U. S. DEPARTMENT
OF TRANSPORTATION

**Federal Highway
Administration**

Pennsylvania Division

228 Walnut Street, Room 508
Harrisburg, PA 17101-1720

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In reply refer to:
HEV-PA.1

Snyder, Union and Northumberland
Counties, Pennsylvania
Central Susquehanna Valley
Transportation Project
S.R.0015, Section 088
FPN: 315-X030-002

Mr. Gary L. Hoffman, P.E.
Deputy Secretary for Highway Administration
Pennsylvania Department of Transportation
Harrisburg, Pennsylvania

Dear Mr. Hoffman:

Enclosed is a copy of the approved Record of Decision for the Central Susquehanna Valley Transportation Project. The efforts of the project team have been key to the advancement of this project. Final Design may now commence, however, it is imperative that all commitments identified within this document be fulfilled.

Sincerely yours,

for David W Cough
James A. Cheatham
Division Administrator

Enclosure

cc: D.A. Schreiber, P.E., PENNDOT, BOD w/attachment
J. Kendter, P.E., PENNDOT, 3-0 w/attachment
Dennis Robinson, Executive Director, SEDA-COG w/attachment

RECORD OF DECISION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL SUSQUEHANNA VALLEY TRANSPORTATION (CSVT) PROJECT
S.R. 0015, SECTION 088
SNYDER, UNION, AND NORTHUMBERLAND COUNTIES, PENNSYLVANIA

I. SELECTED ALTERNATIVE

The Selected Alternative for the CSVT Project is the DA Modified Avoidance (DAMA)/River Crossing 5 (RC5) Alternative combination which consists of approximately 19.95 km (12.4 miles) of 4-lane limited access highway on new location. The Selected Alternative extends from the existing Selinsgrove By-pass stub (US Route 11/15) in Monroe Township, Snyder County, just north of Selinsgrove to the existing interchange between PA Route 147 and PA Route 45 in West Chillisquaque Township, Northumberland County ***(see Figure 1)***.

The DAMA Alternative heads north and west from existing US Routes 11/15 in the area of the stub of the Selinsgrove Bypass. DAMA does not use the existing interchange stub; instead, it requires a reconfiguration of the interchange to move north to avoid the historic Simon P. App Farm Property (App Farm). The alternative then swings to the north around the Kingswood development, heads east to avoid a closed municipal landfill where it impacts the Colonial Acres development. DAMA continues north and east, making use of PPL Ash Basin 2, to an interchange with the PA Route 61 Connector on PPL Ash Basin 3.

The PA Route 61 Connector is a new two-lane limited access roadway that connects the DAMA Alternative to existing US Route 11/15 in Shamokin Dam Borough at the western end of the existing PA Route 61 Bridge (Veterans Memorial Bridge) into Sunbury. The

61 Connector is approximately one mile long and passes through an undeveloped portion of Shamokin Dam Borough between the Gunter and the Orchard Hills developments.

From the 61 Connector interchange, DAMA continues northwest paralleling Park Road to its connection with RC5. RC5 heads north and east to a new, fully directional interchange with existing US Route 15 to the south of Winfield in Union County. RC5 then proceeds east across the West Branch Susquehanna River on a new structure that spans the floodway on both sides of the river. The structure also spans the existing rail lines and PA Route 147 on the east side of the river. The crossing makes use of a small island within the river. RC5 continues north and east to a new, fully directional interchange with Ridge Road. This interchange provides direct access to PA Route 147 via relocated Ridge Road. RC5 continues north and east of existing PA Route 147 and becomes the continuation of the existing 4-lane, limited access section of PA Route 147, just south of the interchange of PA Routes 45/147.

The DAMA and RC5 alignment components are discussed in greater detail in Sections III (Alternatives) and IV (Environmental Consequences and Mitigation) of the Final EIS and are graphically depicted on Figures III-20, IV-1, and VI-1 of the Final EIS.

To facilitate the consideration of the various alternatives, the project area was divided into two study sections, Sections 1 and 2, based on the interconnections of the alignments. Section 1 extends from the southern project terminus at the Selinsgrove Bypass stub to just south of the new interchange with US 15 near Winfield. Section 2 extends from this location to just south of the existing PA Route 147/PA Route 45 Interchange. DAMA is the Selected Alternative in Section 1; RC5 is

the Selected Alternative in Section 2. The study sections are depicted on Figure III-20 and IV-1 of the Final EIS.

The project was developed in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), the FHWA Environmental Impact and Related Procedures (23 CFR Part 771), the National Historic Preservation Act of 1966 (36 CFR Part 800), Pennsylvania Department of Transportation's (PENNDOT) Transportation Project Development Process and other related federal and state requirements.

Environmental studies supportive of NEPA commenced in 1995. Six public meetings were conducted between 1995 and 2003. As requested or needed, meetings were held with county and local government representatives, special interest groups, and individuals throughout the project development process. A Draft EIS was prepared, made available to the public, and circulated in February 2001. The Draft EIS identified the DAMA/RC5 Alternative combination as the Recommended Preferred Alternative. A Public Hearing was held on March 12, 2001, during the Draft EIS comment period. After the close of the comment period for the Draft EIS in March of 2001 and until the Spring of 2003, additional studies were completed to evaluate and consider the public and agency comments received on the Draft EIS. Minor refinements were made to the alternatives as a result of some of the comments. A Final EIS was prepared and made available for public review in August 2003. The same alternative combination (DAMA/RC5) was identified in the Final EIS as the Preferred Alternative. All public and agency comments on the Final EIS were considered in the decision to select the DAMA/RC5 Alternative combination.

II. ALTERNATIVES CONSIDERED

The alternatives development process was a two-phased evaluation conducted between the Fall of 1996 and extending through June 2002. The alternatives development process involved an extensive level of public and agency involvement. The affected public and regulatory agencies were involved in the development of preliminary alternatives, the identification of preliminary alternatives for detailed analysis, the identification of alternatives for examination in the Draft EIS, proposed modifications to the Draft EIS Alternatives, and the identification of the set of alternatives evaluated in the Final EIS.

During the preliminary alternatives evaluation phase, a full range of alternatives was considered, including the following.

- No-Build Alternative
- Transportation Systems Management (TSM) Alternative
- Existing Alignment/Upgrade Alternatives
- New Alignment Alternatives

Ten new alignment alternatives were developed in Section 1 and four different river crossing options were developed in Section 2. Connections from the new alignment alternatives to the local roadway system were also developed. These included a direct connection to the existing roadway system through a new interchange or through new two-lane roadways that connected to the existing roadway system.

The preliminary alternatives were evaluated based on the project needs (reduce congestion, improve safety, ensure sufficient capacity for expected population and employment growth), environmental impacts, and engineering feasibility and practi-

cality. The development and evaluation of the preliminary alternatives was documented in the Phase I Alternatives Analysis Report (October 1997) and summarized in the Final EIS, Sections III.A, B, and C (Development, Evaluation, and Conclusions/Recommendations of the Preliminary Alternatives Analysis on Pages III-1 through III-74 of the Final EIS).

The following general points summarize the conclusions:

- The No-Build Alternative does not address the project needs. However, the No-Build Alternative is considered throughout the entire process as a basis for comparison when weighing the impacts and benefits of the Build Alternatives.

- The TSM and Upgrade Alternatives, as stand alone alternatives, do not fully address the project needs and would have substantial socioeconomic impacts that would adversely alter the social environment of the CSVT Project study area.

- A connection to PA Route 61 is a critical element of any build alternative to fully address the project needs.

- All New Alignment Alternatives have the potential for environmental impacts to social, natural, and cultural resources.

Based on the findings of the Phase I Alternatives Analysis, the TSM/Upgrade Alternatives along with five New Alignment Alternatives and one connector roadway option in Section 1 and one river crossing option in Section 2 were dismissed from further study.

Since multiple New Alignment Alternatives were carried forward for detailed study in Section 1, these alternatives were melded into two different corridors, designated the A-A Hybrid Corridor and the Old Trail Corridor. These two corridors became

the basis of the Phase II, or detailed, engineering and environmental studies. These Phase II study corridors are shown on Figure III-12.

Following the delineation and mapping of the Phase II study corridors and detailed environmental investigations, alternatives were developed within the corridors. Originally, two alternatives were developed in the A-A Hybrid Corridor and four alternatives were developed in the Old Trail Corridor in Section 1. Additionally, four alternatives were developed as river crossing options in Section 2.

Between January 1998 and July 2000, multiple refinements were made to these alternatives. Refinements were made related to:

- the Route 61 Connector and its interchange with existing US Routes 11/15;
- active and inactive PPL ash basins;
- historic property boundaries;
- location/limits of a closed municipal landfill; and
- concerns of the Colonial Acres neighborhood.

The development and refinement of the alternatives studied in detail is discussed in the Final EIS, Sections III.D and E [Evaluations of Alternatives Studied in Detail (Phase II Studies) and Refinements to Phase II Alternatives on Pages III-74 through III-105 of the Final EIS].

As a result of continual refinement of the Phase II Alternatives, three alternatives were studied in detail in Section 1 and four alternatives were studied in detail in Section 2 (and evaluated in the Draft EIS) as follows:

Section 1

A-A Hybrid Corridor

- DA Modified Avoidance (DAMA) Alternative including the 61 Connector

Old Trail Corridor

- Old Trail 2A (OT2A) including the 61 Connector
- Old Trail 2B (OT2B) including the 15 Connector and a Stetler Avenue Interchange

Section 2

- River Crossing 1 East (RC1-E)
- River Crossing 1 West (RC1-W)
- River Crossing 5 (RC5)
- River Crossing 6 (RC6)

A brief summary of each of the alternatives evaluated in detail follows and a more detailed description is included by reference as ***Attachment 5***.

These alternatives are also described in Section III.F (Alternatives Studied in Detail in the Draft EIS on Pages III-105 through III-114 of the Final EIS). The impacts of the alternatives studied in detail are presented in Section IV, Environmental Consequences and Mitigation of the Draft and Final EIS.

The Draft EIS identified the DAMA/RC5 Alternative combination as the Recommended Preferred Alternative. The issues and concerns raised by the public and resource agencies on the Draft EIS during the public review period were considered. In response, minor alignment refinements and additional mitigation measures were identified in the Final EIS. The impacts of the alternatives studied in the Final EIS are presented in Section IV of the Final EIS and are summarized in Attachment 1. The Final EIS also identified the DAMA/RC5 Alternative combination as the Recommended Preferred Alternative.

The impacts of the DAM Alternative without the modification to avoid the historic App farm is also discussed and evaluated in detail in the Final EIS. These impacts were assessed in order to consider and where possible address the concerns raised by the public and municipalities on the Draft EIS. The DA Modified (DAM) Alternative without the 4(f) avoidance would have reduced impacts on commercial acquisitions and reduced impacts on active farm operations. Additionally, the DAM Alternative would result in fewer residential acquisitions, and fewer wetland impacts than the DAMA Alternative. Table III-14 of the Final EIS documents the impacts of the DAM Alternative without consideration of the Section 4(f) resource.

The DAMA/RC5 Alternative combination has a greater impact on Agricultural resources and businesses than either Old Trail (OT) Alternative in part because Section 4(f) requires the avoidance of the historic App Farm. While impacts to forest land and old field habitat are greater with the DAMA Alternative, those impacts offset greater impacts on regulated wetlands and floodplains associated with the OT Alternatives.

In Section 1, the DAMA was recommended as the Preferred Alternative based on the following:

- Least impact to residences (fewest number of displacements)
- Least impact to travel patterns on the existing network during construction
- Least impact to wetlands
- No impact to the Susquehanna River floodplain, including the canal wetland systems located on the floodplain
- Minimizes impacts to communities

- Lowest total project cost

In Section 2, the RC5 was recommended as the Preferred Alternative based on the following:

- Least impact to residences and businesses (fewest number of displacements)
- Does not require the placement of a new river bridge pier on a geological formation prone to sinkholes
- Least impact to high probability archaeological areas
- Provides the best design for the interchange with PA Route 147 east of the river
- Lowest total project cost

In conclusion, based on the above assessment, the DAMA/RC5 is identified as the environmentally preferred alternative pursuant to 40 CFR 1505.2(b) as it causes the least damage to the biological and physical environment, including historic resources, while best balancing economic and transportation needs. See ***Attachment 1*** for a more detailed summation of impacts. Additionally, the DAMA/RC5 Alternative combination is identified as the selected alternative because it best balances the need to provide safe and efficient transportation congestion relief with the protection, preservation, and enhancement of the social, natural, and cultural environment.

Section III of the Final EIS provides additional details regarding the alternatives analysis for this project. A detailed description of the comparison of impacts of the No Build and Build Alternatives is presented in Section IV of the Final EIS.

III. SECTION 4(f) RESOURCES

Section 4(f) of the U.S. Department of Transportation Act of 1966 was enacted to protect publicly owned parks and recreation areas, wildlife and waterfowl refuges, and significant historic sites and structures. The use of these lands will be approved only if there is no prudent and feasible alternative to the use of these resources and the project includes all possible planning to minimize harm to these resources resulting from the use.

All potential Section 4(f) protected properties within the project study area were identified in the first phase of environmental studies. Properties eligible for protection under Section 4(f) were identified including 1 state park (Shikellamy State Park), 8 publicly owned parks or municipal athletic fields, and 24 properties (out of 254 surveyed) already on or determined to meet the eligibility criteria to be listed on the National Register of Historic Places.

Alternatives to avoid impacts on Section 4(f) protected resources were developed during the preliminary alternatives phase. The proposed avoidance alternatives were determined to be prudent and feasible and became components of the alternatives studied in detail in the Draft and Final EIS. Substantial controversy arose as a result of the Draft EIS where the historic App Farm, a Section 4(f) protected property, was avoided by the Recommended Preferred Alternative to the detriment of other resource types. Section IV-H.1 of the Final EIS discusses this issue and Table III-14 documents the impacts anticipated with the non-avoidance of the Section 4(f) protected property. The anticipated impacts of the avoidance of the Section 4(f) protected property do not present unusual problems, nor are

there unusual factors nor will the cost or community disruption be of extraordinary magnitude. The Selected Alternative uses none of the properties currently protected by Section 4(f). Therefore, a Section 4(f) analysis was not required for this project.

IV. MEASURES TO MINIMIZE HARM

Throughout the project development process, alternatives have been designed to minimize, to the extent practicable, impacts to identified resources. In response to coordination with the agencies and the public, there were specific efforts to refine the alternatives carried into detailed study. These refinements and mitigation measures were reviewed by the regulatory agencies and were shown to the public at public meetings and the Public Hearing. Input from the Citizens Advisory Committee (CAC), Public Officials Work Group (POWG), the Monroe Township/Shamokin Dam Borough Focus Group, and the Point Township/Union Township Focus Group was also used to refine the alternatives and minimize impacts.

Some examples of minimization efforts developed and incorporated into the project design include: locating the preferred/selected alternative on an ash basin and the potential use of an ash basin for waste areas, the avoidance of historic properties, evaluation of other river crossings to avoid limestone formations, shifting of alignments to minimize and avoid excessive impacts to farming operations, avoidance of a municipal landfill and accommodation of pedestrian access between the Gunter and Orchard Hill developments in Shamokin Dam Borough. Other minimization efforts are documented throughout the Final EIS in the discussions of specific resource impacts.

Specific mitigation commitments regarding the Selected Alternative are documented in Section IV of the Final EIS - Environmental Consequences and Mitigation. ***Attachment 2*** provides a summary of minimization and mitigation commitments for the Selected Alternative. The most significant of these efforts are as follows.

1. The FHWA and PENNDOT are committed to the use of an Environmental Monitor (EM) throughout final design and construction. The EM will have the responsibility of tracking certain environmental mitigation commitments as defined in this ROD, the mitigation report, and the permit conditions. The responsibilities of the EM will include, but not be limited to, the following:

   - The tracking and use of off site work areas. Should off-site work areas be required by the contractor during construction for the placement of excess excavated material, borrow, staging areas, and service, access, or haulroads, the EM will review the site. The EM will review the site and make a recommendation to the contactor regarding what approvals may be required. This review and any necessary follow-up activities will occur prior to use by the contractor.

   - The coordination and tracking of appropriate surface water and groundwater sampling.

   - The tracking and management of appropriate agency and public coordination efforts including, but not limited to the following:
     i. the natural resources mitigation plan;
     ii. the development and design of the boat launch;
     iii. the necessary detailed noise studies and detailed cost-effectiveness analyses will be performed to determine where noise abatement is warranted and constructed. Coordination with the public regarding noise wall locations and aesthetics will also be undertaken.

iv. coordination will occur with the business community, the local municipalities, and local tourism agencies to determine appropriate signage for the business district and individual businesses and to ensure access during construction.

v. organization and management of a public advisory committee composed of community members and local officials will be formed during final design. This committee will be given the opportunity to review context-sensitive design features and provide input on the bridge/river corridor treatments. This would include representation from SEDA-COG. (EM/PM)

2. A conceptual mitigation proposal for impacts to natural resources is being developed. The FHWA and PENNDOT are attempting to provide a total ecosystem approach by replacing wetlands, reconstructing/restoring streams, and enhancing and preserving existing terrestrial habitat in one location. The proposed work will include individual compensatory commitments including the following:

- creating approximately 7 acres of wetlands;
- restoring, enhancing, and/or reconstructing approximately 1,000 to 4,000 linear feet of stream.

The non-compensatory proposed mitigation work may include where reasonable:

- providing approximately 55 acres of old field mitigation; and
- providing approximately 150 acres of forest land mitigation.

The intention is to create a functioning multiple habitat ecosystem which would be protected in perpetuity. If it were not possible to complete the mitigation at one site, multiple sites in various locations would be investigated.

Completion of the mitigation improvements suggested above at one Site (Multiple Habitat Ecosystem) will satisfy all natural resource environmental mitigation

commitments for the entire CSVT Project excepting for mitigation of wetland impacts on the east side of the West Branch of the Susquehanna River. Mitigation for wetland impacts on the east side of the river will use credits available at the Vargo Wetland Bank Site.

Once a site (or sites) has been selected, the conceptual mitigation plan will be developed in more detail. This plan will show the conceptual designs for wetlands, stream, and terrestrial sites. The selection and development of the mitigation site (or sites) will be coordinated with the natural resource agencies. (EM)

2. Proposed culvert crossings will employ fish passage structures developed by PENNDOT, Pennsylvania Fish and Boat Commission (PFBC), and Pennsylvania Department of Environmental Protection (PA DEP). The box culvert design will be in accordance with BD632M or revisions thereto. (PM)

3. If a contractor, working on the CSVT Project, chooses to use an area outside the project limits for waste/borrow, construction staging areas, and service, access, or haulroads, the contractor is responsible for obtaining any necessary permits and for complying with said permits consistent with #1 above. However, the Department may allow the contractor to use excess acreage in Department mitigation sites for compensatory mitigation for contractor actions, if required and available, and if the contractor compensates the Department for all costs associated with the creation of the additional wetlands. (PM/EM)

4. Surface water monitoring stations will be established in coordinated with the PFBC to monitor the receiving surface water resources potentially impacted by construction of the Selected Alternative over two closed ash basins. Chemical parameters will be collected and examined monthly during pre-construction (a minimum of one year prior to construction), and post-construction (a minimum of one year following construction). During construction, chemical samples will be increased to weekly intervals. Biological sampling will be conducted twice a year during pre-

construction, construction, and post-construction. Changes to proposed monitoring activities will be coordinated with the appropriate agencies. (EM)

5. A temporary collection and treatment system may be developed and implemented, if necessary in response to the testing (above) or required by the terms of any permit, to capture and treat leachate from the ash basins prior to discharge into the receiving streams. (EM/PM)

6. During final design, a detailed assessment of potentially affected individual domestic and public supply wells will be undertaken to verify baseline background water quality conditions. These investigations should be conducted in areas where potential concerns have been identified including, but not limited to, areas in the vicinity of PPL Ash Basins 2 and 3 and portions of Point Township underlain by a limestone aquifer. The data collected during this study will be used to assess potential future impacts to groundwater. Mitigation measures will be further refined using the results of this investigation. A Groundwater Quality and Impact Monitoring Plan (October 2001) has been prepared for this project. The recommendations of this plan, or approved revisions thereto, will be implemented during final design. (EM/PM)

7. A public boat launching area will be constructed on the west side of the West Branch of the Susquehanna River within the RC5 impact area. The boat launch area and access to the area will be developed during final design. Additional coordination with the township and the Pennsylvania Fish and Boat Commission may take place, as necessary, regarding access to the boat launch area. (PM)

8. If present, asbestos will be removed, handled, and disposed of in accordance with current guidelines/regulations. Buildings that will be demolished will be inspected by a certified inspector for asbestos containing materials. (PM/EM)

9. A new connecting roadway (Courtland Avenue Extension) may be constructed to link the Orchard Hills and the Gunter developments pending results of future public involvement efforts. Bicycle/pedestrian accommodations will be made on the proposed Courtland Avenue Extension. (PM/EM)

10. Visually aesthetic treatments (such as staining of a cast concrete structural features with a neutral color, applying the use of a form liner on any cast concrete structural feature, and landscaping berm areas) will be considered in the section of roadway traversing the Colonial Acres development through future public involvement efforts. (PM/EM)

11. A pedestrian-activated signal at the intersection of US Routes 11/15 and Eighth Avenue will be considered to provide a link between the residential areas of Shamokin Dam Borough west of US Routes 11/15 and the recreational facilities along the river east of US Routes 11/15. (PM)

12. Coordination will continue with farm property owners to address access and operation related issues. An ALCAB Hearing will be held, if required. (PM/EM)

13. Mitigation measures for impacts to cultural resources are defined in the Programmatic Agreement (PA) prepared for the project. The PA was fully executed on October 6, 2003, and is included as ***Attachment 3***. (EM)

14. Further detailed hydrologic and hydraulic analyses will be conducted during final design for floodplain encroachments. Coordination with FEMA will continue. (PM)

15. Additional waste investigations will be conducted for the five potential waste areas impacted by the Selected Alternative, including the two PPL ash basins. Coordination with the municipal officials, land owners and the agencies will be undertaken as appropriate. (EM)

16. Measures will be taken to minimize the spread of existing invasive plant species such as minimizing the salvage of topsoil from areas containing invasive plants; promptly re-vegetating disturbed soil surfaces with native, non-invasive species and avoiding the use of invasive plant species in reseeding and other landscaping work. Further, the use of native species in landscaping activities will be incorporated wherever reasonable. (EM/PM)

Beyond these project-specific mitigation commitments, there are many impact reduction methods (standard measures) included on PENNDOT's standard specifications and contract provisions that are included in construction contracts per normal PENNDOT policy and procedure. The following standard measures have been and/or will be implemented into the design and/or construction of the Selected Alternative and will be monitored by the PM in consultation with the EM.

1. Minor alignment modifications to minimize impacts to sensitive social, natural, and cultural resources.

2. All property acquisitions (either residential or commercial) will be in accordance with the Uniform Relocation and Real Property Acquisition Policies Act and the Pennsylvania Eminent Domain Code. Property access issues will also be addressed during the right-of-way acquisition process.

3. Development and implementation of an Erosion and Sedimentation (E&S) Control Plan with provisions for pollution prevention and/or control.

4. During final design and prior to construction, the required permits (Section 404, Chapter 105, Chapter 102, Section 401 Water Quality Certification, NPDES, and amendments thereto, etc.) will be obtained and the conditions of the permits will be incorporated into the construction contracts.

5. Development and implementation of a Maintenance and Protection of Traffic (MPT) Plan.

6. Development and implementation of measures to minimize dust and noise generation during construction.

7. Restoration of natural areas temporarily impacted during construction.

8. A detailed and comprehensive geotechnical and soils testing program will be implemented for the Selected Alternative during final design to determine the physical characteristics of the soils and the rock formations to be disturbed. This program will determine suitable uses for the soils (as construction and embankment material) and locate potential voids in the underlying rock formations. The results of this program will be used to adjust the design of the Selected Alternative as appropriate by providing for steeper rock cuts (thereby reducing excess excavated material) or widening fill slopes, where possible.

All mitigation commitments associated with the Selected Alternative will be consolidated into a single Mitigation Report. This report will be finalized after the Record of Decision (ROD) is obtained and prior to beginning final design. The Mitigation Report will be provided to design and construction personnel and agency representatives, if requested, for their use and reference to ensure that all mitigation commitments are incorporated into the final design plans and implemented during construction. Value engineering recommendations will be coordinated with the PM and EM to ensure consistency with mitigation measures.

Coordination with the public and resource agencies on efforts to further minimize impacts will be continued through final design and construction, as appropriate.

Based on these efforts, the FHWA believes that all practicable measures to minimize harm have been incorporated into the Selected Alternative.

V. MONITORING OR ENFORCEMENT PROGRAM

The FHWA and PENNDOT have committed to monitor final design development and project construction to assure that all mitigation commitments made in this ROD, the Final EIS, PA, and permit conditions are implemented. The monitoring program will include effective communication between the state and federal permitting agencies, resource agencies, the public, PENNDOT and its contractors, and the FHWA. Appropriate public involvement activities will be developed and implemented during final design and construction. Briefings will be conducted, when appropriate, for natural and cultural resource agency representatives. Coordination will occur as needed to comply with any commitments set forth in permit conditions for the project.

The FHWA and PENNDOT will use an Environmental Monitor (EM) to monitor and track certain environmental mitigation commitments as defined in this ROD, the Mitigation Report, and the permit conditions. The EM and the PENNDOT Project Manager (PM) will coordinate closely during the Final Design and Construction of the project. The PM/EM will be responsible for monitoring and tracking all other mitigation commitments as described in this ROD, the Mitigation Report and the permit conditions. The PM in cooperation with the EM will confirm implementation of all commitments during final design and construction.

For reporting purposes, a matrix will be developed by the FHWA and PENNDOT to track the status of all mitigation commitments. Brief mitigation status reports containing this tracking matrix will be developed by the EM and will be distributed to

the FHWA, PENNDOT, the permitting agencies, and the resource agencies at a regular intervals or on an as-needed basis (no less than twice a year during construction) from the start of final design through the completion of construction.

To ensure compliance with all appropriate federal and state regulations, necessary federal and state permits will be obtained prior to construction. These include the following.

1. US ACOE Section 404 Permit and amendments thereto
2. PA DEP Chapter 105 Permit
3. PA DEP 401 Water Quality Certification and amendments thereto
4. NPDES Permit

Because this project is being processed through the Integrated NEPA/404 process, application for the Section 404 Permit and the request for 401 Water Quality Certification were made concurrent with the circulation of the Final EIS. All other permits will be sought during final design, prior to construction.

The construction of the Selected Alternative will result in construction impacts of the following types.

1. Traffic Impacts
2. Air Quality Impacts
3. Noise Impacts
4. Water Quality Impacts
5. Property Access Impacts
6. Disposal of Excess Excavated Material Impacts

The FHWA and PENNDOT are committed to further minimizing these impacts to the extent possible during construction. Construction activities will be consistent with the specifications set forth in PENNDOT Publication 408. Additionally, the location of all off-site work areas required by the contractor during con-

struction (waste disposal areas, borrow areas,) will be subject by contract specifications to review by the EM prior to construction or use by the contractor. This review will afford a protection mechanism for both sensitive and regulated resources.

Associated with typical conditions of the 404 and 105 permits, the EM will also conduct monitoring activities for specific natural resource mitigation activities (e.g., post-construction monitoring of wetland replacement areas).

VI. COMMENTS ON THE FINAL EIS

The Notice of Availability of the Final EIS was published in the Federal Register on August 8, 2003. Block advertisements announcing the availability of the Final EIS were published in the following publications:

1. Daily Item on July 30 and August 8, 2003
2. Standard Journal on July 30 and August 8, 2003
3. Snyder County Times on August 2 and August 9, 2003

These notices announced the availability of the Final EIS, including the locations where copies of the document were available for public review. The notice requested that comments be provided by September 10, 2003, providing for a 33-day comment period. Copies of the Final EIS were provided to the appropriate federal, state, regional, and local agencies and municipalities. Additionally, copies were made available to those who made substantive comments on the Draft EIS. A list of the specific agencies, tribes, and individuals receiving copies of the Final EIS is contained in Section VIII of the Final EIS.

Following the agency and public review of the Final EIS, 15 comment letters were received including 5 from federal agencies, 4 from state agencies, 3 from regional agencies, 1 from a local

municipality, and 2 from the public. The comments received were primarily on issues that were previously raised and responded to throughout the project development. Copies of the agency and public comment letters along with itemized responses are included as ***Attachment 4***.

The following lists the main issues raised during the circulation of the Final EIS and the responses to those issues.

1. **Issue:** Excess excavated material may result in additional impacts to aquatic resources, require additional individual permits from the U.S. Army Corps of Engineers, and processing permits may create scheduling difficulties for both the U.S. Army Corps of Engineers and PENNDOT contractors.

   Response: The amount of excess excavation material generated by the project's Selected Alternative and reported in the EIS is based on a preliminary level of engineering. During final design, efforts will be made to minimize waste and achieve a better balance in the earthwork. However, if a contractor, working on the CSVT Project, chooses to use an area outside the project limits for waste areas the contractor is responsible for obtaining any necessary permits and for complying with said permits. Consistent with mitigation #1 above, the EM will review the site and make a recommendation to the contactor regarding what approvals may be required. This review and any necessary follow-up activities will occur prior to use by the contractor. However, the Department may allow the contractor to use excess acreage in Department mitigation sites for compensatory mitigation for contractor actions, if required and available, and if the contractor compensates the Department for all costs associated with the creation of the additional wetlands.

2. **Issue:** A final, natural resource mitigation plan must be completed and included in the Chapter 105 Permit Application.

Response: Consistent with PENNDOT's Transportation Project Development Process a mitigation plan will be completed shortly after the adoption of this ROD. Coordination with the natural resource agencies regarding the finalization of the natural resource mitigation with the goal of implementing the Multiple Habitat Ecosystem, will continue.

3. **Issue:** Should a sale, subdivision, or other action occur to cause the App farm's historic designation to be reconsidered, please reconsider the use of DAMA as the Preferred Alternative.

Response: Should conditions change from those currently present at the App farm prior to construction, the FHWA and PENNDOT will reevaluate the area of impact. If conditions warrant, modifications of the alignment will be made to further minimize the overall project impacts.

4. **Issue:** The request to survey portions of the Susquehanna River and Chillisquaque Creek for the presence of the yellow lampmussel.

Response: The yellow lampmussel is not a Federally or State listed threatened, endangered, or candidate species. Therefore, the FHWA has determined that survey is not warranted at this time. Continuing coordination may occur between PENNDOT, DEP, PAF&BC, and other interested agencies as appropriate. Further documentation on the conclusion of the yellow lampmussel issue will be included with the 105 Permit application.

5. **Issue:** Context-sensitive design should be incorporated into the final design of the river crossing.

Response: As discussed in the Final EIS, a public advisory committee composed of community members and local officials will be formed during final design. This committee will be given the opportunity to review context-sensitive design features and provide input on the bridge/river corridor treatments. SEDA-COG will be offered

the opportunity to have representation on this group.

6. **Issue:** Impacts resulting from the development and construction of the boat launch were not fully considered.

Response: A public boat launching area will be constructed on the west side of the West Branch of the Susquehanna River within the RC5 impact area. The boat launch area would be dedicated to fishing and boating. This is consistent with the Susquehanna Greenway initiatives. The boat launch and access to the boat launch will be developed during final design. Preliminary impacts were evaluated in the Final EIS as it would lie entirely within the proposed project impact area. The Final EIS further committed to evaluating access issues during final design. Additional coordination with the township, the public and the Pennsylvania Fish and Boat Commission may take place, as necessary during final design, regarding access to the boat launch area. The PFBC would own, maintain and regulate the area's use. Enforcement officers patrol day and night and respond to calls regarding disturbances at their facilities. Coordination would also occur with state police for backup, if necessary.

7. **Issue:** Future land use impacts of the project were not considered in the Final EIS. Funds should be awarded to address land use impacts associated with the project's new interchanges.

Response: Consideration of secondary and cumulative impacts of the project is required by the implementing regulations for NEPA. As such, an analysis of future land use was conducted and is discussed in Section IV.L, Secondary and Cumulative Impacts, of the Final EIS. During the project development, data was collected from municipalities regarding existing and expected population numbers. In general, development in the project study area is expected to continue. Some of the municipalities are expecting growth at rates similar to the past few decades; some municipalities are expecting growth higher than

the past few decades; some municipalities are not anticipated any growth. It does not appear, the higher growth rates anticipated by some municipalities are a result of the CSVT Project but rather are related to other factors such as the provision of sewer and/or water capacity. The CSVT Project is not projected to cause substantial increases in growth. Further, the two new interchange locations that will be created are located in areas without the infrastructure to support any future development at this time. Based on the data collected to date, this project will not create significant impacts on land use. However, the planning entities are encouraged to apply for funding from all available sources to evaluate regional growth and future land use patterns.

8. **Issue:** The Final EIS does not discuss impacts of the project on the Susquehanna River Greenway Partnership.

Response: The Susquehanna River Greenway Partnership is developing a conceptual plan for the enhancement and maintenance of the greater Susquehanna River Corridor. Members of the Partnership participated through various opportunities in the development of the CSVT Project. The CSVT Project will not adversely impact the goals of the Partnership nor will it prohibit future development of the greenway as conceptually presented. The CSVT Project includes a new bridge over the West Branch of the Susquehanna River. During development of the EIS, design concepts consistent with the greenway's conceptual plan were considered. For example, context-sensitive treatment of the bridge will be investigated during final design. Local officials and community members will be given the opportunity to review the context-sensitive design features and provide input. Additionally, a new boat launch area is proposed. Improving existing and developing new or additional access to the river via the new boat ramp is consistent with the concepts discussed in the greenway plan.

9. **Issue:** The regional planning organization, SEDA-COG wants to actively participate in the final design and construction of the project offering their expertise in regional planning, land use and landscape architecture.

Response: SEDA-COG will be offered the opportunity to participate in the final design and construction of the CSVT Project. They may serve in an advisory capacity. Their expertise can serve to enhance the final design and construction efforts. They may participate in the development and implementation of the design and construction contracts.

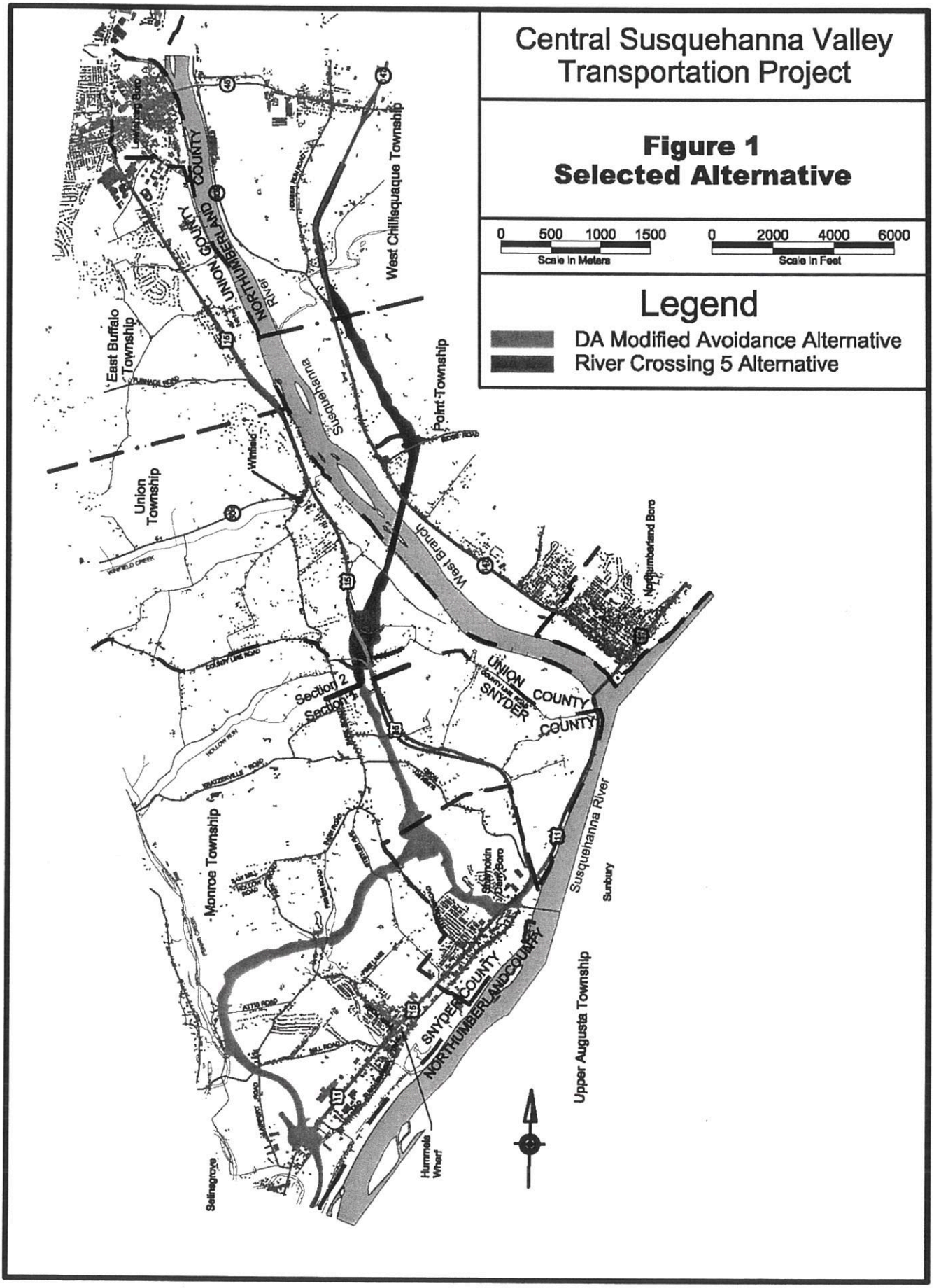
VII. CONCLUSION

Based on the analysis and evaluation presented in the Final Environmental Impact Statement (Final EIS) for this project and after careful consideration of the social, natural, and cultural factors and input from the public involvement process, the DA Modified Avoidance Alternative (DAMA) in Section 1 and the River Crossing 5 (RC5) Alternative in Section 2, as recommended in the Final EIS, is adopted as the Selected Alternative.

Oct 31, 2003 — James A. Cheatham

Date

Division Administrator
FHWA, Pennsylvania Division


Central Susquehanna Valley Transportation Project
Figure 1
Selected Alternative
0 500 1000 1500
Scale in Meters
0 2000 4000 6000
Scale in Feet
Legend
DA Modified Avoidance Alternative
River Crossing 5 Alternative
NORTHUMBERLAND COUNTY
UNION COUNTY
SNYDER COUNTY
NORTHUMBERLAND COUNTY
West Chillisquaque Township
East Buffalo Township
Union Township
Monroe Township
Point Township
Northumberland Boro
Sunbury
Upper Augusta Township
Selinsgrove
Hummels Wharf
Susquehanna River
West Branch
Section 2
Section 1

ATTACHMENT 1
IMPACT SUMMARY TABLE

IMPACT SUMMARY

SECTION 1 (SOUTHERN) ALTERNATIVES

	DA Modified Avoidance	Old Trail 2A	Old Trail 2B
TOTAL AREA (ACRES)	561.22	423.23	470.69
Structures (No.)			
Residential	33	43	46
Residential Accessory	12	38	43
Agricultural - Barns	1	1	1
Agricultural - Outbuildings	3	3	3
Utility Structure	1	0	0
Commercial (# Structures/Businesses Affected)	4/7[a]	2[b]	13/12[d]
Industrial (# Structures/Businesses Affected)	0	1/2[c]	1/2[c]
Churches	0	0	1[e]
Abandoned	0	0	0
Agriculture (Acres)			
Agricultural Security Area (Total)	98.72	25.49	25.21
Agricultural Security Area (In Production)	71.2	20.70	20.90
Productive Farmland	151.60	74.00	76.70
Agricultural Soils			
Prime	143.35	174.12	169.61
Statewide Important	194.34	115.20	134.57
Habitat (Acres)			
Wetlands (Direct and Indirect)	4.79	14.13	14.19
Forest Land	183.89	81.93	123.68
Old Field (Herbaceous and Shrubland)	157.02	118.81	124.26
Riverine Forest	0.05	45.36	45.30
Waste Sites (No.)	5[f]	5[g]	10[h]
Surface Water Resources			
Stream Relocations (No.)	3	4	2
Hydrologic Alterations (No.)	4	0	3
Bridge Crossings (No.)	2	0	0
Culverts (No.)	14	14	14
Total Length of Impact (Ft.)	16,445	13,770	14,945
Cultural			
Historic Properties (No.)	0	0	0
Prehistoric Archaeological Resource Potential (Acres)			
Very High	0.82	35.69	34.87
High	14.93	49.79	47.30
Moderate	155.26	103.42	92.08
Low	164.12	106.00	120.88
Very Low	215.93	128.23	175.36
Historic Archaeological Resource Potential (Acres)			
High	11.14	10.10	14.78
Moderate	32.83	66.50	73.98
Low	44.64	20.88	40.92
Noise Impacts			
Noise Impacted Residences	109	234	209
Residences with Reasonable Mitigation	32	192	167
Earthwork[i]			
Cut (CY)	8,477,000	4,964,000	5,782,000
Fill (CY)	6,120,000	5,913,000	5,790,000
Net	2,357,000	-949,000	-8,000
Length			
Segment Length (Ft./Miles)	35,984/6.82	32,333/6.12	32,333/6.12

Footnotes

a Comfort Inn, Performance Computers/Digital Link, Class A Auto/Class A Carpet Outlet/Styles Unlimited Fitness Center, Styles Unlimited Beauty Salon

b Denise Skotedis Interior Design

c Wildland Floral Supply/Rollins Leasing Company

d Denise Skotedis Interior Design, Pulse Fitness Center/The Country Edition, Sunbury Sewing/Rental Stop, Hummels Service, McDonalds, Leading Electronics, Bailey's Produce Patch (4 buildings), Mulls Auto Sales (2 buildings), Ulrich's Fruit Market

e Calvary Baptist Church

f Class A Auto, PP&L Ash Basin #2, Auto Credit, Inc., PP&L Ash Basin #3, Tax Parcel No. 12-05-146

g Wildland Floral Supply/Rollins Leasing Company, PP&L Ash Basin #1, Abandoned Lot Tax Parcel No. 12-11-298, PP&L Ash Basin #3, Tax Parcel No. 12-05-146

h Wildland Floral Supply/Rollins Leasing Company, Hummels Service, Sunbury Sewing/Rental Stop, Pulse Fitness Center/The Country Edition, Mulls Auto Sales, Budget Bakery, PP&L Ash Basin #1, PP&L Ash Basin #3, Abandoned Lot Tax Parcel No. 12-11-298, Tax Parcel No. 12-05-146

i The cut quantities are based on a 2:1 cut slope. These quantities may be reduced during final design.

Susquehanna Valley

IMPACT SUMMARY

2-28-03

SECTION 2 (NORTHERN) ALTERNATIVES				
	RC1-W	RC1-E	RC5	RC6
TOTAL AREA (ACRES)	389.95	403.49	400.48	415.31
Structures (No.)				
Residential	46	28	25	26
Residential Accessory	30	24	22	21
Agricultural - Barns	2	1	2	1
Agricultural - Outbuildings	13	3	3	3
Utility Structure	0	0	0	0
Commercial (# Structures/Businesses Affected)	8/10[a]	4/7[d]	0/0	5/8[e]
Industrial (# Structures/Businesses Affected)	1[b]	1[b]	0	1[b]
Churches	1[c]	0	0	0
Abandoned	10	9	9	9
Agriculture (Acres)				
Agricultural Security Area (Total)	30.14	14.99	49.01	14.94
Agricultural Security Area (In Production)	12.60	2.60	25.50	2.60
Productive Farmland	140.10	162.40	165.60	142.60
Agricultural Soils				
Prime	45.60	55.80	56.40	61.80
Statewide Important	100.90	107.60	114.40	116.30
Habitat (Acres)				
Wetlands (Direct and Indirect)	2.62	3.10	2.98	4.18
Forest Land	164.47	208.43	181.13	209.96
Old Field (Herbaceous and Shrubland)	21.77	33.64	38.92	35.17
Riverine Forest	10.52	11.17	5.66	11.28
Waste Sites (No.)	3[f]	1[g]	0	2[h]
Surface Water Resources				
Stream Relocations (No.)	0	0	2	0
Hydrologic Alterations (No.)	2	2	3	2
Bridge Crossings (No.)	3	3	4	3
Culverts (No.)	8	7	5	7
Total Length of Impact (Ft.)	7,395	7,210	8,480	6,825
Cultural				
Historic Properties (No.)	0	0	0	0
Prehistoric Archaeological Resource Potential (Acres)				
Very High	8.35	9.31	2.77	6.19
High	10..03	9.59	8.25	15.59
Moderate	57.62	54.18	44.40	62.36
Low	136.56	134.58	151.88	134.67
Very Low	177.31	195.13	192.44	195.77
Historic Archaeological Resource Potential (Acres)				
High	3.02	1.28	1.26	1.40
Moderate	56.61	38.80	23.91	41.50
Low	56.58	52.92	51.89	62.56
Noise Impacts				
Noise Impacted Residences	37	36	42	35
Residences with Reasonable Mitigation	15	15	15	15
Earthwork[i]				
Cut (CY)	2,311,000	4,506,000	4,671,000	4,015,000
Fill (CY)	2,486,000	3,000,000	2,562,000	2,769,000
Net	-175,000	1,505,000	2,108,000	1,246,000
Length				
Segment Length (Ft./Miles)	28,816/5.46	28,943/5.48	29,196/5.53	29,767/5.64

Footnotes

a Central Penn Carpet/Duo-Fast/Mid Atlantic/Pella Window/PA Home accents, Automart (2 buildings), Kohl's Market, US Cargo, Lahr's Mini Storage (2 buildings), Weathervane Boarding Dogs and Cats

b PG Energy

c Ridgeview Evangelical Free Church

d Central Penn Carpet/Duo-Fast/Mid Atlantic/Pella Window/PA Home Accents, Automart (2 buildings), US Cargo

e Central Penn Carpet/Duo-Fast/Mid Atlantic/Pella Window/PA Home Accents, Automart (2 buildings), US Cargo, Winfield Auction and Surplus Outlet

f US Cargo, C&G Rabbitry, Kohl's Market

g US Cargo

h US Cargo, Winfield Auction and Surplus Outlet

i The cut quantities are based on a 2:1 cut slope. These quantities may be reduced during final design

ATTACHMENT 2
SUMMARY OF MITIGATION COMMITMENTS

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	FEIS REFERENCE
A. Social and Economic			
1. Population and Housing	Conduct final relocation survey and provide relocation assistance for all displaced persons	Design, Construction	Section IV, A 1, a, ii (page IV-12)
2. Neighborhoods and Community Cohesion	Design and construct new access road for the northern section of the Colonial Woods neighborhood (Colonial Drive relocated)	Design, Construction	Section IV, A 1, b, ii (page IV-20)
	Design and construct the Courtland Avenue Extension to connect the Orchard Hills and Gunter neighborhoods, incorporating a sidewalk or wide road shoulders to accommodate pedestrians and/or bicyclists	Design, Construction	
	Consider a pedestrain activated signal at Route 11/15 and Eighth Avenue to increase safety of pedestrian crossings	Design, Construction	
3. Community Facilities and Services	Coordinate with School District transportation directors regarding construction activities that may impact daily school bus runs	Construction	Section IV, A 1, c, i, b (page IV-23)
4. Churches	Section 2: Ridge Road relocation property acquisition - fair market value compensation should be made to the Ridgeview Evangelical Free Church	Construction	Section IV, A 1, c, ii, b (page IV-28)
5. Public Parks and Recreational Facilities	Coordinate with the PA Fish and Boat Commission to determine feasibility of constructing a public access area on the west side of the West Branch Susquehanna River in the vicinity of the proposed bridge crossing	Design, Construction	Section IV, A, 1, c, iii, b (page IV-29)
	Coordinate with the township regarding improvements to access road to boat ramp site	Design, Construction	
6. Emergency Response Service Providers	Develop a Maintenance and Protection of Traffic (MPT) Plan during Final Design to minimize the disruption of traffic during construction	Design	Section IV, A, 1, c, vii, b (page IV-33)
7. Public Transportation Services	Coordinate with Rohrer Bus Company regarding construction activities along bus routes that may impact their daily bus runs	Construction	Section IV, A, 1, c, viii, b (page IV-34)
8. Economic Trends and Local Business Impact	Work with the business community, local municipalities, and local tourism agencies to develop appropriate off-site signage for the business district and individual businesses	Design, Construction	Section IV, A, 2, a, ii (page IV-40)
B. Noise	Final Design: Perform additional noise impact and cost-benefit analysis to determine specific noise mitigation measures, using PENNDOT's newest noise abatement guidelines	Design	Section IV, B, 2 (page IV-60)
	Investigate the use of excess excavated material for construction of earthen berm noise barriers	Design, Construction	
	Construct final design recommended noise abatement in the form of vertical noise barriers, earthen berms, or by implementing changes to the roadway design.	Construction	
	Limit construction activities to daylight hours to minimize construction noise impacts (if possible to maintain construction schedule)	Construction	

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	FEIS REFERENCE
C. Air Quality	Construction: Employ typical air quality control measures. These include dust controls at the source (wet suppression) and during transport (covering of hauling trucks). No open burning of construction or demolition waste is permitted.	Construction	Section IV, C, 3 (page IV-87)
	Construction: Obtain necessary permits from the PA DEP if any paving materials plant (or other air contamination source) will be constructed	Construction	
	Construction: Locate vehicle staging and holding areas away from residential land use	Construction	
D. Agricultural Resources	Continue to investigate minimization measures to reduce impacts to agricultural land (minimize required right-of-way width, control runoff/erosion damages)	Design	Section IV, D, 5 (page IV-102)
	Evaluate replacement of disrupted water supplies necessary for continued agricultural operations	Design, Construction	
	Obtain approval from the Agricultural Lands Condemnation Approval Board (ALCAB) prior to condemnation of productive agricultural land for highway purposes	Design	
	Study replacement access to land-locked parcels. Implement if feasible and reasonable; if not, compensate the landowner or acquire the property as an uneconomic remnant	Design, Construction	
E. Visual Quality			
1. General	Form a Public Advisory Committee to review the context-sensitive design features and provide feedback on various bridge designs	Design	Section IV, E, 4 (page IV-160)
2. Section 1	Provide evergreen screening on the northeast side of the highway near Monroe Manor	Construction	Section IV, E, 2, a, i (page IV-104)
	Colonial Acres viewshed: Consider using context-sensitive bridge design (color/texture/materials), landscaping fill slopes, and the use of vegetative screening	Design, Construction	
	Gunter and Orchard Hills developments viewshed: Consider landscaping fill slopes and the use of vegetative screening wherever possible for the Courtland Avenue Extension	Construction	
3. Section 2	Lee's Lane neighborhood (southeast of Winfield) viewshed: Consider using context-sensitive bridge design (color/texture/materials) and the use of vegetative screening	Design, Construction	Section IV, E, 2, b, iii (page IV-151)
	Viewshed southeast of Mertz' Meats at Ridge road and PA Route 147: Attempt to minimize the depth of cuts along the hillside, consider using context-sensitive bridge design (color/texture/materials), landscaping fill slopes, revegetating cut slopes, and using vegetative screening where possible	Design, Construction	

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	FEIS REFERENCE
F. Natural Resources			
1. General Provisions	Hire and maintain an Environmental Monitor to ensure mitigation commitments are fulfilled during both design and construction	Ongoing	Section IV, F, 1, h, i (page IV-188)
	Avoidance and minimization: Consider minor alignment shifts to minimize terrestrial habitat impacts	Design	
	Avoidance and minimization: Consider final design modifications to stormwater management facilities	Design	
	Avoidance and minimization: Document the locally important wildlife habitats	Design	
	Design vegetative clear zones along the edge of roadway to avoid motorist/animal collisions	Design	
	Avoid the use of concrete median barriers where safety is not adversely affected	Design	
	Implement safety measures (such as deer crossing signs) to minimize motorist conflicts with white-tailed deer	Design, Construction	
	Construction management: Environmental Monitor oversight to assure that clearing and disturbance is contained within the right-of-way and that other environmentally sensitive wildlife features are identified and avoided, if possible (such as den trees or snags)	Design, Construction	
	Construction management: Environmental Monitor oversight to review all contractor proposed off-site areas required during construction	Design, Construction	
	Re-seed all exposed soil areas (including staging areas) with permanent cover as early as possible	Construction	
	Ensure no invasive or noxious plants or plant seeds are used in landscaping plans and re-seeding efforts	Construction	
	Avoid the salvage of topsoil from areas containing invasive plant species	Construction	
	Develop a Noxious Plant Control Plan	Design, Construction	
2. Single Site Mitigation Option - Comprehensive	Attempt to provide a total ecosystem approach to natural resource mitigation by completing all compensatory mitigation activities at one location	Design	Section IV, F, 1, h, ii (page IV-190
	Maintain consistency with terrestrial mitigation policies of the FHWA and PENNDOT	Design, Construction	
	Obtain potentially suitable mitigation areas primarily through amicable (voluntary) easement agreements or acquisition	Design	
	Utilize a hierarchical approach to evaluate relevant mitigation opportunities within and adjacent to the project study area	Design	
	Create approximately 7 acres of wetlands	Design, Construction	
	Restore, enhance, or reconstruct approximately 1,000 to 4,000 linear feet of stream	Design, Construction	
	Provide approximately 55 acres of old field mitigation	Design, Construction	
	Provide approximately 150 acres of forestland mitigation	Design, Construction	

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	FEIS REFERENCE
F. Natural Resources (continued)			
3. Multi Site Mitigation Option - Riparian/Riverine Communities	Minimize disturbance of the soil profile and provide suitable topsoil specifications to promote vegetation	Construction	Section IV, F, 1 h, iii, a (page IV-192)
	Re-establish original cross-sectional area of the floodplain	Design, Construction	
	Implement a post-construction landscaping plan designed to re-establish the native riparian plant community and discourage invasive plant species	Design, Post-Construction	
	Incorporate roadway measures into the design to control runoff that may affect vegetative growth	Design	
	Section 2 - preserve and/or restore approximately 5 acres of riverine/riparian corridor habitat along the Susquehanna River through easement agreements or ownership	Design	
4. Multi-Site Mitigation Option - Large Forested Complexes	Conserve existing forested complexes through easements, enrollment in existing public programs (i.e. forest stewardship) or obtaining lands and transferring to public ownership	Ongoing	Section IV, F, 1, h, iii, b (page IV-193)
	Reconnect existing forest tracts through revegetation or active landscaping of gaps (nonforested areas)	Construction	
	Revegetate with native species where applicable and feasible	Construction	
	Remove invasive species where active mitigation takes place	Construction	
	Contribute funding to a conservation organization which is specifically intended to preserve and manage large forested complexes close to the project impact area	Ongoing	
	Contribute funding to a state agency (i.e. PGC, DCNR) to obtain large forested areas for inclusion into a state public use system (i.e. State Game Lands, State Park) close to the project impact area	Ongoing	
	Section 1 - preserve, enhance, and/or re-establish approximately 150 acres of forest, particularly F1, SF2, and SF4 communities	Design, Construction	
	Section 2 - re-establishment and/or preservation of approximately 120 acres of forest land, particularly F1 and SF2 communities	Design, Construction	
5. Multi-Site Mitigation Option - Old Field Habitat	Create old-field habitat on private properties through existing conservation programs	Ongoing	Section IV, F, 1, h, iii, c (page IV-194)
	Contribute funds to state or Federal agencies or other organizations to create old field habitat in the project vicinity	Ongoing	
	Section 1 - preserve and/or create approximately 55 acres of old field habitat	Design, Construction	
6. Terrestrial Mitigation Monitoring	Environmental Monitor: Coordinate with final design engineers to minimize terrestrial impacts	Design	Section IV, F, 1, h, iv (page IV-196)
	Environmental Monitor: Review and advise on all construction-phase mitigation issues and activities	Construction	
	Environmental Monitor: Brief construction engineers and contractors regarding terrestrial habitat sensitivity to avoid unnecessary impacts	Construction	
	Environmental Monitor: Monitor required plantings to ensure stabilization of vegetation	Construction	

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	FEIS REFERENCE
F. Natural Resources (continued)			
7. Wetlands	Minimize the width of the project footprint to reduce encroachments	Design	Section IV, F, 2, c, ii and iii (page IV-211)
	Implement a Stormwater Management Plan	Design, Construction	
	Investigate special drainage methods to avoid indirect impacts on a case by case basis	Design, Construction	
	Implement an approved Erosion and Sedimentation Pollution Control Plan	Design, Construction	
	Coordinate with appropriate natural resource agencies for design and construction of Wooded Run bridge span	Design, Construction	
	Section 1: Create approximately 7 acres of wetlands (*see also* Single Site Mitigation Option)	Design, Construction	
	Section 2: Mitigated by the replacement wetlands already constructed at the John Vargo property adjacent to Warriors Run and PA Route 54 in Lewis Township, Northumberland County	N/A	
8. Surface Water/Aquatic Resources	Consider the use of bridges in place of culverts where practical and feasible	Design	Section IV, F, 3, c, ii and iii (page IV-224)
	Employ fish passage strategies for culvert crossing structures, including standardized construction details	Design, Construction	
	Address measures to separate highway surface water runoff from clean upslope runoff as detailed in referenced FHWA documentation	Design, Construction	
	Minimize length of stream restoration as possible. Where not possible, employ current methodologies such as fluvial geomorphology to design the relocated stream	Design	
	Implement an approved Erosion and Sedimentation Pollution Control Plan (*see also* Wetlands)	Design, Construction	
	Conduct structure installation during low-flow conditions	Construction	
	Use clean rock material and filter fabric for all erosion and sedimentation control meaures, diversion channels, and causeways	Construction	
	Avoid or minimize the siting of construction within stream reaches. If unable to avoid stream siting, use clean rock for causeways to avoid sedimentation impacts to stream	Construction	
	Evaluate, design, and construct crossing structures and in-stream improvements that will reduce the effects of bedload disposition and subsequent maintenance	Design, Construction	
	Locate all construction fueling stations outside of the reaches of the aquatic habitat to avoid accidental discharge of toxic pollutants	Construction	
	Minimize the area to be devegetated to reduce sediment in the stream	Design, Construction	
	Following structure installation, restore all disturbed aquatic substrate and revegetate any disturbed riparian areas to pre-construction condition (*see also* Multi Site Mitigation Option - Riparian/Riverine Communities)	Construction	
	PPL Ash Basins: Implement the Surface Water Monitoring Programs as detailed in the FEIS	Construction	
	PPL Ash Basins: Implement Remediation Strategies (dewatering wells and wick drains) as detailed in the FEIS	Construction	

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	FEIS REFERENCE
F. Natural Resources (continued)			
9. Geology and Soils	Implement a comprehensive geotechnical and soils testing program	Design, Construction	Section IV, F, 4, a, i, a (page IV-232)
	Prepare a detailed Erosion & Sedimentation Plan for inclusion in the National Pollutant Discharge Elimination System (NPDES) Permit(s) required by DEP	Design	
	Investigate alternatives that are underlain by limestone bedrock for the presence of solution features. Both Section 1 (DAMA) and Section 2 (RC-5) overlay these types of features	Design, Construction	
	Boring coverage should be dense both vertically and laterally to ensure an adequate level of confidence. Seal all drill holes upon completion	Design, Construction	
	Address all identified solution features with approved engineering methods	Design, Construction	
	Design and locate stormwater detention structures to prevent aquifer degradation due to sinkholes	Design, Construction	
	Design roadcuts according to characteristics of the local lithology. Both Section 1 and Section 2 contain lithology susceptible to cut-slope stability problems	Design	
10. Public/Private Water Supplies	Perform detailed assessments of potentially affected individual domestic and public supply wells	Design	Section IV, G, 2 (page IV-246)
	Follow recommendations found in the Groundwater Quality and Impact Monitoring Plan	Design, Construction	
	Implement contingency plan to address citizen complaints regarding water supply degradation	Design, Construction	
	Provide continuation of water service to residents served by impacted water supplies (provide connections to public water systems, re-drilling existing wells to a greater depth, relocating a well, providing water treatment)	Design, Construction	
	Properly abandon wells within the take area	Construction	
	In the case of groundwater degradation, implement the water supply contingency program (found in the Public/Private Water Supplies Technical Support Data)	Construction	
	Section 1: Monitor and treat impacts to groundwater quality in the areas surrounding PPL Ash Basins No. 2 and No. 3 (*see also* Surface Water/Aquatic Resources)	Construction	
	Section 2: Monitor and treat impacts to groundwater in the portion of Point Township underlain by a limestone aquifer	Construction	

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	FEIS REFERENCE
F. Natural Resources (continued)			
11. Cultural Resources	Complete a Phase I archaeological survey to identify historic and prehistoric resources	Design	Section IV, H, 2, c (page IV-267)
	Complete a Phase II archaeological survey to test sites identified in Phase I	Design	
	Avoidance: National Register eligible sites should be avoided if feasible	Design	
	Apply Criteria of Effect and Adverse Effect and undertake a Phase III program if avoidance of National Register eligible sites is not feasible	Design	
	Consult with FHWA and PA SHPO to insure satisfactory design and completion of archaeological studies	Design, Construction	
	Fulfill all requirements of programmatic agreement	Construction	
	Maintain coordination with all Federally Recognized Tribes with ancestral ties to Pennsylvania	Ongoing	
12. Floodplains	Detailed hydrologic and hydraulic analyses should be performed during Final Design	Design	Section IV, I, 2 (page IV-290)
	Coordinate with FEMA to provide information needed for map revisions	Post-construction	
	Design: Minimize encroachments on the 100-year floodplain	Design	
	River crossings: Obtain approval by the PA DEP and US ACE (Joint Permit application)	Design	
	Mulch and seed all roadway embankments	Construction	
13. Waste Sites	All intrusive testing and remediation efforts will be undertaken in accordance with PA DEP requirements	Design, Construction	Section IV, J, 2 (page IV-296)
	Miscellaneous dump sites will be appropriately recycled or disposed at an acceptable facility	Construction	
	Inspect buildings slated for demolition for asbestos and undertake removal, handling, and proper disposal	Design, Construction	
	Inspect buildings slated for acquisition but not demolition for lead based paint	Design, Construction	
	Section 1: Perform additional sampling and analysis of identified waste impact sites and mitigate as indicated in Table IV-J-2	Design, Construction	
14.Traffic and Transportation Network	Continue working with SEDA-COG to address contraffic congestion issues that will persist after construction on CSVT is completed	Ongoing	Section IV, M, 5 (page IV-356)

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	FEIS REFERENCE
F. Natural Resources (continued)			
15. Scenic Rivers	Construction staging areas should be screened from the river by a vegetative buffer and set back as far as possible from the river's edge	Construction	Section IV, N, 2 (page IV-359)
	Materials used on the bridge should reflect the natural character of the surrounding area (context-sensitive bridge design)	Design	
	Use native or local stone in areas where riprap is needed	Design	
	Notify river users of construction activity on the river, both upstream and down-stream, by using appropriate signage	Construction	
	Incorporate an approved identification sign on the bridge parapet (upstream) identifying it as the State Route 15 bridge.	Construction	
	If a causeway is to be used during construction, contractor must adhere to requirements of DEP permit BDWW-GP-8 - Temporary Road Crossings	Construction	
	All debris entering the river should be removed, during both construction and cleanup	Construction	
16. Additional Construction Impacts and Mitigation	Final Design: use geotechnical survey to adjust the design of cut/fill sections to reduce project-wide surplus earthwork waste where possible (raising profile, steeper rock cut slopes)	Design	Section IV, O, 6 (page IV-365)
	Investigate use of the PPL Ash Basins for disposal of surplus waste material (*see also* Surface Water/Aquatic Resources *and* Public/Private Water Supplies)	Design	
	Continue coordination with local municipalities to identify other potential surplus waste disposal sites	Ongoing	
	If excess material is to be disposed of outside the project corridor, contractor must obtain all necessary approvals, including environmental clearances	Construction	
	PENNDOT has added a special provision that the contractor must have qualified professionals on staff to investigate and determine that no environmental concerns exist in the proposed disposal area, and to secure all necessary permits and approvals	Construction	

ATTACHMENT 3
PROGRAMMATIC AGREEMENT

PROGRAMMATIC AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION
AND
THE PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR § 800.14(b)(1)

REGARDING THE S. R. 0015, SECTION 088, CENTRAL SUSQUEHANNA VALLEY TRANSPORTATION PROJECT
SNYDER, UNION, AND NORTHUMBERLAND COUNTIES, PENNSYLVANIA

WHEREAS the Federal Highway Administration (FHWA), in order to relieve traffic congestion and to improve safety, proposes to construct a new highway along the existing S.R. 0015, S.R. 0011, S.R 0011/0015, and S R 0147 roadways in Snyder, Union, and Northumberland Counties, Pennsylvania; and

WHEREAS, the FHWA has involved and will continue to involve the public and Native American Tribes with cultural affiliations to the project area, as stipulated under the National Environmental Policy Act (NEPA) of 1969, as amended, in a manner consistent with Pennsylvania Department of Transportation's (PENNDOT) Public Involvement Procedures and the National Historic Preservation Act (NHPA) as amended [16 U S C. § 470], and its implementing regulations (36 CFR § 800), and

WHEREAS the FHWA has established that the S.R 0015, Section 088, Central Susquehanna Valley Transportation (CSVT) Project's area of potential effect (APE), as defined at 36 CFR § 800.16(d), includes all potential direct or indirect impacts to historic resources located within audible and visual distance of the proposed construction area This is an area extending south from the existing S.R 0147 and S.R 0045 Interchange (the northern terminus) to the end of the existing Selinsgrove Bypass (the southern terminus). The Selinsgrove Bypass is where the existing S.R 0011/0015 changes from a four-lane, limited access expressway to a five-lane (four lanes plus center turn lane), free access facility; and

WHEREAS the FHWA, pursuant to 36 CFR § 800 4(c), has determined that the Simon P App Farm, an historic property located within the APE, is eligible for inclusion in the National Register of Historic Places; and

WHEREAS the FHWA has determined that the CSVT Project's preferred alternative in Section 1, the DA Modified Avoidance Alternative (DAMA), will have no adverse effect on the Simon P App Farm, the only historic architectural resource that could potentially be affected by the preferred alternative, as detailed in the Determination of Effect Report (April 2000) prepared for the project, and

WHEREAS the FHWA has determined that there are no architectural resources listed in or eligible for inclusion in the National Register of Historic Places adversely affected by the proposed CSVT Project's preferred alternatives DAMA in Section 1 and River Crossing 5 (RC5) in Section 2, and

WHEREAS for purposes of this agreement, the term 'Tribe(s)' shall mean any Federally Recognized Tribe that may attach religious and/or cultural significance to historic properties that may be located within the project APE; and

WHEREAS Tribes that may attach religious and/or cultural significance to historic properties that may be located within the project APE have been invited to consult on this undertaking, and

WHEREAS the FHWA has consulted with the Pennsylvania State Historic Preservation Officer (SHPO) to develop and test a predictive model for archaeological resources (August 1999), and

WHEREAS the model was applied to a large study area, through which a range of reasonable alternatives meeting the needs of the Project passed; and

WHEREAS the areas identified by the predictive model as having a high sensitivity for archaeological resources were avoided, where possible, during the development of the alternatives; and

WHEREAS the FHWA has requested the comments of the Tribes on the proposed predictive model for archaeological resources,

WHEREAS the FHWA has determined that the Project may have an effect on NRHP-eligible archaeological sites, and

WHEREAS archaeological studies have not been completed for the CSVT Project and the FHWA has elected to comply with the NHPA through execution and implementation of a Programmatic Agreement (Agreement) pursuant to 36 CFR § 800 14, and

WHEREAS the FHWA has invited the Tribes to participate in the consultation and to concur in this Programmatic Agreement (Agreement); and

NOW, THEREFORE, the FHWA, the Tribes and the SHPO agree that, upon FHWA's decision to proceed with the CSVT Project, the project shall be administered in accordance with the following stipulations so as to take into consideration potential effects to archaeological sites eligible for inclusion in the National Register of Historic Places

Stipulations

The FHWA shall ensure that the following stipulations are carried out·

1. PENNDOT shall conduct an archaeological identification survey of the Selected Alternative of the CSVT project in a manner consistent with the *Secretary of the Interior's Standards and Guidelines for Identification* (46 FR 44720-23), also taking into account the National Park Service's publication *The Archaeological Survey: Methods and Uses* (1978: GPO stock #024-016-00091) and the Bureau for Historic Preservation (BHP)/Pennsylvania Historical and Museum Commission's (PHMC) *Cultural Resource Management in Pennsylvania: Guidelines for Archaeological*

Investigations (July 1991) The archaeological predictive model developed for the CSVT Project (*Archaeological Predictive Model Development and Testing, August 1999*) as presented and/or amended through consultation with Tribes and other consulting parties will be used as a guide in conducting field investigations and subsequent site analysis

2 PENNDOT will evaluate archaeological resources identified within the APE in accordance with 36 CFR § 800 4(c), in order to recommend NRHP eligibility which will be made by FHWA in consultation with the SHPO and Tribe(s). If any archaeological sites are determined to be eligible for listing in the NRHP, PENNDOT will consider design alternatives that would avoid or minimize the project impacts on these resources If eligible archaeological sites cannot be avoided the FHWA will ensure that they are treated in accordance with Stipulation 3

3. If eligible archaeological sites cannot be avoided, PENNDOT, in consultation with the SHPO and the Tribe(s) will apply the Criteria of Adverse Effect in accordance with 36 CFR § 800.5. If it is determined that the CSVT project will have an adverse effect on archaeological resources important chiefly for the information it contains and does not warrant preservation in place, PENNDOT will develop a data recovery plan or a plan for alternative mitigation in consultation with the SHPO and Tribe(s) The views of the public will be considered in the development of the plan Any data recovery plan will be consistent with the *Secretary of the Interior's Standards and Guidelines for Archaeological Documentation* (48 FR 44734-37) and the BHP/PHMC's *Cultural Resource Management in Pennsylvania: Guidelines for Archaeological Investigations (July 1991).* If archaeological resources are important chiefly for values other than for the information contained and do warrant preservation in place, then PENNDOT shall comply with 36 CFR § 800 6.

4 If eligible archaeological sites cannot be avoided, PENNDOT, in consultation with the SHPO and the Tribe(s) may develop additional creative mitigation options. The views of the public will be considered in the development of any creative mitigation options

5 If archaeological data recovery or other alternative mitigation is necessary, PENNDOT will ensure that the mitigation plan includes dissemination of the results to the public and the Tribe(s) The materials for public distribution will be determined individually for each archaeological site and may include pamphlets, brochures, artifact displays, lectures, or exhibits Drafts of all public education materials will be submitted to FHWA, the Tribe(s) and SHPO for comment during development and prior to distribution

6 PENNDOT will ensure that any human remains and grave-associated artifacts encountered during the archaeological investigations are brought to the immediate attention of the FHWA, the ACHP, the Tribe(s) and the SHPO. Notification will be within 24 hours of the discovery A field view of the site will take place within 72 hours of notification No activities that might disturb or damage the remains will be conducted until the FHWA, in consultation with the appropriate parties, has determined whether excavation is necessary and/or desirable. All procedures will take into account the guidance outlined in the National Park Service publication *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places*, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (PL 101-601) and the Pennsylvania Historical and Museum Commission's *Policy for the Treatment of Burials and Human Remains*

(1993)

7 PENNDOT shall insure that all archaeological reports and public information materials resulting from actions pursuant to this Agreement will be provided to the FHWA, the Tribe(s) and the SHPO for review and comment The review period will be 30 days Reports may include a Phase I Identification Report, an Identification and Evaluation (Phase I & II) Report, a Mitigation Plan, a Data Recovery Report, and Management Summaries, as appropriate. Draft Data Recovery reports shall be submitted for review within two years of completion of archaeological fieldwork All final Data Recovery reports will be completed and provided to FHWA, the Tribe(s) and SHPO within three years of the completion of the archaeological fieldwork

8 PENNDOT shall ensure that all records and materials resulting from the archaeological investigations that are not privately-owned shall be curated in accordance with 36 CFR 79 and the curation guidelines developed by the Pennsylvania State Museum Curation will be arranged at an appropriate facility, after consultation with the FHWA, the Tribe(s), the SHPO and the public For artifacts recovered from privately owned land, PENNDOT shall ask the property owner to donate the artifacts to the Pennsylvania State Museum

Administrative Conditions

A. Personnel Qualifications

PENNDOT shall ensure that all archaeological investigations carried out pursuant to this Agreement will be by or under the direct supervision of a person or persons meeting at a minimum the *Secretary of the Interior's Professional Qualification Standards for Archaeologists* (48 FR 44738-9)

B Archaeological Sites

If an archaeological site is encountered during the project, an effort will be made to determine the cultural affiliation of any artifacts recovered from the site Should cultural affiliation be linked with any federally recognized Native American tribes that might attach religious and cultural significance to the property, those tribes will be contacted

C Late Discovery

If any unanticipated discoveries of historic properties or archaeological sites are encountered during the implementation of this undertaking, work shall be suspended in the area of the discovery and the FHWA shall comply with 36 CFR 800 13 by consulting with the Tribe(s) and the SHPO The FHWA will notify the SHPO and the Tribe(s) within twenty-four (24) hours of the discovery. The FHWA will invite the SHPO and the Tribe(s) to meet at the location within seventy-two (72) hours of the initial notification to determine appropriate treatment of the discovery prior to the resumption of construction activities in the area of the discovery

D Amendments

Any party to this Agreement may propose to the FHWA that the Agreement be amended, whereupon the FHWA shall consult with other parties to this Agreement to consider such an amendment in accordance with 36 CFR § 800 6(c)(7)

E Resolving Objections by the Signatory Parties

1 Should any party to this Agreement object in writing to the FHWA regarding any action carried out or proposed with respect to the Project or implementation of this Agreement, the FHWA shall consult with the objecting party to resolve the objection If after initiating such consultation, the FHWA determines that the adequately justified objection cannot be resolved through consultation, the FHWA shall forward all documentation relevant to the objection to the ACHP including the FHWA's proposed response to the objection Within thirty (30) days after receipt of all pertinent documentation, the ACHP shall exercise one of the following options

- Advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA shall respond to the objection accordingly; or
- Provide the FHWA with recommendations, which the FHWA shall take into account in reaching a final decision regarding its response to the objection, or
- Notify the FHWA that the objection will be referred for comment pursuant to 36 CFR 800.7, and proceed to refer the objection and comment The FHWA in accordance with 36 CFR 800 7(c) (4) and Part 110(1) of the NHPA shall take the resulting comment into account

2 Should the ACHP not exercise one of the above options within thirty (30) days after receipt of all pertinent documentation, the FHWA may assume the ACHP's concurrence in its proposed response to the objection

The FHWA shall take into account any ACHP recommendation or comment provided in accordance with this stipulation with reference only to the subject of the objection, the FHWA's responsibility to carry out all actions under this Agreement that are not the subjects of the objection shall remain unchanged

F. Resolution of Objections by the Public

Should an objection pertaining to historic preservation or implementation of the terms of this Agreement be raised by a member of the public in a timely and substantive manner, the FHWA shall notify the parties to this Agreement and take the objection into account, consulting with the objector and, should the objector so request, with any of the parties to this Agreement to resolve the objection

G Review of Implementation

This Agreement is designed to implement final design and construction of the preferred alternative, DAMA/RC5 or modifications thereto Should this alternative not be selected or should FHWA not otherwise approve Federal funding for this alternative, this Agreement shall be null and void Further, if the stipulations have not been implemented within three (3) years after execution of this PA, the parties to this agreement shall review the Agreement to determine whether revisions are needed. Periodic status reports will document implementation. If revisions are needed, the parties to this Agreement shall consult in accordance with 36 CFR 800 to make such revisions

H Sunsetting/Duration

If the terms of this Agreement have not been implemented by five (5) years from date of signed Agreement, or if no significant action has taken place on the project in at least three (3) years, this Agreement shall be considered null and void In such event the FHWA shall so notify the parties to this Agreement, and if it chooses to continue with the undertaking, shall reinitiate review of the CSVT Project in accordance with 36 CFR § 800

I Termination

1 If the FHWA determines that it cannot implement the terms of this Agreement or SHPO opinions that the Agreement is not being properly implemented, the FHWA or the SHPO may propose to the other parties to this Agreement that it be terminated

2. The party proposing to terminate this Agreement shall so notify all parties to this Agreement, explaining the reasons for termination and affording them at least thirty (30) days to consult and seek alternatives to termination The parties shall then consult

3 Should consultation fail, the FHWA or the SHPO may terminate the Agreement by so notifying all parties

4 Should this Agreement be terminated, the FHWA shall either

a) Consult in accordance with 36 CFR § 800 6(a)(1) to develop a new Agreement, or

b) Request the comments of the ACHP pursuant to 36 CFR § 800 7(a)(1) The ACHP shall have forty-five (45) days to respond with comments

5 The FHWA and the ACHP may conclude the Section 106 process with an Agreement between them if the SHPO terminates consultation in accordance with 36 CFR § 800.7(a)(2)

Execution of this Agreement by the FHWA and the SHPO, and implementation of its terms, evidence that the FHWA has taken into account the effects of the undertaking on historic properties and fulfilled its responsibilities under Section 106 of the 1966 National Historic Preservation Act (as amended)

FEDERAL HIGHWAY ADMINISTRATION

By: David W Cook Date 10-6-03

PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER

By Jean A Cutler, DSHPO Date 5/28/03

CONCUR

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

By Dean A. Schum Date 5/19/03

ATTACHMENT 4
FINAL EIS COMMENT LETTERS AND RESPONSES

CENTRAL SUSQUEHANNA VALLEY TRANSPORTATION (CSVT) PROJECT
FINAL EIS COMMENTS

FEDERAL AGENCIES

1.	Department of Health and Human Services	August 5, 2003
2.	Delaware Tribe of Indians	August 11, 2003
3.	Federal Emergency Management Agency (FEMA)	August 19, 2003
4.	U.S. Environmental Protection Agency (US EPA)	September 10, 2003
5.	U.S. Army Corps of Engineers (US ACOE)	September 15, 2003

STATE AGENCIES

6.	Pennsylvania Game Commission (PGC)	August 13, 2003
7.	Pennsylvania Department of Agriculture (PA DOA)	September 9, 2003
8.	Pennsylvania Department of Environmental Protection (PA DEP)	September 9, 2
9.	Pennsylvania Fish and Boat Commission (PFBC)	September 11, 2003

REGIONAL AGENCIES

10.	Union County Planning Commission (UCPC)	August 21, 2003
11.	SEDA Council of Governments (SEDA COG)	September 8, 2003
12.	SEDA Council of Governments (SEDA COG)	September 9, 2003

MUNICIPAL GOVERNMENTS/LOCAL CITIZENS

13.	Sherwin and Paula Albert	August 21, 2003
14.	Monroe Township Board of Supervisors	September 8, 2003
15.	Elizabeth Deromedi	September 10, 2003

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

August 5, 2003

Mr. James Cheatham, Division Administrator
Federal highway Administration
228 Walnut Street, Room 508
Harrisburg, Pennsylvania 17101-1720

Dear Mr. Chatham:

We appreciate the opportunity to review the Final Environmental Impact Statement (FEIS) for the Snyder, Union, and Northumberland Counties, Pennsylvania Central Susquehanna Valley Transportation Project. We are responding on behalf of the U.S. Public Health Service, Department of Health and Human Services (DHHS).

We believe this FEIS has addressed our potential concerns which we raised in our March 25, 2001 comments on the Draft Environmental Impact Statement, and we have no specific comments to offer at this time. We believe the planned mitigation measures should minimize any potential impacts to human populations if adequately implemented as described in this FEIS.

Thank you for the opportunity to review and comment on this document. Please send us a copy of any future EAs or EISs which may indicate potential public health impacts and are developed under the National Environmental Policy Act (NEPA).

Sincerely yours,

Paul Joe

Paul Joe, DO, MPH
Medical Officer
National Center for Environmental Health (F16)
Centers for Disease Control & Prevention

DELAWARE TRIBE OF INDIANS

220 N.W. VIRGINIA • BARTLESVILLE, OKLAHOMA 74003
TELEPHONE: (918) 336-5272 • FAX: (918) 336-5513

August 11, 2003

James Cheatham
Division Administrator
Federal Highway Administration
228 Walnut Street, Room 508
Harrisburg, PA 17101-1720

Re: Central Susquehanna Valley Transportation Project Final Environmental Impact Statement and Section 404 Permit Evaluation for S.R. 0015, Section 088 in Snyder, Union and Northumberland Counties, Pennsylvania

Dear Mr. Cheatham:

Thank you for informing us on the proposed construction associated with the above referenced project. Our review indicates that there are no religious or culturally significant sites in the project area. As such, we defer comment to your office as well as to the Pennsylvania State Historic Preservation Office and/or the Pennsylvania State Archaeologist.

We wish to continue as a consulting party on this project and look forward to receiving a copy of any mitigation reports that might be performed for the affected archaeological sites. We also ask that if any human remains are accidentally unearthed during the course of the survey and/or the construction project that you cease development immediately and inform the Delaware Tribe of Indians of the inadvertent discovery.

If you have any questions, please feel free to contact this office by phone at (918) 336-5272.

Sincerely,

Brice Obermeyer

Brice Obermeyer
NAGPRA Director

Federal Emergency Management Agency

Region III
One Independence Mall, Sixth Floor
615 Chestnut Street
Philadelphia, PA 19106-4404

FIM

AUG 19 2003

Mr. James A. Cheatham, Division Director
Federal Highway Administration
228 Walnut Street, Room 508
Harrisburg, Pennsylvania 17101-1720

Dear Mr. Cheatham:

The Federal Emergency Management Agency (FEMA) received your Final Environmental Impact Statement dated July 25, 2003. The report describes the proposed Central Susquehanna Valley Transportation Project, located in Snyder, Union, and Northumberland Counties, Pennsylvania. Each of the proposed alternatives would have some impact on Special Flood Hazard Areas (SFHAs)—areas that have been mapped by FEMA as subject to flooding during the 1% annual chance flood. FEMA has determined base (1% annual chance) flood elevations and floodways for the impacted SFHAs.

FEMA administers the National Flood Insurance Program (NFIP), which is designed to reduce flood losses through local floodplain management and the provision of flood insurance to property owners. The NFIP requires participating communities to adopt and enforce floodplain management ordinances with stipulations about modifications made to areas within the SFHA. As such, each community has an ordinance requiring permits for all proposed construction within the SFHA and also requiring that the flood-carrying capacity of an altered stream be maintained.

To prove that the flood-carrying capacity of an impacted stream will be maintained may require an engineering study and completion of a conditional Letter of Map Revision application. This application and related information can be found on FEMA's website at: www.fema.gov/mit/tsd/dl_mt-2.htm. Please coordinate with the Floodplain Management Officer of the appropriate communities to ensure that the project meets the requirements of their floodplain management ordinance.

As this proposal involves Federal expenditure, it is subject to Executive Order 11988, which directs Federal agencies to "avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative." Each Federal agency has issued regulations to comply with the Executive Order. These are administered by the involved Federal agency.

Please be advised that the U.S. Army Corps of Engineers (USACE), Philadelphia District, under contract to us, is currently revising the Flood Insurance Study and Flood Insurance Rate Maps for the Susquehanna River and North Branch Susquehanna River in this area. The base flood elevations, floodplain boundaries, and floodway may change in this area as a result of this study. For further information on the preliminary results of this analysis, please contact Jason Miller of USACE at (215) 656-6549.

If you have any questions regarding this letter, or the NFIP in general, please call me at 215-931-5669.

Sincerely,

Eugene K. Gruber, P.E., Director
Federal Insurance and Mitigation Division

cc: Jason Miller, USACE, Philadelphia District
State NFIP Coordinator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 10, 2003

Mr. James A. Cheatham, P.E.
Division Administrator
Federal Highway Administratioin
228 Walnut Street, Room 536
Harrisburg, Pa 17101-1720

Re: Pennsylvania - Final Environmental Impact Statement
FHWA -PA-EIS-01-01-F
S.R. 0015, Section 088 Snyder, Union, and Northumberland Counties, PA

Dear Mr. Cheatham:

In accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508), Section 309 of the Clean Air Act, and Section 404 of the Clean Water Act, EPA Region III has reviewed the Final Environmental Impact Statement (FEIS) for the proposed Central Susquehanna Valley Transportation Project in Snyder, Union, and Northumberland Counties in Pennsylvania.

EPA previously reviewed the Draft EIS for the project which consists of a new four-lane, limited access facility that extends approximately 12-13 miles from the existing Selinsgrove Bypass (US Routes 11/15) in Monroe Township, Snyder County, just north of Selinsgrove, to the interchange between PA Route 147 and PA Route 45 in West Chillisquaque Township, Northumberland County. As a result of that review, we assigned a rating of EC-2 (Environmental Concerns with Insufficient Information) due to the significant impacts to wetlands, aquatic resources, and terrestrial and wildlife habitat. After reviewing the FEIS, we have the following remaining comments:

During final design, we suggest exploring ways to reduce the amount of waste material generated by construction of the preferred alternative. We strongly support the use of an appointed Environmental Monitor to track the placement of waste material and to ensure that control measures are maintained and all necessary environmental clearances and permits are secured.

We recommend avoidance of all wetlands or critical habitat in the placement of stormwater management facilities, temporary access roads, and staging areas during construction. The location of these areas should be discussed with the appropriate resource agencies, in advance, so that any unavoidable impacts can be mitigated appropriately.

Please include this Agency and all appropriate resource agencies in regard to wetland replacement or mitigation meetings as the project continues. Specific wetland and stream mitigation commitments should be included in the Record of Decision (ROD). Agencies should be in agreement on the type, location and adequacy of sites to assure successful mitigation.

EPA would support placement of a boating access area on the west side of the West Branch of the Susquehanna River, north of the bridge, to enhance fishing, boating and recreational activities in the project area.

Thank you for providing EPA with the opportunity to work with you on this project. We appreciate the level of effort you have undertaken to address our issues and concerns. We look forward to working with you as this project continues into final design. If you have any questions, please contact me at (215)-814-2995 or Todd Lutte of my staff at (215)814-2099.

Sincerely,

William J. Hoffman, Chief
Environmental Programs Branch

cc: COE - Wettlaufer
PFBC - Spotts
DEP - Miller
FWS - McCoy
PGC - Mixon
PaDOT - Kennedy

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF
Operations Division

SEP 15 2003

Subject: Central Susquehanna Valley Transportation project

Mr. Gary Hoffman
Deputy Secretary for Highway Administration
Pennsylvania Department of Transportation
Commonwealth Keystone Building
400 North Street, 8th Floor
Harrisburg, PA 17120

Dear Mr. Hoffman:

We are writing to advise you of a concern on the subject project and to seek your cooperation in finding an alternative means to address the issue. Your office was previously involved in discussions of this issue with FHWA and Corps Headquarters. The FEIS for the Central Susquehanna Valley Transportation (CSVT) project indicates that the highway will result in 4.46 million cubic yards of excess excavation being hauled from the project. To put that figure into perspective, more than 160 acres of land would be required for the disposal if the material could be piled 20 feet high. We share the concern expressed by the resource agencies that the disposal of this vast quantity of material has the potential to result in significant secondary and cumulative impacts to aquatic resources, and we would appreciate your assistance in minimizing this potential impact.

Once we authorize your highway project, there is a reasonable expectation by PennDOT that the Corps will work with your contractor to authorize permits for borrow and waste sites. While we will be reasonable in working with your contractors, our mission is to ensure that projects utilize no more aquatic resources than are necessary to address the need for the project. The Corps is also responsible to ensure that the cumulative impacts of numerous permit decisions affecting the same watershed are considered and that appropriate NEPA documentation is prepared when impacts that are individually minor become cumulatively significant. Due to the quantity of material to be removed, we anticipate the need for many subsequent authorizations, some of which will require processing as an individual permit.

We have a mutual interest in ensuring that permits are processed expeditiously. Our experience during the last two years indicates that such permits can be time-consuming, particularly to identify a suitable compensatory mitigation site for the additional impact, to coordinate with the resource agencies, and to prepare NEPA and permit documentation. To avoid delaying the contractor, these requests must be given our top priority, which affects our ability to prioritize and manage other projects. Even with the TEA-21 funded position and the other staff that we devote to PennDOT projects, we anticipate difficulty in meeting suspenses on other PennDOT projects because of the

permit workload that will be generated by this project. There are several things that PennDOT could do to expedite the permit processing.

a. The first consideration would be to minimize the amount of waste material. We believe that much of the excess material could be utilized on-site by placing the material in earthern berms constructed adjacent to the highway. A 12-foot high berm constructed with 2:1 side slopes would have a footprint of 48 feet. We would anticipate that the right-of-way is large enough to accommodate this berm, but if this results in the need to acquire additional rights-of-way, the acquisition cost would be partially, if not totally, offset by a reduction in the cost of hauling the material off-site. Using the material on-site would likely result in fewer impacts to aquatic resources, while having noise-attenuating benefits for the public. We would appreciate PennDOT investigating this avenue for reducing the volume of material to be hauled off-site.

b. PennDOT could also assist us to reduce the permit processing time by making some of the excess acreage in PennDOT's wetland mitigation site available for the contractor to purchase. This would eliminate the time that is normally spent by our staff coordinating a mitigation site for the additional impact.

c. For any disposal site that requires Corps authorization to discharge fill in jurisdictional wetlands or streams, it will be necessary to coordinate the potential presence of historic/archeological resources and endangered species on the site. To facilitate and expedite the processing of the permit request, we would appreciate PennDOT's environmental managers conducting this coordination, rather than the contractor, because PennDOT is more familiar with the requirements, procedures, and agency personnel.

d. We understand PennDOT has procedures in place requiring an investigation of every proposed disposal site before granting approval to use the site. To assist us in determining how involved we need to be in conducting permit compliance inspections, we would appreciate receiving a copy of PennDOT's procedures.

We appreciate your cooperation on these requests, and look forward to working with your staff to ensure that subsequent impacts are minimized and that permits are processed in a timely manner. If you have any questions, please call me or have your staff call Mr. Paul Wettlaufer, Transportation Program Manager, at 410-962-5676.

Sincerely,

Christina E. Correale

Christina E. Correale
Chief, Operations Division

CC: Sue McDonald
James Kendter✓

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA GAME COMMISSION
2001 ELMERTON AVENUE, HARRISBURG, PA 17110-9797

August 13, 2003

Mr. James A. Kendter
PennDOT District 3-0
PO Box 218
Montoursville, PA 17754

In re: S.R. 0015, Section 088
Final Environmental Impact Statement
Snyder, Union, and Northumberland Counties, PA

Dear Mr. Kendter:

The Pennsylvania Game Commission (PGC) has received the Final Environmental Impact Statement dated July 2003. The PGC would like to thank PennDOT District 3-0 for the opportunity to comment on the above referenced project.

All contractors should be notified that endangered and threatened species reviews are necessary for storage, waste, or borrow areas within the study area if greater than 1 year has elapsed since prior reviews. Contractors also need endangered and threatened species reviews for any disturbance area outside of the study area.

The PGC encourages ongoing coordination on storage areas, access roads, waste areas, or borrow areas to ensure sensitive natural resources are not adversely impacted. The Pennsylvania Department of Transportation, Federal Highway Administration, natural resource agencies, and contractors should all work together to ensure the avoidance and minimization of impacts to valuable natural resources.

Page IV-186, 2nd to last paragraph, indicates the bald eagle (*Haliaeetus leucocephalus*) and upland sandpiper (*Bartramia longicauda*) are known to occur in the project vicinity. If the bald eagle, upland sandpiper, or any state listed threatened or endangered bird or mammal is identified in the study area the transportation specialist located in the PGC's Harrisburg, PA office should be contacted immediately. The transportation specialist will coordinate with other PGC staff members as needed.

The Impacts to Vegetation and Wildlife Habitat section contains an excellent description of the terrestrial resource impacts for all of the alternatives. The early commitments for terrestrial mitigation are greatly appreciated and facilitate a cooperative and positive working relationship. The PGC would like to acknowledge the District and consultants for doing a great job on terrestrial issues.

The PGC looks forward to finalizing the natural resource mitigation plan in the near future. Please contact me directly at (717) 783-5957 if you have any questions.

Very truly yours,

Kevin L. Mixon
Division of Environmental
Planning and Habitat Protection
Bureau of Land Management

cc: Dusza, PGC
Capouillez, PGC
Spotts, PFBC
Miller, DEP, NC Reg. Office
McCoy, U.S. FWS
Dombroskie, COE
Wettlaufer, COE
Lutte, EPA

Rec'd
8-15-2003

(Rensco) 9/13

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF AGRICULTURE
BUREAU OF FARMLAND PRESERVATION

September 9, 2003

Mr. James Cheatham, PE
Division Administrator
Federal Highway Administration (FHWA)
228 Walnut Street
Room 508
Harrisburg PA 17101-1720

RE: FINAL ENVIRONMENTAL IMPACT STATEMENT
CENTRAL SUSQUEHANNA VALLEY TRANSPORTATION PROJECT

Dear Mr. Cheatham,

Thank you for the opportunity to comment of the Final Environmental Impact Statement for the South Central Susquehanna Valley Transportation Project.

A major concern of the Department with the proposed alternative, DAMA, is the impact this will have on the Heimbach farm, one of the last remaining active dairy farms in the area. The substantial losses to the operation could be avoided, should the App property's designation as historic be reconsidered. It is understood the App property has been rezoned to allow for high-density residential development, and a conversion to this use in the near future is imminent. Should this subdivision and sale occur prior to construction, the Department strongly recommends reconsideration of DAMA as the preferred alternative. Planning done for transportation projects is often based on projections. It is unfortunate we are unable to project this planned subdivision of the App property.

In general terms, should the preferred alternative be carried forward to construction phase, the Department encourages minimizing impacts to all farm properties to the greatest extent possible. During this phase, care should be taken to allow farm owners and operators to continue farming with as few disruptions as possible. This may involve meeting with farmers prior to construction, to discuss what measures may be taken.

As a reminder, PennDOT will need to present a case to the Agricultural Lands Condemnation Approval Board (ALCAB) that no feasible alternatives exist to the taking of farmland for this project. Also, for your informational purposes, Governor Rendell signed Executive Order 2003-2 on March 20, 2003. This order states, "Commonwealth funds and Commonwealth-administered funds shall not be used to encourage the conversion of "prime agricultural land" to other uses when feasible alternatives are available."

2301 NORTH CAMERON ST.
HARRISBURG, PA 17110-9408
717-783-3167
FAX: 717-772-8798

Thank you again for the opportunity to comment of this Final Environmental Impact Statement. Please contact me at (717) 783-3167 if there are questions or concerns regarding this letter.

Sincerely,

Douglas M. Wolfgang
Project Review Specialist

Cc: Mr. James Kendter, P.E., PennDOT District 3-0
Sandra Robison, Director
Russell Redding, Deputy Secretary

LSC

Pennsylvania Department of Environmental Protection

208 West Third Street, Suite 101
Williamsport, PA 17701-6448

September 9, 2003

Northcentral Regional Office

Fax 570-327-3565

James A. Kendter, P.E.
District Executive
Pennsylvania Department of Transportation
Engineering District 3-0
P.O. Box 218
Montoursville, PA 17754-0218

Re: Final Environmental Impact Statement
Central Susquehanna Valley Transportation Project
SR 0015, Section 088
Snyder, Union and Northumberland Counties

Dear Mr. Kendter:

The Department of Environmental Protection (DEP) has reviewed the July 2003 Final Environmental Impact Statement (FEIS) for the SR 0015, Section 088 Central Susquehanna Valley Transportation (CSVT) project in Snyder, Union and Northumberland Counties. The FEIS identifies the DAMA/RC5 combination as the recommended preferred alternative for the project. DEP concurs with the FEIS recommendation. As requested, we offer the following comments in reference to the FEIS document and the proposed CSVT project:

1. A Water Obstruction and Encroachment Permit must be obtained for the project from DEP, Soils and Waterways Section, Water Management, Northcentral Regional Office.

2. The proposed activity must comply with Chapters 93, 95, 102 and 105 of the Department's rules and regulations and all other applicable state regulations and other state requirements.

3. The Pennsylvania Department of Transportation (PENNDOT) must continue to reduce project-related water resource impacts throughout the final design process and submit that information with the Chapter 105 Water Obstruction and Encroachment Permit application. Documentation must be included demonstrating how each impact to waters of the Commonwealth was minimized to the maximum extent practicable. PENNDOT must provide specific practicable impact avoidance and minimization measures that will be taken at all permanent and temporary water obstruction and encroachment sites. Examples of these measures include, but are not limited to:

alignment shifts, alternative designs, steepening of slopes, minimizing culvert and stream enclosure length, use of retaining walls/headwalls, roadway footprint width minimization, stormwater management basins and other storm water facility redesign, and special drainage methods. Indirect impacts should be included in this analysis.

4. As part of the final design and Chapter 102 and 105 permit applications, PENNDOT must identify locations and discuss permanent and temporary impacts of: waste disposal areas, borrow areas, service roads, access roads, haul roads, staging areas, temporary stream and wetland crossings, causeways and cofferdams.

5. Details regarding post-construction stormwater runoff impacts, resulting from the completed project, and control measures that will be taken, should be addressed in the final design and Chapter 105 permit application. The discussion should include stream flow regime changes and increased thermal loading and pollution from highway runoff. The discussion should also include efforts that will be taken to preserve the integrity of stream channels, and to protect the physical, biological and chemical qualities of Commonwealth waters.

6. A final stream and wetland resource mitigation/compensation plan must be included with the Chapter 105 permit application.

7. As part of the final design and Chapter 105 permit application submittal, PENNDOT needs to provide documentation of final resolution of the yellow lamp mussel issue.

8. Air Quality Concerns:

   Fugitive dust problems could result from land clearing, demolition and construction operations. Department regulations require that all reasonable actions be taken to prevent particulate matter from becoming airborne, including the use of water or approved chemicals for control of dust and the prompt removal of earth or other material deposited onto paved roadways. In addition, visible fugitive dust must not be allowed to pass onto adjacent property.

   Problems could result from the open burning of clearing and grubbing waste. Department regulations allow the burning of trees, shrubs, and other native vegetation (not including dirt laden roots) that are cleared from land for construction provided that the Department does not receive a complaint or determine that an air pollution problem exists.

   Any waste materials generated by construction or demolition operations must be handled and disposed of properly. No open burning of construction waste is permitted.

As part of this project, if any buildings are to be demolished they must be thoroughly inspected by a certified inspector for the presence of asbestos-containing materials (ACM). Any ACM that is friable or may be rendered friable during the demolition must be properly removed prior to the start of demolition. If ACM will be removed or disturbed during the project, emission control procedures and waste handling and disposal requirements may apply. Notification must be made prior to the start of the project.

If a concrete or asphalt plant (or other air contamination source) will be constructed as part of this project, plan approval and an operating permit from the Department may be required. Please contact the New Source Review Section of the Air Quality Program to determine what approvals are required and to obtain the necessary application forms. Any required plan approvals must be obtained prior to the construction of the sources.

Thank you for the opportunity to comment on the proposed SR 0015, Section 088 project. If you have any questions concerning these findings, please contact Gerald Miller, of this office, at 570-321-6516.

Sincerely,

Gary J. Byron
Assistant Regional Director

cc: D. Suciu-Smith – FHA
P. Wettlaufer – USACE, Baltimore District
M. Dombroskie – USACE, Baltimore District
R. McCoy – USFWS
T. Lutte – EPA
D. Spotts – PFBC
K. Mixon – PCG
J. Seiber – DEP Policy Office
F. A. Sever – DEP NCRO
R. Hughey – DEP NCRO
G. Miller – DEP NCRO
File

GB/GM/sr/rjh

Commonwealth of Pennsylvania
Pennsylvania Fish and Boat Commission
Division of Environmental Services
450 Robinson Lane
Bellefonte, PA 16823
814-359-5115

cc: LJL
JMP

September 11, 2003

James A. Kendter, P.E.
District Engineer
Engineering District 3-0
Department of Transportation
P.O. Box 218
715 Jordan Avenue
Montoursville, PA 17754-0218

Re: Snyder County
S.R. 0015, Section 88
Central Susquehanna Valley Transportation Project
Final Environmental Impact Statement

Dear Mr. Kendter:

The Pennsylvania Fish and Boat Commission (PFBC) would like to thank the Pennsylvania Department of Transportation for coordinating with our agency towards the development of the proposed subject project. As documented within our 21 March 2001 Draft Environmental Impact Statement comments, the PFBC has no objections to the construction of the preferred DMA/RC5 Alternative. We are pleased to see that the majority of our recommendations during the duration of the development of this project have been addressed within the Final Environmental Impact Statement (FEIS). We are especially pleased to see (page IV 226) that the Department is still planning on constructing the public boat access facility at the RC5 crossing along the western shore of the West Branch Susquehanna River. PFBC personnel and local sportsmen strongly believe that a new launching facility at this location would provide additional and needed boating and fishing opportunities to Lake Augusta.

In reviewing the FEIS document and our files, we realize that there are a number of "unknowns" that need to be coordinated with our agency as this project moves through final design. These unfinished items are as follows:

Stream and Wetland Mitigation –The project will impact up to 24,925 feet of stream habitat and 7.8 acres of wetland habitat. We concur to compensate all of the natural resource impacts at one mitigation site, however the location of the site and logistics of the compensation plan have yet to be finalized. The Department must develop an acceptable plan with the resource agencies prior to Chapter 105 permit submittal for the transportation project.

Stormwater Management Facility Locations –We strongly recommend that the Department develop a stringent stormwater control plan to treat highway runoff prior to discharging into existing waterways. The location of these facilities may directly or indirectly impact aquatic resources within the project area. Therefore, the sitting of these facilities must be closely coordinated with the resource agencies.

Species of Special Concern –Personnel from the PFBC Natural Diversity Section have identified potential impacts to populations of yellow lampmussels within the project area. Resolution to this issue must be implemented prior to the Chapter 105 permit submittal.

Stream Relocations –Personnel from the PFBC would like to review and comment on any Natural Stream Design plans that may be developed for perennial stream relocations associated with this proposed project.

Culvert Design –Any new culvert installation must follow the designs (see enclosure) recently adopted by the Pennsylvania Department of Transportation and the PFBC.

Waste and Borrow Areas –The location of waste and borrow areas may directly or indirectly impact aquatic resources. The Department should identify these areas and include them within the Chapter 105 application. The resource agencies should also be given the opportunity to review and comment on these identified sites.

Thank you again for allowing us the opportunity to comment. We look forward to coordinating all of the necessary activities as listed above to insure the protection, conservation and enhancement of our aquatic resources.

Sincerely,

David E. Spotts

David E. Spotts, Chief
Watershed Analysis Section

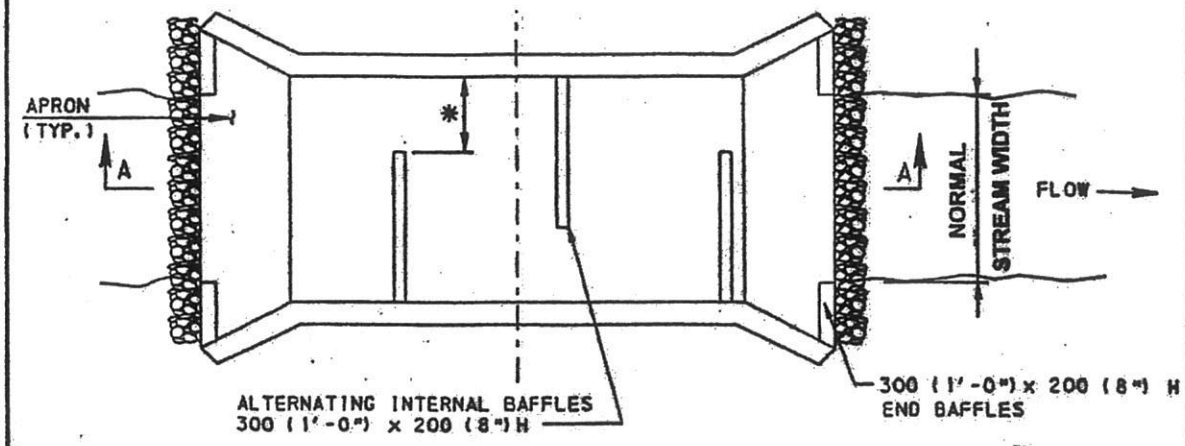
c: EPA - Lutte
COE - Dombroskie, Wettlaufer
DEP - Miller
FWS - McCoy
PGC - Mixon
PFBC - Schmid, Boughter

Enclosure

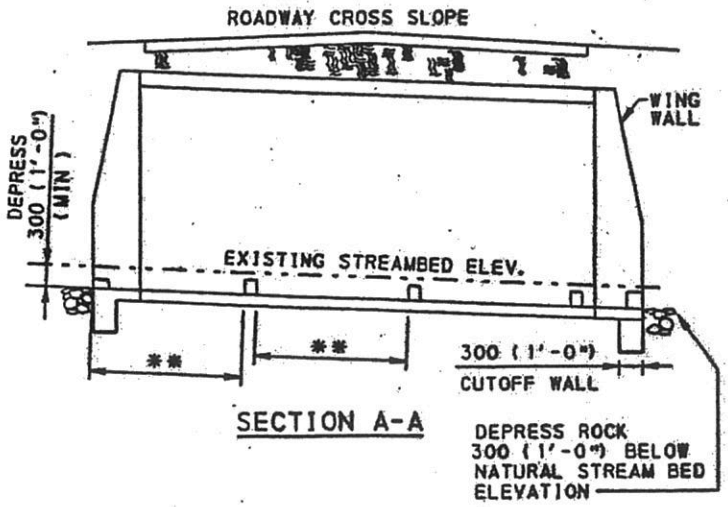
RECOMMENDED CULVERT DESIGNS FOR FISH PASSAGE IN PENNSYLVANIA

Pennsylvania Fish and Boat Commission
Division of Environmental Services
450 Robinson Lane
Bellefonte, PA 16823
Phone: 814-359-5115
Fax: 814-359-5175

List of Figures

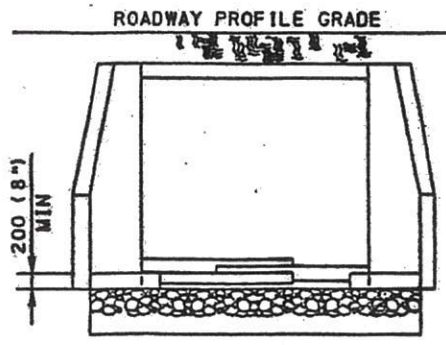


PLAN VIEW



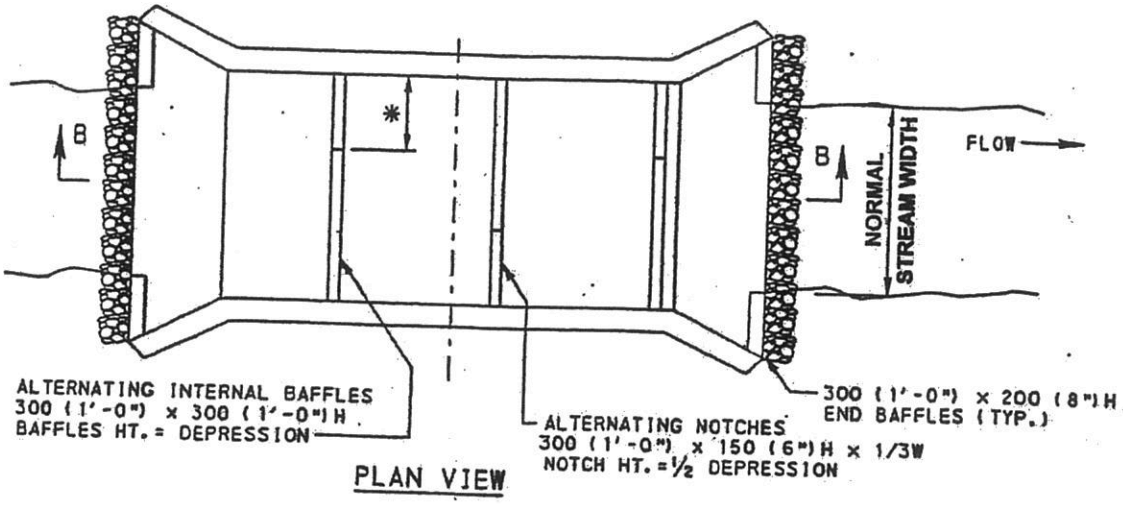
SECTION A-A

* BAFFLE OPENING = NORMAL STREAM WIDTH/3
** BAFFLE SPACING = NORMAL STREAM WIDTH OR 8 FT. WHICH EVER IS GREATER

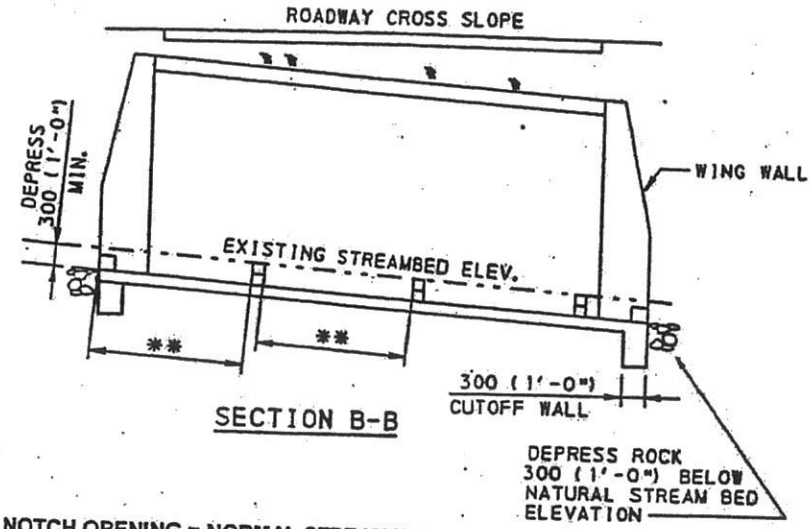


ELEVATION

FIGURE 1
STANDARD REINFORCED CONCRETE SINGLE CELL BOX CULVERT DESIGN FOR FISH PASSAGE ON STREAMS WITH GRADIENT ≤ 4%

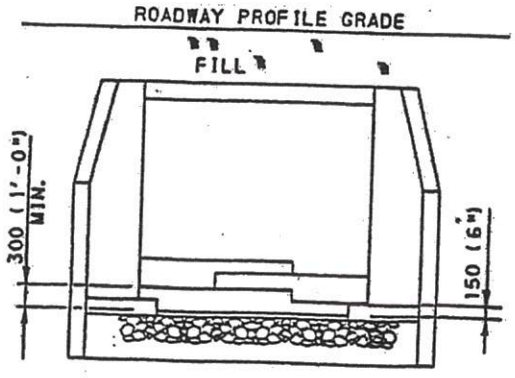


PLAN VIEW



SECTION B-B

* BAFFLE AND NOTCH OPENING = NORMAL STREAM WIDTH/3
** BAFFLE SPACING = NORMAL STREAM WIDTH OR 8 FT. WHICH EVER IS GREATER



ELEVATION

FIGURE 2
STANDARD REINFORCED CONCRETE SINGLE CELL BOX CULVERT DESIGN FOR FISH PASSAGE ON STREAMS WITH GRADIENT > 4%

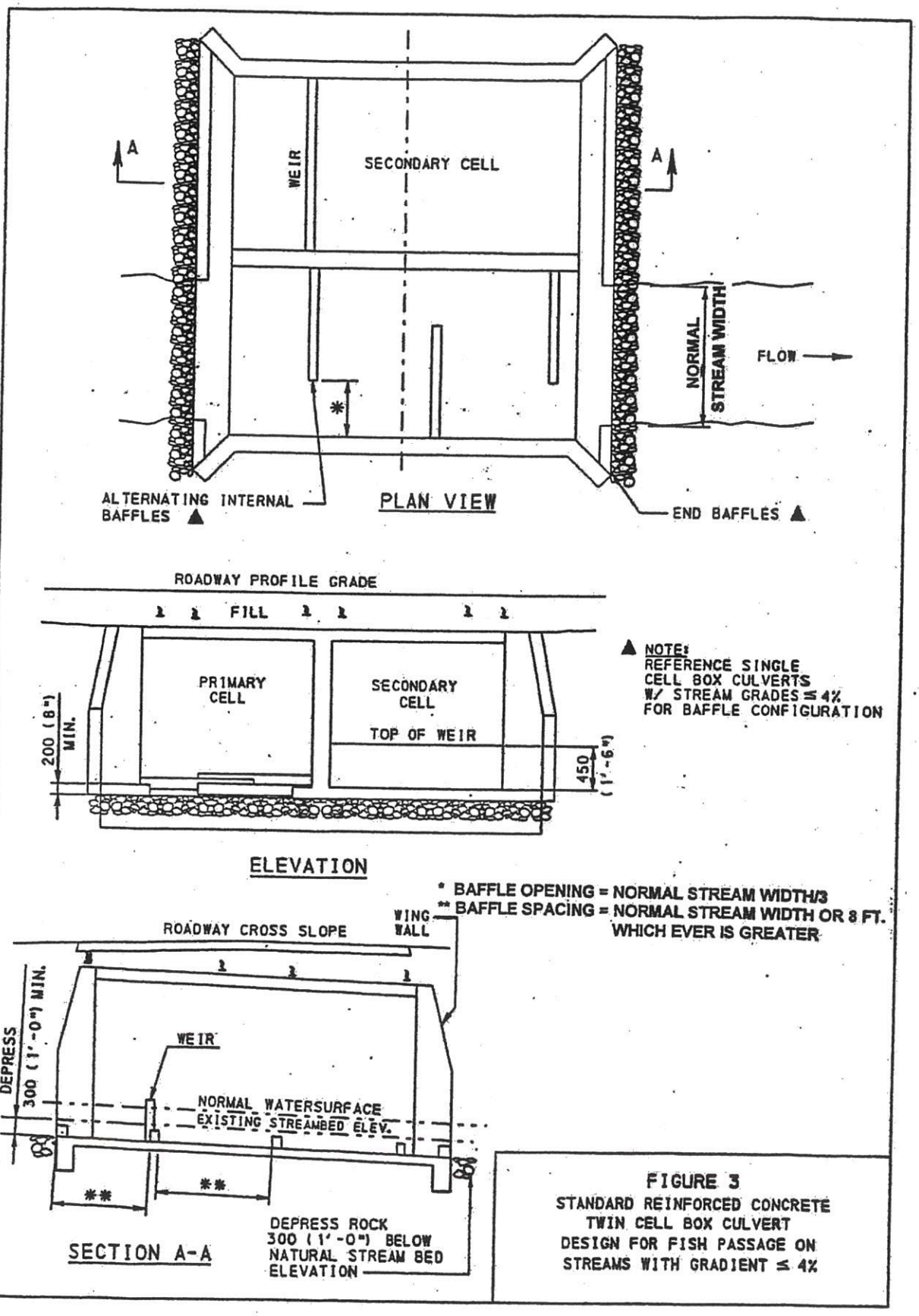
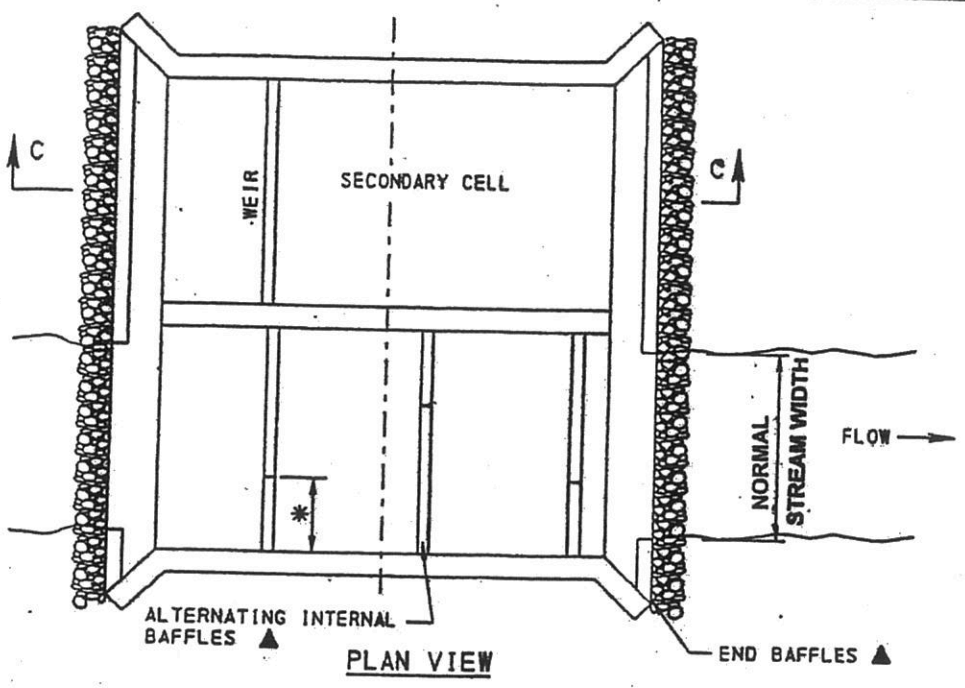
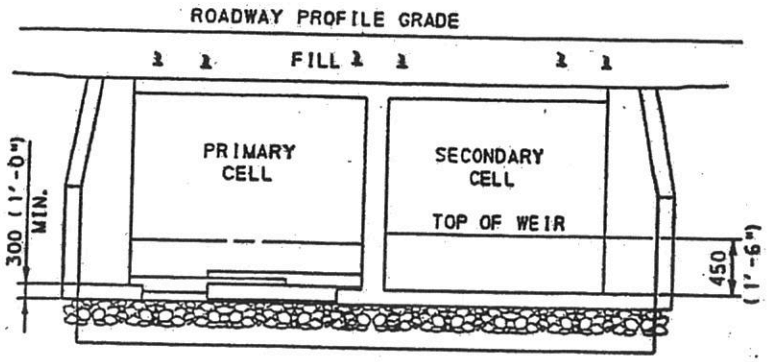


FIGURE 3
STANDARD REINFORCED CONCRETE TWIN CELL BOX CULVERT DESIGN FOR FISH PASSAGE ON STREAMS WITH GRADIENT ≤ 4%



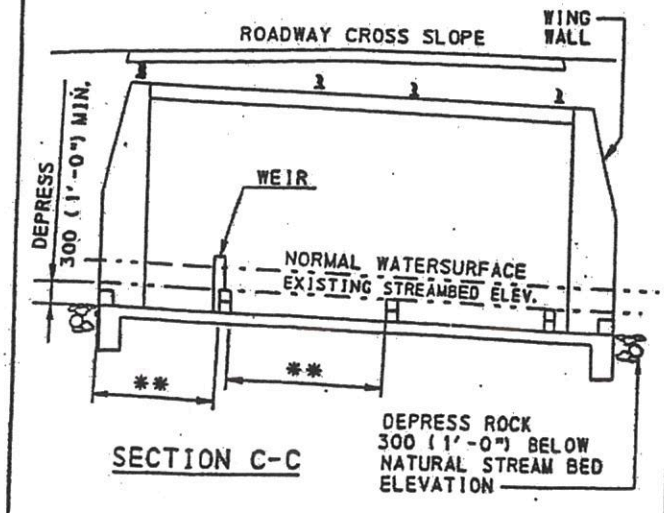
PLAN VIEW



ELEVATION

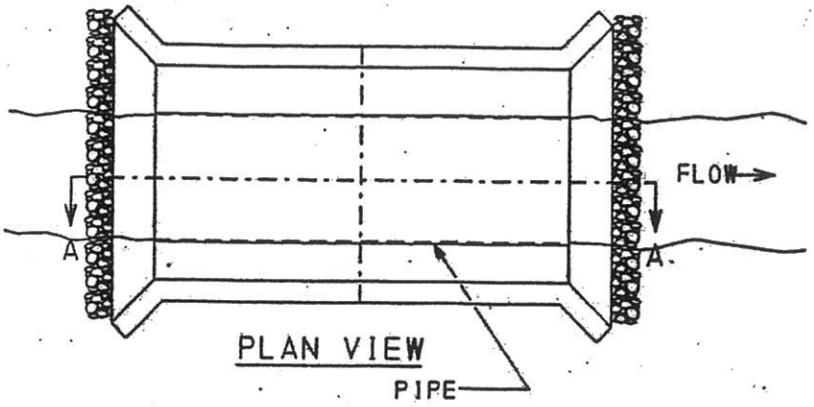
▲ NOTE:
REFERENCE SINGLE CELL BOX CULVERTS W/ STREAM GRADES >4% FOR BAFFLE CONFIGURATION

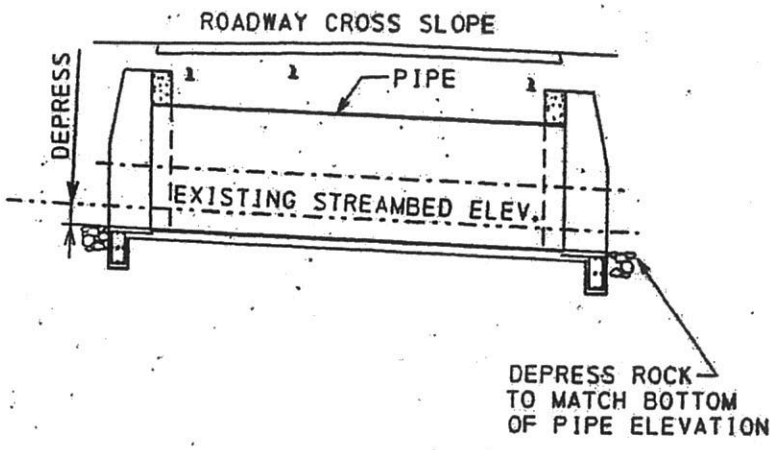
* BAFFLE AND NOTCH OPENING = NORMAL STREAM WIDTH/3
** BAFFLE SPACING = NORMAL STREAM WIDTH OR 8 FT. WHICH EVER IS GREATER



SECTION C-C

FIGURE 4
STANDARD REINFORCED CONCRETE TWIN CELL BOX CULVERT DESIGN FOR FISH PASSAGE ON STREAMS WITH GRADIENT > 4%





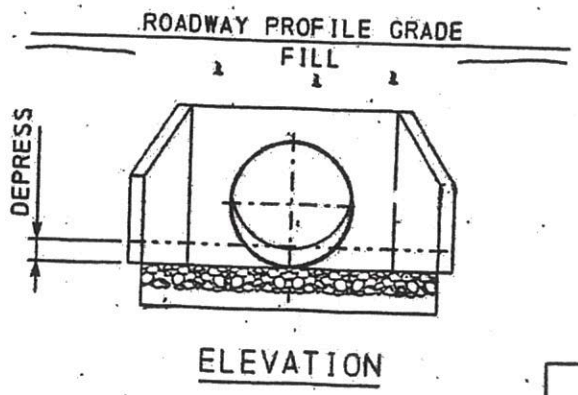


FIGURE 5
PIPE CULVERT GUIDELINES

DRAINAGE AREA	INVERT DEPRESSION
≤100 ACRES	NONE REQUIRED
100-640 ACRES	6 INCHES
≥ 640 ACRES	12 INCHES

Union County Planning Commission
1610 Industrial Blvd., Suite 600
Lewisburg, Pennsylvania 17837-1273
Telephone: (570) 522-1370
Fax: (570) 522-1389

August 21, 2003

James Cheatham
Division Administrator
Federal Highway Administration
228 Walnut Street, Room 536
Harrisburg, PA 17101-1720

RE: Comments on FEIS for Central Susquehanna Valley Transportation (CSVT) Project

Dear Mr. Cheatham:

The Union County Planning Commission respectfully submits the comments below in response to the Final Environmental Impact Statement for the Central Susquehanna Valley Transportation Project.

1. On Page IV-7, Table IV-A-1 (Past, Current and Projected Population Data) the projected population for Union County in the year 2030 is not entered and is listed as "no data available". The Union County Planning Department has population projections available for 2030. The projected population for Union County in the year 2030 is 52,165.

2. On Page IV-7, Table IV-A-2 (Selected Housing Data) the projected number of total housing units for Union County in 2030 is listed as "no data available". The Union County Planning Department has housing unit projections available for 2030. The projected total number of housing units in the year 2030 is 20,692.

3. The Union County Planning Commission strongly supports starting the development and construction of the project in the north. By initiating construction in the northern part of the corridor and making the connection to the PA Route 147 upgrade immediate benefits will likely ensue in the Lewisburg and Northumberland study areas.

4. Local residents have been concerned with the type of bridge structure that will be built over the West Branch of the Susquehanna River as part of River Crossing 5. The Union County Planning Commission requests that a context sensitive design be incorporated into the preliminary and final engineering of the bridge structure that will afford local officials and citizens a participatory role in the process.

5. It is not apparent those responsible for preparing the FEIS took into account the implications of the project on the Susquehanna Greenway. The FEIS report basically acknowledged the greenway work is underway but did not appear to evaluate any potential impacts to the long-term vision of river corridor management.

6. The Union County Planning Commission supports the construction of a boat launch as a mitigation project since residents identified river access in the Winfield area as a future project during planning meetings of the Susquehanna Greenway. The location of the boat launch facility should be carefully planned to include a full evaluation of potential use, security, maintenance, and the like. The local municipality has indicated they are not in favor of being burdened by maintenance responsibilities of the launch or any access roads thereto. Since there is not a local

police force there should be a safety analysis conducted or at least consultation with the jurisdictional police force---in this case the Pennsylvania State Police.

7. Since at least one municipality in the study area does not have land use controls in place via zoning codes, and others have only done rudimentary planning, it is recommended that assistance be provided to help communities address future growth impacts related to the new highway and its interchanges.

In closing it should be noted that the Union County Planning Commission and the County Commissioners support the construction of the CSVT and submitted testimony to that effect to the Pennsylvania State Transportation Commission in 2001 and will do so again this year. Thank you for the opportunity to review and comment on the FEIS and please do not hesitate to contact our office should you have any questions or if you would like to discuss this matter further.

Sincerely,

Shawn R. McLaughlin, AICP
Planning Director

CC: James Kendter, PENNDOT District 3-0
Representative Russell Fairchild
Senator Roger Madigan
James McAllister, Seda-Cog
File

SEDA COG

September 8, 2003

Mr. James Cheatham, Division Administrator
Federal Highway Administration
228 Walnut Street, Room 536
Harrisburg, PA 17101-1720

RE: Final Environmental Impact Analysis (FEIS) Comments for the Central Susquehanna Valley Transportation Project (CSVT)

Dear Mr. Cheatham:

The SEDA Council of Governments Rural Planning Organization (RPO) offers the following comments on the above referenced project.

1. At no point in the FEIS did PennDOT address future land use impacts. Two (2) new major interchanges will be constructed both of which will connect with high volume roadways. Most if not all of the municipalities that will be impacted by these new interchanges do not have sufficient land use controls in place to address future impacts. SEDA-COG RPO was awarded funding to address these impacts from the PA RT 45/PA RT 147 intersection in the Village of Montandon north to the intersection of I-180 and PA RT 54 in Delaware Township, Northumberland County. That study is currently underway. No funds, however, have been awarded to address the impacts south of Montandon, specifically Point Township in Northumberland County and Union Township in Union County. The RPO recommends that funds be awarded to SEDA-COG to address these impacts as part of the participatory planning process that the RPO is involved with north of Montandon.

2. Request that the RPO be employed to coordinate public input on the application of context sensitive design techniques to the proposed River Crossing #5. It is fairly obvious that a bridge the size and height of the proposed River Crossing #5 will result in substantial visual and landscape impacts. A landscape and visual impact analysis which would study the relationship between the landscape and the proposed bridge should be performed as part of final design for this project.

3. Although the RPO supports the establishment of a new boat launch, there is no data or analysis that addresses safety or the impact the boat ramp will have on local roads and intersecting state roads. Granted, the Pennsylvania Fish and Boat

A LOCAL DEVELOPMENT DISTRICT

serving the counties of
Centre
Clinton
Columbia
Juniata
Lycoming
Mifflin
Montour
Northumberland
Perry
Snyder
Union

SEDA
Council of
Governments

201 Furnace Rd
Lewisburg
PA 17837
USA

(570) 524-4491
fax 524-9190

Commission (PFBC) is responsible for policing their own facility; however, depending on the final location of the boat launch, the facility could be located as much as two (2) miles away from any major state maintained roadway. Most if not all of these local roadways do not have the ability to handle large volumes of traffic. Since the affected township has no local police, Pennsylvania State Police (PSP) is responsible for law enforcement. PSP should be given the opportunity to provide comments specifically on the impacts this boat ramp will have on PSP operations. PFBC should also be required to submit a traffic impact study.

4. The FEIS did not address the efforts of the Susquehanna River Greenway Partnership and the impacts this project will have on the proposed greenway.

5. Based on preliminary information provided by PennDOT, it appears that construction of the north section of this project, that is, from the US RT 15 intersection in Winfield to the connection with PA RT 147 including the river bridge, would be the most cost effective way to start construction of this project. Under that option, there would be immediate relief to the Borough of Lewisburg and Kelly Township in Union County as well as the Borough of Northumberland in Northumberland County.

The SEDA-COG RPO appreciates the opportunity to comment on CSVT FEIS and looks forward to the construction of this most important project.

Sincerely,

James J. McAllister, Program Director
Transportation Planning & Public Safety

JJM/ml

SEDA COG

A LOCAL DEVELOPMENT DISTRICT

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SEDA Council of Governments

201 Furnace Rd
Lewisburg
PA 17837
USA

(570) 524-4491
fax 524-9190

LJL

September 9, 2003

Mr. James A. Cheatham
Division Administrator
Federal Highway Administration
228 Walnut Street, Room 536
Harrisburg, PA 17101-1720

RE: Central Susquehanna Valley Transportation Project
S.R. 0015, Section 088
Snyder, Union, and Northumberland counties, PA
Comments to the EIS, Section 404 Permit Application

Dear Mr. Cheatham,

On behalf of SEDA-Council of Governments (SEDA-COG) and the Susquehanna Greenway Partnership, I am submitting the following comments on the Central Susquehanna Valley Transportation Project. SEDA-COG heads a large and diverse team in the planning and design of the Susquehanna Greenway. The team consists of agencies and organizations including the Susquehanna River Basin Commission, PA Environmental Council, PA Downtown Center, County Planning Agencies and the Northcentral Pennsylvania Conservancy. Project advisors and financial contributors to the Susquehanna Greenway include: the National Park Service and the PA Departments of Conservation and Natural Resources, Environmental Protection, and Transportation.

The Susquehanna Greenway project is large in scope, creating a conceptual greenway design and strategic plan for the 500 linear mile river corridor in Pennsylvania. The Susquehanna Greenway project is one of regional significance raising public pride, awareness and stewardship in the river and promoting vibrant, successful communities and raising the quality of life.

The Susquehanna Valley Transportation Project will have a significant impact on a strategic section of the West Branch Susquehanna River. The highway's integration with the Susquehanna Greenway design concept and strategic plan is essential for the success of both projects.

The following areas will need utmost consideration in the development and refinement of the highway design. These comments are being submitted by SEDA-COG on behalf of the Susquehanna Greenway Partnership in response to the Final EIS / Section 404 Permit Application.

1. **Highway alignments must consider the Susquehanna Greenway conceptual design in maintaining multiple connections including:**
   a. Maintain or enhance public access to the River.
   b. Maintain safe passage of fishermen and recreational boaters using the established West Branch Water Trail (please refer to West Branch Water Trail available from the Lumber Heritage Region).
   c. Maintain or enhance pedestrian / bicycle connections along the river corridor, especially the town-to-town connections called for in the Susquehanna Greenway conceptual plan (attached).
   d. Integrate greenway connection functions into the highway and bridge design.
   e. Maintain green infrastructure, corridors linking natural areas and wildlife habitats, along the river and regional ridges.
   f. Consider design and strategic actions of both the Susquehanna Greenway and the Lower West Branch Rivers Conservation Plan prepared by the Northcentral Pennsylvania Conservancy.

2. **Design and Aesthetic Considerations for the Highway and River Bridge**
   a. The proposed highway alignments will pass through a scenic and diverse landscape consisting of rolling hills, forest and farmland with wide-open views of the river and Montour Ridge. The landscape character and interest warrants a specialized approach to highway and bridge design.
   b. The highway alignment, grading and landscaping should integrate with the character of the surrounding land and river.
   c. Given the striking landscape of the river corridor, the bridge should have the design aesthetics and considerations of a 'signature bridge.'
   d. The design should consider motorist's views as they approach and pass over the West Branch Susquehanna River. The landscape and bridge design should frame and optimize views.
   e. The West Branch Susquehanna River Bridge should include innovative drainage and storm water management to prevent accidental spills from reaching the river.
   f. Consideration to be given to a scenic overlook / visitor and interpretive center (Susquehanna Gateway Visitor Center) in the highway corridor between Route 15 and Route 147 interchanges.

3. Susquehanna Greenway and Regional Tourism Promotion

a. The Susquehanna Greenway concept design considers linkages to major transportation routes as "Portals" into the greenway system. The West Branch Susquehanna River Bridge offers an opportunity to develop such a Gateway (Portal) Concept as a statewide demonstration.
b. The Gateway should integrate Susquehanna Greenway signage and way-finding concepts.
c. Refinement of the highway project should consider access, location and design for a Susquehanna Gateway Visitor Center. The functions of the center will include scenic overlook, visitor center, comfort facilities and serve as a regional destination for interpretation of the Susquehanna River and its story.

Please don't hesitate to contact us with any questions you may have on these comments. Upon your request we will make available all current Susquehanna Greenway mapping and design data for your use in highway / greenway integration. We appreciate your thoughtful consideration of these comments and look forward to more input and interaction in future highway and bridge planning activities.

Sincerely,

Dennis E. Robinson

Dennis Robinson, Executive Director

Cc: James Kendter

FROM:

Sherwin & Paula Albert Jr.
161 Ryan Lane
Milton, PA 17847

Former address – RD 1 Box 246A

TO: Penn Dot

RE: Comments and questions concerning our property and the bypass.

DATE: 8-21-2003

We would appreciate a written response to our following concerns.

- The right of way required included our septic tank and the entire front lawn, how will this be addressed since the backyard has poor drainage and includes our water supply?
- The front lawn also was devoted to a required turn around site. This area includes our septic system.
- The previous plan indicated that the noise decibels exceeded the limits at our parking area just below the bedroom. How can this be addressed?
- The right of way required takes our access road. What would be the timetable to assure proper access and within the township codes? Will it include blacktopping and proper drainage and how will it be maintained?
- With construction nearby and prevailing winds in the direction of our property will create a dust problem. How does Penn Dot deal with this issue if the house gets caught in the potential dust?

Thank You

MONROE TOWNSHIP BOARD OF SUPERVISORS
RR 5, BOX 39
SELINSGROVE, PA 17870
Phone: (570) 743-7057
Fax: (570) 743-6879

#03-192
Due: 9/23/03

September 8, 2003

cc: LJL

PennDOT
Engineering District 3-0
P.O. Box 218
Montoursville, PA 17754-0218

Attention: Leon Liggitt, P.E.

On behalf of the Board of Supervisors of Monroe Township, I am writing to express their concerns about the traffic congestion on Routes 11 & 15 in Shamokin Dam Borough and Monroe Township. The major traffic congestion on most weekdays seems to occur from the hours of 2:00 p.m. until 7:00 p.m. along with continuous traffic congestion during the weekends and holiday travel times. The Board of Supervisors strongly agree that the traffic problem arises in the Shamokin Dam Borough area of 8th Avenue, where the traffic signal excessively delays the movement of traffic thus creating traffic jams several miles in length. The magnitude of the traffic congestion most likely is a contributing factor to most vehicular accidents on this section of Routes 11 & 15. Also, the Board of Supervisors is concerned about the blocking of intersections by the traffic congestion, which greatly impacts on fire and/or ambulance personnel attempts to access the roads for emergency situations.

The Board of Supervisors wishes to express their regret that the Central Susquehanna Valley Transportation Project will not address the problem for the foreseeable future with the current conditions becoming only more hazardous. The Board of Supervisors would welcome PennDOT's efforts to remedy this problem in an expeditious fashion and await your immediate response.

Sincerely,

Elizabeth Paige

Elizabeth Paige
Monroe Township Board Secretary

Cc: Board of Supervisors

RECEIVED
PA DEPARTMENT
OF TRANSPORTATION
03 SEP -9 AM 8:54
DISTRICT 3-0
MONTOURSVILLE, PA.

~~JAL~~
~~RHH~~
LJL

Elizabeth Deromedi
RD 5 Box 120
Selinsgrove, PA 17821

September 10, 2003

To Whom it may concern:

This letter is being sent in response to the plans for Final Environmental Impact Statement for CSVTP. The property in question is that of Elizabeth Deromedi on Fisher Road, Monroe Township.

In the Impact study the buildings on the property are not with in the line of the project so the I can not proceed with a hardship case. The impact line is with in 5 feet of a working well on the property and the incline of the embankment will create a drainage problem on my property due to the high water table and all the run off from the properties above my property. The planned project causes me grave concern due to the run off, impact to my working well and also the storm drain run offs located at the other one end of my property. I would like to fully understand how the Commonwealth of Pennsylvania plans to not have standing water in the run off drain and still control the run off as to not flood my property or destroy my well. It has not been clearly explained to my family how this is going to be handled. Also, the impact of the incline on my property and the removal of my access to the only easy access to my home is an important issue that should be considered. All the other entrances are via steps and at 74 years of age this will cause me great difficulty if I will only be able to enter my home via my front steps.

I feel that under the current plan it has caused me undue stress since I now live in the home by myself and I am unable to sell the property for it current value due to the planned project and feel that the property should be taken in full at the current time. The project has taken property for hardship with the building being in the impact line yet you can come within 10 feet of my home put an steep incline, inform me that you will not be maintaining the embankment and remove my only easy access into my home and destroy the well on the property but it is for the good of the project that you not take my home. Please advise me in writing on your answers to the question listed in this letter.

It is truly disheartening that the Commonwealth of Pennsylvania would take advantage of an elderly women and cause her grief over the planned expansion of a highway and not take my property at the current time.

Sincerely,
Elizabeth Deromedi

Elizabeth Deromedi

CSVT FEIS COMMENTS

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
Department of Health & Human Services	8/5/03	a. FEIS has addressed potential concerns. Believe planned mitigation should minimize any potential impact to population if adequately implemented.	a. Comment noted.
Delaware Tribe of Indians	8/11/03	a. Their review indicates no religious or culturally significant sites in project area.	a. Comment noted.
		b. Wish to continue as a consulting party. Would like copy of any mitigation reports written	b. Coordination will continue. A copy of the mitigation report will be provided.
		c. If human remains accidently unearthed during additional surveys or construction, cease development immediately and inform tribes	c. Coordination will be undertaken as requested if human remains discovered in accordance with the Programmatic Agreement.
FEMA	8/19/03	a. Coordinate with the Floodplain Management Officer of the appropriate communities to ensure that the project meets the requirements of their floodplain management ordinances.	a. Will coordinate with affected municipalities as appropriate.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		b. Continue to "avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of the floodplain and avoid direct and indirect support of floodplain development wherever there is a practicable alternative".	b. Floodplain impacts will continue to be avoided and minimized during final design.
		c. Advised that the Flood Insurance Study and the Flood Insurance Rate Maps for the Susquehanna River and North Branch Susquehanna River are being revised.	c. We are aware of study and mapping revisions and will continue to coordinate with the appropriate agencies.
U.S. Environmental Protection Agency	9/10/03	a. During Final Design, explore ways to reduce the amount of waste material generated	a. During Final Design, efforts will be made to further reduce the waste material generated as noted on Page IV-365 of the Final EIS.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		b. Use Environmental Monitor (EM) to track placement of waste material and ensure that control measures are maintained and that necessary environmental clearances and permits are obtained.	b. The FHWA and PENNDOT's approach to impacts associated with the potential earthwork imbalance is described on Page IV-365 of the Final EIS. The FHWA and PENNDOT have committed to the use of an EM during the Final Design and construction phases of project development. If a borrow/waste or staging area is required to be located outside of the area permitted for construction of the CSVT Project by the US ACOE or PA DEP, PENNDOT will require the contractor to notify PENNDOT's Project Manager. PENNDOT's manager will then inform the EM. The EM will review the site and make a recommendation to the contractor on what approvals may be required. The EM will assure that control measures are maintained and that necessary permits and clearances are secured.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
U.S. Environmental Protection Agency (Continued)		c. Avoid placing stormwater management facilities, temporary access roads, and staging areas in wetlands and critical habitats. The placement of these areas should be discussed with appropriate resource agencies in advance of construction to avoid impacts or to assure that unavoidable impacts are appropriately mitigated.	c. The EM will ensure that reasonable efforts are made to avoid using wetlands and critical habitats during the placement of stormwater management facilities, temporary access roads and staging areas during construction. The EM will oversee construction activities regarding protection of sensitive environmental areas. PENNDOT will coordinate with the appropriate resource agencies to mitigate unavoidable impacts.
		d. Include the US EPA and other appropriate agencies in regard to wetland and stream mitigation commitments.	d. PENNDOT will continue coordination with the US EPA and other appropriate agencies as work on the natural resources mitigation package continues as noted on Pages IV-191, IV-213, and IV-227 of the Final EIS.
		e. Specific wetland and stream mitigation commitments should be included in the ROD. Agencies should be in agreement on type, location, and adequacy of mitigation sites.	e. The commitment to complete specific wetland and stream mitigation is hereby included in this ROD. Coordination with the appropriate agencies will continue.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
)		f. Support a boat launch on the west side of the river.	f. Comment noted.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
U.S. Army Corps of Engineers	9/15/03	a. Concern that disposal of excess excavation required for project will result in additional impacts to aquatic resources. Also concerned about processing of additional individual permits that will be required in a timely manner. Suggest PENNDOT could expedite permitting process by:	a. The amount of waste generated by the Preferred Alternative and reported in the DEIS and FEIS is based on a preliminary level of engineering. The FHWA and PENNDOT's approach to impacts associated with the potential earthwork imbalance is described on Page IV-365 of the Final EIS. The FHWA and PENNDOT have committed to the use of an EM during the Final Design and construction phases of project development. If a borrow/waste or staging area is required to be located outside of the area permitted for construction of the CSVT Project by the US ACOE or PA DEP, PENNDOT will require the contractor to notify PENNDOT's Project Manager. PENNDOT's manager will then inform the EM. The EM will review the site and make a recommendation to the contractor on what approvals may be required. Post letter discussions with a representative from the USCOE clarified the interest in further discussions on a statewide basis of several issues identified in this letter. PENNDOT will respond to the letter regarding statewide issues shortly.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		1. minimize amount of waste. Suggest using excess material on-site by constructing earthen berms adjacent to highway	1. During Final Design, efforts will be made to minimize excess waste and achieve a better balance between excavated and fill material. As discussed on Pages IV-365 and 366 and Pages V-216 and 217 of the Final EIS, the possibility of using excavated material for the construction of earthen berms will be addressed. However, it must be noted that some of the local municipalities have gone on record as being opposed to earthen berms for noise mitigation. They prefer noise walls.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
U.S. Army Corps of Engineers (Continued)		2. make excess acreage in the mitigation site available for contractor to purchase as mitigation for potential wetland impacts that may occur outside of the already permitted area and may require an additional individual permit	2. If a contractor, working on the CSVT Project, chooses to use an area outside the project limits, the contractor is responsible for obtaining any necessary permits and for complying with said permits. However, the Department may allow the contractor to use excess acreage in Department mitigation sites for compensatory mitigation for contractor actions, if required and available, and if the contractor compensates the Department for all costs associated with the creation of the additional wetlands.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		3. have PENNDOT's environmental managers conduct historic/archaeological and endangered species coordination for the necessary permits rather than the contractor's personnel since they are more familiar with procedures.	3. The FHWA and PENNDOT have committed to the use of an Environmental Monitor (EM) throughout Final Design and construction, as discussed on Pages IV-365, 366, and V-216 of the Final EIS. If a borrow/waste or staging area is required to be located outside of the area permitted for construction of the CSVT Project by the US ACOE or PA DEP, PENNDOT will require the contractor to notify PENNDOT's Project Manager. PENNDOT's manager will then inform the EM. The EM will review the site and make a recommendation to the contractor on what approvals may be required.
		b. Would like a copy of PENNDOT's procedures that are used to investigate proposed disposal sites before PENNDOT grants approval to use site.	b. PENNDOT's specifications for work are presented in Publication 408. Section 105 of Publication 408 discusses the "Control of Work." Section 105.14 discusses the control of work in Borrow and Waste areas. Publication 408 is available on-line through PENNDOT's Website - www.dot.state.pa.us under "Doing Business With PENNDOT."

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
PA Game Commission	8/13/03	a. All contractors should be notified that endangered and threatened species reviews are necessary for storage, waste or borrow areas within study area if greater than 1 year has elapsed since prior reviews. Contractors will also need T&E coordination for any disturbed area outside of study area.	a. Annual endangered and threatened species reviews will be completed by PENNDOT during final design for within the project study area. The Environmental Monitor (EM) will ensure that contractors will coordinate on the locations of and impacts associated with storage areas, access roads and waste/borrow areas outside of the cleared (permitted) area consistent with PENNDOT's Publication 408 and applicable federal and state laws and regulations. Coordination regarding potential impacts to endangered and threatened species will be conducted as appropriate.
PA Game Commission (Continued)		b. Contractors should work with PENNDOT, FHWA and natural resource agencies to ensure the avoidance and minimization of impacts to natural resources on storage areas, access roads and borrow/waste areas.	b. See response to a. above.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		c. If a bald eagle, upland sandpiper or any state listed threatened or endangered bird or mammal is identified in the study area, PENNDOT should contact the PGC's transportation specialist in Harrisburg.	c. The PGC's transportation specialist will be contacted by the EM or PM if a bald eagle, upland sandpiper or any state listed threatened or endangered bird or mammal is identified in the study area.
		d. Report contains excellent description of terrestrial resource impacts. PGC appreciates early efforts for terrestrial mitigation.	d. Comment noted.
Pennsylvania Department of Agriculture	9/9/03	a. Should a subdivision and/or sale occur at the App Property prior to construction, please reconsider the DAMA as the preferred alternative.	a. The FEIS states in on Page IV-258 in Section IV.H.1, the discussion of Historical Resources "should conditions change from those currently present at any point prior to construction of the CSVT Project, we have committed to re-evaluating the area of impact. If conditions warrant, modifications of the alignment will be made to further minimize project impacts. This commitment includes the entire CSVT study area, as well as avoidance of the Simon P. App Farmstead".

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		b. Minimize impacts to all farm properties during design and construction.	b. As noted on Page IV-102 in Section IV.D of the Final EIS discussing Agricultural Resources, efforts to minimize impacts to farms and coordination regarding access issues, etc. will continue through final design and construction.
		c. PENNDOT will need to present a case to ALCAB that no feasible alternatives exist to the taking of farmland for this project.	c. If condemnation of any productive farmland is required, PENNDOT will present its case to ALCAB.
		d. Compliance with Executive Order 2003-2 (3/20/03).	d. The actions of the FHWA and PENNDOT are consistent with the Executive Order.
Pennsylvania Department of Environmental Protection	9/9/03	a. A Water Obstruction and Encroachment Permit must be obtained for the project.	a. This permit will be secured during Final Design.
		b. Activity must comply with Chapters 93, 95, 102, and 105 of the Department's rules and regulations.	b. Activity does and will continue to comply with applicable state regulations and requirements.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		c. PENNDOT must continue to reduce project-related water resource impacts through Final Design in accordance with the 105 Permit. Documentation must be included demonstrating how project impacts to waters were minimized to the maximum extent practicable. Indirect impacts must also be included in this analysis.	c. Avoidance and minimization measures will be implemented during Final Design and documented as part of the 105 Permit application.
		d. As part of Chapter 102 and 105 Permit applications, PENNDOT must identify locations and discuss temporary impacts of the following. ! waste disposal areas ! borrow areas ! service roads ! access roads ! haul roads ! staging areas ! temporary stream and wetland crossings ! causeways ! cofferdams	d. Some of the items (such as temporary stream and wetland crossings, causeways, and cofferdams) will be included with the Chapter 105 permit applications. The other items will be addressed in accordance with the procedures outlined on Page V-216 of the Final EIS.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		e. Details regarding post-construction stormwater runoff impacts and proposed control measures should be addressed in the 105 Permit application. The discussion should include the following. ! stream flow regime changes ! increased thermal loading and pollution from highway runoff	e. PENNDOT will comply with all applicable requirements regarding the preparation and submission of Chapter 105 permit applications.
		f. A final stream and wetland resource mitigation/compensation plan must be included with the Chapter 105 Permit application.	f. A final mitigation plan will be included with the Chapter 105 Permit application.
Pennsylvania Department of Environmental Protection (Continued)		g. PENNDOT needs to provide documentation of final resolution of the yellow lampmussel issue.	g. The yellow lampmussel is not a Federally or state listed threatened, endangered, or candidate species. Continuing coordination will occur between DEP, PAF&BC, and etc. on the handling of the requests for research through the PENNDOT regarding non-listed species.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		h. All reasonable actions must be taken to prevent particulate matter from becoming airborne, including the use of water or approved chemicals for dust.	h. PENNDOT's policies regarding dust control will be implemented in accordance with PENNDOT's Publication 408 and applicable federal and state laws and regulations, as noted on Page IV-362 of the Final EIS.
		i. Problems could result from the open burning of clearing and grubbing waste.	i. Open burning of construction or demolition waste will not occur, as noted on Page IV-362 of the Final EIS.
Pennsylvania Department of Environmental Protection (Continued)		j. Any waste materials generated by construction or demolition operations must be handled and disposed of properly.	j. Any waste materials generated by construction or demolition operations will be handled and disposed of properly.
		k. Any buildings to be demolished must be thoroughly inspected by a certified inspector for the presence of asbestos-containing materials (ACM). Any friable ACM must be properly removed prior to start of demolition. If ACM is to be removed or disturbed, emission-control procedures and waste-handling and disposal requirements may apply.	k. An ACM survey will be completed during Final Design and, if present, asbestos will be removed, handled, and disposed of properly, as noted on Page IV-297 of the Final EIS.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		l. If a concrete or asphalt plant will be constructed as part of the project plan approval, an operating permit may be required from PA DEP. Contact the New Source Review Section of PA DEP's Air Quality Program to determine what approvals are required. Approvals must be obtained prior to construction of source.	l. If any paving materials plant will be constructed as part of this project, the New Source Review Section of PA DEP's Air Quality Program will be contacted, if required. All approvals will be obtained prior to construction, as noted on Page IV-363 of the Final EIS.
Pennsylvania Fish and Boat Commission	9/11/03	a. PENNDOT must develop an acceptable plan for mitigation of stream and wetland impacts and must coordinate with agencies prior to Chapter 105 Permit submission.	a. Coordination with the resource agencies will continue as the mitigation plans for wetlands, streams, and terrestrial areas are developed, as discussed on Pages IV-191, IV-213, and IV-227 of the Final EIS.
Pennsylvania Fish and Boat Commission (Continued)		b. Recommend that PENNDOT develop a stringent stormwater control plan to treat highway runoff prior to discharging into existing waterways. The siting of the stormwater management facilities must be coordinated with the resource agencies.	b. A stormwater management plan will be developed consistent with current state and local regulations.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		c. The yellow lampmussel issue must be resolved prior to Chapter 105 Permit submission.	c. The yellow lampmussel is not a Federally or state listed threatened, endangered, or candidate species. Continuing coordination will occur between DEP, PAF&BC, and etc. on the handling of the requests for research through the PENNDOT regarding non-listed species.
		d. Personnel from the PFBC would like to review and comment on any natural stream design plans that may be developed for perennial stream relocations.	d. Personnel from the PFBC will be involved in the review of the stream relocation plans, particularly those using natural stream design concepts.
		e. Any new culvert installation must follow the designs recently adopted by PENNDOT and the PFBC.	e. As discussed on Page IV-224 of the Final EIS, culvert design will be in accordance with specifications agreed to by PENNDOT and the PFBC (i.e., BD 632M or revisions thereto).
		f. Identify waste and borrow areas and include them with the Chapter 105 submission. Resource agencies should be given the opportunity to review and comment on these sites.	f. PENNDOT's procedures regarding the identification and evaluation of waste and borrow areas is discussed on Pages IV-365 and 366 and V-215 through 217.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
Union County Planning Commission	8/21/03	a. Projected population for Union County in 2030 is 52,165.	a. Comment noted. Thank you for the information. These data are consistent with the data used in our analysis.
		b. Projected total housing units for Union County in 2030 is 20,692.	b. Comment noted. Thank you for the information. These data are consistent with the data used in our analysis.
		c. Supports project development beginning in north.	c. Comment noted.
Union County Planning Commission (Continued)		d. Requests context sensitive design be incorporated into final design of river crossing. Also allow local officials and citizens to participate in bridge development.	d. As discussed on Page IV-160 of the Final EIS and in the Measures to Minimize Harm Section of the Record of Decision (ROD), public involvement will play a role in the further design of river bridge. A public advisory committee composed of community members and local officials will be formed. This committee will be given the opportunity to review context sensitive design features and provide comments on various bridge treatments.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		e. FEIS does not evaluate any potential impacts to the long-term vision of river corridor management as proposed for Susquehanna Greenway.	The Susquehanna River Greenway Partnership is developing a concetual plan for the enhancement and maintenance of the greater Susquehanna River Corridor. Members of the Partnership participated through various opportunities in the development of the CSVT Project. The CSVT Project will not adversely impact the goals of the Partnership nor will it prohibit future development of the greenway as conceptually presented. The CSVT Project includes a new bridge over the West Branch of the Susquehanna River. During development of the EIS, design concepts consistent with the greenway's conceptual plan were considered. For example, context-sensitive treatment of the bridge will be investigated during final design. Local officials and community members will be given the opportunity to review the context-sensitive design features and provide input. Additionally, a new boat launch area is proposed. Improving existing and developing new or additional access to the river via the new boat ramp is consistent with the concepts discussed in the greenway plan.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
Union County Planning Commission (Continued)		f. Location of boat launch facility should be carefully planned to include a full evaluation of use, security and maintenance. Consultation with Pennsylvania State Police should occur. Local municipality has indicated they are not in favor of the burden of maintaining the boat launch or any access roadways to the launch.	f. The public boat access area is discussed in detail on Pages V-443 through 446 of the Final EIS. The use of the boat access area should be dedicated to fishing and boating. The PFBC would regulate the use of the boat launch area and enforce the proper use of the facility. Enforcement officers patrol day and night and respond to calls regarding disturbances at their facilities. The PFBC would also coordinate for back up calls with state police, if necessary. Access to the proposed boat access area would be developed in detail during final design. Coordination with the township will take place regarding local roadways and access to the boat launch at that time. The Pennsylvania State Police (PSP) were contacted regarding the proposed public boat access facility. The PSP indicated that any new roadways or other improvements would become part of their preventive patrol zones and would be patrolled as is currently done. In addition, the PSP indicated that they would respond to specific incidents at the proposed boat access facility like they presently do. Union Township has not notified PENNDOT or the FHWA of any opinions on the boat launch.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
	8/21/03	g. Recommended that assistance be provided to help communities address future growth impacts related to new highway since local planning efforts either don't exist or are rudimentary.	g. Analysis of future land use was conducted during development of the Draft and Final EIS's and is addressed in Section IV.L - Secondary and Cumulative Impacts. As noted on Page IV-330 of the Final EIS, completion of the CSVT Project will not induce substantial increases in growth in the study area. However, the RPO and local municipalities are encouraged to apply for funding from all available sources to evaluate current growth and future land use patterns.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
SEDA COG	9/8/03	a. The FEIS does not address future land use impacts. RPO recommends funds be awarded to address the land use impacts associated with two new major interchanges.	a. Analysis of future land use was conducted during development of the Draft and Final EIS's and is addressed in Section IV.L - Secondary and Cumulative Impacts. As noted on Page IV-330 of the Final EIS, completion of the CSVT Project will not induce substantial increases in growth in the study area. However, the RPO and local municipalities are encouraged to apply for funding from all available sources to evaluate current growth and future land use patterns. A meeting was held with SEDA COG officials on October 7, 2003, to discuss their comments on the CSVT Land Use Analysis. The SEDA COG recognized that the Final EIS does address potential future land use impacts associated with the new interchanges associated with the CSVT Project. However, SEDA COG noted that the Final EIS does not address land use issues associated with the existing interchanges on PA Route 147 in Northumberland County in Delaware Township, Lewis Township, Turbot Township, West Chillisquaque Township, and Milton Borough. The FHWA agreed that the Final EIS does not include potential impacts of the CSVT Project on the interchanges in these municipalities since they are located outside of the project study area.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		b. Requests RPO be employed to coordinate public input on the application of context sensitive design techniques for RC5.	b. SEDA-COG will be offered the opportunity to participate in the final design and construction of the CSVT Project. They may serve in an advisory capacity. Their expertise can serve to enhance the final design and construction efforts. They may participate in the development and implementation of the design and construction contracts.
SEDA COG (Continued)		c. A landscape and visual impact analysis which would study the relationship between the landscape and proposed bridge should be performed as part of final design.	c. A preliminary landscape and visual analysis was completed as part of the EIS (see Pages IV-103 through 160 of the Final EIS). Consideration will be given to the completion of additional visual renderings during the Final Design process.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		d. The Pennsylvania State Police should be given the opportunity to provide comments on the impacts of the boat ramp on their operations.	d. The Pennsylvania State Police (PSP) were contacted regarding the impacts of the proposed public boat access facility on their operations. The PSP indicated that any new roadways or other improvements would become part of their preventive patrol zones and would be patrolled as is currently done. In addition, the PSP indicated that they would respond to specific incidents at the proposed boat access facility like they presently do for any other incident.
		e. The PFBC should be required to submit a traffic impact study on the final location of the boat launch.	e. The final location of the boat launch and access to the boat launch will be developed in detail during Final Design. Potential impacts to local roadways associated with the boat launch will be determined at that time. Coordination regarding access to the boat launch will be undertaken with the township in final design.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
SEDA COG (Continued)		f. FEIS did not address impacts the project will have on proposed greenway along the river or address efforts of the Susquehanna River Greenway Partnership.	f. The FEIS recognizes the efforts of the Susquehanna River Greenway partnership on Page S-19 of the Executive Summary. The Susquehanna River Greenway is a conceptual plan. The CSVT Project will not have an adverse impact on the greenway nor will it prohibit future development of the river's greenway, as conceptually presented. The Susquehanna River Bridge will span the flood way, so access to the river will not be adversely impacted. During development of the EIS, design concepts which are consistent with many items of the greenway's plan were considered. For example, a public boat ramp is proposed as a mitigation measure for this project. This mitigation measure will improve access to the river and is believed to be consistent with the greenway's corridor planning efforts. Related to the river crossing, a public advisory committee composed of community members and local officials will be formed. This committee will be given the opportunity to review context sensitive design features and provide comments on various bridge treatments, as discussed on Page IV-160 of the Final EIS.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		g. Construction of the north section of the project would be the most cost-effective way to start construction of this project.	g. Comment noted.
SEDA COG	9/9/03	a. CSVT will have a significant impact on a strategic section of West Branch Susquehanna River. Integration of the highway with the greenway design concept is essential.	a. PENNDOT will continue to coordinate with SEDA COG and the Susquehanna Greenway Partnership, as appropriate.
SEDA COG (Continued)		b. Maintain or enhance various existing connectors with the river, such as: ! public access; ! bike/pedestrian paths; and ! green infrastructure	b. All existing access routes to the river are maintained. Additionally, the CSVT Project provides a new potential access point since a public boat launch will be constructed as a project mitigation measure. Access to existing public pathways will be considered during Final Design.
		c. Integrate landscape and aesthetic considerations when designing the river bridge. Consider the scenic landscape. Consider a "signature bridge".	c. Context-sensitive design features will be considered as the Final Design of river bridge proceeds, as discussed in the Final EIS on Page IV-160.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		d. The bridge should include innovative drainage and stormwater management to prevent accidental spills from reaching the river.	d. PENNDOT will implement a Stormwater Management Plan to protect the river. At this time, no specific design features are planned to address accidental spills on the bridge.
		e. Consideration should be given to a scenic overlook/visitor and interpretive center in the highway corridor between the Route 15 and Route 147 interchanges.	e. A scenic overlook/visitor and interpretive center between the US Route 15 and PA Route 147 interchanges was not part of the original scope of this project. However, development of the CSVT Project does not preclude future consideration of such a facility.
		f. The project should promote regional tourism. The river bridge offers an opportunity to develop a "Gateway" concept.	f. PENNDOT will convene a public advisory committee to review context-sensitive design features related to the river crossing.
Sherwin & Paula Albert, Jr.	8/21/03	a. Required R/W includes septic and front lawn. How will this be addressed since back yard includes water supply and has poor drainage?	a. In accordance with federal and state laws and regulations, PENNDOT will acquire properties that become functionally impaired as a result of construction.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
Sherwin & Paula Albert, Jr. (Continued)		b. Noise levels exceed limits.	b. Section IV-B. Noise of the Final EIS discusses noise impacts and mitigation associated with this project. Pages IV-74 through 81 specifically discuss the noise impacts and mitigation in this area. These impacts and mitigation measures are based on preliminary levels of engineering. During Final Design of the selected alternative, additional noise analyses will be performed along with detailed cost-effectiveness analyses to specify noise mitigation measures as needed.
		c. R/W impacts access road. Timetable for assurance of access?	c. Access issues will be addressed during final design. Final design phase will start after the Record of Decision (ROD).
		d. Will new access road include black-topping with proper drainage?	d. If the access roadway needs to be replaced, the replacement roadway will be comparable to or better than the existing access.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		e. How does PENNDOT deal with dust created during construction?	e. In accordance with Publication 408, all reasonable actions will be taken to prevent particulate matter from becoming airborne, including use of water or chemicals for control of dust. Air quality impacts during construction are addressed on Page IV-362 of the Final EIS.
Monroe Township Board of Supervisors	9/8/03	a. Concern that the CSVT Project does not address the major traffic problem in the township, which is congestion on US Routes 11 and 15 caused by traffic backlog at the traffic signal in Shamokin Dam Borough on 8th Avenue, in the foreseeable future.	a. PENNDOT recognizes that congestion problems exist on U.S. Routes 11 and 15. The reduction of current congestion on study area roadways is listed as one of the needs for the project. PENNDOT will evaluate interim measures to improve traffic conditions until the CSVT roadway can be completely constructed.
Elizabeth Deromedi	9/10/03	a. Impact line is within five feet of a well. The embankment slope will create a drainage problem on the property due to the high water table and runoff from the highway and other properties upslope.	a. Stormwater management facilities for the project will be developed during Final Design. Additionally, as discussed on Page IV-246 of the Final EIS, PENNDOT will undertake a detailed assessment of potentially affected individual domestic and public supply wells during Final Design prior to construction. Specific properties to be tested will be selected at that time.

FROM	DATE	SUMMARY OF COMMENT	RESPONSE
		b. The embankment will affect access to the home.	b. Access to properties must be maintained. If access cannot be maintained or new access provided, the property will be acquired. If an access roadway needs to be replaced, the replacement roadway will be comparable to the existing access.
		c. The plan has caused stress. Unable to sell the home for the current value due to the planned project. Wants home to be acquired.	c. The current impact lines and embankment slope details are preliminary. The lines and slope details may change during Final Design. If during Final Design it is determined that the property is necessary for highway purposes, the part of the property required for the project construction will be acquired. In addition, if the property will become functionally impaired as a result of construction, the whole property will be acquired.

Attachment 5

ALTERNATIVES STUDIED IN DETAIL IN THE EIS

As a result of continual refinement to the Phase II Alternatives, the following set of alternatives were found to be reasonable and warrant further study. They were evaluated in the EIS.

Section 1

It is anticipated that Section 1 Alternatives would carry the designation of U.S. Route 15. It is likely that the section of US Route 15 that is bypassed will be designated Business Route 15 and US Route 11.

Old Trail 2A (OT2A)

OT2A begins in the vicinity of the Selinsgrove Bypass stub. It proceeds due north between existing Old Trail Road and the Susquehanna River attempting to minimize residential acquisitions in the Old Trail area. In the vicinity of the existing power plant the alternative impacts a portion of Ash Basin 1, then moves to the northwest to cross over existing US Routes 11/15 in the power line clearing near the Hampton Inn. OT2A proceeds northwest, skirting the edge of densely developed Shamokin Dam Borough. OT2A interchanges with the 61 Connector in the area of Ash Basin 3. The alternative continues northwest to its connection with the Section 2 Alternatives.

Old Trail 2B (OT2B)

Essentially, OT2B is very similar to OT2A in its mainline characteristics. The differences between OT2B and

OT2A occur in the way the alternatives reconnect to the existing system. OT2B does not use the 61 Connector to connect to the existing system. Rather, it connects by way of a fully directional interchange in the vicinity of Stetler Avenue and the Route 15 Connector, which is a new two-lane roadway through undeveloped land just north and west of the split between US Route 11 and US Route 15.

Section 2

River Crossing 1 East (RC1-E)

RC1-E heads north and east from its connection with the Section 1 Alternatives. A fully directional interchange is provided between RC1-E and US Route 15 in the Winfield area. RC1-E proceeds across the West Branch Susquehanna River on a structure that spans the floodway and floodplain on both sides of the West Branch of the Susquehanna River. The structure also spans the existing rail line and existing PA Route 147 on the east side of the river. Piers would be required on the large island in the West Branch Susquehanna River. RC1-E continues east to a new interchange with PA Route 147. It then runs north and east of existing PA Route 147 to its connection with the Build Out of the Two on Four Section near PA Route 45.

River Crossing 1 West (RC1-W)

RC1-W heads north and east from its connection with the Section 1 Alternatives and is essentially the same as RC1-E until it reaches the east side of the West Branch Susquehanna River. On the east side of the river RC1-W interchanges with PA Route 147, then proceeds north and slightly west of existing PA Route 147. Due to the need to retain access to properties along PA Route 147, a system of

frontage roads will need to be constructed alongside RC1-W. As a result, the right-of-way area for RC1-W is somewhat enlarged. This alternative also connects to the Build Out of the Two on Four Section near PA Route 45.

River Crossing 6 (RC6)

The northernmost of the river crossing options, RC6 heads north and east from its connection with the Section 1 Alternatives. A fully directional interchange is provided between RC6 and US Route 15 in the Winfield area. RC6 then proceeds north to cross the river on a skewed structure. The bridge for RC6 crosses the West Branch Susquehanna River on the upstream end of the big island also crossed by RC1-E and RC1-W. RC6 also spans the floodway and floodplain on both sides of the river and the existing rail line and PA Route 147 east of the river. RC6 continues east to a new interchange with PA Route 147. From this location, RC6 runs east of existing PA Route 147 on the same alignment as RC1-E. It then connects to the Build Out of the Two on Four Section near PA Route 45.

Public involvement will play a role in the further design of the proposed Susquehanna River Bridge. A public advisory committee composed of community members and local officials will be formed. This committee will be given the opportunity to review context sensitive design features and provide comments on various bridge design options.