland R is a narrow non-tidal freshwater wetland located along the edge of the I-295 northbound corridor just west of the Bell Road overpass bridge. The northern edge of this wetland area will be impacted by fill from the embankment and retaining wall for the proposed highway construction. Only three (3) species of deciduous trees form the thin canopy, with herbaceous species dominating the vegetation. Deciduous tree species are: red maple, silver maple, and black willow. Herbaceous species dominate this area including: nodding smartweed, common reed, white snakeroot, jewelweed, pokeweed, and common hop. This area may be used by various wildlife species including mammals, birds, amphibians, fish, and invertebrates.

Wetland S is a non-tidal freshwater wetland located to the east of the Bell Road Bridge at the bridge abutment for the Bell Road overpass bridge, adjacent to the I-295 northbound corridor. It will be impacted by fill from an embankment for the proposed highway construction. A small stand of tree-of-heaven is the main deciduous tree species. Also present are sassafras and a horticultural variety of rhododendron. The main vegetation within the wetland is herbaceous species consisting primarily of jewelweed, willow-leaf smartweed, and poison ivy. This area may be used by various wildlife species including mammals, birds, amphibians, fish, and invertebrates.

Wetland T is a small, narrow, non-tidal freshwater wetland located approximately 100 feet east of the Bell Road bridge abutment along the south side of the I-295 northbound corridor. It will be impacted by fill from an embankment for the proposed highway construction. While herbaceous species dominate this area, tree-of-heaven is also prevalent. The herbaceous species found here include: spotted knapweed, Canada thistle, white snake root, asters, common reed, jewelweed, Virginia creeper, and one-seeded bur cucumber. This area may be used by various wildlife species including mammals, birds, amphibians, fish, and invertebrates.

Wetland V (Photograph 3) is a non-tidal freshwater wetland located south of the noise barrier and parallel to the I-295 northbound lanes east of the Bell Road Bridge. It will be impacted by fill from an embankment for the proposed highway construction. Herbaceous species within this wetland include: white snake root, jewelweed, grape, and goldenrod. This area may be used by various wildlife species including mammals, birds, amphibians, fish, and invertebrates.

Wetlands AE and AF (Photographs 4 and 5) straddle a stormwater channel located east of the sewer pumping station north of Anderson Avenue, Bellmawr. They will be impacted by fill from an embankment for the proposed highway construction. The vegetation observed in these wetland areas is as follows:

Wetland AE Vegetation – The dominant species is common reed. Other herbaceous species include: sensitive fern, white snake root, goldenrod, tall redtop grass, summer grape, poison ivy, American vetch, mixed grasses, mixed blue grasses and Japanese honeysuckle. Shrub species include: tartarian honeysuckle, multiflora rose, blackberry, red-osier dogwood, and witch hazel. The tree canopy

consists of: red maple, sweet gum, tree-of-heaven, stag horn sumac, and black willow.

Wetland AF Vegetation – This area is a forested and scrub/shrub mixed wetland area. Red maple, black willow, and sweet gum are the most prevalent tree species. Other species include: tree-of-heaven, basswood, common locust, sycamore, black cherry, common hackberry, and red mulberry. Tartarian honeysuckle grows along the edge and upgrade of the AF wetland boundary, but the dominant shrub is multiflora rose. Sandbar willow forms dense thickets in several places. Arrowwood is also present in places. The dominant herbaceous species is jewelweed; however, common reed and white snake root are also noted in great abundance. Other herbaceous species include: poison ivy, blackberry, sensitive fern, Japanese honeysuckle, woodland horsetail, summer grape, and ground ivy.

Wetland B (Photograph 33) is a small non-tidal wetland area located east of Essex Avenue and the Bellmawr Baseball League Fields, north of Creek Road. It will be impacted by roadway fill from construction of the proposed I-295 southbound highway alignment. It is a forested wetland with previously disturbed soils, presumably from highway construction to the east and development of the recreation area to the immediate west. Due to this previous disturbance, the understory is practically devoid of herbaceous and shrub vegetation except for sensitive fern and poison ivy. Tree species observed include red maple, pin oak, and northern red oak. This area may be used by various wildlife species including mammals, birds, amphibians, and invertebrates.

Wetland H (Photographs 34 and 35) is a small wetland area located at the junction of Dewey and Colonial Roads in Bellmawr, just east of the sound barrier wall. It will be impacted by roadway fill from construction of the proposed Route 42 highway alignment. Shrub species include: red-osier dogwood and arrowwood. The dominant herbaceous species is common reed. Other herbaceous plants include: jewelweed, asters, manicured lawn, and some brambles. This area may be used by various wildlife species including mammals, birds, amphibians, and invertebrates.

Wetland K (Photographs 9 and 10) is a small wetland area located between the northern edge of the New St. Mary's Cemetery and the I-295 northbound highway. It will be impacted by fill from an embankment for the proposed highway construction. This wetland has a deciduous hardwood canopy and mixed shrub and herbaceous under story. The main canopy species are red maple, white ash, and tulip poplar, but northern red oak, common locust, and red mulberry are also present. Shrubs include: sweet pepper bush, smooth arrowwood and green ash. The herbaceous community is diverse with skunk cabbage, jewelweed, poison ivy, white snake root, nodding smartweed, willow weed, summer grape, and common reed along the edge of the I-295 highway. This area may be used by various wildlife species including mammals, birds, amphibians, and invertebrates.

A small section of non-tidal Open Water lies within the highway interchange between Wetlands B and H. It will be impacted by road fill from the proposed highway

construction. This Open Water is a result of the stormwater system that drains from Wetland H, under the highway interchange, and drains into Wetland B.

B. Give the following information in regard to the project size:

1. Total area to be filled.

The approximate total, permanent impact to wetlands and Open Waters is 1.971 acres (85,860 ft²). See Table 2A.

2. Size of underwater area to be filled.

The approximate total, permanent impact to Open Waters is 0.056 acres (2,440 ft²). See Table 2A.

3. Area of intertidal zone to be filled.

The approximate total, permanent impact to freshwater tidal wetlands is 0.637 acres (27,750 ft²). See Table 2A.

4. Area of wetlands to be filled.

The approximate total, permanent impact to freshwater non-tidal wetlands is 1.278 acres (55,670 ft²). See Table 2A.

5. Proposed height of fill.

The height of the proposed fill varies with the location along the path of the proposed highway and the design of the proposed highway and associated structures is still in preliminary stages. The final design will address these fill heights in more detail. However, the approximate height of fill in wetland areas ranges from a few inches (at the roadway toe of slopes) to a maximum of approximately 20 feet where Ramp D crosses Wetland TD

6. Volume of material that will be used in filling.

The estimated volume of fill material in the open water and wetland impact areas (permanent impacts) is provided in Table 2A, based on an analysis of the preliminary design of the proposed highway improvements.

C. Describe in detail the material to be used as fill including as follows:

- 1. Type of fill to be used (sand, stone, rubble, etc.). If the material is a composite (i.e., rubble), list the types of materials it will contain.**

The riprap, gabions, and roadway fill material will consist of clean stone and soil as required by standard NJDOT specifications for road construction activities. Likewise, the concrete structures to be installed will be constructed with concrete as required by standard NJDOT specifications for bridge construction activities. Fill material originating from on-site will also meet NJDOT specifications as well as NJDEP requirements as set forth in the Technical Requirements for Site Remediation.

- 2. Give the specific location of the source of this material.**

The fill material originating from off-site will come from approved quarries and/or sources of clean stone, soil, and concrete, as required by standard NJDOT specifications. Any excavated areas to be backfilled with material originating from on-site would be filled with soil meeting NJDOT standards as well as NJDEP requirements as set forth in the Technical Requirements for Site Remediation.

- 3. What types of leachates will be produced from the fill material and what is planned for protection of surface and groundwater?**

The clean fill material will not produce leachate that will adversely impact surface or groundwater. The fill areas will be separated from the adjacent open waters and wetlands by standard soil erosion control devices such as silt fencing and floating turbidity barriers. Work in the open water areas and tidal wetlands will be separated from the surrounding waters by cofferdams and/or sheet piling, to prevent excessive turbidity and to prevent raw concrete from entering the open waters. Standard construction procedures will be used to minimize impacts to the aquatic resources.

Even though acid-producing soils may exist within the study area, NJDEP Technical Requirements for Site Remediation would be utilized to ensure that excavated soil to be reused as backfill would not be acid-producing.

D. Carefully describe the method of fill, including the following:

- 1. Method of fill placement, including equipment used in deposition and grading.**

Typical large scale construction equipment (bulldozers, excavators, loaders, cranes, etc.) will be used for earthmoving, pile driving, and material transport/installation of structures. Materials used will be typical road and bridge construction materials, including crushed stone, clean fill soils, concrete, asphalt, and steel. Temporary cofferdams/sheet piling will be erected in order to place riprap and/or gabions at the base of highway structures to provide scour countermeasures. After installation of appropriate

control devices (cofferdams/sheet piling, silt fencing, and turbidity barriers), fill will be placed in open waters, tidal wetlands, and non-tidal wetlands to build roadways in accordance with permit conditions. Retaining walls will be erected in selected areas to reduce open water and wetland impacts. The impacts, as well as the avoidance, minimization and compensation aspects are more fully described in Part II and subsequent sections of this application.

2. Method of stabilization of banks from erosion, sloughing, wave action, boat wakes, etc.

Bank stabilization will be achieved through slope and retaining wall installation in association with the roadway embankment. Erosion will be prevented using silt fencing, seeding, and/or topsoil stabilization matting of exposed soil slope surfaces. Roadway fill materials will be stabilized by asphalt paving of the road surfaces. Turbidity of the water column will be prevented by the use of temporary floating turbidity barriers. To prevent scour at the base of proposed highway structures, scour countermeasures will be provided by placement of riprap and/or gabions. Excess soils will be properly disposed offsite at an approved disposal site in accordance with all applicable regulatory requirements. Cofferdams/sheet piling will be installed prior to excavation of the soils and placement of the riprap to prevent entrainment of the excavated soils in the water column.

3. Method of stabilization of the surface of the fill.

The roadway and embankment fill materials will be placed and compacted with standard construction equipment. The materials will be stabilized as described in Item 2, above.

SECTION 4.0

4.0 INDIVIDUAL PERMIT APPLICATION CHECKLIST

The USACE Individual Permit Application Checklist follows this page. All items on this list that are not already presented within this permit application package are found as subsections of this section (Section 4.0). Items that have not yet been completed will be prepared with the final design as noted.



Individual Permit Application Checklist

Project Name: I-295/I-76/Route 42 Direct Connection Applicant: New Jersey DOT
CENAP-OP-R

Contact Information:

- ☒ Name, address, telephone and fax numbers of the applicant.
- ☐ NA Name, title, address, telephone and fax numbers of the authorized agent, if applicable.
- ☐ f Mailing addresses of adjacent property owners, local newspapers, post offices, and local government offices.

Project Location:

- ☒ Project street address, municipality, county, and state.
- ☐ f Legal description of property (Block and Lot, Tax Map #, Parcel).
- ☒ Location map indicating project location and driving directions to the site.
- ☒ USGS Topographical Quadrangle map labeled with quad name and project location.
- ☒ Latitude and Longitude in degrees, minutes, and seconds.

Project Description:

- ☒ Project name.
- ☒ Project purpose, need, and intended use.
- ☒ Name of nearest waterbody.
- ☒ Project narrative describing all project features and anticipated temporary, permanent, and indirect environmental impacts, including method(s) of construction.
- ☒ Representative color photographs of the project site and plan of the photograph locations.
- ☐ f Wetland delineation report, if available, including presence/absence and description of each type of wetlands for the entire project site. Field verification by the Corps of the delineation may be required.
- ☐ NA Submerged aquatic vegetation survey (if applicable).
- ☒ Type(s) and amount of fill material (cubic yardage) proposed for discharge below OHW or MHW.
- ☒ Surface area of wetlands or other waters filled in square footage/acreage.
- ☐ NA Location and description of any dredged material disposal site.

A written statement that clearly describes the following:

- ☒ Measures that have been taken to avoid impacts on aquatic resources (alternatives).
- ☒ Measures that have been taken to avoid and/or minimize any discharges into wetlands or waters of the U.S.
- ☒ Measures that have been developed to compensate for any impacts to wetlands or waters of the United States.

Plan Completeness:

- ☐ f Scaled plans of the proposed work on 8 1/2 by 11 inch paper, including existing conditions and cross-sections, of all work in areas of Federal jurisdiction.
- ☐ f Half or full-sized scaled engineering drawings, if available.
- ☒ Complete title block, legend, scale, draft date, and latest revision date.
- ☒ Show north arrow on all plans.
- ☐ f Limits of disturbance for the entire project site.
- ☐ f Jurisdictional boundaries and dimensions of waters of the U.S., including wetlands, (indicated by Wetland Line, Ordinary High Water mark, High Tide Line, Mean High Water line, Mean Low Water line, as applicable), clearly labeled on plan and detail drawings.
- ☐ f Location and limits of any temporary and/or permanent work (e.g. grading; temporary stockpiles, staging areas, dewatering/cofferdams, detention basins, and temporary access roads), required for the construction.
- ☐ NA Provide existing water depths, width of the waterway, and distance to Federal or other navigation channels for pier, dock, and dredging applications.
- ☐ NA Location of any shellfish beds in close proximity to the area of impact.
- ☐ f Height of any cables, pipelines, or other structures above mean high water and depth of any cables or pipelines below mean low water.
- ☐ f Maximum distance that any structures and/or fill would extend channelward of the mean high water line or ordinary high water in non-tidal areas.
- ☐ f Show existing contours and the proposed contours indicating existing and proposed elevations, if available.

f- Denotes items or information to be included in the final design.



Individual Permit Application Checklist

Additional Information:

- ☒ Copies and/or status of previous Federal or State approvals and/or any other permits applied for, used, or intended to be used to authorize any part of the proposed project or related activity (CZM, WQC, etc).
- ☒ Environmental Questionnaire.

Mitigation Plan (if available)

- ☐ Construction plan and cross-sectional details for proposed mitigation site.
- ☐ Existing and proposed elevations.
- ☐ Pre-construction soil profiles.
- ☐ Source of hydrology for proposed site.
- ☐ Area of watershed feeding the proposed site.
- ☐ List of proposed plant types and quantities.
- ☐ Types of plantings (*e.g.* seed, cuttings, potted, etc.).
- ☐ Proposed planting scheme/layout.
- ☐ Acreage of proposed mitigation and/or mitigation ratios used.
- ☐ Monitoring plan and methodologies.
- ☐ Photographs of proposed mitigation site.

Note: Project-specific or clarifying information may be required by the U.S. Army Corps of Engineers for application processing.

4.1 Contact Information

Applicant contact information has been provided in Section 2.0 (Department of the Army Individual Permit Application, ENG FORM 4345). Addresses of Adjoining Property Owners, Lessees, etc. will be prepared with the final design.

4.2 Project Location

This information has been provided in Section 2.0 (Department of the Army Individual Permit Application, ENG FORM 4345).

4.3 Project Description

Project name, purpose, need and intended use, as well as nearest waterbody, are provided in Section 2.0 (Department of the Army Individual Permit Application, ENG FORM 4345).

Project narrative describing all project features and anticipated temporary, permanent, and indirect environmental impacts, including method(s) of construction is provided in Section 2.0 (Department of the Army Individual Permit Application, ENG FORM 4345).

Representative color photographs of the project site are found in Appendix A.

A wetland delineation report including presence/absence and description of each type of wetlands for the entire project site will be provided with the final design. This report was previously submitted to the USACE in association with the JD request. Confirmation of the field verification by the USACE and NJDEP of the delineation is provided in Appendix B.

Type(s) and amount of fill material (cubic yardage) proposed for discharge below OHW or MHW is provided in Table 2A of Section 2.0 (Department of the Army Individual Permit Application, ENG FORM 4345).

Surface area of wetlands or other waters filled in square footage/acreage was identified in Table 2A of Section 2.0 (Department of the Army Individual Permit Application, ENG FORM 4345).

4.4 Avoidance, Minimization and Compensation

An Environmental Impact Statement (EIS) is currently being prepared for this proposed project. This EIS is supported by Technical Environmental Studies (TES) conducted for the project, including the following disciplines: Noise, Air Quality, Socioeconomics, Land Use, and Environmental Justice, Natural Ecosystems, Historic Architectural Resources, Phase I/II Archeological Investigation, and Hazardous Waste Screening. A Traffic Report, Feasibility Assessment Report, and Letter of Interpretation/Jurisdictional Determination for wetlands have also been completed.

The NJDOT evaluated 26 possible alternatives in an extensive screening process that included representatives from the USACE, the USEPA and the NJDEP. More detailed information on the 26 alternatives and the screening process that produced the five build alternatives can be found in Section 4 of the Draft EIS. All 26 conceptual alternatives were constructible and viable concepts that met the purpose and need of the project; however, not all 26 were deemed practicable. These 26 conceptual alternatives were subjected to a screening process with the objective of identifying feasible alternatives that satisfy the project need with minimal impact to the natural and built environment. After extensive community involvement and input from regulatory agencies, five build alternatives (D, D1, G2, H1 and K) and a No Build Alternative were chosen to advance for further study as part of the EIS process. These five build alternatives were generally found to be the most feasible (least impacts) when compared to previously studied alternatives. Based upon comments received during the alternatives screening process, these five alternatives were refined and minor alignment adjustments were incorporated into their conceptual design in order to minimize environmental impacts and to improve traffic operations. The 21 alternatives that were dismissed were generally found to result in higher environmental impacts, including higher constructability, residential, wetlands, noise, and visual/contextual impacts.

There are no practicable build alternatives that would avoid impacts to wetlands. The only build alternatives that might have resulted in less wetland impacts would have divided the Bellmawr community and resulted in the most severe relocation of residents. These socioeconomic impacts were not acceptable to the community. Retaining walls and the steepening of side slopes were incorporated into the design of each of the build alternatives in order to avoid and/or minimize impacts to wetlands and waters of the United States.

All of the five build alternatives studied in the TES reports would result in wetland impacts. The five build alternatives studied in the TES reports were selected as having the least potential adverse impacts, including those related to wetlands, while still meeting the project purpose and need.

On-site mitigation is the preferable form of mitigation, since the same ecosystem that is impacted would be benefited by the mitigation. The alternatives that provide the highest potential for this (D, G2, and K) do not include the reuse of Al Jo's Curve and would

provide an enhancement to the community in the form of public access (trail and viewing area) to Little Timber Creek. Alternatives D1 and H1 would only contain a viewing area over Little Timber Creek, but no access since Al Jo's Curve would remain and would block passage to Little Timber Creek. The mitigation areas are more thoroughly discussed below in Section 4.0.

The five build alternatives are depicted in Figures 6-10 and discussed below. The alternatives are compared in a matrix in Table 6 and the metrics used in the comparison matrix are depicted in Table 7.

No Build Alternative

ENGINEERING ISSUES

The existing I-295/I-76/Route 42 interchange is insufficient to accommodate current traffic volumes and travel speeds safely, resulting in an accident rate that is more than seven times the statewide average. The interchange's existing roadways include a number of geometric deficiencies that can be considered contributing factors to the high number of accidents. The deficiencies were identified from NJDOT record construction drawings and SI&A Sheets. The interchange is deficient from an operational standpoint due to the lack of a direct connection for through movement on I-295, significant weaving problems, deficient connecting ramps, and high volumes of traffic resulting in operational deficiencies (or congestion) within and near the interchange.

The No Build Alternative has no initial cost; however, there will be costs associated with scheduled pavement resurfacing, bridge redecking, and roadside maintenance. There will also be costs to the traveling public for longer commuting time, increased traffic congestion, decreased air quality, and unsafe conditions.

ENVIRONMENTAL ISSUES

The existing roadway drainage along I-295/Route 42 and exterior drainage on I-76 is an umbrella type drainage system with runoff flowing into ditches that drain to culverts which flow to Little Timber Creek and the unnamed tributary to Big Timber Creek. A limited measure of water quality and groundwater recharge is achieved for those existing areas flowing through ditches prior to discharge into closed storm sewer systems and culverts. The remaining portions of the existing ramps and I-76 interior drainage are conveyed directly into storm sewer systems, and directly to Little Timber Creek and Big Timber Creek, with no measurable groundwater recharge or water quality improvement measures.

CONCLUSION

The No Build Alternative would not meet the purpose and need of the proposed project. The deficient highway geometry and substandard stormwater drainage system would remain. Therefore, this alternative was dismissed.

Alternative – G2

A summary of design features of Alternative G2 are:

- Southbound I-295 above Northbound I-295 using a double-decker configuration
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct over Ramp C and Browning Road
- I-295 on viaduct over Ramp D
- Ramp D on viaduct over I-76/Route 42 and Ramp C
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph (Design Speed: 60 mph)
- Ramp Speed Limits: 40 mph (Design Speed: 45 mph)

ENGINEERING ISSUES

The construction duration for this alternative is expected to last 70 months and the temporary construction impacts would cause an inconvenience to neighboring properties for several years. These temporary impacts include the diversion of some traffic off the main highway. The length of the southbound viaduct, combined with the complex nature with which the viaduct is aligned, would result in security vulnerabilities and the possibility of multiple extreme failures of facilities with an extended duration for repair. In addition, this magnitude of viaduct would require significant maintenance. The cost to build Alternative G2 would be approximately \$834 M. Figure 6 depicts the alignment of Alternative G2.

ENVIRONMENTAL ISSUES

Alternative G2 represents the lowest permanent impacts to the floodplain and wetlands/open waters, with 0.90 acre and 0.95 acre impacts, respectively. The highway design included the use of retaining walls and steepening of side slopes in order to avoid and/or minimize impacts to aquatic resources. This alternative would also provide for waterfront access to the public and 100% on-site wetland mitigation opportunities with the removal of Al Jo's Curve. However, there would be an increase of post mitigation residential noise; the viewshed of the Bellmawr Historic District would be dominated by intrusive infrastructure at a relatively close distance; and the field of view of the local community in general would be dominated by the massive (78 feet high) intrusive highway overpass structures.

CONCLUSION

Although this alternative has the lowest impact to floodplains and wetlands/open waters, the 70 month construction duration, high cost to build, increases to post mitigation noise and visual impacts to the Bellmawr Historic District, as well as security issues, resulted in the dismissal of this alternative.

Alternative – H1

Alternative H1 is almost identical to Alternative G2. The primary difference is the configuration of Ramps B and C. Ramps B and C would exit from I-295 from the right. Ramp C would generally follow (within 150'±) the existing Ramp C alignment (Al Jo's Curve) and pass under I-76 and Ramp F before merging with Route 42 southbound. The substandard radius on the existing Ramp C would be replaced with a larger radius. Ramp B would split from Ramp C and meet I-76 northbound.

A summary of design features of Alternative H1 are:

- Southbound I-295 above Northbound I-295 using a double-decker configuration
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct over Ramp C and Browning Road
- I -295 on viaduct over Ramp D
- Ramp D on viaduct over I-76/Route 42
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph (Design Speed: 60 mph)
- Ramp Speed Limits: 40 mph (Design Speed: 45 mph)

ENGINEERING ISSUES

The engineering issues with Alternative H1 concerning maintenance, temporary construction impacts, and security are similar to Alternative G2. Alternative H1 represents the highest cost to build of all alternatives at approximately \$894 M and the second longest construction duration at 73 months. Figure 7 depicts the alignment of Alternative H1.

ENVIRONMENTAL ISSUES

Although the highway design incorporated the use of retaining walls and steepening of side slopes, this alternative would cause the second highest impacts to the floodplain and wetlands/open waters of 4.26 acres and 3.15 acres, respectively. This is due in large part to approximately 250 feet of the channel of Little Timber Creek being relocated. In addition, there would be no opportunity for waterfront access and only 12% of the required wetland mitigation would be possible on-site. The field of view of the Bellmawr Historic District and local community in general would be dominated by the massive (78 feet high) intrusive highway overpass structures.

CONCLUSION

The high impacts to the aquatic environment, floodplain, and viewshed, high cost to build, long construction duration, coupled with the concerns over temporary construction impacts, maintenance, and security resulted in the dismissal of this alternative.

Alternative – D1

A summary of design features of Alternative D1 are:

- Northbound and Southbound I-295 are side-by-side
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct over Ramp C and Browning Road
- Ramp D on viaduct over I-76/Route 42 and under I-295
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph (Design Speed: 60 mph)
- Ramp Speed Limits: 40 mph (Design Speed: 45 mph)

ENGINEERING ISSUES

While Alternative D1 would require the shortest duration of construction at 63 months, there would be significant need for future maintenance of the increased structure. The cost to build Alternative D1 is approximately \$642 M. Figure 8 depicts the alignment of Alternative D1.

ENVIRONMENTAL ISSUES

Despite the use of retaining walls and steepening of side slopes, Alternative D1 would cause the greatest impact to the floodplain and wetlands/open waters at 4.45 acres and 3.73 acres, respectively. Since this alternative calls for the reuse of Al Jo's Curve, it does not provide waterfront access to the public. In addition, it would have the smallest opportunity for on-site wetlands mitigation at only 10% of the total required.

CONCLUSION

The high floodplain and wetlands/open waters impacts, lack of on-site mitigation opportunities and waterfront access, high requirements for the maintenance and protection of traffic during construction, and facility maintenance following construction resulted in the dismissal of D1 as a viable alternative.

Alternative – K

A summary of design features of Alternative K are:

- Northbound and Southbound I-295 are side-by-side
- Mainline I-295 is a tunnel under I-76/Route 42 on a skew
- Ramp C on viaduct over Ramps B and D and I-76/Route 42
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph (Design Speed: 60 mph)
- Ramp Speed Limits: 40 mph (Design Speed: 45 mph)

ENGINEERING ISSUES

Alternative K would make I-295 a continuous direct-through alignment in the form of a tunnel beneath I-76/Route 42. This tunnel design not only presents logistical problems for local police, fire, and rescue crews during emergencies, but also creates significant vulnerabilities in the security of the interchange. There would be a need for significant maintenance in the future with a tunnel. The cost to build Alternative K is approximately \$823 M. Figure 9 depicts the alignment of Alternative K

ENVIRONMENTAL ISSUES

The impacts to the floodplain and wetlands/open waters for this alternative would be 3.04 acres and 2.90 acres, respectively. The highway design incorporates the use of retaining walls and steepening of side slopes in order to avoid and/or minimize impacts to aquatic resources. The highest reduction of residential noise impacts and lowest visual impacts would result from this alternative. However, during the long construction duration (88 months), the cut-and-cover operations of tunnel construction would cause a temporary disruption to the community.

CONCLUSION

The concept of a tunnel had initially received some support from the public due to a large portion of the interchange being relocated underground. However, the high cost, temporary construction impacts and disruption to commuters caused by the 88 month long construction of this alternative were not acceptable to the public. In addition, the existence of a tunnel in the area would present security vulnerabilities and logistical problems for local emergency personnel and result in high maintenance and operations needs. Therefore, this alternative was dismissed.

Alternative – D (Preferred Alternative)

With the exception of the removal of Al Jo's Curve, this alternative's alignment is very similar to Alternative D1. A summary of design features of this alternative are:

- Northbound and Southbound I-295 are side-by-side
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct over Ramp C and Browning Road
- Ramp D on viaduct over I-76/Route 42, Ramp C and under I-295
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph (Design Speed: 60 mph)
- Ramp Speed Limits: 40 mph (Design Speed: 45 mph)

ENGINEERING ISSUES

As with all of the other proposed alternatives, Alternative D would cause inconveniences to neighboring properties in the form of noise, dust, and/or visual impacts. Some traffic would be diverted off the mainline for Alternative D and construction duration is expected to last 64 months. However, compared to Alternative K, the tunnel alternative, construction time and costs are decreased and potential breaches in security are not considered to be as significant. The maintenance needs for this alternative are the lowest for all build alternatives. Since Alternative D does not use a stacked infrastructure design, permanent visual intrusion on the community will be less of an issue as well. The cost to build Alternative D is approximately \$608 M. Figure 10 depicts the alignment of Alternative D.

ENVIRONMENTAL ISSUES

This alternative would cause the second lowest impacts to the floodplain and wetlands/open waters at 2.28 and 1.97, respectively. The opportunity for on-site mitigation is 100% with the removal of Al Jo's Curve. This alternative would result in the lowest acreage of total impervious coverage at 61 acres compared to the other build alternatives.

As stated above, an EIS is currently being prepared for this proposed project. As a result, the highway design is still in preliminary stages and specific details of the measures that would be taken to avoid and/or minimize impacts to wetlands and waters of the United States are not yet available. These specific details will be more thoroughly addressed in the final design. The following is an overview of the measures that would be taken for Alternative D using the information that is currently available. Similar measures were evaluated to avoid and/or minimize impacts for the other build alternatives.

Steepening of Side Slopes

Along the south side of the I-295 northbound alignment, on the east side of the Bell Road bridge, the highway embankment was steepened from 2:1 to 1.5:1 in order to minimize impacts to Wetlands T, V, and AE/AF. Wetland I, on the western side of Bell Road, was avoided using these steepened slopes. Impacts to Wetland S were unavoidable due to the

bridge abutment for Bell Road and impacts to Wetland R are due to the proposed drainage improvements

Use of Retaining Walls

Along the north side of Ramps B and C where the road parallels Little Timber Creek, retaining walls will be used to avoid impacts to the Little Timber Creek channel and minimize impacts to Wetland TE.

Along the north side of I-295 northbound where Ramp C splits from I-295 northbound, retaining walls will be used to minimize impacts to Wetland TF.

Along the west side of Ramp D where it crosses Little Timber Creek, retaining walls will be used to minimize impacts to Wetland TD and the Open Water of Little Timber Creek.

CONCLUSION

Alternative D meets the purpose and need of the proposed project, and is preferred by the local community, government officials, environmental agencies, NJDOT and the Federal Highway Administration. It will improve traffic safety, reduce traffic congestion, and utilizes design speeds consistent with that of the interchange's approach roadways. Aquatic resource impacts will be avoided or minimized where practicable. Alternative D is the Preferred Alternative.

All existing functions of impacted tidal wetlands, such as surface water retention and habitat, would be maintained. Only the edges of tidal wetlands would be affected. The loss of these edges would minimally affect their overall functions and values. While a few isolated, non-tidal freshwater wetlands would be lost, their primary function of short-term water retention would be replaced by the proposed stormwater systems. Figures 2-5 depict the approximate areas of temporary and permanent impacts.

4.5 Plan Completeness

Scaled figures of the proposed work are provided on 11 by 17 inch paper in lieu of the standard 8.5 by 11 inch scaled plans. The following information is not included with this Permit Application, but will be provided with the final design:

- Scaled plans of the proposed work on 8.5 by 11 inch paper, including existing conditions and cross sections of all work in areas of Federal Jurisdiction. Scaled figures of the proposed work are provided on 11 by 17 inch paper with this submittal.
- Half or full-sized scaled engineering drawings.
- Final limits of disturbance.
- Jurisdictional boundaries and dimensions of waters of the US, including wetlands (indicated by Wetland Line, Ordinary High Water Mark, High Tide Line, Mean High Water Line, Mean Low Water Line, as applicable) will be clearly labeled on the plan and detail drawings.

- Location and limits of any temporary and permanent work (e.g. grading; temporary stockpiles, staging areas, dewatering/cofferdams, detention basins, and temporary access roads), required for the proposed construction.
- Heights of any cables, pipelines, or other structures above mean high water and depth of any cables or pipelines below mean water, if applicable.
- The maximum distance that any structures and/or fill would extend channelward of the mean high water line or ordinary high water in tidal areas.

4.6 Additional Information

Copies and/or status of previous Federal or State approvals and/or any other permits applied for, used, or intended to be used to authorize any part of the proposed project or related activity (CZM, WQC, etc) are listed in Table 8 (List of Other Certifications or Approvals/ Denials Received from Other Federal, State, or Local Agencies for Work Described in this Application).

A completed Environmental Questionnaire is included in this report and is found in Section 3.0.

4.7 Mitigation Plan

A formal mitigation plan has yet to be developed for the proposed project. However, potential sites have been researched and the findings are summarized below.

A data review and field search was performed to identify potential wetland mitigation sites within the Little Timber Creek watershed and the surrounding areas based on the NJDEP required 2:1 ratio for wetland mitigation and 1:1 ratio for open water mitigation. This site search was conducted in accordance with the mitigation site identification process, i.e. look first for potential sites within the project area (onsite) and then within the watershed. If necessary, then look for potential sites outside the watershed, but as close to the project area as possible.

Out of 36 potential sites, the search identified three onsite areas (Figure 11) that are considered suitable for mitigation, as well as one offsite area (Figure 12). These sites would replace all of the functions and values of the wetlands that would be impacted. The four most promising sites are onsite mitigation area Nos. 1, 3, 5, and offsite mitigation area No. 36.

Sites 1 and 3 include the existing ramps of Al Jo's Curve, which would be removed and replaced with tidal wetlands. These sites consist of the existing roadway and adjacent NJDOT right-of-way located within the western (Site 1 with 2.2 acres) and eastern (Site 3 with 2.4 acres) portions of Al Jo's Curve on I-295 SB. According to the NJDEP Division of Coastal Resources map (Atlas Sheet No. 378-1878), these areas of former tidelands were granted to the NJ State Highway Department on July 20, 1964.

Mitigation in this area would consist of removal of the existing paved roadway and adjacent shoulders and slopes, and creation of tidal wetlands, up to the approximate limits of the former tidelands lines on each side of Little Timber Creek, and upgradient of the delineated wetland lines. Since removal of these roadway ramp areas would restore tidal wetlands to the floodplain of Little Timber Creek (and increase flood storage) and ownership is not an issue, these areas are considered suitable for mitigation. In addition, creation of wetlands in these areas would replace the functions and values that would be impacted by construction of the new interchange, including storage of surface water, dissipation of energy, and improvement of water quality and wetland habitat for many wildlife species.

The wetlands that would be created in these locations would function as part of the existing, larger wetlands complex found in this portion of Little Timber Creek, which includes the existing natural tidal marsh adjacent to the Creek. This marsh contains stands of wild rice, an important source of food for wildlife, which could be expanded into the mitigation areas. Upon construction of these proposed mitigation areas, there would be approximately 4.6 acres of additional open tidal water and wetlands along Little Timber Creek. In addition, the immediately adjacent upland area would be left undeveloped, and enhanced with a proposed public access trail and wetland viewing area. These site conditions would serve to enhance and protect the habitat of the created wetland and adjacent areas. This would result in improved wetland functions and values within the immediate project area, including habitat, water quality and vegetative diversity.

The third onsite area, Site 5, is located at Bell Road and involves the cleanout and restoration of the silt-filled channel of Little Timber Creek. During the Agency line check of the wetland delineation for this project, the NJDEP and USACE representatives commented on the poor condition of the Creek channel in this area. The Creek channel, including the culvert beneath Bell Road, is clogged with sediment from upland erosion and runoff. In addition, there are a significant number of trees, snags and debris in the streambed that block the flow of water downstream. The build-up of silt and obstructions result in increased flooding in the near-stream areas because of the restricted flow of storm water. Consequently, enhancement of the open water channel and adjacent wetlands would improve the condition of the Creek and reduce the severity of flooding in the immediately adjacent areas. This potential mitigation option is available for all five build alternatives and appears to be an opportunity to enhance the hydraulic functions of Little Timber Creek in this area. Mitigation in this area would replace some of the functions and values that would be impacted by construction of the new interchange, including storage of surface water, dissipation of energy, and improvement of water quality and wetland habitat for wildlife species.

If Alternatives D or G2 are selected, adequate on-site mitigation is available. However, if Alternatives D1, H1, or K are selected, off-site mitigation is available. Offsite mitigation area Site 36 is located in West Deptford and includes the GreenVest Main Ditch property, which is the property selected as mitigation for the I-295/42 Missing Moves project. There is additional land on this property which would be suitable for mitigation for the needs of the Direct Connection project. The property contains areas that are currently

occupied by successional and primarily invasive herbaceous and tree species that have colonized a former dredge spoil deposition area, as well as lower lying farmed areas that could be utilized for mitigation. The site is owned by GreenVest, LLC, and has an existing mitigation area that was created for New Jersey Transit, which is approximately three years old. The GreenVest property is located within the same Hydrologic Unit Code (HUC) 11 Watershed as the Direct Connection project site.

A tidal waterway, Main Ditch, is located within the property and drains to the Delaware River, providing a readily accessible tidal source. This property is large enough to potentially allow for replacement of all of the wetland systems that will be impacted at the Direct Connection project site, i.e. open tidal water, tidal wetlands and non-tidal wetlands. In addition, the functions and values of any created open tidal water and wetlands at the GreenVest site will be of higher quality than those that will be impacted at the Direct Connection project location, because they will not be subject to roadway and urban land runoff. The created wetlands will replace all of the functions and values impacted at the project site, including storage of surface water, dissipation of energy, replenishment of soil moisture and improvement of water quality. The mitigation site also will provide habitat for many wildlife species.

In the interest of continuing its practice of sound environmental stewardship, NJDOT has discussed with the NJDEP the possibility of performing additional stream restoration activities on Little Timber Creek, beyond what would be required by the USACE for mitigation. Since the location and specifics of these activities have yet to be determined, the regulatory obligations are unknown. The specifics of these stream restoration activities will be more thoroughly covered in the final design.

TABLES

Table 2A - Summary of Permanent Fill Areas					
Impacted Wetland	Reason / Type of Material Discharged	Existing Characteristics (Wetland/Open Water)	Area (Feet²)	Area (Acres)	Volume (Yds³)
AE/AF	Slope embankment	Non-tidal Wetlands	4,008	0.092	660
AJ	Concrete & road fill	Non-tidal Wetlands	305	0.007	50
B	Road fill	Non-tidal Wetlands	610	0.014	670
C	Concrete & bioretention basin	Non-tidal Wetlands	12,632	0.290	4,440
H	Stormwater outfall structure	Non-tidal Wetlands	4,269	0.098	310
K	Slope embankment	Non-tidal Wetlands	44	0.001	90
N	Concrete & road fill	Non-tidal Wetlands	653	0.015	160
P	Concrete & road fill	Non-tidal Wetlands	3,528	0.081	280
R	Road fill, slope embankment, & drainage swale	Non-tidal Wetlands	4,704	0.108	600
S	Slope embankment	Non-tidal Wetlands	523	0.012	40
T	Slope embankment	Non-tidal Wetlands	1,350	0.031	120
TD	Road fill & retaining wall	Non-tidal & Tidal Wetlands	4,487	0.103	2,590
TE	Road fill, retaining wall, & riprap	Non-tidal & Tidal Wetlands	3,920	0.090	4,850
TF	Road fill, retaining wall, & riprap	Non-tidal & Tidal Wetlands	40,511	0.930	12,400
V	Slope embankment	Non-tidal Wetlands	1,742	0.040	200
TD	Culvert Extension	Open Water	2,439	0.056	90
Total Cumulative Permanent Fill Areas:			85,857	1.971	27,550

Table 2B - Summary of Temporary Fill/Impact Areas		
Impacted Wetland	Reason / Type of Material Discharged	Existing Characteristics (Wetland/Open Water)
TB, TE, & TF	Roadway and embankment removal of Al Jo's Curve for on-site mitigation	Non-tidal wetland
TB, TD, & TE	Removal of existing culverts under Al Jo's Curve	Tidal wetland & open water
TD	Roadway and embankment removal for on-site mitigation	Non-tidal wetland
TD	Access for construction of Ramp D and drainage outfall installation	Tidal wetland
TE	Access for drainage outfall installation	Tidal & non-tidal wetland
TE	Access for construction of Ramp B	Tidal & non-tidal wetland
TF	Access for construction of Ramps B, C and I-295 southbound	Tidal & non-tidal wetland
TF	Access for drainage outfall installation	Tidal & non-tidal wetland

TABLE 4
I-295/I-76/Route 42 Direct Connection
LIST OF VEGETATION FOUND IN WETLAND AND UPLAND AREAS

Trees

<u>Scientific Name</u>	<u>Common Name</u>	<u>Indicator Status</u>
<i>Acer rubrum</i>	Red maple	FACW+ thru FAC
<i>Acer negundo</i>	Boxelder	FAC+
<i>Acer platanoides</i>	Norway maple	UPL
<i>Acer saccharinum</i>	Silver maple	FACW
<i>Albizia julibrissin</i>	Silktree ("Mimosa")	UPL
<i>Ailanthus altissima</i>	Tree-of-heaven	FACU-
<i>Betula lenta</i>	Sweet birch	FACU
<i>Catalpa speciosa</i>	Northern catalpa	FAC
<i>Celtis occidentalis</i>	Common hackberry	FACU
<i>Cercis Canadensis</i>	Redbud	FACU-
<i>Cornus florida</i>	Flowering dogwood	FACU-
<i>Diospyros virginiana</i>	Common persimmon	FAC-
<i>Fraxinus americana</i>	White ash	FACU
<i>Fraxinus pennsylvanica</i>	Green ash	FACW
<i>Fagus grandifolia</i>	American beech	FACU
<i>Juglans nigra</i>	Black walnut	FACU
<i>Juniperus virginiana</i>	Eastern red cedar	FACU
<i>Liquidambar styraciflua</i>	Sweet gum	FAC
<i>Liriodendron tulipifera</i>	Tulip-tree, yellow poplar	FACU
<i>Morus rubra</i>	Red mulberry	FACU
<i>Nyssa sylvatica</i>	Black gum	FAC
<i>Pinus strobus</i>	Eastern white pine	FACU
<i>Pinus virginiana</i>	Scrub pine	FACU
<i>Plantanus occidentalis</i>	American sycamore	FACW-
<i>Prunus serotina</i>	Black cherry	FACU
<i>Quercus alba</i>	White oak	FACU
<i>Quercus marilandica</i>	Black-jack oak	NE
<i>Quercus muehlenbergii</i>	Chinquapin (yellow) oak	NI
<i>Quercus palustris</i>	Pin oak	FACW
<i>Quercus phellos</i>	Willow oak	FAC+
<i>Quercus prinus</i>	Chestnut oak	UPL
<i>Quercus rubra</i>	Northern red oak	FACU-
<i>Quercus nigra</i>	Water oak	FAC
<i>Rhododendron spp</i>	Rhododendron spp.	UPL - FACW+
<i>Rhus typhina</i>	Staghorn sumac	UPL
<i>Robinia pseudoacacia</i>	Black locust	FACU-
<i>Salix nigra</i>	Black willow	FACW+
<i>Sassafras albidum</i>	Sassafras	FACU-
<i>Tilia americana</i>	American basswood	FACU
<i>Ulmus americana</i>	American elm	FACW-
<i>Ulmus parvifolia</i>	Chinese elm	UPL

TABLE 4
I-295/I-76/Route 42 Direct Connection
LIST OF VEGETATION FOUND IN WETLAND AND UPLAND AREAS (Cont.)

Shrubs

<u>Scientific Name</u>	<u>Common Name</u>	<u>Indicator Status</u>
<i>Aralia spinosa</i>	Devil's Club	NE
<i>Berberis spp.</i>	Barberry species (2 spp.)	FACU
<i>Cephalanthus occidentalis</i>	Common buttonbush	OBL
<i>Clethra alnifolia</i>	Sweet pepperbush	FAC+
<i>Cornus amomum</i>	Silky dogwood	FACW
<i>Cornus stolonifera</i>	Red-osier dogwood	FACW+
<i>Hamamelis virginiana</i>	American witch-hazel	FAC-
<i>Lindera benzoin</i>	Northern spicebush	FACW-
<i>Lonicera canadensis</i>	American fly-honeysuckle	FACU
<i>Lonicera tatarica</i>	Tartarian honeysuckle	FACU
<i>Rosa multiflora</i>	Multiflora rose	FACU
<i>Salix interior</i>	Sandbar willow	OBL
<i>Sambucus canadensis</i>	Common elder	FACW-
<i>Viburnum acerifolium</i>	Maple-leaf arrow-wood	UPL
<i>Viburnum dentatum</i>	Southern arrow-wood	FAC
<i>Viburnum prunifolium</i>	Smooth black haw	FACU
<i>Viburnum recognitum</i>	Northern arrow-wood	FACW-

Vines

<u>Scientific Name</u>	<u>Common Name</u>	<u>Indicator Status</u>
<i>Humulus lupulus</i>	Common hop	FACU
<i>Ipomoea purpurea</i>	Common morning-glory	UPL
<i>Lonicera dioica</i>	Limber honeysuckle	FACU
<i>Lonicera japonica</i>	Japanese honeysuckle	FAC-
<i>Parthenocissus quinquefolia</i>	Virginia creeper	FACU
<i>Smilax rotundifolia</i>	Common greenbrier	FAC
<i>Toxicodendron radicans</i>	Poison ivy	FAC
<i>Vitis aestivalis</i>	Summer grape	FACU
<i>Vitis labrusca</i>	Fox grape	FACU
<i>Wisteria frutescens</i>	American wisteria	FACW

TABLE 4
I-295/I-76/Route 42 Direct Connection
LIST OF VEGETATION FOUND IN WETLAND AND UPLAND AREAS (Cont.)

Herbs

<u>Scientific Name</u>	<u>Common Name</u>	<u>Indicator Status</u>
<i>Achillea millefolium</i>	Common yarrow	FACU
<i>Ageratina altissima</i>	White snakeroot	FACU-
<i>Agrostis gigantea</i>	Redtop	FACW
<i>Alliaria petiolata</i>	Garlic mustard	FACU-
<i>Allium vineale</i>	Wild garlic	FACU-
<i>Ambrosia trifida</i>	Giant ragweed	FAC
<i>Ambrosia artemisiifolia</i>	Common ragweed	FAC
<i>Arctium minus</i>	Common burdock	NE
<i>Arisaema quintatum</i>	Jack-in-the-pulpit (5-leafed)	NI
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit (3-leafed)	FACW-
<i>Asclepias rubra</i>	Red milkweed	OBL
<i>Asclepias syriaca</i>	Common milkweed	FACU-
<i>Asclepias verticillata</i>	Whorled milkweed	UPL
<i>Aster spp.</i>	Aster species	OBL thru UPL
<i>Bidens coronata</i>	Swamp beggar-ticks	OBL
<i>Bidens laevis</i>	Larger bur marigold	NE
<i>Cannabis sativa</i>	Hemp	FACU
<i>Carex folliculata</i>	Northern long sedge	OBL
<i>Cichorium intybus</i>	Chicory	NI
<i>Cirsium arvense</i>	Canada-thistle	FACU
<i>Centaurea maculosa</i>	Spotted knapweed	UPL
<i>Commelina virginica</i>	Virginia dayflower	FACW
<i>Commelina asiatica</i>	Asiatic dayflower	FAC-
<i>Conyza canadensis</i>	Canadian horseweed	UPL
<i>Cyperus strigosus</i>	Umbrella (Flat) sedge	FACW
<i>Daucus carota</i>	Queen Anne's lace	UPL
<i>Eupatoriadelphus dubius</i>	Joe Pye weed	OBL
<i>Equisetum sylvaticum</i>	Woodland horsetail	FACW
<i>Gautheria hispidula</i>	Creeping snowberry	FACW
<i>Glechoma hederacea</i>	Ground ivy	FACU
<i>Impatiens capensis</i>	Spotted touch-me-not (Jewelweed)	FACW
<i>Impatiens pallida</i>	Pale touch-me-not (Jewelweed)	FACW
<i>Iris spp.</i>	(Iris or Flag)	OBL
<i>Lactuca canadensis</i>	Wild lettuce	FACU-
<i>Lycopodium obscurum</i>	Tree clubmoss	FACU
<i>Lythrum salicaria</i>	Purple loosestrife	FACW+-
<i>Oenothera fruticosa</i>	Narrow-leafed sundrop	FAC
<i>Onoclea sensibilis</i>	Sensitive fern	FACW
<i>Oxalis corniculata</i>	Creeping woodsorrel	FACU
<i>Oxalis europeae(stricta)</i>	Upright yellow woodsorrel	UPL

TABLE 4
I-295/I-76/Route 42 Direct Connection
LIST OF VEGETATION FOUND IN WETLAND AND UPLAND AREAS (Cont.)

<i>Oxalis montana</i>	White woodsorrel	FAC-
<i>Panicum virgatum</i>	Switch grass	FAC
<i>Paspalum laeve</i>	Smooth paspalum	FAC+
<i>Peltandra virginica</i>	Arrow-arum	OBL
<i>Phragmites australis</i>	Common reed	FACW
<i>Physalis heterophylla</i>	Common ground cherry	UPL
<i>Physostegia purpurea</i>	Purple dragon-head	FACW
<i>Phytolacca americana</i>	American pokeweed	FACU+
<i>Pilea pumila</i>	Canadian clearweed	FACW
<i>Plantago major</i>	Common plantain	FACU
<i>Polygonum amphibium</i>	Water smartweed	OBL
<i>Polygonum cuspidatum</i>	Japanese knotweed	FACU-
<i>Polygonum hydropiper</i>	Common smartweed	OBL
<i>Polygonum hydropiperoides</i>	Mild water pepper	OBL
<i>Polygonum lapathifolium</i>	Willow-weed	FACW+
<i>Polygonum perfoliatum</i>	Asiatic tearthumb	FAC
<i>Polygonum punctatum</i>	Dotted smartweed	OBL
<i>Polygonum scandens</i>	Climbing false buckwheat	FAC
<i>Pontederia cordata</i>	Pickernelweed	OBL
<i>Ribes lacustre</i>	Bristly black currant	FACW
<i>Rubus spp.</i>	Black berry species	FACU- thru FAC+
<i>Rudbeckia hirta</i>	Black-eyed-Susan	FACU-
<i>Rumex crispus</i>	Curly dock	FACU
<i>Saururus cernuus</i>	Lizard's tail	OBL
<i>Setaria verticillata</i>	Bristle grass	FAC
<i>Sicyos angulatus</i>	One-seed bur-cucumber	FACU
<i>Solidago spp.</i>	Goldenrod species	UPL thru OBL
<i>Smilacina racemosa</i>	False Solomon's seal	FACU-
<i>Symphoricarpos albus</i>	Common snowberry	FACU-
<i>Symplocarpus foetidus</i>	Skunk cabbage	OBL
<i>Taraxacum officinale</i>	Common dandelion	FACU-
<i>Thelypteris noveboracensis</i>	New York fern	FAC
<i>Triodia flava</i>	Purpletop tridens	NE
<i>Typha angustifolia</i>	Narrow-leaf cattail	OBL
<i>Typha latifolia</i>	Broad-leaf cattail	OBL
<i>Urtica dioica</i>	Stinging nettle	FACU
<i>Veronia noveboracensis</i>	New York ironweed	FACW+
<i>Vicia americana</i>	American purple vetch	NI
<i>Vicia sativa</i>	Common vetch	FACU-
<i>Viola spp.</i>	Violet species	OBL thru FAC
<i>Zizania aquatica</i>	Wild rice	OBL

TABLE 5		
I-295/I-76/Route 42 Direct Connection		
LIST OF POSSIBLE WILDLIFE SPECIES & DOCUMENTED SIGHTINGS		
MAMMALS		
Scientific Name	Common Name	Observed
<i>Ondatra zibethica</i>	Muskrat	
<i>Procyon lotor</i>	Raccoon	X
<i>Vulpes vulpes</i>	Red fox	
<i>Sciurus carolinensis</i>	Eastern gray squirrel	X
<i>Mephitis mephitis</i>	Striped skunk	
<i>Odocoileus virginianus</i>	White-tailed deer	X
BIRDS		
Scientific Name	Common Name	Observed
<i>Butorides striatus</i>	Green heron	
<i>Anas rubripes</i>	American black duck	
<i>Anas platyrhynchos</i>	Mallard	X
<i>Cathartes aura</i>	Turkey vulture	X
<i>Buteo platypterus</i>	Broad-winged hawk	
<i>Buteo jamaicensis</i>	Red-tailed hawk	X
<i>Bonasa umbellus</i>	Ruffed grouse	
<i>Rallus limicola</i>	Virginia rail	
<i>Charadrius vociferous</i>	Killdeer	
<i>Scolopax minor</i>	American woodcock	
<i>Coccyzus erythrophthalmus</i>	Black-billed cuckoo	
<i>Coccyzus americanus</i>	Yellow-billed cuckoo	
<i>Otus asio</i>	Eastern screech owl	
<i>Bubo virginianus</i>	Great horned owl	
<i>Chaetura pelagica</i>	Chimney swift	
<i>Archilochus colubris</i>	Ruby-throated hummingbird	
<i>Melanerpes carolinus</i>	Red-bellied woodpecker	X
<i>Picoides pubescens</i>	Downy woodpecker	X
<i>Picoides villosus</i>	Hairy woodpecker	X
<i>Colaptes auratus</i>	Northern flicker	X
<i>Dryocopus pileatus</i>	Pileated woodpecker	
<i>Contopus virens</i>	Eastern wood-pewee	
<i>Empidonax virens</i>	Acadian flycatcher	
<i>Empidonax alnorum</i>	Alder flycatcher	
<i>Empidonax traillii</i>	Willow flycatcher	
<i>Sayornis phoebe</i>	Eastern phoebe	X
<i>Myiarchus tyrannus</i>	Great crested flycatcher	

TABLE 5		
I-295/I-76/Route 42 Direct Connection		
LIST OF POSSIBLE WILDLIFE SPECIES & DOCUMENTED SIGHTINGS (Cont.)		
BIRDS (Cont.)		
Scientific Name	Common Name	Observed
<i>Tyrannus tyrannus</i>	Eastern kingbird	
<i>Progne subis</i>	Purple martin	
<i>Tachycineta bicolor</i>	Tree swallow	X
<i>Stelgidopteryx serripennis</i>	Northern rough-winged swallow	X
<i>Certhia americana</i>	Brown creeper	
<i>Polioptila acerulea</i>	Blue-gray gnatcatcher	
<i>Sialia sialis</i>	Eastern bluebird	
<i>Catharus fuscenscens</i>	Veery	
<i>Catharus guttatus</i>	Hermit thrush	
<i>Hylocichla mustelina</i>	Wood thrush	
<i>Turdus migratorius</i>	American robin	X
<i>Dumetella carolinensis</i>	Gray catbird	X
<i>Bombycilla cedrorum</i>	Cedar waxwing	
<i>Vireo solitarius</i>	Blue-headed vireo	
<i>Vireo flavifrons</i>	Yellow-throated vireo	
<i>Vireo gilvus</i>	Warbling vireo	
<i>Vireo olivaceus</i>	Red-eyed vireo	
<i>Vermivora pinus</i>	Blue-winged warbler	
<i>Verivora chrysoptera</i>	Golden-winged warbler	
<i>Dendroica petechia</i>	Yellow warbler	
<i>Dendroica pensylvanica</i>	Chestnut-sided warbler	
<i>Dendroica virens</i>	Black-throated green warbler	
<i>Dendroica cerulean</i>	Cerulean warbler	
<i>Mniotilta varia</i>	Black-and-white warbler	
<i>Setophaga reticulla</i>	American redstart	
<i>Helmitheros vermivorus</i>	Worm-eating warbler	
<i>Seiurus aurocapillus</i>	Ovenbird	
<i>Seiurus motacilla</i>	Louisiana waterthrush	
<i>Geothlypis trichas</i>	Common yellowthroat	
<i>Wilsonia Canadensis</i>	Canada warbler	
<i>Piranga olivacea</i>	Scarlet tanager	
<i>Cardinalis cardinalis</i>	Northern cardinal	X
<i>Pheucticus ludovicianus</i>	Rose-breasted grosbeak	
<i>Passerina cyanea</i>	Indigo bunting	
<i>Pipilo erythrophthalmus</i>	Eastern towhee	
<i>Spizella passerina</i>	Chipping sparrow	
<i>Spizella pusilla</i>	Field sparrow	

TABLE 5		
I-295/I-76/Route 42 Direct Connection		
LIST OF POSSIBLE WILDLIFE SPECIES & DOCUMENTED SIGHTINGS (Cont.)		
BIRDS (Cont.)		
Scientific Name	Common Name	Observed
<i>Melospiza melodia</i>	Song sparrow	X
<i>Agelaius phoeniceus</i>	Red-winged blackbird	X
<i>Quiscalus quiscula</i>	Common grackle	X
<i>Icterus galbula</i>	Baltimore oriole	
<i>Carduelis tristis</i>	American goldfinch	X
AMPHIBIANS		
Scientific Name	Common Name	Observed
<i>Plethodon cinereus cinereus</i>	Red-backed salamander	
<i>Bufo americanus</i>	American toad	
<i>Rana clamitans melanota</i>	Green frog	X
<i>Rana catesbeiana</i>	Bullfrog	
<i>Rana utricularia</i>	Southern leopard frog	
<i>Hyla crucifer</i>	Spring peeper	
REPTILES		
Scientific Name	Common Name	Observed
<i>Thamnophis sirtalis sirtalis</i>	Eastern garter snake	
<i>Neroidida sipedon</i>	Northern water snake	
<i>Clemmys muhlenbergii</i>	Bog turtle	
<i>Clemmys insculpta</i>	Wood turtle	
<i>Chrysemys picta</i>	Painted turtle	
<i>Chelydra serpentina</i>	Snapping turtle	
<i>Terrapene Carolina Carolina</i>	Eastern box turtle	

TABLE 6
ALTERNATIVE COMPARISON MATRIX

CRITERIA	BUILD ALTERNATIVES					NO BUILD
	D	K	D1	G2	H1	
ENGINEERING CRITERIA						
Meets Purpose and Need	Yes	Yes	Yes	Yes	Yes	No
Temporary Construction Impacts	Medium	Medium	Medium	High	High	Low
Maintenance and Protection of Traffic	Medium	High	High	High	High	Low
Security	Medium	High	Medium	High	High	Low
Design Criteria (Substandard Elements)	Low	Low	Low	Low	Low	High
Cost to Build	\$608 million	\$822 million	\$642 million	\$833 million	\$893 million	N/A
Construction Duration	64 months	88 months	63 months	70 months	73 months	As Needed
Maintenance and Operations	Medium	High	Medium	High	High	Low
ENVIRONMENTAL CRITERIA						
Noise						
Residential Noise Impact Reduction	109	113	109	91	91	0
Post Mitigation Residential Noise Increase over Existing Conditions						
Less than 3 dBA (Not Perceivable)	135	133	125	150	140	250
Greater than 3 dBA but less than 7 dBA (Perceivable)	15	7	26	35	46	4
Greater than 7 dBA (Noticeable)	0	0	0	12	12	0
Approved Additional Residential Units (not present under existing condition)	5	5	5	18	18	15
Natural Ecosystems						
Floodplain	2.28 acres	3.04 acres	4.45 acres	.90 acre	4.26 acres	0
Total Wetland and SOW Permanent Impacts	1.97 acres	2.90 acres	3.73 acres	.95 acre	3.15 acres	0
On-Site Wetland Mitigation Opportunities	100%	93%	10%	100%	12%	N/A
Total Impervious Coverage	61 acres	67 acres	65 acres	64 acres	67 acres*	42 acres**
Waterfront Access	Yes	Yes	No	Yes	No	No
Socioeconomics						
Visual Impacts	Medium	Low	Medium	High	High	None
Residential Acquisitions	13	13	13	5	5	0
Community Property Acquisitions	Medium	Medium	Medium	Low	Low	None
4(f) Property Acquisition (In Acres)	.70 acre	.70 acre	.70 acre	.32 acre	.32 acre	0
Regional Accessibility (Annual)	\$39 million	\$39 million	\$39 million	\$39 million	\$39 million	0
Cost Benefit from Reduction in Accidents (Annual)	\$11 million	\$11 million	\$11 million	\$11 million	\$11 million	0
Historic Architectural Resources						
Physical Impacts to Historic District	2.11 acres/5bldgs	2.20 acres/5 bldgs	2.11 acres/5 bldgs	1.05 acres/1 bldg	1.05 acres/1 bldg	0 acres/0 bldgs
Noise Impact Reduction to Historic District	14	18	14	14	14	0
Post Mitigation Residential Noise Increase over Existing Conditions						
Less than 3 dBA (Not Perceivable)	16	12	16	18	18	23
Greater than 3 dBA but less than 7 dBA (Perceivable)	0	0	0	1	1	0
Greater than 7 dBA (Noticeable)	0	0	0	0	0	0
Impact to Viewshed	Medium	Low	Medium	High	High	None

NOTES: Air Quality, Hazardous Waste and Archaeology are not distinguishing criteria, since results are virtually equal for each alternative.

* Includes channel realignment/relocation.

** Does not provide for stormwater treatment.

TABLE 7
ALTERNATIVE COMPARISON METRICS

CRITERIA	METRICS
Meets Purpose & Need	The metric is yes or no.
Temporary Construction Impacts	Low: Impacts caused by routine maintenance and potential upgrades which will result in local noise, dust and inconvenience of short duration (less than a few months).
	Medium: Noise, dust, vibration and/or visual impacts and inconvenience to neighboring properties for several years.
	High: Considerable noise, dust, vibrations, visible impacts, inconvenience to neighboring properties for several years.
Maintenance & Protection of Traffic	Low: Minimal traffic is diverted off the mainline due to construction.
	Medium: Traffic diversions off the mainline due to the southbound weave are 12 months or less and/or overall construction duration is less than 6 years.
	High: Traffic diversion off the mainline due to the southbound weave is greater than 12 months and/or overall construction duration is 6 years or more.
Security	Low: Potential breach of security results in minor facility damage with a short recovery time for repair.
	Medium: Potential breach of security results in significant facility damage with an extended duration for repair.
	High: Potential breach in security results in multiple extreme failures of facilities with an extended duration for repair.
Design Criteria (Substandard Elements)	Low: Mainline I-295 is accommodated with a direct connection with 55 mph posted speed, and interchange ramps are designed for a 40 mph posted speed. The substandard design elements are primarily limited to existing bridges and/or facilities at the limits of the project (i.e., Market Street, railroad bridge).
	Medium: Some geometric improvements are made to the interchange with some increase in posted speeds; however, there are still a number of substandard design exceptions or other substandard conditions throughout the project limits.
	High: Mainline I-295 is not accommodated with a direct connection and the northbound weave with Route 42 and the use of Al Jo's Curve for I-295 southbound still exist. There are no changes in posted speed. Numerous substandard design elements and conditions are present for the roadway, ramps, and bridges within the interchange, as well as for bridges or facilities at the limits of the project.
Cost to Build	The metric is the estimated Cost to Build.
Construction Duration	The metric for construction duration is the estimated duration of the project.
Maintenance & Operations	Low: Amount of structure has not increased and structure maintenance is routine. Operations of stormwater pump stations and tunnel sections are not required.
	Medium: Amount of structure has increased or structure maintenance is significant. Operations of stormwater pump stations are required. Operations of tunnel sections are not required.
	High: Amount of structure has increased significantly or structure maintenance is significant. Operations of stormwater pump stations and tunnel sections are required.

**TABLE 7 (Cont.)
ALTERNATIVE COMPARISON METRICS**

CRITERIA	METRICS
Noise	
Residential Noise Impact Reduction	The number of receptors presently above the Category B NAC (66 dBA) who will be reduced below the Category B NAC as a result of the project.
Post Mitigation Residential Noise Increase over Existing Conditions	The number of receptors experiencing an increase over existing conditions in each of three ranges: less than 3 dBA (not perceivable); greater than 3 dBA but less than 7 dBA (perceivable); and greater than 7 dBA (noticeable).
Natural Ecosystems	
Floodplain	The actual acreage of floodplain lost due to construction and fill.
Total Wetland and SOW Permanent Impacts	The actual acreage of permanent wetland and SOW impacts.
On-Site Wetland Mitigation Opportunities	The percentage of acreage available for on-site mitigation.
Total Impervious Coverage	The total impervious coverage in acres.
Waterfront Access	Yes or No.
Socioeconomics	
Visual Impacts	<p>None: There will be no change to the viewshed.</p> <p>Low: View is open with limited intrusion of concrete infrastructure. Landscape is dominated by vegetation and existing buildings of a consistent nature.</p> <p>Medium: View has changed to include some road infrastructure, but infrastructure is balanced with the rest of the landscape. Although the view has changed, the view is recognizable.</p> <p>High: Field of view is dominated by massive intrusive infrastructure, and the resulting view is barely recognizable from existing conditions.</p>
Residential Acquisitions	The actual number of residential acquisitions.
Community Property Acquisitions	<p>None: No impact to community facility.</p> <p>Low: No loss of use of community facility.</p> <p>Medium: Temporary loss of use of community facility.</p> <p>High: Permanent loss of use of community facility.</p>
4(f) Property Acquisition	The actual acreage acquired from the 4(f) property.
Regional Accessibility	The annual vehicle cost savings in dollars due to reduced travel time.
Cost Benefits From Reduction in Accidents	The cost savings in dollars on an annual basis.
Historic Architectural Resources	
Physical Impacts to Historic District	The number of actual acres impacted and the number of structures impacted.
Noise Impact Reduction to Historic District	The number of receptors presently above the Category B NAC (66 dBA) that will be reduced below the Category B NAC as a result of the project.
Post Mitigation Residential Noise Increase over Existing Conditions	The number of contributing buildings within the Bellmawr Park Mutual Housing Historic District that would have an increase in noise levels over existing conditions in each of three ranges: less than 3 dBA (not perceivable); greater than 3 dBA but less than 7 dBA (perceivable); and greater than 7 dBA (noticeable).
Impact to Viewshed	<p>None: There will be no change to viewshed.</p> <p>Low: The viewshed would remain relatively unchanged and open with limited intrusion of physical infrastructure.</p> <p>Medium: The viewshed would be changed to include some new infrastructure at a relatively close distance to the historic district.</p> <p>High: The viewshed would be dominated by intrusive infrastructure at a relatively close distance to the historic district.</p>

Table 8. Block 25 (ENG 4345) List of Other Certifications or Approvals/Denials Received from Other Federal, State, or Local Agencies for Work Described in this Application

Agency	Type of Approval	Identification Number	Date Applied	Date Approved	Date Denied
New Jersey Department of Environmental Protection	Stream Encroachment Permit*			Pending	
New Jersey Department of Environmental Protection	Freshwater Wetlands Individual Permit			Pending	
New Jersey Department of Environmental Protection	Waterfront Development Permit (Commercial)			Pending	
New Jersey Department of Environmental Protection	Water Quality Certificate			Pending	
New Jersey Department of Environmental Protection	Tidal Wetlands (1970) Permit			Pending	
New Jersey Department of Environmental Protection	Freshwater Wetlands Letter of Interpretation	0400-04-0002.1 LOI 040001	July 12, 2004	Feb. 9, 2005	
U.S. Army Corps of Engineers	Jurisdictional Determination	CENAP-OP-R-199802102-35	June 30, 2004	Feb. 15, 2005	

* As part of the proposed NJDEP Stream Encroachment Regulations, this permit will soon be known as a "Flood Hazard Area Permit."

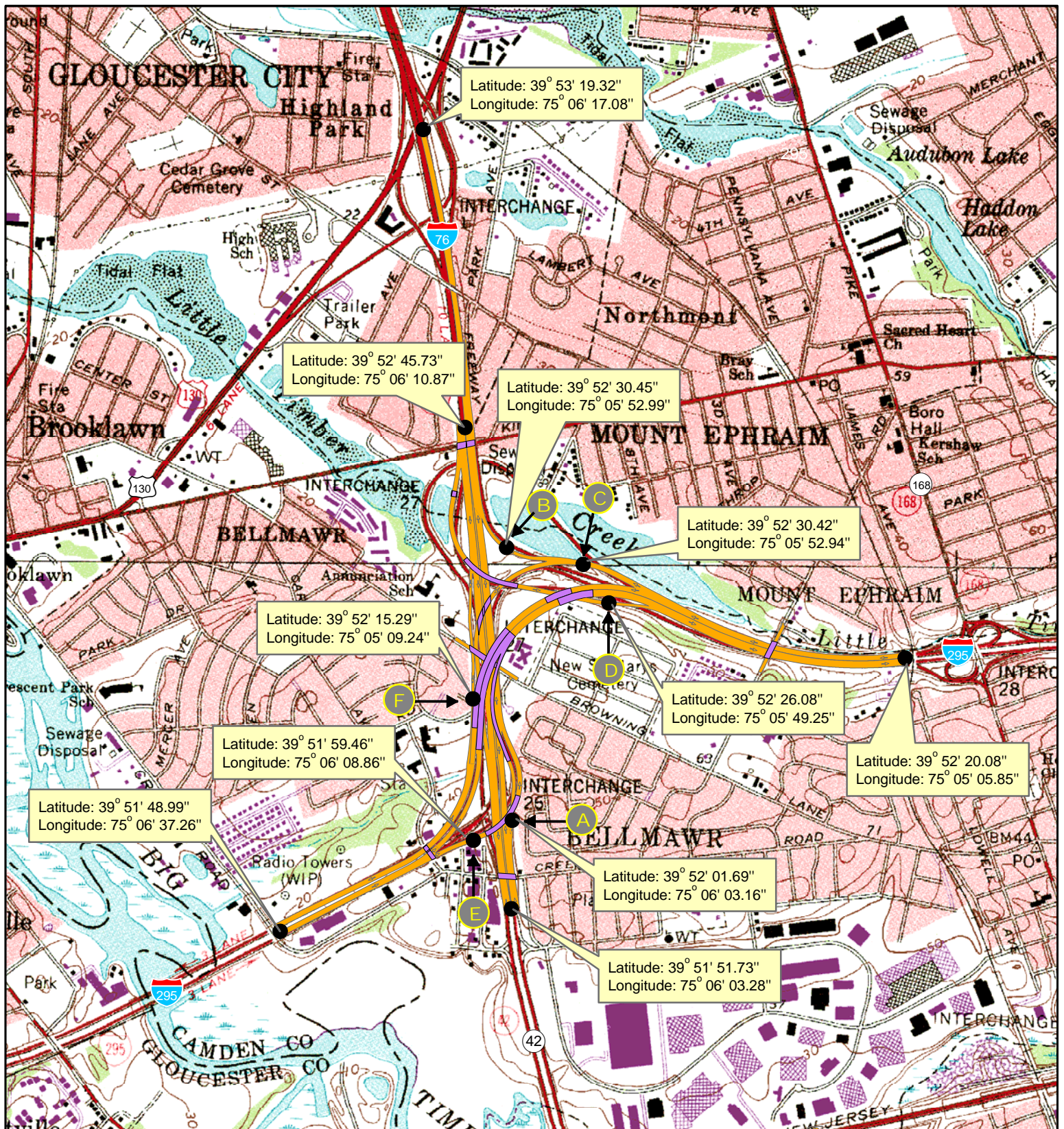
Table 9
Block 24 (ENG 4345) Addresses of Adjoining Property Owners, Lessees, etc. Whose Property Adjoin the Waterbody

Municipality	Block	Lot	Property Location	Owner's Name	Owner's Mailing Address	City/State/Zip
Mount Ephraim	97	5.04	M10	Borough of Mount Ephraim	121 S Black Horse Pike	Mt. Ephraim, NJ 08059
Mount Ephraim	97	7.01	Winthrop Ave.	Borough of Mount Ephraim	121 S Black Horse Pike	Mt. Ephraim, NJ 08059
Mount Ephraim	98	4.04	Jefferson Ave.	Borough of Mount Ephraim	121 S Black Horse Pike	Mt. Ephraim, NJ 08059
Mount Ephraim	98	4.05	135 Roosevelt Ave.	Meeser, John R.	135 Roosevelt Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	98	4.06	Roosevelt Ave.	VBI, Inc.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	98	4.07	Roosevelt Ave.	VBI, Inc.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	99	7.02	Jefferson Ave.	BHP S APTS C/O J CANAL	1221 Crane Dr.	Cherry Hill, NJ 08003
Mount Ephraim	99	7.03	Cleveland Ave.	Colony III Corp.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	99	7.04	Jefferson Ave.	Verzilli, William D. & Susan E.	131 Jefferson Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	100	6.01	Adams & Cleveland Ave.	VBI, Inc.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	100	6.02	Adams & Cleveland Ave.	VBI, Inc.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	100	7	Adams & Cleveland Ave.	VBI, Inc.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	101	5	Adams Ave.	VBI, Inc.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	102	1	Linwood & Locust Ave.	VBI, Inc.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	103	1	Winthrop & Harding	BHP APTS S C/O J CANAL	1221 Crane Dr.	Cherry Hill, NJ 08003
Mount Ephraim	104	1.01	Emerson Ave.	McGlensey & Musselman & Rodgers	243 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	104	1.02	Emerson Ave.	McGlensey & Musselman & Rodgers	243 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	104	2.01	Emerson Ave.	VBI, Inc.	115 Black Horse Pike	Haddon Heights, NJ 08035
Mount Ephraim	104	2.02	Emerson Ave.	NJDOT	W. State & Wilson St.	Trenton, NJ 08646
Mount Ephraim	104	2.03	Emerson Ave.	McGlensey & Musselman & Rodgers	243 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.01	Emerson & Garfield Ave.	McGlensey, Raymond J.	243 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.02	251 Lowell Ave.	Musselman III, Richard N. & Dana L.	251 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.04	215 Lowell Ave.	Hagerty, John & Patricia	215 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.05	247 Lowell Ave.	Poole, Mark & Peggy B.	247 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.06	243 Lowell Ave.	Est. of Donald E. McGlensey	243 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.07	239 Lowell Ave.	Sylvester, Karen N.	239 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.08	235 Lowell Ave.	Ulatowski, Stanley	235 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.09	Emerson & Garfield Ave.	McGlensey, Raymond J.	243 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.10	231 Lowell Ave.	Beebe Jr., Oron C. & McNamara, Jennifer	231 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.11	223 Lowell Ave.	O'Kane, Erin M. & Wood, Christine M.	223 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.12	227 Lowell Ave.	Garris, Anthony M.	227 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.13	213 Lowell Ave.	McMonagle, James P. & Renee M.	213 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.14	207 Lowell Ave.	Koehl, Wayne	207 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	105	1.15	205 Lowell Ave.	Gaglianore, Michael & Suzanne	205 Lowell Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	115	1.01	326 Emerson Ave.	Bocchicchio, Mario	424 Gaskill Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	115	1.02	328 Emerson Ave.	Sylvester, Rita & Chrzanowski, Diane	328 Emerson Ave.	Mt. Ephraim, NJ 08059
Mount Ephraim	115	2.04	805 Bell Rd.	Est. of F. Staffieri C/O Michael Stafieri	289 James St.	Mt. Ephraim, NJ 08059
Mount Ephraim	115	2.05	Emerson Ave.	Verizon	PO Box 152206	Irving, TX 75015
Mount Ephraim	123.01	2.01	1154 W Kings Highway	Eves, David J. & Phyllis	1154 W Kings Highway	Mt. Ephraim, NJ 08059
Mount Ephraim	123.01	2.02	1204 W Kings Highway	DeLucca, Michael J. & Montano, Nicole	1204 W Kings Highway	Mt. Ephraim, NJ 08059
Mount Ephraim	123.01	2.05	1200 W Kings Highway	Cucinotti, Dolores	1200 W Kings Highway	Mt. Ephraim, NJ 08059
Mount Ephraim	123.01	3.03	33 Linden Ave.	Borough Garage	121 S Black Horse Pike	Mt. Ephraim, NJ 08059
Mount Ephraim	123.02	1.01	1242 W Kings Highway	Mt. Ephraim Senior Housing	1242 W Kings Highway	Mt. Ephraim, NJ 08059
Bellmawr	32	28	831 W Browning Rd.	Rite Aid of New Jersey, Inc.	PO Box 3165, ST # 433	Harrisburg, PA 17105
Bellmawr	32	29	1020 Kings Highway	South Penn Associates LLC	36 South Main Street	Pleasantville, NJ 08232

Table 9
Block 24 (ENG 4345) Addresses of Adjoining Property Owners, Lessees, etc. Whose Property Adjoin the Waterbody

Bellmawr	32	29.03	Off Kings Highway	Borough of Bellmawr	21 E Browning Rd.	Bellmawr, NJ 08031
Bellmawr	49	1.02	Essex Avenue - Fields	Borough of Bellmawr	21 E Browning Rd.	Bellmawr, NJ 08031
Bellmawr	50	1.01	615 Browning Rd.	New St. Mary's Cemetery	615 Browning Rd.	Bellmawr, NJ 08031
Bellmawr	50.01	37	Kennedy Blvd.	Borough of Bellmawr	21 E Browning Rd.	Bellmawr, NJ 08031
Bellmawr	50.01	40	235 Kennedy Blvd.	McGuckin, Thomas A. & DePietro, B.	235 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	41	233 Kennedy Blvd.	Andrews, Timothy & Andrea	233 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58	Rear Kennedy Blvd.	Borough of Bellmawr	21 E Browning Rd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.01	201 Kennedy Blvd.	Helm, Shane	201 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.02	203 Kennedy Blvd.	Dykty, Thomas M. & Carlotta D. Wert-	203 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.03	205 Kennedy Blvd.	McFadden, Arlene Varra	205 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.04	Pollick, William F. & Anne	Pollick, William F. & Anne	207 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.05	209 Kennedy Blvd.	Merlino-Oliveira, Dawn	209 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.06	211 Kennedy Blvd.	Luck C. & Drasham, S. & Luck C.	211 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.07	213 Kennedy Blvd.	Lisk, Margaret	213 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.08	215 Kennedy Blvd.	Renzulli, Frederick M. & Kristen M.	215 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.09	217 Kennedy Blvd.	Perkins, Charles Jr. & Joan	217 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.10	219 Kennedy Blvd.	DePamphilis, Anne	219 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.11	221 Kennedy Blvd.	Piccioni, Albert A. & Estelle C.	221 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.12	223 Kennedy Blvd.	Waldron, Michael J.	223 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.13	225 Kennedy Blvd.	Char, Dorothy	225 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.14	227 Kennedy Blvd.	Ciullo, Richard & Bernadette	227 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.15	229 Kennedy Blvd.	Schalalbeo, Kathleen	229 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.01	58.16	231 Kennedy Blvd.	Cook, John W. & Kelly L.	231 Kennedy Blvd.	Bellmawr, NJ 08031
Bellmawr	50.04	1.02	601 W Browning Rd.	Church of the Annunciation BVM	601 W Browning Rd.	Bellmawr, NJ 08031
Bellmawr	50.05	1.01	Bell Rd.	Borough of Bellmawr	21 E Browning Rd.	Bellmawr, NJ 08031
Bellmawr	51.11	6	468 Colonial Rd.	Borough of Bellmawr	21 E Browning Rd.	Bellmawr, NJ 08031
Bellmawr	51.11	7	464 Colonial Rd.	Correll, Edward J Jr. & Elizabeth D.	464 Colonial Rd.	Bellmawr, NJ 08031
Bellmawr	80	2	Rear 191 Anderson Ave.	Borough of Bellmawr	21 E Browning Rd.	Bellmawr, NJ 08031
Bellmawr	80	4.01	191 Anderson Ave.	Borough of Bellmawr	21 E Browning Rd.	Bellmawr, NJ 08031
Bellmawr	80	16	101 Snyder Ave.	Gillis, Matthew J. & Dawn M.	101 Snyder Ave.	Bellmawr, NJ 08031
Bellmawr	180	1.02	State & County Rds.	NJDOT	1035 Parkway Ave.	Trenton, NJ 08625
Gloucester City	277	16	Kings Highway	Gloucester City	512 Monmouth St.	Gloucester City, NJ 08030

FIGURES



Legend

- Alternative D Bridge
- Alternative D Roadway

SOURCE:

- Runnemede, NJ
USGS 7.5 Minute Quadrangle
1964, Revised 1994
- Camden, NJ
USGS 7.5 Minute Quadrangle
1967, Revised 1994

0 750 1,500 3,000
Feet

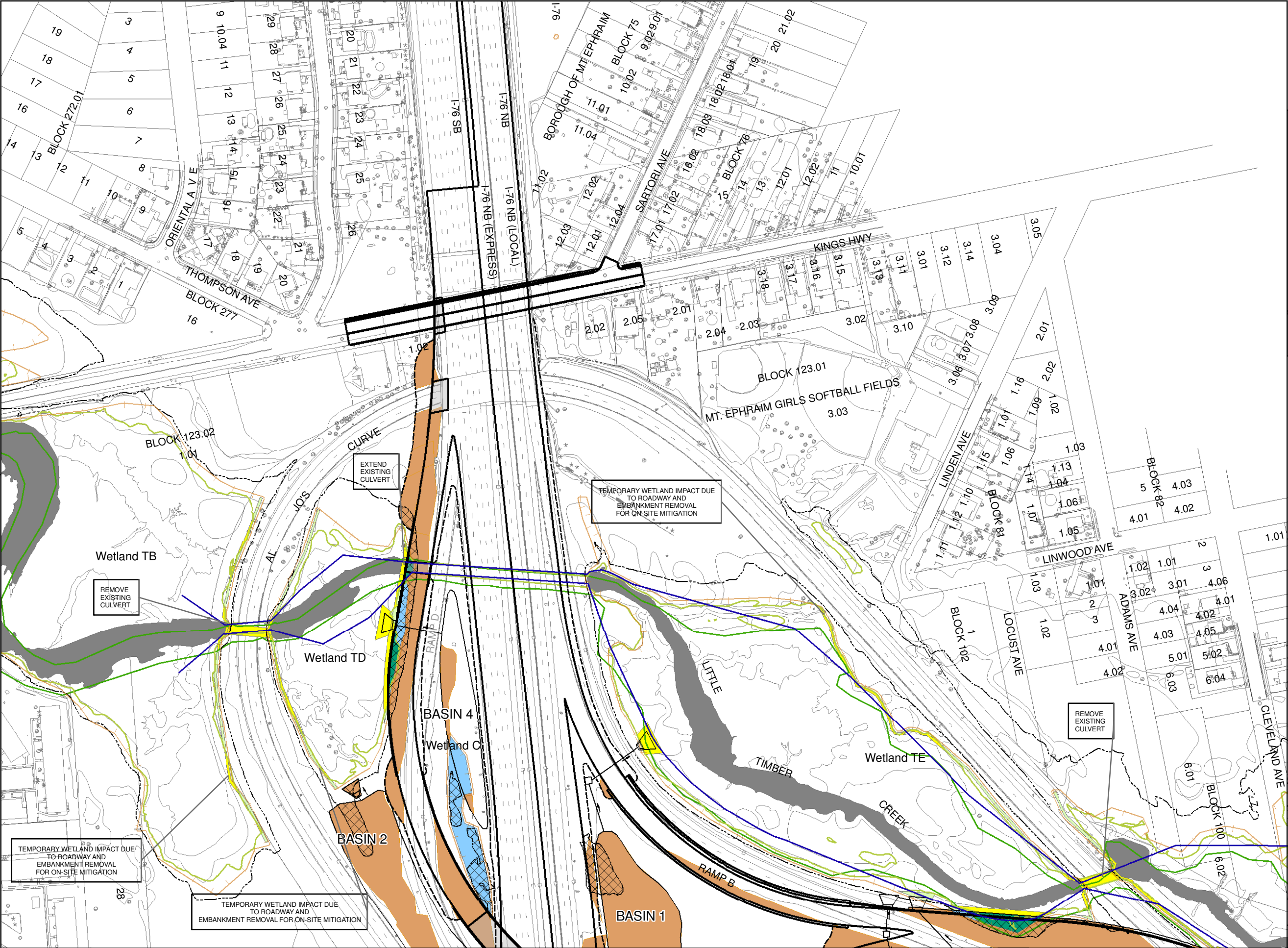
New Jersey Department of Transportation


I-295 / I-76/ ROUTE 42
Direct Connection
Camden County

Figure 1
Project Location Map

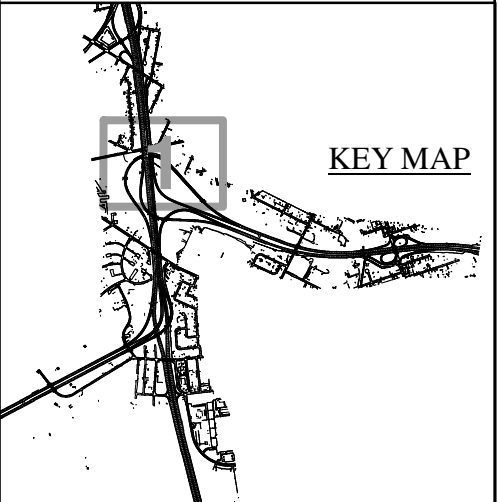
Date

November 2007





PROJECT NORTH



KEY MAP

Legend

- Existing Conditions
- Proposed Edge of Pavement
- Proposed Retaining Wall
- Proposed Slope Limits
- Proposed Drainage Improvements
- Proposed Bridges
- Spring High Tide (El. 3.81' NAVD 1988)
- Upper Wetlands Boundary (1970 Wetlands)
- Open Water
- 100-Year Floodplain
- Floodway
- Wetland Boundaries
- Floodplain Impacts
- Upland Vegetation Impacts
- Wetland and State Open Water Impacts
- Non Tidal Permanent Impacts
- Non Tidal Temporary Impacts
- Tidal Permanent Impacts
- Tidal Temporary Impacts

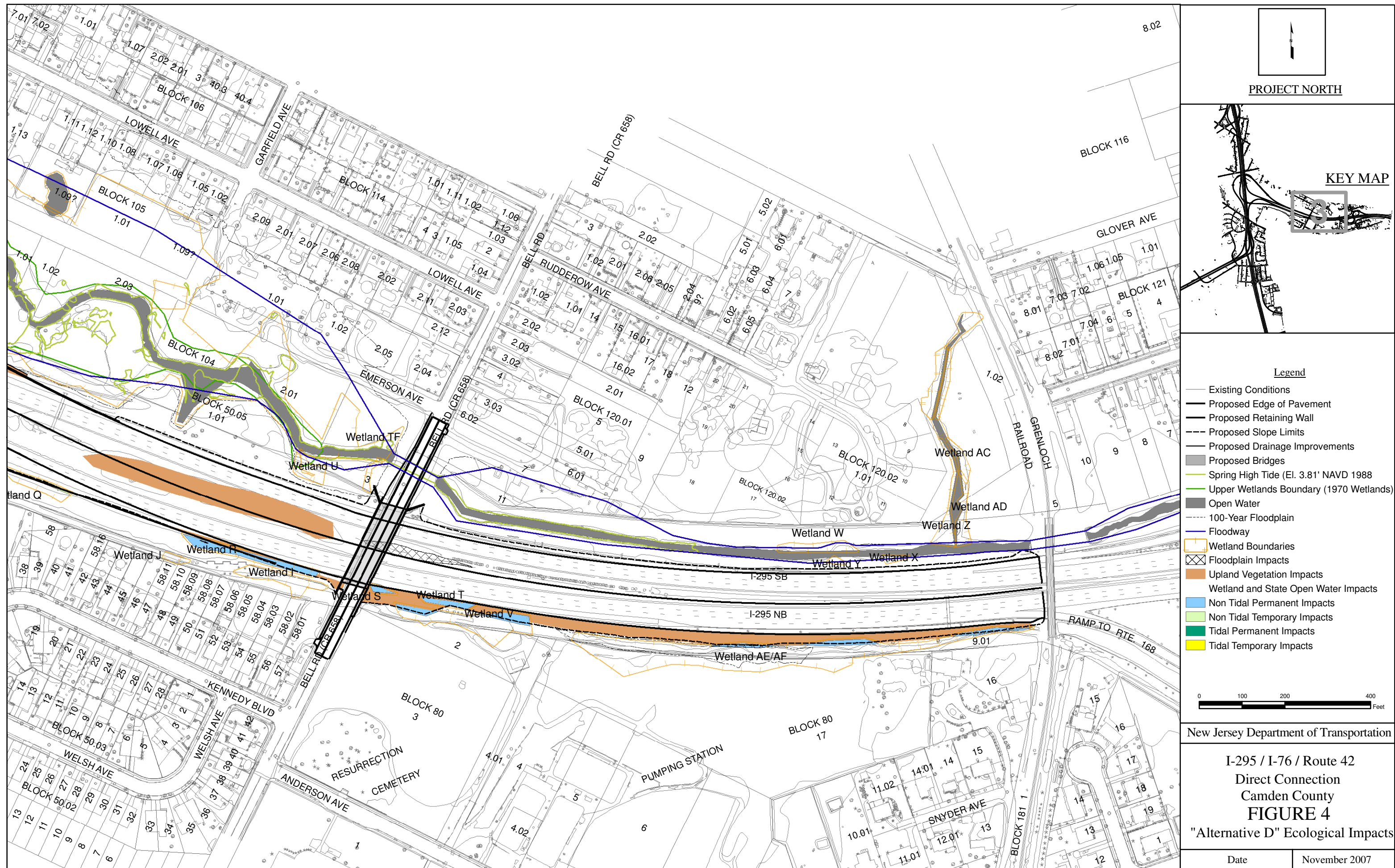
0 200 400 Feet

New Jersey Department of Transportation

I-295 / I-76 / Route 42
Direct Connection
Camden County

FIGURE 2
"Alternative D" Ecological Impacts

Date	November 2007
------	---------------





Legend

- Existing Conditions
- Proposed Edge of Pavement
- Proposed Retaining Wall
- Proposed Slope Limits
- Proposed Drainage Improvements
- Proposed Bridges
- Spring High Tide (El. 3.81' NAVD 1988)
- Upper Wetlands Boundary (1970 Wetlands)
- Open Water
- 100-Year Floodplain
- Wetland Boundaries
- Floodplain Impacts
- Upland Vegetation Impacts
- Wetland and State Open Water Impacts
- Non Tidal Permanent Impacts
- Non Tidal Temporary Impacts
- Tidal Permanent Impacts
- Tidal Temporary Impacts






0 200 400 Feet

New Jersey Department of Transportation

I-295 / I-76 / Route 42
Direct Connection
Camden County
FIGURE 5
"Alternative D" Ecological Impacts

Date	November 2007
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-  - Ramp Designation
-  - Roadway
-  - Bridge
-  - Ramps for Missing Moves
-  - Roadway to be Removed

0 750 1,500 3,000 Feet

New Jersey Department of Transportation

I-295 / I-76/ ROUTE 42
Direct Connection
Camden County

Figure 6
Alternative G2

Date

November 2007



New Jersey Department of Transportation






I-295 / I-76/ ROUTE 42
Direct Connection
Camden County

Figure 7
Alternative H1

Date

November 2007



-  - Ramp Designation
-  - Roadway
-  - Bridge
-  - Ramps for Missing Moves
-  - Roadway to be Removed

0 750 1,500 3,000 Feet

Q:\2652\technical\GIS\DEIS\Conceptual_404 Permit\Alternative D1 Figure 8

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I-295 / I-76/ ROUTE 42
Direct Connection
Camden County

Figure 8
Alternative D1

Date

November 2007



New Jersey Department of Transportation

I-295 / I-76/ ROUTE 42
Direct Connection
Camden County

Figure 9
Alternative K

Date

November 2007



- Ramp Designation

- Roadway

- Bridge

- Ramps for Missing Moves

- Roadway to be Removed

0 750 1,500 3,000 Feet

New Jersey Department of Transportation

I-295 / I-76/ ROUTE 42
Direct Connection
Camden County

Figure 10
Alternative D

Date

November 2007



LEGEND



SITE 1
2.2 Ac

Approximate Site Boundary and Acreage

0 400 800 1,600
Feet

Q:\2652\technical\GIS\DEIS\CONCEPTUAL_404 PERMIT\On-Site Potential Wetland Mitigation Figure 11

New Jersey Department of Transportation

I-295 / I-76/ ROUTE 42

Direct Connection

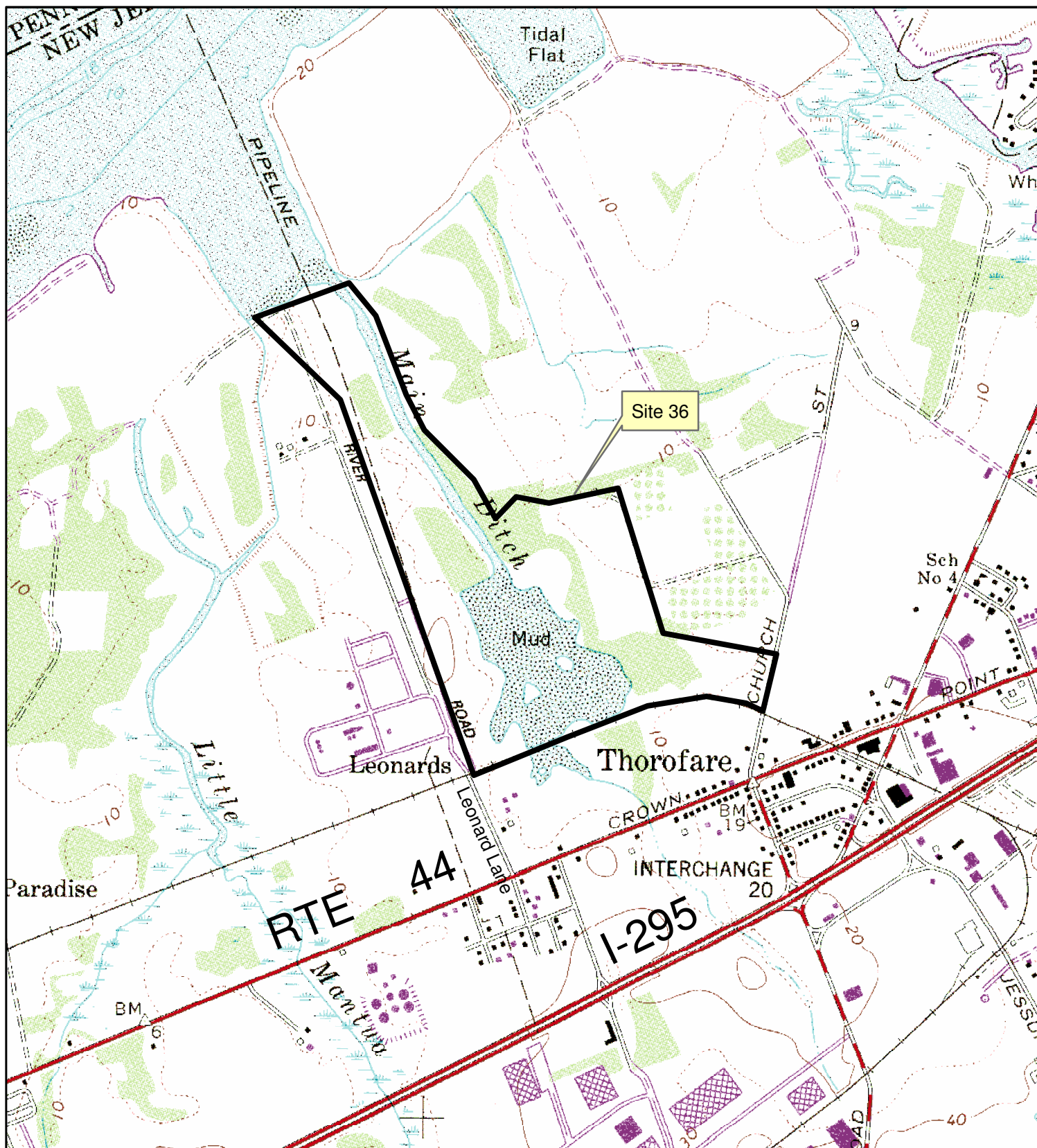
Camden County

Figure 11

On-Site Areas Inspected For
Potential Wetland Mitigation

Date

November 2007



0 625 1,250 2,500 Feet

Q:\2652\technical\GIS\DEIS\CONCEPTUAL_404 PERMIT\Off-Site Potential Wetland Mitigation Figure 12

New Jersey Department of Transportation

I-295 / I-76/ ROUTE 42

Direct Connection

Camden County

Figure 12

Off-Site Areas Inspected For
Potential Wetland Mitigation

Date

November 2007

APPENDIX A



Photo Plate 1: View looking downstream (west) from Bell Road Bridge.



Photo Plate 2: View looking upstream (east) from Bell Road Bridge.



Photo Plate 3: View looking east toward Wetland V data point behind noise barrier.



Photo Plate 4: View looking east from AF-1 just beyond inlet. Note drop inlet.



Photo Plate 5: View looking southwest toward Wetland AF from AE-2.



Photo Plate 6: View looking south from Wetland Z Upland Data Point.



Photo Plate 7: View looking upstream from sanitary sewer line toward Wetlands AA and AB



Photo Plate 8: View looking downstream from sanitary sewer line toward Wetlands Z and AC.



Photo Plate 9: Wetland K. Note skunk cabbage up slope along seep line.



Photo Plate 10: Wetland K looking toward cemetery. Seep/spring along far side.



Photo Plate 11: Open Water behind residential dwelling on Lowell Avenue.



Photo Plate 12: View of wetland data point behind residential dwelling on Lowell Avenue. Note jewelweed is the dominant forb.



Photo Plate 13: View looking east along the I 295 north corridor at Wetland P.



Photo Plate 14: Photograph of landfilled materials (glass, plastics, concrete, etc.) near TF-17.



Photo Plate 15: Photograph of TF tidal wetland mud flat from TF-17.



Photo Plate 16: Photograph of Wetland N from the edge of the I-295 highway.



Photo Plate 17: View of the Upland Data Point 1 for Wetland TF. Data point at edge of Shining Star Park.



Photo Plate 18: View of the Wetland Data Point 1 for Wetland TF. Note wild rice beyond data point.



Photo Plate 19: View of the Upland Data Point 4 for Wetland TE. Note phragmites is an opportunistic species.



Photo Plate 20: View looking southeast from the Wetland Data Point 4 for Wetland TE.



Photo Plate 21: View looking west from Wetland TE station 8.



Photo Plate 22: View looking northwest from Wetland TE Data Point 1.



Photo Plate 23: View looking upstream from TB 49 at West Kings Highway Bridge.



Photo Plate 24: View of Wetland Data Point 1 for Wetland TB.



Photo Plate 25: View looking southwest near the culvert on Al Jo's curve.



Photo Plate 26: View looking downstream from the culvert at Al Jo's curve.



Photo Plate 27: View of Wetland Data Point 3 for Wetland TD.



Photo Plate 28: View of Upland Data Point 3 for Wetland TD



Photo Plate 29: Inlet in the southeast corner of Wetland TD.



Photo Plate 30: View looking toward Wetland TC from West Kings Highway.



Photo Plate 31: View looking toward wetland TC from West Kings Highway.



Photo Plate 32: View looking toward Wetland Data Point 1 for Wetland AI.



Photo Plate 33: View of upland area to the north of Wetland B.



Photo Plate 34: View of Wetland Data Point for Wetland H.



Photo Plate 35: View looking toward the storm water inlet pipes into Wetland H.



Photo Plate 36: View looking downstream from wetland point S-1 A-21.



Photo Plate 37: View looking across stream corridor of Stream S-1. Note mature stand of hardwoods.



Photo Plate 38: View looking downstream from Stream 1 Data Point 12.



Photo Plate 39: View of inlet pipes conveying flow (Waters of the U.S. in Culvert) under Bellmawr Park. Note severe scouring of stream bank and structure.



Photo Plate 40: View looking upstream from culvert at Creek Road.



Photo Plate 41: View looking downstream toward Creek Road from Wetland TA station TA-17.



Photo Plate 42: View looking upstream from Wetland TA station TA-17



Photo Plate 43: TA Wetland. Note diversity of wetland species present.



Photo Plate 44: View of radio tower and open field adjacent to I-295 southbound near Creek Road.

Lo



Photo Plate 45: View of area near Upland Reference Point for Wetland TA and wetland S-1-A.



Photo Plate 46: View of Wetland A an Isolated Ordinary Wetland



Photo Plate 47: View of Drainage Pipes beneath Essex Avenue, at Delineation Points Dew-1 and B-61, looking East.



Photo Plate 48: Little Timber Creek pass below I-295 on Northside of Al Jo's Curve.



Photo Plate 49: Bell Road, downstream side.



Photo Plate 50: Bell Road, downstream side.



Photo Plate 51: Bell Road, downstream side.



Photo Plate 52: Drain behind Bellmawr Baseball field downstream side of I-295.



Photo Plate 53: Drain behind Bellmawr Baseball field downstream side of I-295.

APPENDIX B

DEPARTMENT OF THE ARMY
PHILADELPHIA DISTRICT CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3390

FEB 15 2005

Regulatory Branch
Application Section II

SUBJECT: CENAP-OP-R-199802102-35 (JD)
I-295 Direct Connection

Mr. Nick Caiazza
Project Manager
New Jersey Department of Transportation
Bureau of Environmental Project Support
1035 Parkway Avenue
P.O. Box 600
Trenton, New Jersey 08625-0600

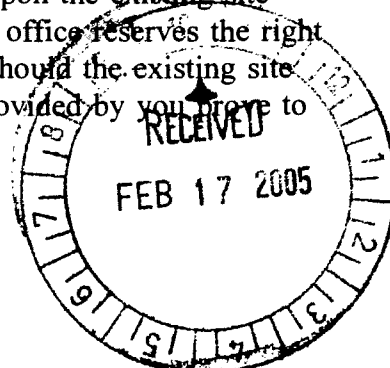
Dear Mr. Caiazza:

The plans identified on the following page depict the extent of Federal jurisdiction on the subject property. The basis of our determination of jurisdiction is also provided (Enclosure 1).

Pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, a Department of the Army permit is required for work or structures in navigable waters of the United States and the discharge of dredged or fill material into waters of the United States including adjacent and isolated wetlands. Any proposal to perform the above activities within the area of Federal jurisdiction requires the prior approval of this office.

This delineation/determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participating in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

This letter is valid for a period of five (5) years. However, this wetland determination is issued in accordance with current Federal regulations and is based upon the existing site conditions and information provided by you in your application. This office reserves the right to reevaluate and modify the jurisdictional determination at any time should the existing site conditions or Federal regulations change, or should the information provided by you prove to be false, incomplete or inaccurate.



In accordance with the U.S. Army Corps of Engineers Administrative Appeal Process, you may accept or appeal the approved jurisdiction determination. For further information in this regard, please refer to the Notification of Administrative Appeal Options and Process and Request for Appeal form (Enclosure 2).

If you should have any questions regarding this matter, please contact me at (215) 656-5822 or write to the above address.

Sincerely,

Michael H. Hayduk
Biologist

SUBJECT PROPERTY: I-295/I-76/Route 42 Direct Connection project, Borough of Bellmawr, Borough of Mount Ephraim, and City of Gloucester, Camden County, New Jersey.

SURVEY DESCRIPTION: Plans entitled "Wetlands Delineation, Index Sheet", dated June 2004, last revised January 26, 2005, prepared by Dewberry-Goodkind Inc., and "Wetlands Delineation, Sheets 1 through 6", dated November 9, 2004, last revised/signed November 10, 2004, prepared by Dewberry-Goodkind Inc.

COMMENTS: Site visits with DG Inc. on October 17, 2003 & December 3, 2003. Aerial photo review on November 26, 2003.

Enclosures

Copies Furnished:

✓ William McLaughlin, NJDEP, LURP
Brian Sayre
Dewberry-Goodkind Inc.
299 Webro Road
Parsippany, New Jersey 07054-2800

PROJ. MANAGEMENT

Fax: 609-530-5397

Mar 8 2005 15:40 P. 02



State of New Jersey
Department of Environmental Protection

Bradley M. Campbell
Commissioner

Richard J. Codey
Acting Governor

Land Use Regulation Program
P.O. Box 439, Trenton, NJ 08625-0439
Fax # (609) 292-8115
Fax # (609) 777-3656
www.state.nj.us/landuse

NJ Department of Transportation
1035 Parkway Avenue
P.O. Box 600
Trenton, NJ 08625-0600

FEB 09 2005

Attention: Nicholas Calazza

RE: I-295 / I-76 / Route 42 Direct Connection
Letter of Interpretation/Line Verification and Jurisdictional Determination
File No.: 0400-04-0002.1 LOI 040001
Applicant: NJDOT
Trenton, NJ 08625

Dear Nick Calazza:

This letter is in response to your request of July 12, 2004 for a Letter of Interpretation to verify the jurisdictional boundary of the freshwater wetlands and waters on the referenced property.

In accordance with agreements between the State of New Jersey Department of Environmental Protection, the U.S. Army Corps of Engineers Philadelphia and New York Districts, and the U.S. Environmental Protection Agency, the NJDEP, Land Use Regulation Program is the lead agency for establishing the extent of State and Federally regulated wetlands and open waters in those areas assumed by the State of New Jersey. The USEPA and/or USACE retain the right to reevaluate and modify the jurisdictional determination at any time should the information prove to be incomplete or inaccurate. Portions of the subject wetlands are not subject to assumption and therefore remain jointly regulated by the State and the U.S. Army Corps of Engineers, Philadelphia District.

Based upon the information submitted, and upon site inspections conducted on October 31 and December 3, 2003 and May 5, 2004, the Land Use Regulation Program has determined that the wetlands and waters boundary line(s) as shown on the six (6) plan sheets entitled: "I-295 / I-76 / Route 42 Direct Connection Borough of Bellmawr, Borough of Mount Ephraim and City of Gloucester, Camden County", signed by George Soule, dated 11/19/04 and one (1) Index Sheet signed by Arthur J. Schappell Jr. and dated 1/26/05, are accurate as shown.

Any activities regulated under the Freshwater Wetlands Protection Act proposed within the wetlands or transition areas or the deposition of any fill material into any water area, will require a permit from this office unless exempted under the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq. and implementing rules, N.J.A.C. 7:7A. A copy of this plan, together with the information upon which this boundary determination is based, has been made part of the Program's public records.

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PROJ. MANAGEMENT

Fax:609-530-5387

Mar 8 2005 15:41 P.03

I-295 / I-76 / Route 42 Direct Connection Page 2

File No.: 0400-04-0002.1 LOI 040001

Pursuant to the Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A-1 et seq.), you are entitled to rely upon this jurisdictional determination for a period of five years from the date of this letter.

The freshwater wetlands and waters boundary line(s), as determined in this letter, must be shown on any future site development plans. The line(s) should be labeled with the above LURP file number and the following note:

"Freshwater Wetlands/Waters Boundary Line as verified by NJDEP."

In addition, the Department has determined that wetlands on the subject property are of intermediate resource value and have a standard transition area or buffer required adjacent to these wetlands of fifty (50) feet, with the exceptions listed below. This intermediate resource value classification is based on the determination that the wetlands are associated with tributaries to Big Timber Creek or Little Timber Creek, which are FW-2 waters as listed in the "Classification of New Jersey Waters As Related to Their Suitability For Trout," December, 1996. This classification may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-3), the types of Statewide General Permits available for the wetlands portion of this property (see N.J.A.C. 7:7A-9) and the modification available through a transition area waiver (see N.J.A.C. 7:7A-7). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules for additional information.

Wetland Area	Resource Classification
Sheet W-1	
TC1 thru TC19	Intermediate w/State Open Water
AI1 thru AI7	Intermediate
TB1-17 thru TB34-49	Intermediate w/State Open Water
TD8 thru TD18	Intermediate w/State Open Water
EC7-1 thru EC7-8	Ordinary
TE21 thru TE23	Intermediate w/State Open Water
Sheet W-2	
TD1 thru TD 21	Intermediate w/State Open Water
C1 thru C9	Ordinary
EC7-1 thru EC7-8	Ordinary
TE1 thru TE36	Intermediate w/State Open Water
TF1-43 thru TF83-89	Intermediate w/State Open Water
D1 thru D10	Intermediate
E1 thru E5	Intermediate
P1 thru P8	Ordinary
AJ1 thru AJ4	Ordinary
N1 thru N7	Ordinary
M1 thru M4	Ordinary
K10 thru K11	Ordinary
OW1 thru OW12	State Open Water
Sheet W-3	
TF42 thru TF89 & TF76B	Intermediate w/State Open Water
OW1 thru OW12	State Open Water
U1 thru U7	Intermediate w/State Open Water
K1 thru K21	Intermediate
Q1 thru Q6	Intermediate
J1 thru J4	Intermediate

PROJ. MANAGEMENT

Fax:609-530-5387

Mar 8 2005 15:42 P.04

I-293 / I-76 / Route 42 Direct Connection Page 3

File No.: 0400-04-0002.1 LOI 040001

R1 thru R6
 I1 thru I10
 S1 thru S4
 T1 thru T4
 V1 thru V12
 AF1-12 thru AE1-7
 Y1 thru Y3
 W1 thru W5
 X1 thru X3
 Z1-6, AA1-8, AAA1-3 thru AB-D

Ordinary
 Intermediate
 Ordinary
 Ordinary
 Intermediate
 Intermediate w/State Open Water
 Intermediate w/State Open Water
 Intermediate w/State Open Water
 Intermediate w/State Open Water
 Intermediate w/State Open Water

Sheet W-4

TB15 thru TB33
 TD4 thru TD 18
 C1 thru C12

Intermediate w/State Open Water
 Intermediate w/State Open Water
 Ordinary

Sheet W-5

TA1-4 thru TA21-27
 S1A1 thru S1A21
 D1-31 thru B1-4, B48-61
 B4 thru B27
 C1 thru C8
 B1 thru B4 (Wetland B)
 Area HW
 H1 thru H6

Intermediate w/State Open Water
 Intermediate w/State Open Water
 Intermediate w/State Open Water
 Upland
 Intermediate
 Ordinary
 State Open Water
 Ordinary

Sheet W-6

TA3 thru TA27, S1A13-16
 Wetland A

Intermediate w/State Open Water
 Ordinary

It should be noted that this determination of wetland classification is based on the best information presently available to the Department. The classification is subject to change if this information is no longer accurate, or as additional information is made available to the Department, including, but not limited to, information supplied by the applicant.

The coastal wetlands (1970) upper wetlands boundary, mean-high-water, and spring-high-water lines appear accurate as shown on the above-referenced plans. Impacts to coastal wetlands and intertidal/subtidal shallows are subject to mitigation in accordance with the coastal rules (see N.J.A.C. 7:7E) applicable to Waterfront Development and Coastal Wetlands Permits. Areas subject to review pursuant to the coastal rules for waterfront development extend at least 100 feet and no more than 500 feet landward of the mean-high-water line as depicted, in accordance with N.J.A.C. 7:7-2.3(a)3.

This letter in no way legalizes any fill, which may have been placed, and does not waive any Tidelands ownership that the State of New Jersey may have in these properties or authorizes other regulated activities, which may have occurred on-site. Also this determination does not affect your responsibility to obtain any local, State, or Federal permits which may be required.

Please note any remediation activities proposed within the designated wetlands and/or transition area will require the review and written approval from the Land Use Regulation Program prior to commencement of any regulated activities.

PROJ. MANAGEMENT

Fax:609-530-5387

Mar 8 2005 15:42 P.05

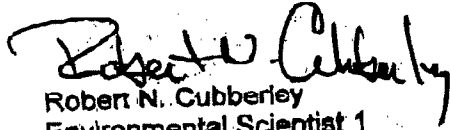
I-295 / I-76 / Route 42 Direct Connection Page 4

File No.: 0400-04-0002.1 LOI 040001

In accordance with N.J.A.C. 7:7A-12.7, any person who is aggrieved by this decision may request a hearing within 30 days of the decision date by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, P.O. Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist.

Should you have any questions or need additional information regarding this letter, please contact William Mc Laughlin of our staff by mail at the above address, telephone (609-984-0195), or email (william.mclaughlin@dep.state.nj.us). Be sure to indicate the Program's file number in all communication.

Sincerely,


Robert N. Cubberley
Environmental Scientist 1
Land Use Regulation Program

WMcL

C: Micheal Hayduk, ACOE Philadelphia District Office
Township of Bellmawr Clerk
Township of Mt. Ephraim Clerk
Gloucester City Clerk

W/o att. Township of Bellmawr Construction Official
Township of Mt. Ephraim Construction Official
Gloucester City Construction Official

Lawrence Smith
Dresdner Robin

260123

201 - 217 - 9607

Date: 7/18/05 NJDOT
Subject: I 295/I 76/Rt 42



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Habitat Conservation Division
James J. Howard Marine
Sciences Laboratory
74 Magruder Rd.
Highlands, NJ 07732

Anita Riportella
Anita Riportella (reviewing biologist)

revised from 5/27/05
new information provided 7/15/05 letter from L. Smith
The National Marine Fisheries Service's Habitat Conservation Division has received your request for information. Your request concerning the presence or absence of marine resources is required pursuant to the regional conditions implemented for nationwide permit activities in the State of New Jersey.

It should be noted that our response to your request should not be construed as a formal review of your proposed project with respect to its eligibility or compliance with the Corps' nationwide permit program (NWP). It is incumbent upon you or your agent to coordinate your application with the appropriate office of the U.S. Army Corps of Engineers to ensure that the project complies with all of the necessary NWP requirements.

Based upon our review of the information you have provided, we offer the following comments:

Endangered Species Act

☒ Other than an occasional transient, there are no endangered or threatened species under NMFS's jurisdiction present in the project area.

☐ Endangered species or threatened species may be present in the project area. Please contact: Protected Resources Division, National Marine Fisheries Service, One Blackburn Drive, Gloucester, MA 01930.

Fish and Wildlife Coordination Act

The following may be present in the project area:

Big Timber Creek - always, blueback herring
stupid bass, American shad

Little Timber Creek - no resources of concern

DEPENDENT UPON THE PROJECT DETAILS, RECOMMENDATIONS MAY INCLUDE:

Big Timber Creek: 3/15 - 6/30 for in-water work

Little Timber Creek: if no disturbance, none necessary

Magnuson-Stevens Fishery Conservation and Management Act (MSA)

The project area has been designated as Essential Fish Habitat (EFH) pursuant to the MSA for one or more species. The information you have provided will be utilized by the Corps to prepare an EFH assessment of the proposed activity and its impacts to EFH. Conservation recommendations may be included as a condition of the permit. For a listing of EFH and further information regarding EFH, please go to our website: www.nmfs.gov/ro/doc/webintro.html

PLEASE NOTE IF CHECKED BELOW

☐ We are unable to fully respond to your request due to insufficient information provided in your request. In order to assess the effects to the above listed species by the proposed activity, please provide us with the all information required in condition G-1 of the regional permit conditions listed in the Federal Register/Vol. 67, No. 10, 15 January 2002.

☐ The proposed project does not appear to qualify for NWP authorization. To avoid any unnecessary and/or lengthy delays, please contact the Army Corps of Engineers at (215) 656-6728 as soon as possible to assure that your project complies with the NWP.

Copy to: ☐ U.S. Army Corps of Engineers, Philadelphia District ☐ U.S. Army Corps of Engineers, New York District





State of New Jersey

Department of Environmental Protection

Division of Parks and Forestry
Office of Natural Lands Management
Natural Heritage Program
P.O. Box 404
Trenton, NJ 08625-0404
Tel. #609-984-1339
Fax. #609-984-1427

Bradley M. Campbell
Commissioner

James E. McGreevey
Governor

September 11, 2003

Victor Furmanec
Dresdner Robin
371 Warren Street
Jersey City, NJ 07302-3035

Re: I-295/I-76/Route 42 Direct Connection

Dear Mr. Furmanec:

Thank you for your data request regarding rare species information for the above referenced project site in Bellmawr, Mt. Ephraim and Gloucester City, Camden County.

Searches of the Natural Heritage Database and the Landscape Project are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Request for Data into our Geographic Information System. We do not verify that your project bounds are accurate, or check them against other sources. Landscape patches are searched using the boundary depicted on your map buffered by 15 meters. The 15-meter buffer is to accommodate for inherent GIS mapping imprecision.

We have checked the Natural Heritage Database and the Landscape Project habitat mapping for occurrences of any rare wildlife species or wildlife habitat on the referenced site. Please see Table 1 for species list and conservation status.

Table 1 (on referenced site).

Common Name	Scientific Name	Federal Status	State Status	Grank	Srank
herptile species of special concern					

Neither the Natural Heritage Database nor the Landscape Project has records for any additional rare wildlife species or wildlife habitat within 1/4 mile of the referenced site.

We have also checked the Natural Heritage Database for occurrences of rare plant species or natural communities. The Natural Heritage Data Base does not have any records for rare plants or natural communities on or within 1/4 mile of the site.

Attached is a list of rare species and natural communities that have been documented from Camden County. If suitable habitat is present at the project site, these species have potential to be present.

Status and rank codes used in the tables and lists are defined in the attached EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS.

If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive I-Map-NJ website at the following URL, <http://www.state.nj.us/dep/gis/imapnj/imapnj.htm> or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program.

PLEASE SEE THE ATTACHED 'CAUTIONS AND RESTRICTIONS ON NHP DATA'.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,

Herbert A. Lord

Herbert A. Lord
Data Request Specialist

cc: Lawrence Niles
NHP File No. 03-3907571

27 JUN 2002

CAMDEN COUNTY
RARE SPECIES AND NATURAL COMMUNITIES PRESENTLY RECORDED IN
THE NEW JERSEY NATURAL HERITAGE DATABASE

NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	REGIONAL STATUS	GRANK	SRANK
ARDEA HERODIAS	GREAT BLUE HERON		S/S		G5	S2B, S4N
CLEMMYS MULENBERGII	BOG TURTLE	LT	E		G3	S2
CROTALUS HORRIDUS HORRIDUS	TIMBER RATTLESNAKE		E		G4T4	S2
FALCO PEREGRINUS	PEREGRINE FALCON		E		G4	S1B, S7N
HYLA ANDERSONII	PINE BARRENS TREEFROG		E		G4	S3
MELANERPES ERYTHROCEPHALUS	RED-HEADED WOODPECKER		T/T		G5	S2B, S2N
PITUOPHIS MELANOLEUCUS	NORTHERN PINE SNAKE		T		G4T4	S3
MELANOLEUCUS						
COASTAL PLAIN INTERMITTENT POND	VERNAL POND				G3?	S2S3
FRESHWATER TIDAL MARSH COMPLEX	FRESHWATER TIDAL MARSH COMPLEX				G4?	S3?
PITCH PINE LOWLAND FOREST	PITCH PINE LOWLAND FOREST				G3	S3
ANAX LONGIPES	COMET DARNER				G5	S2S3
CALLOPHRYS IRUS	FROSTED ELFIN		T		G3	S2S3
CELITHEMIS MARTHA	MARTHA'S PENNANT				G4	S3S4
ENALLAGMA PICTUM	SCARLET BLUET				G3	S3
ENALLAGMA RECURVATUM	PINE BARRENS BLUET				G3	S3
EPITHECA SPINOSA	ROBUST BASKETTAIL				G4	S1
ERYNNIS MARTIALIS	MOTTLED DUSKY WING				G3G4	SH
GOMPHUS APOMYIUS	BANNER CLUBTAIL				G4	S1
HELICODISCUS SINGLEYANUS	SMOOTH COIL				G4G5	S2S3
HESPERIA ATTALUS SLOSSONAE	DOTTED SKIPPER				G3G4T3	S2S3
LAMPUSILLIS RADIATA	EASTERN LAMPUSSEL		T		G5	S3
LEPTODEA OCHRACEA	TIDEWATER MUCKET		T		G4	S1

*** Vertebrates

*** Ecosystems

*** Invertebrates

27 JUN 2002

CAMDEN COUNTY
RARE SPECIES AND NATURAL COMMUNITIES PRESENTLY RECORDED IN
THE NEW JERSEY NATURAL HERITAGE DATABASE

NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	REGIONAL STATUS	GRANK	SRANK
LIBELLULA AXILENA	BAR-WINGED SKIMMER				G5	S2BS3B, SZ
LIGUMIA NASUTA	EASTERN POND MUSSEL		T		G4G5	N S1
NICOPHORUS AMERICANUS	AMERICAN BURYING BEETLE	LE	E		G2G3	SH
PIERIS VIRGINIENSIS	WEST VIRGINIA WHITE				G3G4	SH
POLYGONIA PROGNE	GRAY COMMA				G5	SH
PONTIA PROTODICE	CHECKERED WHITE		T		G4	S1
SPARTINIPHAGA CARTERAE	CARTER'S NOCTUID MOTH				G2G3	S2
AESCHYNOMENE VIRGINICA	SENSITIVE JOINT-VETCH	LT	E	LP	G2	S1
AGASTACHE SCROPHULARIIFOLIA	PURPLE GIANT-HYSSOP				G4	S2
AMANTHIUM MUSCITOXICUM	FLY POISON				G4G5	S2
ARISTIDA DICHOTOMA VAR CURTISSII	CURTISS' THREE-AWN GRASS				G5T5	S2
ARISTIDA LANOSA	WOOLLY THREE-AWN GRASS		E		G5	S1
ARISTIDA VIRGATA	WAND-LIKE THREE-AWN GRASS				G5T4T5	S2
ARNOGLOSSUM MUEHLENBERGII	GREAT INDIAN PLANTAIN				G4	SX.1
ASCLEPIAS RUBRA	RED MILKWEED			LP	G4G5	S2
ASCLEPIAS VARIEGATA	WHITE MILKWEED				G5	S2
ASCLEPIAS VERTICILLATA	WHORLED MILKWEED				G5	S2
ASTER RADULA	LOW ROUGH ASTER		E		G5	S1
BIDENS BIDENTOIDES	ESTUARY BURR-MARIGOLD				G3	S2
BOTRYCHUM ONEIDENSE	BLUNT-LOBE GRAPE FERN				G4Q	S2
CACALIA ATRIPLICIFOLIA	PALE INDIAN PLANTAIN		E		G4G5	S1
CALAMOVILFA BREVIPILIS	PINE BARREN REEDGRASS			LP	G4	S4
CALYSTEGIA SPITHAMAEA	ERECT BINDWEED		E		G4G5T4T5	S1
CAREX AQUATILIS	WATER SEDGE		E		G5	S1
CAREX BARRATTII	BARRATT'S SEDGE			LP	G4	S4
CAREX CUMULATA	CLUSTERED SEDGE		E		G4?	SH

*** Vascular plants

CAMDEN COUNTY
RARE SPECIES AND NATURAL COMMUNITIES PRESENTLY RECORDED IN
THE NEW JERSEY NATURAL HERITAGE DATABASE

NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	REGIONAL STATUS	GRANK	SRANK
CAREX MITCHELLIANA	MITCHELL'S SEDGE				G3G4	S2
CAREX UTRICULATA	BOTTLE-SHAPED SEDGE				G5	S2
CASTILLEJA COCCINEA	SCARLET INDIAN-PAINTBRUSH				G5	S2
CERCIS CANADENSIS	REDBUD	E	E		G5T5	S1
CHENOPODIUM RUBRUM	RED GOOSEFOOT	E	E		G5	S1
COELOGLOSSUM VIRIDE VAR VIRESCENS	LONG-BRACT GREEN ORCHID				G5T5	S2
COMMELINA ERECTA	SLENDER DAYFLOWER	E	E		G5T5	SH.1
COREOPSIS ROSEA	ROSE-COLOR COREOPSIS			LP	G3	S2
CROTON WILLDENOWII	ELLIPTICAL RUSHFOIL			LP	G5	S2
CUSCUTA POLYGONORUM	SMARTWEED DODDER				G5	S2
CYPERUS ENGELMANNII	ENGELMANN'S FLAT SEDGE				G4Q	S2
CYPERUS LANCASTRIENSIS	LANCASTER FLAT SEDGE	E	E		G5	S1
CYPERUS RETROFRACTUS	ROUGH FLATSEDGE	E	E		G5	SH
DESMODIUM STRICTUM	PINELAND TICK-TREEFOIL			LP	G4	S2
DESMODIUM VIRIDIFLORUM	VELVETY TICK-TREEFOIL				G5?	S2
DIODIA VIRGINIANA	LARGER BUTTONWEED	E	E		G5T5	S1
DOELLINGERIA INFIRMA	CORNEL-LEAF ASTER	E	E		G5	S2
DRABA REPTANS	CAROLINA WHITLOW-GRASS	E	E		G5	SH
EPILOBIUM STRICTUM	DOWNY WILLOWHERB				G5?	S2
ERIOCAULON PARKERI	PARKER'S PIPEWORT				G3	S2
ERIOPHORUM TENELLUM	ROUGH COTTON-GRASS	E	E		G5	S1
ERYNGIUM YUCCIFOLIUM VAR YUCCIFOLIUM	TALL RATTLESNAKE-MASTER				G5T5	SX
EUPATORIUM CAPILLIFOLIUM	DOG-FENNEL THOROUGHWORT	E	E		G5	S2
EUPATORIUM HYSSOPIFOLIUM VAR LACINIATUM	TORREY'S BONESET				G5T4T5	S2
EUPATORIUM RESINOSUM	PINE BARREN BONESET	E	E	LP	G3	S2
GENTIANA AUTUMNALIS	PINE BARREN GENTIAN			LP	G3	S3
GLYCERIA GRANDIS	AMERICAN MANNA GRASS	E	E		G5T5	S2

CAMDEN COUNTY
RARE SPECIES AND NATURAL COMMUNITIES PRESENTLY RECORDED IN
THE NEW JERSEY NATURAL HERITAGE DATABASE

NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	REGIONAL STATUS	GRANK	SRANK
GNAPHALIMUM HELLERI	SMALL EVERLASTING		E		G4G5T3?	SH
HELONIAS BULLATA	SWAMP-PINK	LT	E	LP	G3	S3
HEMICARPHA MICRANTHA	SMALL-FLOWER HALFCHAFF SEDGE		E		G4	S1
HETERANTHERA MULTIFLORA	BOUQUET MUD-PLANTAIN				G4	S2
HYDRASTIS CANADENSIS	GOLDEN SEAL		E		G4	SH.1
JUNCUS CAESARIENSIS	NEW JERSEY RUSH		E	LP	G2	S2
JUNCUS TORREYI	TORREY'S RUSH		E		G5	S1
KUHNTIA EUPATORIODES	FALSE BONESET		E		G5T5	S1
LEMNA PERPUSILLA	MINUTE DUCKWEED		E		G5	S1
LIMOSELLA SUBULATA	AWL-LEAF MUDWORT		E		G4G5	S1
LINUM INTERCURSUM	SANDPLAIN FLAX		E		G4	S1
LISTERA AUSTRALIS	SOUTHERN TWAYBLADE			LP	G4	S2
MELANTHIUM VIRGINICUM	VIRGINIA BUNCHFLOWER		E		G5	S1
MICRANTHEMUM MICRANTHEMOIDES	NUTTALL'S MUDWORT		E		GH	SH
MUHLENBERGIA TORREYANA	PINE BARREN SMOKE GRASS			LP	G3	S3
MYRIOPHYLLUM TENELLUM	SLENDER WATER-MILFOIL		E		G5	S1
NELUMBO LUTEA	AMERICAN LOTUS		E		G4	S1
NUPHAR MICROPHYLLUM	SMALL YELLOW POND-LILY		E		G5T4T5	SH
ONOSMODIUM VIRGINIANUM	VIRGINIA FALSE-GROMWELL		E		G4	S1
PLANTAGO PUSILLA	DWARF PLANTAIN		E		G5	SH
PLATANATHERA FLAVA VAR FLAVA	SOUTHERN REIN ORCHID		E		G4T4?Q	S1
PLUCHEA FOETIDA	STINKING FLEABANE		E		G5T5	S1
POLYGALA INCARNATA	PINK MILKWORT		E		G5	SH
PRUNUS ANGUSTIFOLIA	CHICKASAW PLUM		E		G5T4T5	S2
PUCCINELLIA FASCICULATA	SALTMARSH ALKALI GRASS				G3G5	S2
PYCNANTHEMUM CLINOPODIOIDES	BASIL MOUNTAIN-MINT		E		G2	S1
RHYNCHOSPORA GLOBULARIS	COARSE GRASS-LIKE BEAKED-RUSH		E		G5?	S1
RHYNCHOSPORA INUNDATA	SLENDER HORNED-RUSH			LP	G3G4	S2
RHYNCHOSPORA KNIESKERNII	KNIESKERN'S BEAKED-RUSH	LT	E	LP	G1	S1
RHYNCHOSPORA PALLIDA	PALE BEAKED-RUSH				G3	S3

27 JUN 2002

CAMDEN COUNTY
RARE SPECIES AND NATURAL COMMUNITIES PRESENTLY RECORDED IN
THE NEW JERSEY NATURAL HERITAGE DATABASE

NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	REGIONAL STATUS	GRANK	SRANK
SAGITTARIA TERES	SLENDER ARROWHEAD		E		G3	S1
SCHUCHZERIA PALUSTRIS	ARROW-GRASS		E		G5T5	SH
SCHIZAEA PUSILLA	CURLY GRASS FERN			LP	G3	S3
SCHWALBEA AMERICANA	CHAFFSEED	LE	E	LP	G2	S1
SCIRPUS LONGII	LONG'S WOOLGRASS		E	LP	G2	S2
SCIRPUS MARITIMUS	SALTWASH BULRUSH		E		G5	SH
SPIRANTHES ODORATA	FRAGRANT LADIES'-TRESSES				G5	S2
STELLARIA PUBERA	STAR CHICKWEED		E		G5	SH
THASPIUM BARBINODE	HAIRY-JOINT MEADOW-PARSNIP				G5	SX
VERBENA SIMPLEX	NARROW-LEAF VERVAIN		E		G5	S1
VULPIA ELLIOTEA	SQUIRREL-TAIL SIX-WEEKS GRASS		E		G5	SH
XYRIS FIMBRIATA	FRINGED YELLOW-EYED-GRASS		E		G5	S1

17 Records Processed



United States Department of the Interior
FISH AND WILDLIFE SERVICE

New Jersey Field Office
Ecological Services
927 North Main Street, Building
Pleasantville, New Jersey 08232
Tel: 609-646-9310
Fax: 609-646-0352
<http://njfieldoffice.fws.gov>



IN REPLY REFER TO:
ES-03/512

OCT 9 2003

Victor Furmanec, Senior Project Manager
Dresdner Robin
371 Warren Street
Jersey City, New Jersey 07302-3035
Fax Number: (201) 217-9607

Reference: Threatened and endangered species review within the vicinity of the proposed I 295, I 76, and Route 42 connection project located within Bellmawr, Mount Ephraim, and Gloucester City, Camden County, New Jersey.

The U.S. Fish and Wildlife Service (Service) has reviewed the above-referenced proposed project pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of federally listed endangered and threatened species. The following comments do not address all Service concerns for fish and wildlife resources and do not preclude separate review and comment by the Service as afforded by other applicable environmental legislation.

Except for an occasional transient bald eagle (*Haliaeetus leucocephalus*), no other federally listed or proposed threatened or endangered flora or fauna under Service jurisdiction are known to occur within the vicinity of the proposed project site. Therefore, no consultation pursuant to Section 7 of the Endangered Species Act is required between the federal action agency and the Service. If additional information on federally listed species becomes available, or if project plans change, this determination may be reconsidered.

Enclosed is current information regarding federally listed and candidate species occurring in New Jersey. The Service encourages federal agencies and other planners to consider candidate species in project planning. The addresses of State agencies that may be contacted for current site-specific information regarding federal candidate and State-listed species are also enclosed.

Reviewing Biologist: *Jim Solberg*

Authorizing Supervisor: *J.C. [Signature]*

Enclosures: Current summaries of federally listed and candidate species in New Jersey
Addresses for additional information on candidate and State-listed species
Permit requirements for activities in wetlands

No part of this response should be used out of context and if reproduced, should appear in its entirety.



FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN NEW JERSEY



An **ENDANGERED** species is any species that is in danger of extinction throughout all or a significant portion of its range.

A **THREATENED** species is any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

	COMMON NAME	SCIENTIFIC NAME	STATUS
FISHES	Shortnose sturgeon	<i>Acipenser brevirostrum</i>	E
REPTILES	Bog turtle	<i>Clemmys muhlenbergii</i>	T
	Atlantic Ridley turtle	<i>Leptochelys kempii</i>	E
	Green turtle	<i>Chelonia mydas</i>	T
	Hawksbill turtle	<i>Eretmochelys imbricata</i>	E
	Leatherback turtle	<i>Dermochelys coriacea</i>	E
	Loggerhead turtle	<i>Caretta caretta</i>	T
BIRDS	Bald eagle	<i>Haliaeetus leucocephalus</i>	T
	Piping plover	<i>Charadrius melodus</i>	T
	Roseate tern	<i>Sterna dougallii dougallii</i>	E
MAMMALS	Eastern cougar	<i>Felis concolor couguar</i>	E+
	Indiana bat	<i>Myotis sodalis</i>	E
	Gray wolf	<i>Canis lupus</i>	E+
	Delmarva fox squirrel	<i>Sciurus niger cinereus</i>	E+
	Blue whale	<i>Balaenoptera musculus</i>	E
	Finback whale	<i>Balaenoptera physalus</i>	E
	Humpback whale	<i>Megaptera novaeangliae</i>	E
	Right whale	<i>Balaena glacialis</i>	E
	Sel whale	<i>Balaenoptera borealis</i>	E
	Sperm whale	<i>Physeter macrocephalus</i>	E

	COMMON NAME	SCIENTIFIC NAME	STATUS
INVERTEBRATES	Dwarf Wedgemussel	<i>Alasmidonta heterodon</i>	E
	Northeastern Benthic Finger Beetle	<i>Cicindela dorsalis dorsalis</i>	T
	Mitchell's Salamander	<i>Neonympha m. mitchellii</i>	E+
	American Longhorn Beetle	<i>Nicrophorus americanus</i>	E+
PLANTS	Small Horned Frog	<i>Isotria medeoloides</i>	T
	Swamp Pink	<i>Helonias bullata</i>	T
	Kniekershaker	<i>Rhynchospora knieskernii</i>	T
	American Chaffinch	<i>Schwalbea americana</i>	E
	Sensitive Plant	<i>Aeschynomene virginica</i>	T
	Seaside Amaranth	<i>Amaranthus pumilus</i>	T

STATUS			
E	endangered species	PE	proposed endangered
T	threatened species	PT	proposed threatened
+	presumed extirpated**		

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

** Current records indicate the species does not presently occur in New Jersey, although the species did occur in the State historically.

Note: for a complete listing of Endangered and Threatened Wildlife and Plants, refer to 50 CFR 17.11 and 17.12.

For further information, please contact:

U.S. Fish and Wildlife Service
New Jersey Field Office
927 N. Main Street, Building D
Pleasantville, New Jersey 08232
Phone: (609) 646-9310
Fax: (609) 646-0352

Revised 12/06/00



FEDERAL CANDIDATE SPECIES IN NEW JERSEY

CANDIDATE SPECIES are species that appear to warrant consideration for addition to the federal List of Endangered and Threatened Wildlife and Plants. Although these species receive no substantive or procedural protection under the Endangered Species Act, the U.S. Fish and Wildlife Service encourages federal agencies and other planners to give consideration to these species in the environmental planning process.

SPECIES	SCIENTIFIC NAME
Bog asphodel	<i>Narthecium americanum</i>
Hirst's panic grass	<i>Panicum hirsutii</i>

Note: For complete listings of taxa under review as candidate species, refer to Federal Register Vol. 64, No. 205, October 25, 1999 (Endangered and Threatened Wildlife and Plants; Review of Plant and Animal Taxa that are Candidates for Listing as Endangered or Threatened Species).

Revised 11/99

FEDERAL CANDIDATE AND STATE-LISTED SPECIES

Candidate species are species under consideration by the U.S. Fish and Wildlife Service (Service) for possible inclusion on the List of Endangered and Threatened Wildlife and Plants. Although these species receive no substantive or procedural protection under the Endangered Species Act, the Service encourages federal agencies and other planners to consider federal candidate species in project planning.

The New Jersey Natural Heritage Program maintains the most up-to-date information on federal candidate species and State-listed species in New Jersey and may be contacted at the following address:

Coordinator
Natural Heritage Program
Division of Parks and Forestry
P.O. Box 404
Trenton, New Jersey 08625
(609) 984-0097

Additionally, information on New Jersey's State-listed wildlife species may be obtained from the following office:

Dr. Larry Niles
Endangered and Nongame Species Program
Division of Fish and Wildlife
P.O. Box 400
Trenton, New Jersey 08625
(609) 292-9400

If information from either of the aforementioned sources reveals the presence of any federal candidate species within a project area, the Service should be contacted to ensure that these species are not adversely affected by project activities.

Revised 07/03

PERMIT REQUIREMENTS FOR ACTIVITIES IN WETLANDS

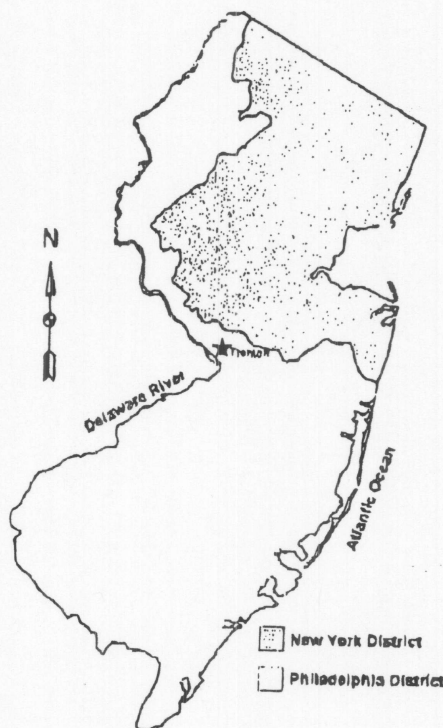
A review of the Service's National Wetland Inventory maps indicates that wetlands occur within the project area. Wetlands provide habitats for a variety of migratory and resident species of fish and wildlife. Thus, the Service discourages activities in and affecting the Nation's wetlands that would unnecessarily damage, degrade, or destroy the values associated with them. Project activities in wetlands may require federal and State permits from the U.S. Army Corps of Engineers pursuant to the Clean Water Act of 1977 (33 U.S.C. 1344 *et seq.*), and the New Jersey Department of Environmental Protection and Energy pursuant to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 *et seq.*). Thus, if work is proposed in or adjacent to wetlands, the following offices must be contacted to determine federal and State permit requirements, respectively:

Federal Permitting Authority:

Regulatory Branch
U.S. Army Corps of Engineers
New York District
26 Federal Plaza
New York, New York 10278-0090
(212) 264-3996
Fax #: (212) 264-4260

or

Regulatory Branch
U.S. Army Corps of Engineers
Philadelphia District
100 Penn Square East
Philadelphia, Pennsylvania 19107-3390
(215) 656-6725
Fax #: (215) 656-6724



State Permitting Authority:

Land Use Regulation Program
New Jersey Department of Environmental Protection
P.O. Box 439
501 East State St., 2nd Floor
Trenton, New Jersey 08625
(609) 984-3444
Fax #: Northern Counties (609-292-1231); Southern Counties (609-292-8115)

Revised January 29, 2003



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
PHILADELPHIA DISTRICT, CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3390

October 18, 1995

CENAP-OP-R-Coastal Zone Management (New Jersey and Pennsylvania)

PUBLIC NOTICE

SUBJECT: "Consistency Certification" with Approved State Coastal Zone Management Program

Federal regulations require that applicants for Department of the Army permits to perform work which falls under the jurisdiction of a State with a Coastal Zone Management (CZM) Program approved by the Secretary of Commerce, MUST PROVIDE CONSISTENCY CERTIFICATION. The certification statement must accompany the application for a Department of the Army permit.

On September 29, 1978 and September 29, 1980, respectively, CZM Programs were approved for the State of New Jersey and the Commonwealth of Pennsylvania by the Department of Commerce. Therefore, all applications for Department of the Army permits for work in their designated Coastal Zones must contain a consistency statement.

The statement should be as follows:

"The proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management Program."

Signature of Applicant


Additional information concerning the approved Coastal Zone Management Programs can be obtained by contacting:

State of New Jersey

New Jersey Department of
Environmental Protection
Land Use Regulation Program
CN 401
Trenton, New Jersey 08625-0401
Telephone Number - (609) 292-0060

Commonwealth of Pennsylvania

Pennsylvania Department of
Environmental Protection
Division of Coastal Programs
P.O. Box 8555
Harrisburg, Pennsylvania 17105-8555
Telephone Number - (717) 787-2529


FRANK J. CIANFRANI
Chief, Regulatory Branch

**US Department of Transportation
Federal Highway Administration
New Jersey Department of Transportation**

